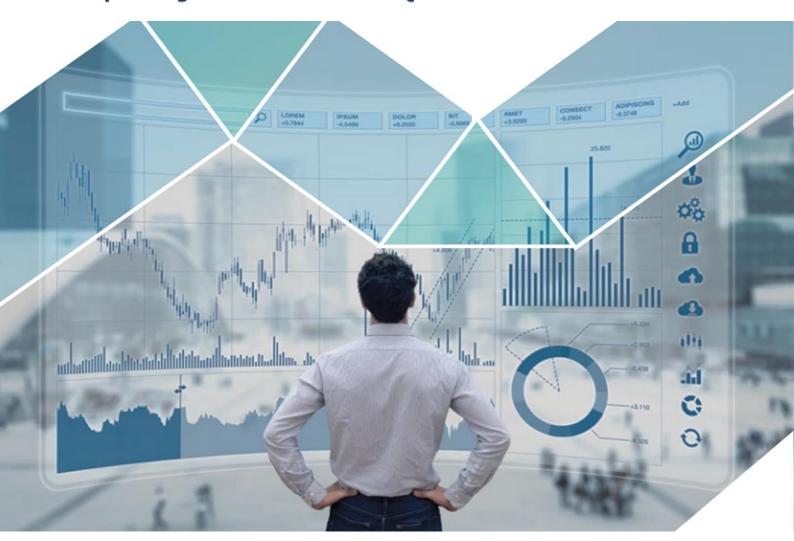


# **IRPC Public Company Limited**

# **Management Discussion and Analysis**

**Operating Results for the First Quarter of 2023** 









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# Management Discussion and Analysis (MD&A) IRPC Public Company Limited and its subsidiaries Operating Results for the First Quarter of 2023

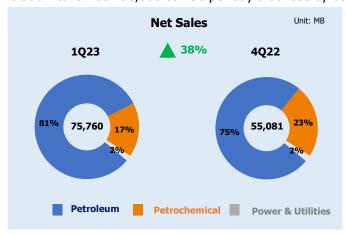
# **Executive Summary**

	Unit		Quarter		Cha	nge
	O.I.i.c	1Q23	4Q22	1Q22	QoQ	YoY
Crude Intake	Million bbl	17.63	10.97	17.46	61%	1%
Sales <sup>[1]</sup>	Million Baht	81,430	57,007	79,432	43%	3%
Net Sales [2]	Million Baht	75,760	55,081	76,608	38%	(1%)
Market GIM	Million Baht	7,084	2,609	4,105	172%	73%
	USD/bbl <sup>[3]</sup>	11.80	6.50	7.08	82%	67%
Accounting GIM	Million Baht	5,342	(4,207)	9,891	227%	(46%)
	USD/bbl	8.90	(10.50)	17.05	185%	(48%)
EBITDA	Million Baht	2,020	(7,836)	6,600	126%	(69%)
Net Profit	Million Baht	301	(7,149)	1,501	104%	(80%)

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 2023 (1Q23) compared to those in the fourth quarter of 2022 (4Q22): In 1Q23, the Company registered net sales of Baht 75,760 million increasing by Baht 20,679 million or by 38% from that in 4Q22. This attributed to a 62% increase in sales volume while a 24% decrease in average selling prices following lower crude oil price. The average crude intake was 196,000 barrels per day that rose by 65% because of the operating resumption after



major turnaround in 4Q22 taking approximately 1 month.

The Market Gross Integrated Margin (Market GIM) was Baht 7,084 million or USD 11.80 per barrel rising by 172% following a decrease in the cost of crude premium as well as an increase in petrochemical products spreads.

The crude oil price in 1Q23 decreased from USD 84.85 per barrel in 4Q22 to USD 80.23 per barrel. This was mainly due to the recession concerns following bank crises in the U.S. and Europe during March 2023 though crude oil price in the first 2 months of this quarter increased following



OPEC and allies' production cut, the sanction on Russian petroleum products and rebounding China demand from China reopening. This led to the net inventory loss of Baht 1,742 million or USD 2.90 per barrel including the stock loss of Baht 3,763 million or USD 6.26 per barrel as well as a reversal on Net Realizable Value (NRV) of Baht 2,021 million or USD 3.36 per barrel. Therefore, the Accounting Gross Integrated Margin (Accounting GIM) was Baht 5,342 million or USD 8.90 per barrel compared to the loss on Accounting GIM of Baht 4,207 million or USD 10.50 per barrel in the previous quarter. The operating expenses were Baht 3,291 million decreasing by 8%. These resulted in the earnings before interest, tax, depreciation and amortization (EBITDA) of Baht 2,020 million escalating by Baht 9,856 million or by 126% compared to the loss on EBITDA of Baht 7,836 million in 4Q22. In this quarter, the Company recorded an unrealized gain on oil hedging of Baht 61 million dropping by 93%. Meanwhile, there was a gain on impairment and disposal of assets amounting to Baht 825 million, which rose by Baht 804 million mainly owing to the reversal impairment on spare part. Offsetting with the corporate income tax amounting to Baht 70 million, the performance in 1Q23 resulted in the net profit of Baht 301 million compared to the net loss of Baht 7,149 million.

