

S-OIL Corporation 4Q 2022 Results

February 2023



Highlights



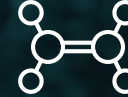
332.6 billion Won
Income before taxes in 4Q

The Company reports -157.5 billion Won of operating income due to oil price decline. But, refining and lube margins maintained solid levels. Income before taxes in 4Q posted 332.6 billion Won thanks to consistent FX risk management



**China's Reopening
amid Refining Facility
Shortage**

Expected rebound in China's domestic fuel demand, along with the reopening progress, is expected to put a constraint on its fuel export to global fuel market, which is under persistent refinery shortage



Shaheen Project

Shaheen Project's expansion into chemicals and industry leading competitiveness will enable another leap forward in profit generation capacity

DISCLAIMER

Financial results for 4Q 2022 are provisional and subject to change according to the outside independent auditors' review.

This presentation contains forward-looking statements that are based on our current expectation, assumptions, estimates and projections about S-OIL and the refinery industry. We caution you not to place undue reliance on any forward-looking statement which may involve various risks and uncertainties.

Please also note that although we believe that the assumptions on which our forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate, and, as a result, the forward-looking statements based on those assumptions could be incorrect. Except as required by law, we do not undertake to release the results of any revisions of these forward-looking statements to reflect future events or circumstances.



4Q 2022 Performance & Outlook

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4Q 2022 Performance & Outlook

- 4Q 2022 Financial Result
- Financial Status
- Refining
- Petrochemical
- Lube

4Q 2022 Financial Result

(Unit: bil. Won)	4Q 22	3Q 22	QoQ	4Q 21	2022	2021
Revenue	10,594.0	11,122.6	4.8%↓	8,291.1	42,446.0	27,463.9
Operating Income	-157.5	511.7	Turn to loss↓	391.3	3,408.1	2,140.9
(Margin)	-1.5%	4.6%	-	4.7%	8.0%	7.8%
Refining	-379.6	78.8	Turn to loss↓	228.2	2,346.5	908.2
Petrochemical	-57.4	56.1	Turn to loss↓	-63.7	-48.9	243.8
Lube	279.5	376.7	25.8%↓	226.8	1,110.5	989.0
Finance & Other Income	490.1	-538.1	-	-2.3	-506.6	-262.9
- Net Interest gain	-35.1	-34.3	-	-22.9	-120.2	-100.8
- Net F/X gain*	516.4	-520.0	-	2.7	-355.3	-263.3
- Others	8.8	16.2	-	17.9	-31.1	101.2
Income before tax	332.6	-26.4	Turn to Profit↑	389.0	2,901.5	1,878.0
Net Income	231.3	-9.6	Turn to Profit↑	288.5	2,106.8	1,378.5

* Including gain/loss from F/X derivatives for hedging

Operating Income

- -157.5 bil. Won in operating income (QoQ -669.2)
 - Refining earnings turned negative due to one-off impact caused by decline in oil price
 - Solid contribution from refining and lube margins continued
 - Inventory-related impact
4Q: -433.8 bil. Won
(3Q: -158.1 bil. Won)

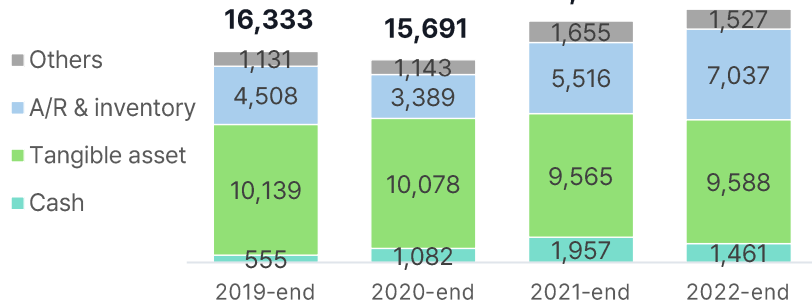
Income before Tax

- 332.6 bil. Won of income before tax (QoQ +359.0)
 - Decrease of ₩/\$ rate
 - 4Q: -167.5 ₩/\$
 - 3Q: +141.9 ₩/\$
 - Consistent FX risk management policy resulted in net positive FX impact for the full-year 2022

