

# IRPC PLC

No. 104/2024  
24 June 2024

## CORPORATES

Company Rating:	A-
Issue Ratings:	
Senior unsecured	A-
Outlook:	Stable

## RATIONALE

TRIS Rating assigns a “A-” company rating to IRPC PLC (IRPC) and a “A-” issue rating to its outstanding senior unsecured debentures totaling THB42 billion. The rating outlook is “stable”. The ratings reflect our view of IRPC as a strategically important subsidiary of PTT PLC (PTT, rated “AAA/Stable”<sup>\*</sup>). The company rating incorporates a three-notch uplift from its stand-alone credit profile (SACP) of “bbb-”. The uplift embeds our expectation of strong parental support in times of distress.

The SACP reflects IRPC’s business profile underpinned by its large refinery complex with petrochemicals integration, high utilization of its refining capacity, and integration with its parent in terms of feedstock supply and product offtake. However, the SACP is constrained by its high susceptibility to the cyclicity of the oil refining and petrochemical sector. The SACP also factors in its low level of cash generation against debt obligations.

## KEY RATING CONSIDERATIONS

### Flagship petrochemical complex of PTT Group

We view IRPC as a strategically important subsidiary of PTT. PTT has a combined direct and indirect shareholding in IRPC of 48%, the same level it has in its other two flagship refineries. Nevertheless, IRPC’s earnings contribution to PTT is relatively low, compared to the others.

IRPC’s operation is partly integrated with PTT’s businesses. PTT purchases and supplies crude oil for all PTT group’s refineries including IRPC, to benefit from economies of scale. In terms of distribution, IRPC exports almost all refined petroleum products through PTT. In 2023, IRPC exported 30% of total refined products sales volume. In the domestic market, substantial portions of refined petroleum products were sold to the PTT Group.

As with PTT’s other flagship companies, PTT provides intercompany loan facilities to IRPC as well as a credit extension for crude supply payment if needed.

Also, IRPC supports PTT’s missions in national energy security given its significant refining capacity in Thailand. With its role as a petrochemical flagship, we view IRPC is linked to PTT’s reputation. Based on the above assessment, we expect IRPC to receive strong parental support in times of distress.

### Large refinery with petrochemical integration

IRPC has a large business scale, with sizable oil refining and petrochemical capacities. Its refinery has a crude intake capacity of 215 thousand barrels per day (KBD), making it the third largest in Thailand, accounting for 17% of domestic refining capacity. Also, IRPC has a large domestic petrochemical capacity. Its polypropylene (PP) capacity comprises 31% of domestic capacity making it one of the three largest PP producers. IRPC also has the largest domestic capacity of Acrylonitrile-Butadiene-Styrene (ABS) at 65%. IRPC sold around two-thirds of its petrochemical sales volume in the domestic market and exported the rest through selling agents.

With its petrochemical integration, IRPC’s refinery is more complex than many domestic refineries. The integration has enabled business diversification. IRPC’s refinery was able to run at high refinery utilization of around 89% in

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<sup>\*</sup> The company rating assigned to PTT is based on public information, which TRIS Rating believes provides a sufficient basis for the assessment of credit profile of PTT. The rating is assigned without participation from PTT

2020 and 2021 when the demand for petroleum refined products was hit severely by the pandemic. This number was higher than those of peer refineries that lacked petrochemical integration. During 2016-2023, IRPC's refinery had been running consistently at high utilization except for the major turnarounds in 2017 and 2022.

IRPC generated EBITDA in three business segments: Petroleum, Petrochemical, and Utilities and Others. The Petrochemical unit generated around 44% of EBITDA on average during 2016-2023, followed by the Petroleum unit at 40% and the Utilities and Others at 16%.

### Highly volatile financial performance

We assess IRPC as highly susceptible to wild swings in global oil prices, given the uncertainties in the global oil market. These uncertainties include supply chain constraints, the dynamics of the global economic slowdowns and recoveries, and supply control by major global crude suppliers such as OPEC+. IRPC's earnings are exposed to the risk of considerable inventory losses from market turmoil.

Over the recent years, IRPC's earnings fluctuated considerably from year to year. Its EBITDA can surge when the company recognizes large net inventory gains, or when petrochemical spreads are cyclically strong or temporarily widened. On the other hand, it could move sharply in the opposite direction from inventory losses or tightened petrochemical spreads. Its debt to EBITDA ratio fluctuated from 2.8 to 17.7 times over the period of 2016-2023.