The operating results in the first quarter of 2023 (1Q23) compared to those in the operating results in the first quarter of 2022 (1Q22): In 1Q23, the Company's net sales decreased by Baht 848 million or by 1% from that in 1Q22 due to a 13% decrease in average selling prices following lower crude oil price versus a 12% increase in sales volume. The average crude intake was 196,000 barrels per day rising by 1%. The Market GIM increased by Baht 2,979 million or by 73%, mainly from the decline in the cost of crude premium as well as a rise in petroleum products spreads. There was a net inventory loss of Baht 1,742 million in 1Q23 compared to a net inventory gain of Baht 5,786 million in 1Q22. These led to Accounting GIM decline by Baht 4,549 million or by 46%. Meanwhile, the operating expenses reduced by 9%. Therefore, EBITDA was Baht 2,020 million decreasing by Baht 4,580 million or by 69%. Furthermore, the Company recorded an unrealized gain on oil hedging of Baht 61 million compared to an unrealized loss on oil hedging of Baht 2,699 million in 1Q22, while gain on investment dropped by Baht 119 million or by 92%. Offsetting with the corporate income tax amounting to Baht 70 million, the performance in 1Q23 resulted in the net profit of Baht 301 million decreasing by 80% from that in 1Q22.



# **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 2023 (1Q23):** The global oil consumption was 100.6 million barrels per day declining by 1.8 million barrels per day from 4Q22 oil consumption of 102.4 million



barrels per day. The Dubai price in 1Q23 moved between USD 70.29 per barrel and USD 84.88 per barrel, with an average of USD 80.32 per barrel decreasing by USD 4.53 per barrel from USD 84.85 per barrel in 4Q22. The crude oil price gradually escalated during January and February thanks to OPEC and allies'

agreement to cut the production by 2 million barrels per day from November 2022 to December 2023, along with Europe's sanction on Russian petroleum products being effective in early-February arising supply uncertainties in petroleum market. In addition, China reopening incentivized the market to expect continuously rising oil demand. Nevertheless, the crude oil price was down in March even though Russia announced to reduce 0.5 million barrels per day of production during March and June so as to retaliate sanctions from the West. This was owing to recession concerns being stemmed from bank crises in the U.S. and Europe. Meanwhile, the crises were solved swiftly able to calm some concerns down, so the crude oil price visibly climbed but was still lower than February levels.

**Crude oil outlook in the second quarter of 2023 (2Q23):** The global oil consumption is predicted to rise from that in 1Q23, mainly thanks to China reopening as well as almost-recovered airline business aligning with tourism that almost revives from COVID-19 pandemic. Oil supply is expected to be tighter from 1Q23 condition as OPEC and allies agreed to additionally reduce the production by 1.15 million barrels per day from May to end-2023, hence a chance of higher crude oil price. In the meantime, the incremental crude oil price may not be considerable as 2Q23 is a typical refinery maintenance period, so some crude oil demand is prone to be curbed.



#### 1.1.2 Crude Intake and Capacity

		Quarter	% Change		
Petroleum	1Q23	4Q22	1Q22	QoQ	YoY
Crude Intake	Crude Intake				
Million barrels	17.63	10.97	17. <del>4</del> 6	61%	1%
KBD	196	119	194	65%	1%
Utilization Rate	Utilization Rate				
Refinery	91%	55%	90%	36%	1%
RDCC	111%	48%	102%	63%	9%
Lube Base Oil	94%	54%	81%	40%	13%

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

In 1Q23, crude intake was 17.63 million barrels or 196,000 barrels per day. Refinery utilization rate was 91%. In 1Q23, crude intake was 17.63 million barrels or 196,000 barrels per day (196 KBD). Refinery utilization rate was 91% increasing by 36% from that in 4Q22 because there was a major turnaround of the refinery during October – November 2022 taking 37 days in average. Also, by comparing with 1Q22, the rate was approximate. The

refinery could operate efficiently after finished major turnaround in 4Q22.

The utilization rate of RDCC plant in 1Q23 was 111%, up by 63% from that in 4Q22 owing to major turnaround in 4Q22; besides, by comparing YoY, the rate increased by 9% as there was a planned maintenance shutdown of HYVAHL unit to replace the catalyst.

The utilization rate of Lube Base Oil plant in 1Q23 was 94% rising by 40%, QoQ, owing to major turnaround in 4Q22. In addition, by comparing YoY, the rate climbed by 13% due to a planned maintenance shutdown of the Lube Base Oil plant in 1Q22.

#### 1.1.3 Petroleum Sales

	Sales Vo	Sales Volume (Million Barrel)					
Products	Quarter						
	<b>1Q23</b>	4Q22	1Q22				
Refinery	16.21	9.28	13.36				
Lube Base Oil	1.99	1.15	1.73				
Total	18.20	10.43	15.09				

Sales Value (Million Baht)					
Quarter					
1Q23	1Q23 4Q22 1Q2				
54,678	36,768	50,474			
7,095	4,584	5,785			
61,773	41,352	56,259			



In 1Q23, net sales of petroleum businesses increased by 49%, QoQ, thanks to a 74% rise in sales volume versus a 25% decline in average selling prices following the slumped crude oil price.

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In 1Q23, net sales of petroleum businesses were Baht 61,773 million increasing by Baht 20,421 million or by 49% from that in 4Q22. This was mainly because of a 74% rise in sales volume, from 10.43 million barrels to 18.20 million barrels being from every key product group versus a 25% decline in average selling prices following the slumped crude oil price.

By comparing YoY, the net sales of petroleum businesses soared by Baht 5,514 million or by 10%, mainly from a 21% upsurge in sales volume of entire key product groups, while average selling prices softened by 11% aligning with the crude oil price shrinkage.

The proportion of domestic and export of petroleum products in 1Q23 was 64:36 and most of the exported products were shipped to Singapore, Cambodia and Laos respectively.