Financial Status

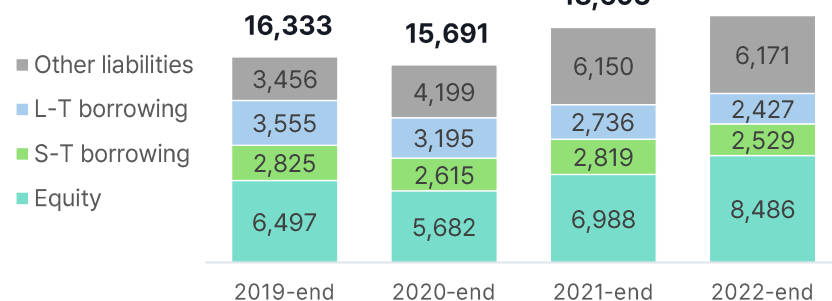
Assets

(Unit: bil. Won)

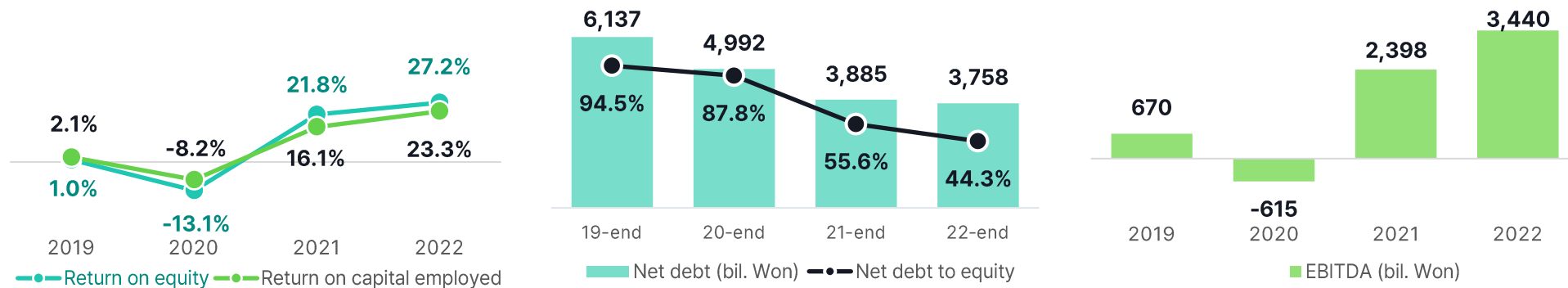


Liabilities & Equities

(Unit: bil. Won)



Financial Highlights

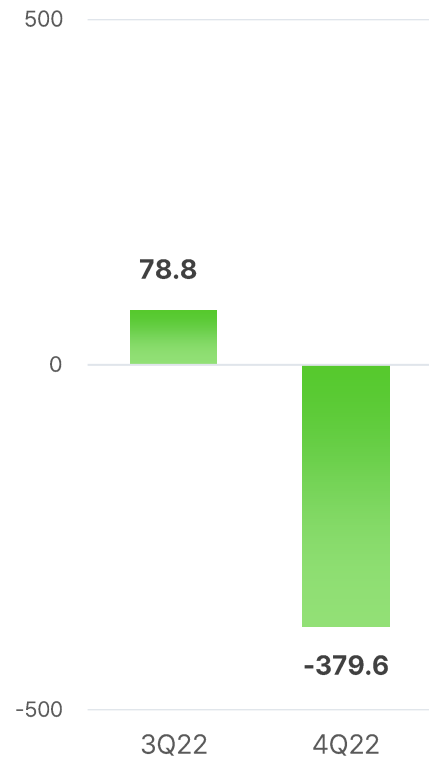


* Net debt: Short-term borrowing + Long-term borrowing + Lease obligation - Cash

* EBITDA: Income before tax + Net interest expense + Depreciation (Excluding catalyst amortization cost)

Refining

Operating Income (Unit: bil. Won)



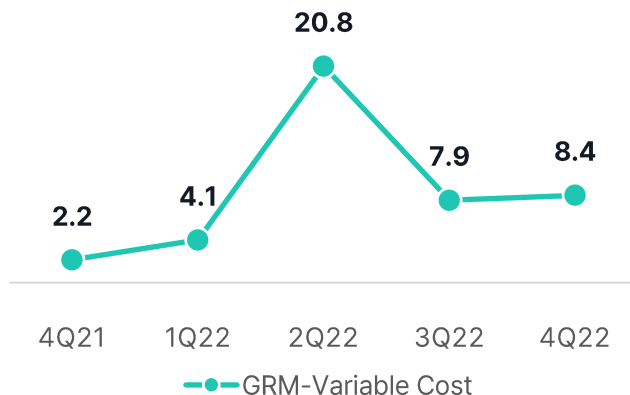
4Q 22 Market Environment

- **Regional refining margin** remained solid due to winter heating demand and continued air travel recovery in spite of Chinese fuel products export increase
- **Crude oil price** fell to its lowest level last year in December owing to global economic recession fears and resurgence of COVID cases in China