### Narrow petrochemical spreads

Global economic growth is threatened by several strong headwinds, including lingering inflationary pressures, prolonged high interest rates, and mounting geopolitical tensions. This has caused weak demand for petrochemical products while new petrochemical supplies especially from China have caused excess supply and compressed spreads of most petrochemical products (the difference between products and feedstock prices). In 2023, IRPC's market product-to-feed margin (market PTF), which represents cash gross profit from producing petrochemical products by using one barrel of oil, was only USD1.24 per barrel. This was below the average of USD5.79 per barrel during 2016-2022. PP spread over naphtha was only USD366 per tonne, much below the average of USD600 per tonne during 2016-2022.

For petroleum products, the crack spreads (the difference between refined products and crude oil prices) softened in 2023 from the extraordinarily strong level in 2022 following the supply disruptions and a surge in gas prices. IRPC's market gross refinery margin (market GRM) fell from USD8.0 per barrel in 2022 to USD5.7 per barrel in 2023 but was still higher than the average USD4.4 per barrel during 2016-2021. In total, IRPC's market gross integrated margin (market GIM, mostly a combination of market PTF and market GRM) fell to USD7.9 per barrel in 2023 from USD10.6 per barrel in 2022. However, the net inventory and hedging loss of THB1.1 billion in 2023 was much less than the THB6.3 billion loss in 2022. Also, refinery crude run was 192 thousand barrels per day (KBD) in 2023, higher than 175 KBD in the 2022 major turnaround. As a result, EBITDA increased to THB7.0 billion in 2023 from THB4.1 billion in 2022.

For the first quarter of 2024, IRPC's market PTF recovered to USD1.75 per barrel, yet still far below the long-term average. PP spread over naphtha rebounded to USD359 per tonne from USD312 per tonne in the last quarter of 2023. Meanwhile, IRPC's market GRM remained high at USD6.56 per barrel. The strong spreads of refined products were driven by unplanned refinery outages in USA and Asia. IRPC recorded a net inventory gain of THB2.3 billion and EBITDA of THB4.5 billion.

### CAPEX to decrease after UCF refinery upgrade

IRPC had large capital expenditures (CAPEX) totaling THB24 billion during 2021-2023. Apart from the capital expenditures related to the refinery major turnaround in 2022, IRPC has made hefty outlays since 2021 in ultra clean fuel project (UCF), totaling about THB13 billion. After UCF project's completion in the first quarter of 2024, IRPC's refinery can convert high-sulfur diesel to low-sulfur diesel (Euro 5) production from the previous capacity of approximately 50% of diesel production to up to 100%. This refinery upgrade will enable IRPC to comply with the current domestic regulation and to sell more diesel in the domestic market. The refinery will be able to increase the portion of cheap heavy and sour crude, as well as to run at a higher utilization rate. The price of Euro 5 diesel is also slightly higher than high-sulfur diesel.

IRPC's business strategy is to expand through vertical integration and new value chains such as health & life science, advanced materials, and low carbon emission businesses. However, over the near term, we expect IRPC will focus on improving its financial performance and pursue a prudent investment policy. Following the UCF investment, IRPC has no large investment plan over the next few years. We expect IRPC's capital expenditures to total around THB11.5 billion during 2024-2026, much lower than the past three years.

### Gradual financial improvement expected

Looking ahead, we expect oil refining margin to normalize and to soften from the strong performances in 2022-2023. Meanwhile, the current petrochemical market is still in an oversupply condition. As such, we expect petrochemical spreads

to gradually recover as demand is taking time to catch up the supply glut. We project the total market GIM to range USD8-USD9 per barrel in 2024-2026.

For the crude intake, we expect IRPC's refinery to run at 195-205 KBD during 2024-2026 which is higher than 192 KBD in 2023. Despite weak demand for petrochemical products, IRPC is planning to maximize crude run and sell the higher yield of petrochemical feedstock (by product of refinery) at negative price spreads. In our base case, we assume a Dubai crude price of around USD80 per barrel on average in 2024 before declining to USD75 per barrel in 2025-2026. As a result, we forecast EBITDA to range THB6.4-THB9.8 billion per year in 2024-2026. We also project IRPC to arrive at the funds from operations (FFO) of THB4.0-THB7.2 billion per year over the forecast period.

#### **Low level of cash generation against debt**

In the first quarter of 2024, IRPC's debt to EBITDA ratio (annualized with trailing 12 months) was about 9 times and the ratio of FFO to debt (annualized with trailing 12 months) was merely 8%, indicating a low level of cash generation against debt obligations.

In our base case, we forecast the ratio of debt to EBITDA to remain high at 10-11 times in 2024-2025, before decreasing to about 6.7 times in 2026. Meanwhile, FFO to debt is expected to remain below 6% in 2024-2025 before increasing to 11% in 2026. We project the debt to capitalization ratio to stay around 50% over the forecast periods.