# 1.1.4 Crude Price and Petroleum Products Spread

		Quarter	% Change			
	1Q23	4Q22	1Q22	QoQ	YoY	
Dubai Crude Oil (USD/bbl)	80.32	84.85	95.56	(5%)	(16%)	
Petroleum (USD/bbl)						
Naphtha – Dubai	(6.5)	(14.6)	1.2	55%	(642%)	
ULG95 – Dubai	18.6	9.4	17.8	98%	4%	
Gas Oil 0.05%S - Dubai	25.2	39.3	19.6	(36%)	29%	
FO 180 3.5%S - Dubai	(16.3)	(22.5)	(8.3)	28%	(96%)	
Lube Base Oil (USD/MT)						
500SN - FO 180 3.5%S	640	780	522	(18%)	23%	
150BS - FO 180 3.5%S	888	891	791	(0.3%)	12%	
Asphalt - FO 180 3.5%S	88	146	(81)	(40%)	209%	

#### The spread between petroleum products and raw material

# The spread between petroleum products and Dubai

• Naphtha Spread - Higher: Naphtha - Dubai spread in 1Q23 was USD -6.5 per barrel enhancing by 55% from USD -14.6 per barrel in 4Q22. This was owing to growing Gasoline spread boosting Naphtha demand for Gasoline blending. Still, Naphtha crackers did not run at their full capacity because of the unrecovered petrochemical market. By comparing with 1Q22 of USD 1.2 per barrel, the spread declined by 642%.



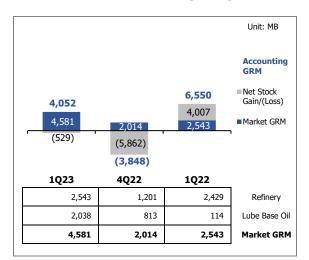
- ULG95 Spread Higher: ULG95 Dubai spread in 1Q23 was USD 18.6 per barrel escalating by 98% from USD 9.4 per barrel in 4Q22 as Gasoline demand was supported by Lunar New Year festival and China reopening that slowed Gasoline export from China down, along with the U.S. driving season. Moreover, one of Malaysian refinery units' operation issues hampered Gasoline supply upholding the price. By comparing with 1Q22 of USD 17.8 per barrel, the spread rose by 4%.
- **Gas Oil Spread Lower**: Gas Oil Dubai spread in 1Q23 was USD 25.2 per barrel being down by 36% from USD 39.3 per barrel in 4Q22 as European Diesel inventory level was high due to warmer-than-typical climate curbing Diesel demand. Likewise, some parts of Europe rushed to import Russian Diesel before the sanction was effective in February. By comparing with 1Q22 of USD 19.6 per barrel, the spread increased by 29%.
- Fuel Oil Spread Higher: HSFO Dubai spread in 1Q23 was USD -16.3 per barrel climbing by 28% from USD -22.5 per barrel in 4Q22 as China's Fuel Oil demand for utilizing as coker unit's feedstock improved. In the meantime, Russian Fuel Oil was exported progressively dampening Fuel Oil price. By comparing with 1Q22 of USD -8.3 per barrel, the spread decreased by 96%.

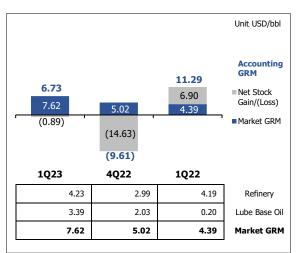
# The spread between Lube Base Oil products and Fuel Oil

- **500SN Spread Lower:** 500SN Fuel Oil spread in 1Q23 was USD 640 per ton being down by 18% from USD 780 per ton in 4Q22 as Diesel spread decreased encouraging certain Lube producers to deviate Diesel yield while shift Lube Base yield up. The increasing supply had more obvious impact than improving Lube Base demand being supported by China reopening. By comparing with 1Q22 of USD 522 per ton, the spread was up by 23%.
- Asphalt Spread Lower: Asphalt Fuel Oil spread in 1Q23 was USD 88 per ton decreasing by 40% from USD 146 per ton in 4Q22 because Asphalt supply in 4Q22 was tight following maintenance shutdowns of several Lube Base Oil plants. On the contrary, Asphalt supply rose in 1Q23 aligning with growing Asphalt demand in China according to the reopening. Meanwhile, limited cargo ships due to vessel remainder in China entailed revised-down Asphalt price for inventory management. By comparing with 1Q22 of USD -81 per ton, the spread rose by 209%.



# 1.1.5 Gross Refining Margin





In 1Q23, Market GRM was Baht 4,581 million or USD 7.62 per barrel increasing by Baht 2,567 million or USD 2.60 per barrel, QoQ, mainly owing to the significantly dropped cost of crude premium and escalating Gasoline spread.

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the softened cost of crude premium.

The Gross Refining Margin (Market GRM) in 1Q23 was Baht 4,581 million or USD 7.62 per barrel increasing by Baht 2,567 million or USD 2.60 per barrel, QoQ, mainly owing to the significantly dropped cost of crude premium and escalating spreads of refinery products, especially Gasoline. Also, by comparing YoY, Market GRM rose by Baht 2,038 million or USD 3.23 per barrel, mainly from growing Lube Base spreads and

In 1Q23, there was a net inventory loss equaling Baht 529 million or USD 0.89 per barrel comprising of a stock loss of Baht 2,017 million, a reverse of Net Realizable Value (NRV) of Baht 1,488 million. This entailed the Accounting Gross Refining Margin (Accounting GRM) equaling Baht 4,052 million or USD 6.73 per barrel compared to the Accounting GRM loss of Baht 3,848 million or USD 9.61 per barrel. On the other hand, by comparing with 1Q22, the Accounting GRM declined by Baht 2,498 million or USD 4.56 per barrel.