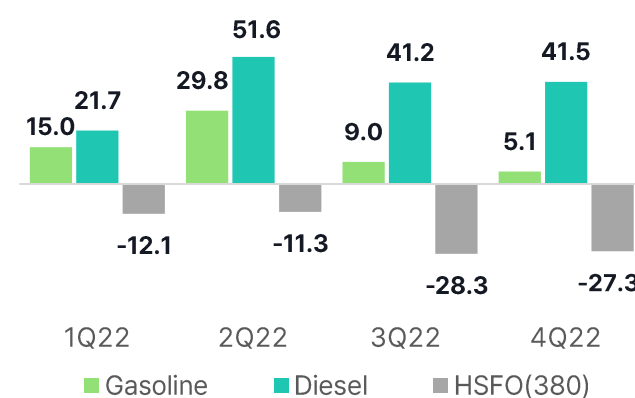
2023 Outlook

- **Regional refining margin** is expected to maintain an elevated level over the past cycles before 2022 amid on-going refinery shortage despite woes on recessionary slowdown of demand growth
 - EU's import ban on Russian refining products, recovery of China's domestic demand after reopening and global jet fuel demand are anticipated to additionally support refining margin throughout the year

Singapore Margin (Unit:\$/bbl)

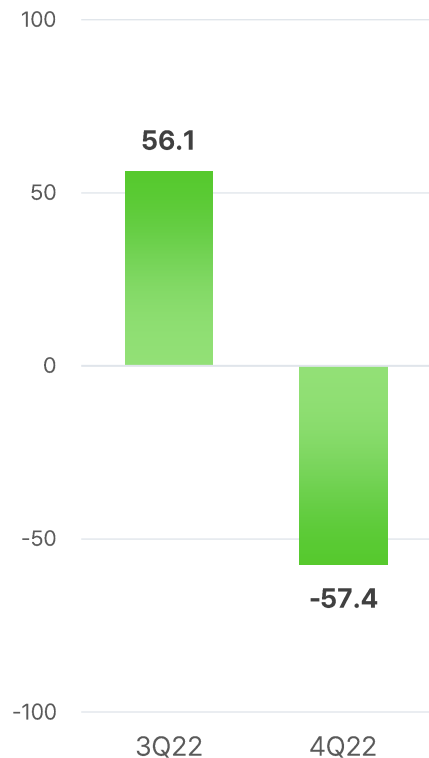


Products Spread over Dubai (Unit:\$/bbl)



Petrochemical

Operating Income (Unit: bil. Won)



4Q 22 Market Environment

Aromatics

- PX spread eased owing to incremental supply from new PX capacities and demand recovery being hampered by COVID in China

Olefin downstream

- PP and PO demand remained weak caused by stagnant end-users' buying sentiment amid deteriorating global economic conditions
 - PO spread was further pressured down by new plants' start-up in China

2023 Outlook

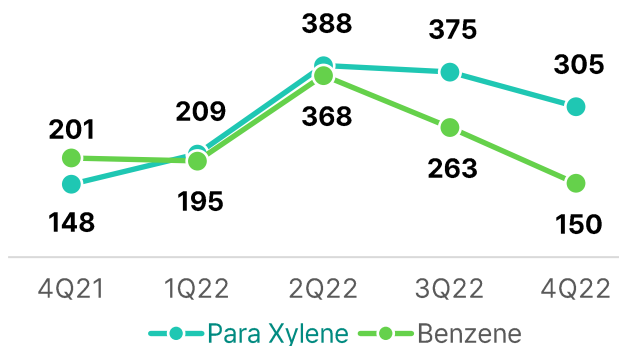
Aromatics

- PX spread is expected to maintain at healthy level despite large-scale PX capacity addition, supported by PTA capacity addition and post-COVID downstream demand recovery in China