#### **Manageable liquidity**

We assess IRPC's liquidity as manageable over the next 12 months. IRPC had THB5.2 billion in cash as of March 2024. The company has undrawn credit facilities of THB17.7 billion, plus estimated FFO of THB4 billion. These sources of funds should enable IRPC to meet the funding needs of maturing long-term debts of THB11 billion. IRPC's liquidity is also supported by the occasional extensions of credit terms from PTT with respect to payment of crude oil.

#### **Debt structure**

At the end of March 2024, IRPC's consolidated debt (excluding lease liability) was THB75 billion, with a negligible amount of priority debt.

#### **BASE-CASE ASSUMPTIONS**

- Dubai crude price projected at around USD80 per barrel on average in 2024, and USD75 per barrel in 2025-2026.
- Refinery's crude run at about 195 KBD in 2024, and 205 KBD in 2025-2026.
- Total market GIM to be around USD8 per barrel in 2024-2025, and USD9 per barrel in 2026.
- Total capital spending to be totaling around THB11.5 billion during 2024-2026

#### **RATING OUTLOOK**

The "stable" outlook reflects our expectation that the linkage between IRPC and PTT will remain intact, and IRPC's financial performance to gradually improve while business investment to be prudent to keep the level of cash generation against debt obligations within our forecast range.

#### **RATING SENSITIVITIES**

A revision to the company rating on IRPC is subject to changes in its SACP and/or its strategic relevance to the PTT Group.

We could revise the SACP upward if we see IRPC's performance improves considerably, which translates into enhanced cash flow and stronger financial profile. This could potentially result from solidified GIM from a faster pace of recovery in the petrochemical business. Conversely, we could revise the SACP downward if IRPC's performance drastically falls short of our estimates, or the company carries out aggressive debt-funded investments that lead to a material deterioration in its financial profile.

According to TRIS Rating's "Group Rating Methodology", any material changes in the linkage between IRPC and PTT that change our view on the group status and degree of support from PTT, could also impact the rating uplift from the company's SACP.

**COMPANY OVERVIEW**

IRPC formerly known as Thai Petrochemical Industry PLC (TPI) was founded by Leophairatana family in 1978. TPI had been listed on the Stock Exchange of Thailand (SET) in 1995. The company suffered from financial crisis in 1997 and entered rehabilitation in 2000. After the successful rehabilitation in 2006, PTT group has become the major shareholder of IRPC. PTT has direct and indirect 48% shareholding in IRPC.

IRPC owns and operates fully integrated petrochemicals complex in Rayong. The company operates through three businesses segments: Petroleum, Petrochemical, Utilities and Others.

In 2023, IRPC generated THB299 billion in net sales revenue. The Petroleum and Petrochemical units were the primary contributors to sales revenue, accounting for 80.7% and 17.8% of total sales revenue, respectively.

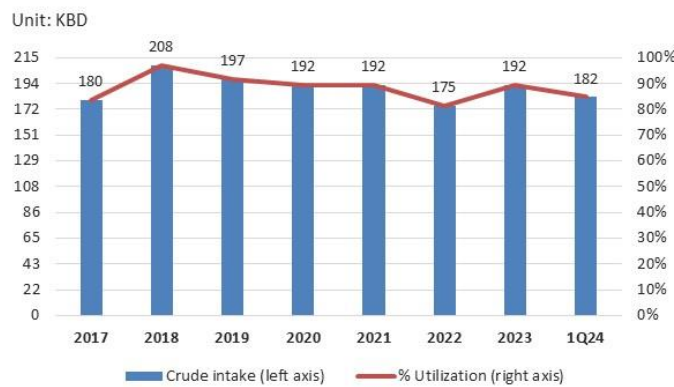
Petroleum business: IRPC’s refinery has a total crude intake capacity of 215,000 barrels per day (bpd). Additionally, IRPC’s Lube Base Oil plant has a total capacity of 320 kilotons per annum (KTA), and the associated asphalt plant has a total capacity of 600 KTA.

Petrochemical business: IRPC has upstream petrochemical products capacity both for olefins and aromatics chains. Olefins main capacities consist of Ethylene (433 KTA), Propylene (732 KTA), and Butadiene (56 KTA). Aromatics main capacities consist of Benzene (114 KTA), Toluene 132 (KTA), and Mixed Xylene 121 KTA. Upstream capacities are mostly used as feedstocks for IRPC’s downstream petrochemical plants both for polyolefins and polystyrenics. Polyolefins main capacities consist of PP (775 KTA), High Density Polyethylene (HDPE, 140 KTA) while polystyrenics main capacities consist of ABS (119 KTA), Styrene-acrylonitrile (105 KTA), Polystyrene (125 KTA), and Expandable Polystyrene (48 KTA).