# 1.2 Petrochemical business unit

#### 1.2.1 Petrochemical Market Overview

**Petrochemical market situation in 1Q23:** The demand for petrochemical products did not recover as expected despite positive signals at the beginning of the quarter after China lifted lockdown measures and arranged the reopening. Such signals was initially expected to make demand for end products recover after the Lunar New Year holiday, while supply was thought to be tight owing to the annual maintenance shutdown plans of producers in Southeast Asia. Moreover, the sluggish global economy as well as inflationary in the U.S. and the European Union led to slow recovery of China's operating rate in the current quarter. However, after the Lunar New Year holiday, the demand for products in China did not improve as expected and the volume of destination orders remained low.



Most buyers decided to wait and see the situation, so the purchases were made only when necessary. Furthermore, the supply in China increased, both from new capacity and from existing capacity that gradually resumed from their maintenance shutdowns. This incentivized Chinese sellers to export more products to Southeast Asia. Additionally, banking crises in the U.S. and Europe built concerns about the growth of the economy and global trade, along with consumer confidence. According to the crises and the increased inflation worldwide, the demand for consumer goods in both electrical appliance and electronic industries was still not recovered. This was because inventory levels of the aforementioned products were high and the product release was slower than expected.

**Petrochemical market situation in 2Q23:** The demand for petrochemical products is expected to remain stable. Most manufacturers tend to still obtain high inventory levels due to the sluggish demand, particularly in China. This is a result of the global economy's sluggishness caused by concerns over financial crises in many banks in the U.S. and Europe, which is expected to inflame banks in other countries, particularly in China. This conducted most buyers to wait and see the situation and to make purchases only when necessary. Furthermore, there are expected new capacities from China, Malaysia, and Vietnam pressuring prices in Asian market. Meanwhile, the demand for petrochemical products in Thailand has shown signs of recovery after China's announcement to open up the country, which is expected to boost tourism in Thailand, hence potentially higher demand for plastics, especially those in packaging sector. Plus, Thailand's upcoming election in May is anticipated to support plastic demand for producing campaign posters. Thailand's summer also is prone to surge the demand for electrical appliances and construction as the climate is favorable for construction activities.

# 1.2.2 Petrochemical Capacity

Duradurata		Quarter	% Change		
Products	1Q23	4Q22	1Q22	QoQ	YoY
Utilization Rate					
Olefins Group	54%	74%	91%	(20%)	(37%)
Aromatics and Styrenics Group	77%	54%	108%	23%	(31%)

In 1Q23, the utilization rate of Olefins group was 54% declining by 20%, QoQ, and by 37%, YoY, as there was a planned maintenance shutdown of Olefins plant in 1Q23.

The utilization rate of Aromatics and Styrenics group was 77% rising by 23%, QoQ, owing to production adjustment in 4Q22 to align with the major turnaround and market conditions. On the contrary, by comparing YoY, the utilization rate dropped by 31% due to a planned maintenance shutdown of Aromatics and Styrenics plants in 1Q23.



#### 1.2.3 Petrochemical Sales

	Sales Volume (KMT)					
Products	Quarter					
	1Q23	4Q22	1Q22			
Olefins Group	180	223	267			
Aromatics and Styrenics Group	149	87	183			
Total	329	310	450			

Sales Value (MB)						
Quarter						
1Q23	4Q22	1Q22				
6,925	8,635	11,278				
5,763	4,113	8,172				
12,688	12,748	19,450				

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

In 1Q23, the net sales of petrochemical businesses dropped by 0.5%, QoQ, due to a 6.5% decrease in average selling prices versus a 6% increase in sales volume.

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In 1Q23, the net sales of petrochemical businesses amounted to Baht 12,688 million dropping by Baht 60 million or 0.5%, QoQ. This was mainly due to a 6.5% decrease in average selling prices according to softened market prices. Still, sales volume was up by 19,000 tons or 6%, mainly from Mixed Xylene in Aromatics group and PS in Styrenics group. By comparing YoY, the net sales of petrochemical businesses decreased

by Baht 6,762 million or by 35% because of a decrease in sales volume equaling 121,000 tons or by 27% and an 8% drop in average selling prices. The sales volume decrease was mainly from PP and HDPE in Olefins group.

The proportion of domestic and export of petrochemical products in 1Q23 was 70:30 and most of the exported products were shipped to Singapore, Hong Kong and Indonesia respectively.

# 1.2.4 The spread between key Petrochemical products and raw material

Average Price		Quarter		%Ch	ange
(USD/MT)	1Q23	4Q22	1Q22	QoQ	YoY
Naphtha	689	673	877	2%	(21%)
Olefins					
HDPE - Naphtha	466	442	448	5%	4%
PP - Naphtha	435	322	489	35%	(11%)
Aromatics					
BZ - Naphtha	241	152	197	59%	22%
TOL - Naphtha	185	188	19	(2%)	874%
MX - Naphtha	257	241	100	7%	157%
Styrenics					
ABS - Naphtha	694	695	1,078	(0.1%)	(36%)
PS (GPPS) - Naphtha	603	607	776	(1%)	(22%)



# The spread between petrochemical products and raw material

# The spread between Polyolefins group and Naphtha

- HDPE Spread Higher: HDPE Naphtha spread was USD 466 per ton increasing by 5% from USD 442 per ton in 4Q22 owing to tight supply following annual maintenance shutdowns of several manufacturers in Asia. Still, demand slowed down due to economic concerns about the impact of the U.S. banking crisis. When compared with 1Q22 of USD 448 per ton, the spread increased by 4%.
- **PP Spread Higher:** PP Naphtha spread was USD 435 per ton increasing by 35% from USD 322 per ton in 4Q22 due to increased demand in the early period of the quarter following China's announcement to lift lockdown measures, along with a decrease in supply from manufacturers in Asia who arranged annual maintenance shutdowns. However, demand from China began to weaken after the Lunar New Year holiday due to economic concerns and increased supply from new manufacturers as well as existing manufacturers resuming their production. When compared with 1Q22 of USD 489 per ton, the spread decreased by 11%.