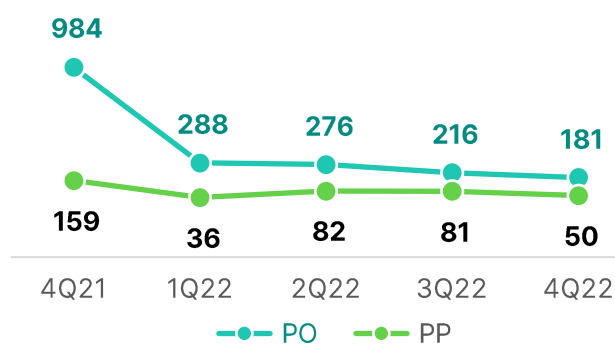
Olefin downstream

- PP and PO markets are expected to recover gradually in tandem with China's reopening, with potential upside depending on the pace of full-fledged recovery of Chinese economy

Aromatics Spread over Naphtha (Unit : \$/ton)

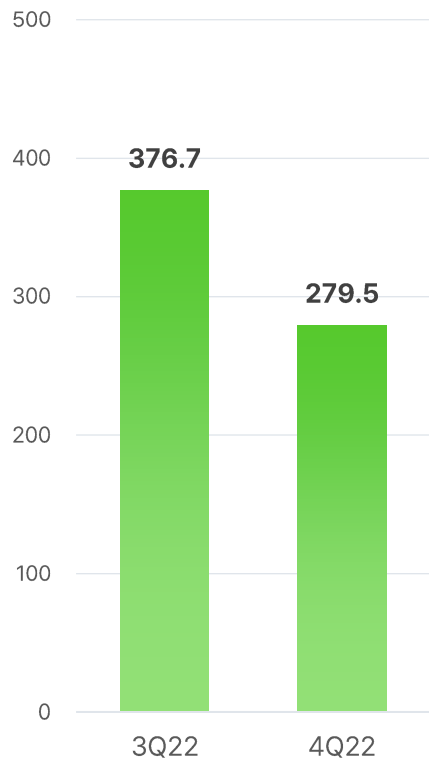


Olefin Spread over Propylene (Unit : \$/ton)



Lube

Operating Income (Unit: bil. Won)



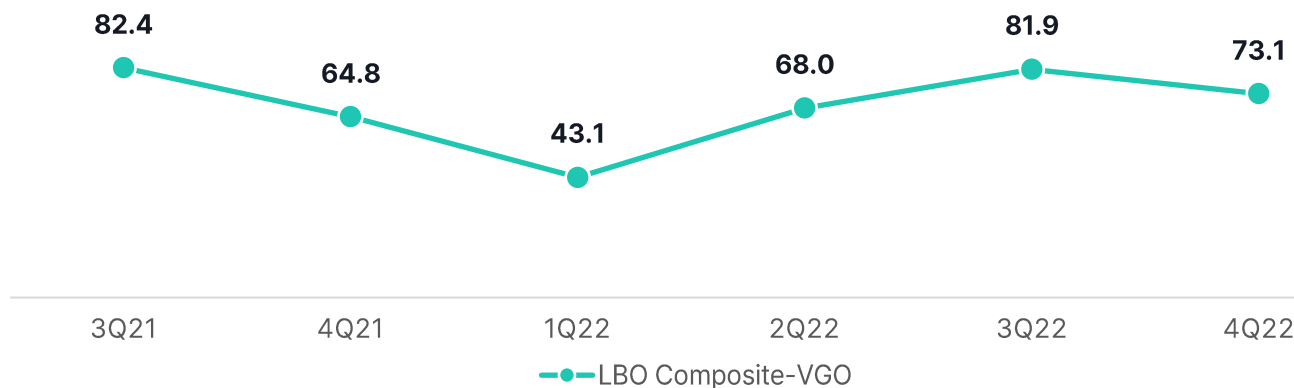
4Q 22 Market Environment

- **LBO fundamental** moderated due to seasonally softer demand
 - Demand for high-quality products remained at firm level
- **LBO spread** stayed at robust level under lowered feedstock cost

2023 Outlook

- **LBO fundamental** is forecast to stay at robust level which is similar to the last year's level with no new capacity addition and healthy demand
 - Strong demand is anticipated ahead of spring lubricant change season and summer driving season
- **LBO spread** is expected to maintain a solid level amid sound fundamentals