Utilities and other businesses include generation and distribution of power and steam, as well as basic utilities such as wastewater management. IRPC has a cogeneration power plant with total capacity of 307 megawatts (MW) for both internal usage and selling to external users. The company also has 21-MW floating solar power. In addition, IRPC also provides Port and Tank services.

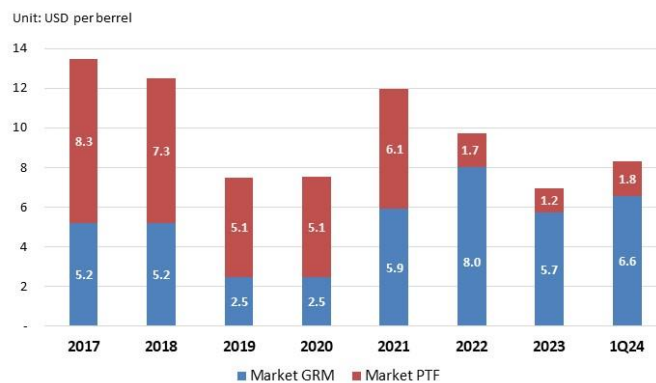
**KEY OPERATING PERFORMANCE**

**Chart 1: Crude intake and % utilization**



Source: IRPC

**Chart 2: Market GRM and Market PTF**



Source: IRPC

## FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS\*

Unit: Mil. THB

	Jan-Mar 2024	-----Year Ended 31 December -----			
		2023	2022	2021	2020
Total operating revenues	79,442	319,592	325,343	256,148	175,224
Earnings before interest and taxes (EBIT)	2,552	(1,508)	(3,805)	18,636	(4,163)
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	4,554	7,034	4,146	26,641	4,715
Funds from operations (FFO)	4,039	4,402	2,026	24,019	2,660
Adjusted interest expense	500	2,591	2,088	1,850	2,039
Capital expenditures	809	12,069	8,899	3,061	3,666
Total assets	195,589	192,661	198,187	190,492	173,491
Adjusted debt	75,155	69,878	73,302	54,377	57,745
Adjusted equity	77,673	76,122	79,678	87,712	75,666
<b>Adjusted Ratios</b>					
EBITDA margin (%)	5.7	2.2	1.3	10.4	2.7
Pretax return on permanent capital (%)	0.2 **	(1.0)	(2.5)	12.6	(2.9)
EBITDA interest coverage (times)	9.1	2.7	2.0	14.4	2.3
Debt to EBITDA (times)	8.7 **	9.9	17.7	2.0	12.2
FFO to debt (%)	8.0 **	6.3	2.8	44.2	4.6
Debt to capitalization (%)	49.2	47.9	47.9	38.3	43.3

\* Consolidated financial statements

\*\* Annualized with trailing 12 months

## RELATED CRITERIA

- Group Rating Methodology, 7 September 2022
- Corporate Rating Methodology, 15 July 2022
- Key Financial Ratios and Adjustments for Corporate Issuers, 11 January 2022
- Issue Rating Criteria, 15 June 2021

**IRPC PLC (IRPC)**

<b>Company Rating:</b>	A-
<b>Issue Ratings:</b>	
IRPC259A: THB4,000 million senior unsecured debentures due 2025	A-
IRPC265A: THB4,000 million senior unsecured debentures due 2026	A-
IRPC265B: THB500 million senior unsecured debentures due 2026	A-
IRPC265C: THB2,503 million senior unsecured debentures due 2026	A-
IRPC265D: THB700 million senior unsecured debentures due 2026	A-
IRPC275A: THB1,000 million senior unsecured debentures due 2027	A-
IRPC275B: THB6,000 million senior unsecured debentures due 2027	A-
IRPC285A: THB2,000 million senior unsecured debentures due 2028	A-
IRPC285B: THB2,852.5 million senior unsecured debentures due 2028	A-
IRPC285C: THB900 million senior unsecured debentures due 2028	A-
IRPC295A: THB750 million senior unsecured debentures due 2029	A-
IRPC305A: THB2,803.5 million senior unsecured debentures due 2030	A-
IRPC305B: THB200 million senior unsecured debentures due 2030	A-
IRPC309A: THB1,300 million senior unsecured debentures due 2030	A-
IRPC315A: THB2,000 million senior unsecured debentures due 2031	A-
IRPC325A: THB1,500 million senior unsecured debentures due 2032	A-
IRPC335A: THB1,841 million senior unsecured debentures due 2033	A-
IRPC335B: THB200 million senior unsecured debentures due 2023	A-
IRPC345A: THB2,250 million senior unsecured debentures due 2034	A-
IRPC359A: THB2,700 million senior unsecured debentures due 2035	A-
IRPC365A: THB2,000 million senior unsecured debentures due 2036	A-
<b>Rating Outlook:</b>	Stable

**TRIS Rating Co., Ltd.**

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