#### The spread between Aromatics group and Naphtha

- **TOL Spread Lower:** Toluene Naphtha spread was USD 185 per ton decreasing by 2% from USD 188 per ton in 4Q22. The spread decreased slightly due to the increase in Naphtha price following Dubai crude oil price. However, the demand for products began to improve thanks to improving needs for solvent production, which is a supportive factor for Toluene price. When compared with 1Q22 of USD 19 per ton, the spread increased by 874%.
- MX Spread Higher: Mixed Xylene Naphtha spread was USD 257 per ton rising by 7% from USD 241 per ton in 4Q22 due to increased Mixed Xylene demand for Gasoline blending following higher Gasoline spread. In addition, increased demand for solvent production helped support the price. When compared with 1Q22 of USD 100 per ton, the spread increased by 157%.

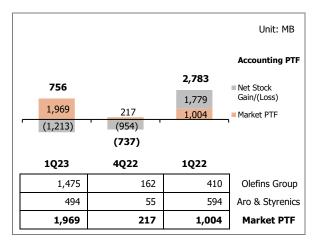
# The spread between Polystyrenics group and Naphtha

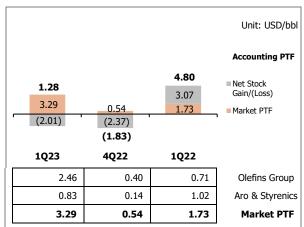
- ABS Spread Lower: ABS Naphtha spread was USD 694 per ton being approximate to that in 4Q22 of USD 695 per ton. The price of the product initially increased as market expectations of higher demand following China reopening. However, the demand did not progress as expected, hence decreased price. Besides, there were concerns about the U.S. banking crisis, which affected consumer confidence, especially in the major markets including electronics and automotive industries, and was another factor that put pressure on prices. When compared with 1Q22 of USD 1,078 per ton, the spread decreased by 36%.
- **PS Spread Lower:** PS Naphtha spread was USD 603 per ton decreasing by 1% from USD 607 per ton in 4Q22. The product price in early-1Q23 increased due to expectations that demand would rise after China announced the reopening before slowed down due to slower recovery than



expected. Additionally, the price was under pressure from increased supply in China. When compared with 1Q22 of USD 776 per ton, the spread decreased by 22%.

# 1.2.5 Product to Feed Margin (Product to Feed : PTF)\*





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

In 1Q23, the Market PTF was Baht 1,969 million enhancing by Baht 1,752 million, QoQ, as PP and Aromatics products spreads rose.

The Market Product to Feed Margin (Market PTF) in 1Q23 was Baht 1,969 million or USD 3.29 per barrel enhancing by Baht 1,752 million or by USD 2.75 per barrel, QoQ, mainly from rising products spreads, especially those of PP and Aromatics products being supported by increasing demand for Gasoline

blending. By comparing with 1Q22, Market PTF improved by Baht 965 million or USD 1.56 per barrel, mainly from soaring spreads of Polyolefins products, especially that of HDPE.

In 1Q23, the Company recorded the net inventory loss of the petrochemical businesses of Baht 1,213 million or USD 2.01 per barrel comprising of a stock loss of Baht 1,746 million and an NRV reverse of Baht 533 million. Hence, the Company obtained the Accounting Product to Feed Margin (Accounting PTF) equaling Baht 756 million or USD 1.28 per barrel compared to the Accounting PTF loss of Baht 737 million or USD 1.83 per barrel in the prior quarter. Meanwhile, by comparing YoY, the Accounting PTF was down by Baht 2,027 million or USD 3.52 per barrel.



# 1.3 Power Plant and Utility business units Capacity and Sales

		Quarter	% Ch	ange	
	1Q23	4Q22	1Q22	QoQ	YoY
Utilization Rate					
Electricity	61%	47%	69%	14%	(8%)
Steam	60%	45%	61%	15%	(1%)
Sales (Baht million)					
Electricity	754	575	497	31%	52%
Steam	483	352	3 <del>4</del> 3	37%	41%
Others	62	54	59	15%	5%
Total	1,299	981	899	32%	44%

**Utilization rates of Electricity and Steam** In 1Q23, the utilization rate of Electricity was 61% increasing by 14% from that in the previous quarter as there was production adjustment to align with major turnaround. Nonetheless, by comparing with 1Q22, the utilization rate of Electricity dropped by 8%. The utilization rate of Steam was 60% rising by 15%, QoQ, due to production adjustment to align with major turnaround, while being approximate by comparing YoY.

The net sales of power and utility businesses In 1Q23, the Company recorded the net sales of power and utility businesses equaling Baht 1,299 million, up by 32%, QoQ, mainly from enhancing sales volumes of Electricity and Steam. Plus, by comparing YoY, the net sales climbed by 44%, mainly from escalating average selling prices of Electricity and Steam.