Products Spread (Unit : \$/bbl)



Key Business Update

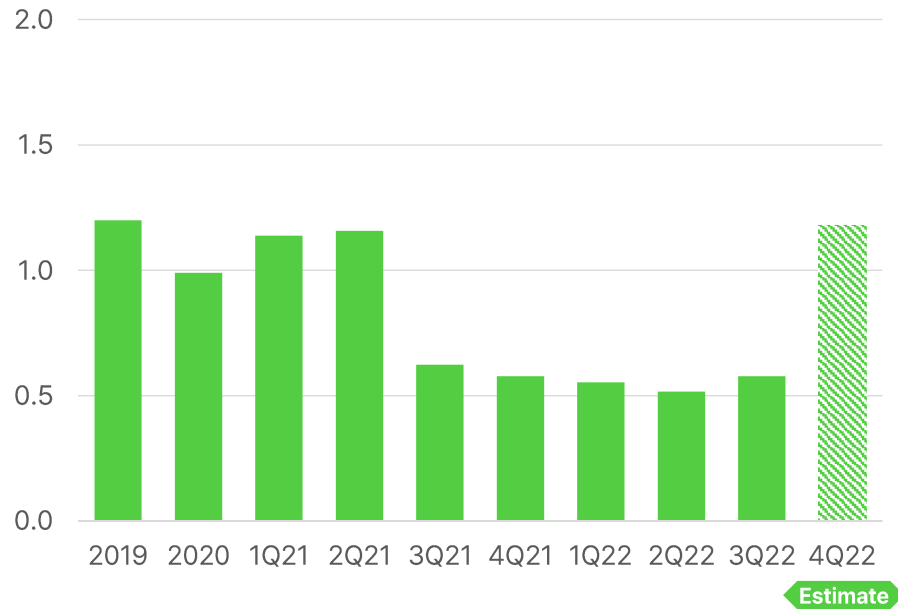
- China's post-COVID Reopening
- Refining Facility Shortage
- Shaheen Project

China's post-COVID Reopening

- China's domestic fuel demand is likely to see meaningful recovery in line with its reopening progress, which could keep more barrels for domestic demand and reduce export requirement

China's Light Fuel Export Historical Trend

(Unit : mil. B/D)



Source: IHS, FACTS, WoodMac, ESAI, The Company

China's Light Fuel Demand Forecast by Institutions

(Unit : mil.B/D)

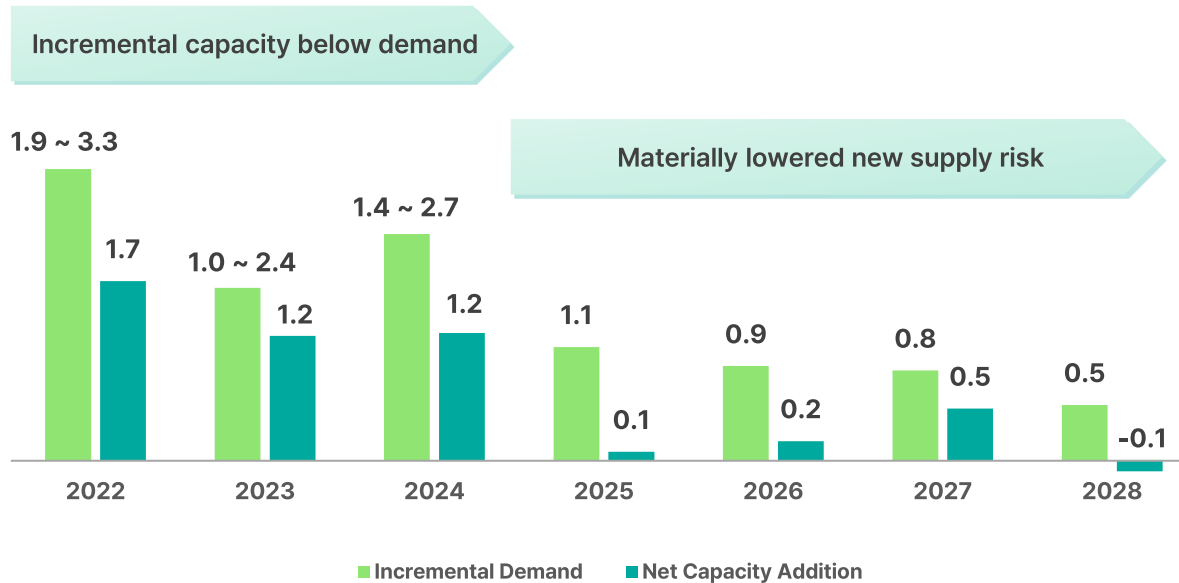


Refining Facility Shortage

- Despite the near term macro-economic uncertainties, long-term shortage of refining facility is forecast to persist
- In 2023, increase in effective throughput from new capacity is expected to be gradual, which will help tighten the balance