# 2. Total Operating Performance

Total Operating Performance of IRPC and its subsidiaries for 1Q23 are as follows;

	Unit : Million Baht			Unit	: USD per ba	rrel
		Quarter			Quarter	
	1Q23	4Q22	1Q22	1Q23	4Q22	1Q22
Average FX (THB/USD)	34.07	36.55	33.22			
Total Crude Intake (Mbbl)	17.63	10.97	17.46			
Average Crude (USD/bbl) (1)	85.10	94.01	102.08			
Sales <sup>(2)</sup>	81,430	57,007	79,432	135.57	142.18	136.95
Net Sales <sup>(3)</sup>	75,760	55,081	76,608	126.13	137.38	132.08
Variable Cost (Raw Material - Market Price)	(68,676)	(52,472)	(72,503)	(114.33)	(130.88)	(125.00)
Market GIM	7,084	2,609	4,105	11.80	6.50	7.08
Stock Gain (Loss)	(3,763)	(3,826)	6,399	(6.26)	(9.54)	11.03
Net Realizable Value (NRV)	2,021	(1,905)	54	3.36	(4.75)	0.09
Realized Gain (Loss) on Oil Hedging	-	(1,085)	(667)	-	(2.71)	(1.15)
Net Inventory Gain (Loss)	(1,742)	(6,816)	5,786	(2.90)	(17.00)	9.97
Accounting GIM	5,342	(4,207)	9,891	8.90	(10.50)	17.05
Other Incomes (4)	352	316	352	0.59	0.79	0.61
Selling Expenses	(383)	(352)	(625)	(0.64)	(0.88)	(1.08)
Accounting GIM and Other Incomes	5,311	(4,243)	9,618	8.85	(10.59)	16.58
OPEX	(3,291)	(3,593)	(3,018)	(5.47)	(8.96)	(5.20)
EBITDA	2,020	(7,836)	6,600	3.38	(19.55)	11.38
Depreciation	(2,105)	(2,022)	(2,008)	(3.50)	(5.04)	(3.46)
EBIT	(85)	(9,858)	4,592	(0.12)	(24.59)	7.92
Net Financial Cost	(496)	(515)	(398)	(0.83)	(1.28)	(0.69)
Gain (Loss) on Financial Derivatives	23	281	200	0.04	0.70	0.34
Gain (Loss) on Foreign Exchange from Borrowing	47	402	19	0.08	1.00	0.03
Unrealized Gain (Loss) on Oil Hedging	61	849	(2,699)	0.10	2.12	(4.65)
Gain (Loss) on Impairment and Disposal of Assets	825	21	-	1.37	0.05	-
Gain (Loss) on Investment	10	(86)	129	0.02	(0.22)	0.22
Other Expenses	(11)	3	(1)	(0.02)	0.01	(0.00)
Net Profit (Loss) before Income Tax	374	(8,903)	1,842	0.64	(22.21)	3.17
Income Tax	(70)	1,752	(338)	(0.12)	4.37	(0.58)
Gain (Loss) on non-controlling interests	(3)	2	(3)	-	-	(0.01)
Net Profit (Loss)	301	(7,149)	1,501	0.52	(17.84)	2.58
Earning per share (EPS) (Baht/Share)	0.01	(0.35)	0.07			

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

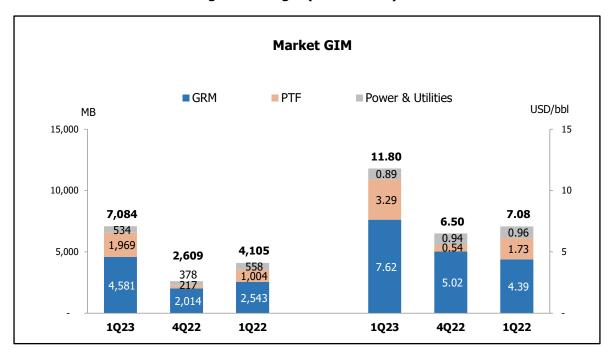
<sup>[2]</sup> Sales include (1) Petroleum Sales (2) Petrochemical Sales (3) Power and Utilities Sales (4) Sales of tank farm and port service, etc.

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

<sup>[4]</sup> Other Incomes include land, tank farm and port service etc.



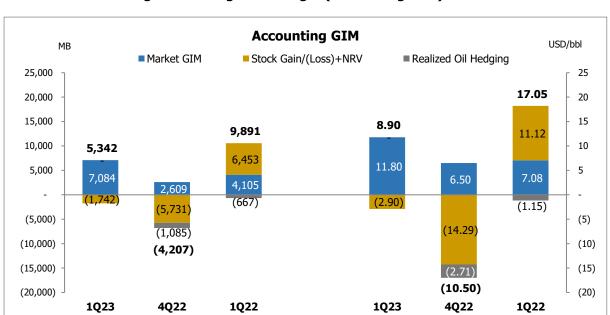
# 2.1 Market Gross Integrated Margin (Market GIM)



The Market Gross Integrated Margin (Market GIM) in 1Q23 was Baht 7,084 million or USD 11.80 per barrel moving up by Baht 4,475 million or USD 5.30 per barrel from that in the prior quarter. This was mainly from the softened cost of crude premium of USD 4.38 per barrel. Also, China reopening soared most petroleum and petrochemical products spreads, especially those of Gasoline as well as Olefins and Aromatics products.

By comparing with 1Q22 of Baht 4,105 million or USD 7.08 per barrel, the Market GIM escalated by Baht 2,979 million or USD 4.72 per barrel, mainly owing to improved petroleum products spreads, along with the lower cost of crude premium of USD 1.74 per barrel.





# 2.2 Accounting Gross Integrated Margin (Accounting GIM)

The Accounting Gross Integrated Margin (Accounting GIM) in 1Q23 was Baht 5,342 million or USD 8.90 per barrel compared to the Accounting GIM loss of Baht 4,207 million or USD 10.50 per barrel. This was because the net inventory loss declined by Baht 5,074 million or USD 14.10 per barrel, along with higher Market GIM of Baht 4,475 million or USD 5.30 per barrel. The net inventory loss in 1Q23 was Baht 1,742 million or USD 2.90 per barrel comprising of a stock loss amounting to Baht 3,763 million or USD 6.26 per barrel and a reversal on Net Realizable Value (NRV) of Baht 2,021 million or USD 3.36 per barrel.

By comparing with the 1Q22 Accounting GIM of Baht 9,891 million or USD 17.05 per barrel, the Accounting GIM was down by Baht 4,549 million or by USD 8.15 per barrel as the Company recorded a net inventory loss of Baht 1,742 million or USD 2.90 per barrel in 1Q23 compared to a net inventory gain of Baht 5,786 million or USD 9.97 per barrel in 1Q22. In the meantime, the Market GIM increased by Baht 2,979 million or by USD 4.72 per barrel.

# 2.3 Other Incomes

Other incomes consist of port and tank farm services and other services. In 1Q23, the Company had other incomes of Baht 352 million increasing by Baht 36 million from that in the previous quarter. This was mainly from enhanced incomes from port and tank farm services. Still, other incomes unchanged by comparing YoY.

# 2.4 Operating Expenses

In 1Q23, the Company had operating expenses of Baht 3,291 million decreasing by Baht 302 million from that in the prior quarter, mainly from employee expenses. On the other hand, by comparing



YoY, operating expenses rose by Baht 273 million, mainly from maintenance expenses and employee expenses.

#### 2.5 Depreciation

In 1Q23, the depreciation was Baht 2,105 million increasing by Baht 83 million, QoQ and by Baht 97 million, YoY. This was mainly due to increased asset value following the 4Q22 major turnaround.

#### 2.6 Net Financial Cost

In 1Q23, the net financial cost was Baht 496 million dropping by Baht 19 million, QoQ, mainly from lower interest expenses following declining loans. However, by comparing YoY, the net financial cost increased by Baht 98 million, mainly from higher interest rates.

# 2.7 Gain (Loss) on Financial Derivatives

In 1Q23, there was a gain on financial derivatives amounting to Baht 23 million, mainly from a gain on Cross Currency Swap (CCS). The gain was down by Baht 258 million, QoQ, and by Baht 177 million, YoY.

# 2.8 Gain (Loss) on Foreign Exchange from Borrowing

In 1Q23, the Company recorded a gain on foreign exchange (FX) from U.S. dollar-borrowings of Baht 47 million lessening by Baht 355 million, QoQ, as Thai Baht was less appreciated. The FX moved from 34.73 Baht per USD at the end of 4Q22 to 34.26 Baht per USD at the end of 1Q23. In the meantime, by comparing YoY, the FX gain increased by Baht 28 million owing to Thai Baht appreciation.

# 2.9 Unrealized Gain (Loss) on Oil Hedging

In 1Q23, the Company recorded an unrealized gain on oil hedging of Baht 61 million decelerating by Baht 788 million, QoQ, while compared to a loss of Baht 2,699 million in 1Q22.

#### 2.10 Gain (Loss) on Impairment and Disposal of Assets

In 1Q23, the Company recorded a gain on impairment and disposal of assets equaling Baht 825 million rising by Baht 804 million, QoQ, and by Baht 825 million, YoY, mainly from a reverse on spare part impairment resulting from adjustment of impairment principal, from time-based to condition-based.

# 2.11 Gain (Loss) on Investments

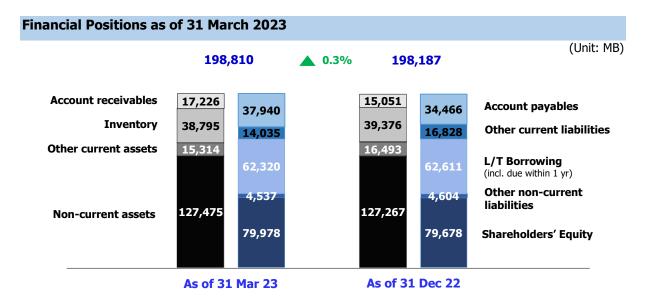
In 1Q23, the Company recorded a gain on investments of Baht 10 million compared to a loss of Baht 86 million in the previous quarter, mainly from higher profit sharing from investments in associates and joint ventures. Still, by comparing YoY, the gain was down by Baht 119 million, mainly due to lower profit sharing from investments in associates and joint ventures.



# 2.12 Corporate Income Tax

In 1Q23, the Company recorded a corporate income tax of Baht 70 million compared to a corporate income tax benefit of Baht 1,752 million in the prior quarter thanks to improved performance. However, by comparing YoY, the tax decreased by Baht 268 million due to lessened performance.





#### **Assets**

As of March 31, 2023, the Company had total assets of Baht 198,810 million increasing by Baht 623 million or 0.3% from that on December 31, 2022. It was due to the following reasons:

• **Trade receivables:** increased by Baht 2,175 million or 14% from that at the end of 2022, mainly due to a rise in total sales volume. The Company's credit term policy is about 7 - 120 days and most customers made payment on schedule. As of March 31, 2023, there were trade receivables being overdue of over 3 months amounting to Baht 45 million, which incorporated in the Company's provision for doubtful debt of Baht 35 million. The average collection period was 18 days increasing by 2 days from that at the end of 2022.

Trade receivables by payment period are as follows;

	31 March 2023			31 December 2022			
(Unit : MB)	Related	Other	Total	Related	Other	Total	
,	parties	parties		parties	parties		
Current	8,769	8,381	17,150	7,884	6,761	14,645	
Overdue	14	97	111	239	192	431	
- less than 3 months	14	52	66	239	167	406	
- over 3 months but less than 12 months	-	21	21	-	1	1	
- over 12 months	-	24	24	-	24	24	
Total	8,783	8,478	17,261	8,123	6,953	15,076	
Less Allowance for doubtful accounts	-	(35)	(35)	-	(25)	(25)	
Total Account Receivables	8,783	8,443	17,226	8,123	6,928	15,051	

• **Inventory:** decreased by Baht 581 million or 1% from that at the end of 2022, mainly due to a 7% decrease in the crude oil price and products prices following market situations versus a 3%



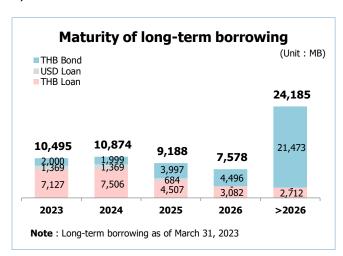
increase in inventory volume. The average inventory period was 45 days increasing by 3 days from that at the end of 2022.

- Other current assets: decreased by Baht 1,179 million or 7% from that at the end of 2022. This was mainly attributed to a decrease in other receivables by Baht 2,111 million and a decrease in refundable value-added tax by Baht 1,614 million. Meanwhile, there was an increase in other receivables amounts due from related parties by Baht 2,266 million, along with an increase in cash and cash equivalents by Baht 183 million.
- **Non-current assets:** increased by Baht 209 million or 0.2% from that at the end of 2022, mainly due to a rise in fixed assets and intangible assets by Baht 273 million.

# Liabilities

As of March 31, 2023, the Company had total liabilities of Baht 118,832 million increasing by Baht 322 million or 0.3% from what was stated as of December 31, 2022. It was due to the following reasons:

- **Trade payables:** increased by Baht 3,474 million or 10% compared to that at the end of 2022. It was mainly due to an increase in accrued crude payable volume. The average payment period was 42 days increasing by 5 days from that at the end of 2022.
- Other current liabilities: decreased by Baht 2,794 million or 17% compared to that at the end of 2022, mainly due to a decrease in accrued bonus expenses by Baht 1,110 million, a decline in other payables by Baht 1,015 million and a drop in short term borrowing from financial institutions by Baht 800 million.



• Long - term borrowing including current portion within one year: decreased by Baht 291 million or 0.5% compared to that at the end of 2022, mainly due to the repayment of borrowing and debentures of Baht 250 million and unrealized gain on foreign exchange of Baht 47 million.



# The details of long-term borrowings are shown below;

(Unit: MB)

	Mar 31, 2023	Dec 31, 2022	Change
Thai Baht Bonds	33,965	33,963	2
USD Loan	3,422	3,467	(45)
Thai Baht Loan	24,933	25,181	(248)
Total Long-term Borrowing	62,320	62,611	(291)
Less current portion of long-term borrowing	(10,770)	(10,762)	(8)
Net Outstanding Long-term Borrowing	51,550	51,849	(299)

Note: As of March 31, 2023, 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 79,978 million, which increased from what was stated as of December 31, 2022 by Baht 301 million. This was mainly from the net profit amounting to Baht 301 million in 1Q23.

# **Statement of Cash Flow**

(Unit: MB)

	Jan – Mar 23	Jan – Mar 22
Net cash flows from (used in) operating activities	3,620	7,029
Net cash flows from (used in) investing activities	(1,921)	(892)
Net cash flows from (used in) financing activities	(1,515)	(2,242)
Net increase (decrease) in cash	184	3,895
Beginning cash	3,230	11,236
Ending cash	3,414	15,131

As of Mar 31, 2023, the ending cash was Baht 3,414 million. Net cash flow increased by Baht 184 million, which was mainly contributed from the following items:

- **Net cash inflow from operating activities:** of Baht 3,620 million. The cash inflow was mainly from EBITDA of Baht 2,020 million, an increase in trade payables of Baht 3,485 million and a decrease in inventory of Baht 3,420 million. Nevertheless, the cash outflow was mainly from a rise in other receivables from related parties of Baht 2,266 million, an increase in trade receivables of Baht 2,234 million and a decrease in other payables of Baht 1,408 million.
- **Net cash outflow from investing activities:** of Baht 1,921 million, mainly from investment in Ultra Clean Fuel Project (UCF), the capitalized major turnaround expenses and investments in joint ventures.
- **Net cash outflow from financing activities:** of Baht 1,515 million, mainly from the repayment of short-term borrowing from financial institutions by Baht 800 million, long-term loans repayment of Baht 250 million and interest payment of Baht 463 million.



# **Key Financial Ratios**

	Unit	Quarter			
	Onit	1Q23	4Q22	1Q22	
Profitability Ratios					
EBITDA Margin	%	2.48	(13.75)	8.31	
Net Profit Margin	%	0.37	(12.54)	1.89	
Earnings per share	Baht/share	0.01	(0.35)	0.07	
Return on Equity*	%	1.51	(5.23)	6.80	
Liquidity Ratios					
Current Ratio	time	1.14	1.14	1.33	
Quick Ratio	time	0.33	0.29	0.53	
Financial Policy Ratios					
Net Interest bearing Debt to Equity	time	0.84	0.86	0.50	
Net Interest bearing Debt to EBITDA*	time	8.42	14.89	1.79	

Note: \*Annualized

# **Liquidity and Capital Structure**

In 1Q23, current ratio was 1.14 times being equal to that in 4Q22. Thus, the Company has sufficient liquidity for its operations. At the end of 1Q23, net interest bearing debt to equity ratio was 0.84 times decreasing by 0.02 times from that in 4Q22 of 0.86 times. This was mainly due to a rise in shareholders' equity from 1Q23 performance. 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 Goods Sold / 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