Global Demand Growth & Net Capacity Addition

(Unit : mil. B/D)



Major New Refining Capacity Timeline

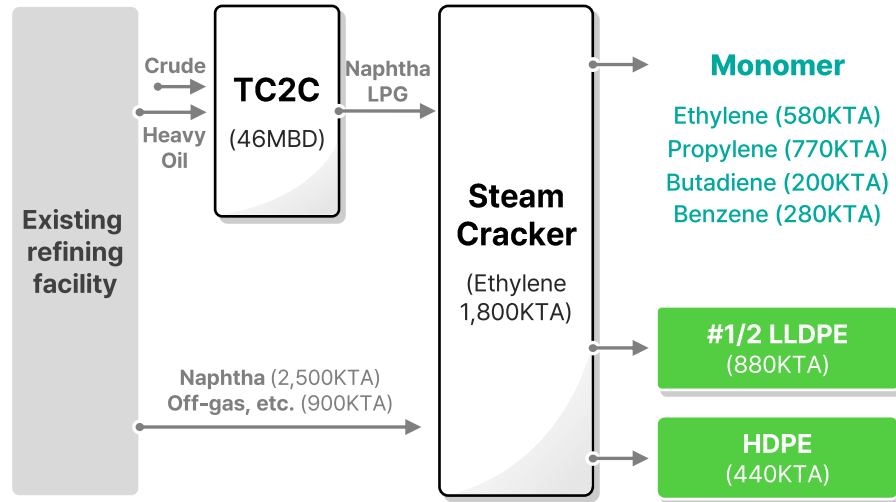
(Unit : mil. B/D)

Refinery	Country	Expected Start-up	Capacity (kbd)
Al-Zour	Kuwait	'22.4Q	615
Beaumont (Texas)	USA	'23.2Q	250
Duqm	Oman	'23.2Q	230
Dangote	Nigeria	'23.2Q~'23.4Q	650

Shaheen Project

- Shaheen Project is a pivotal expansion into chemical business with industry-leading competitiveness, which will enable another leap forward in future profit generation capacity
- Following the final investment decision in Nov 2022, the Company has commenced EPC work in full swing

Configuration



Target Schedule

Mechanical Completion by 1H 2026

Core competitiveness

- 1 Refining & chemical integration synergy in feedstock, facility and operation
- 2 New TC2C technology to maximize chemical yield
- 3 Industry-leading energy efficiency and carbon intensity
- 4 1st quartile cost competitiveness in NE Asia

Estimated EBITDA margin impact

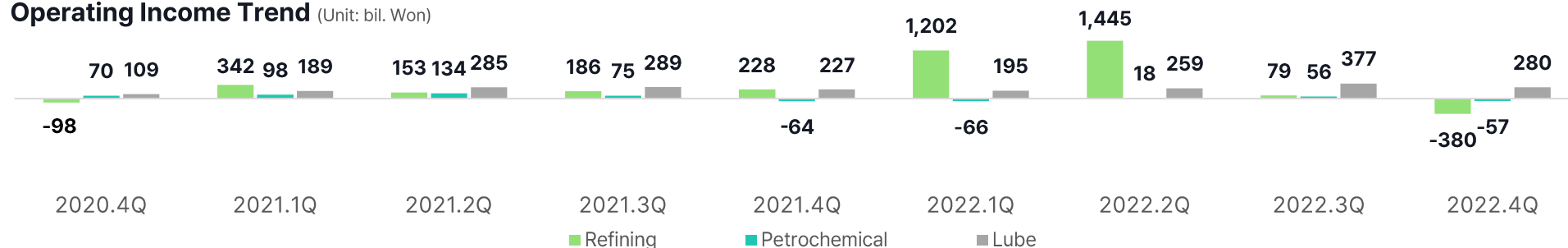
↑ 4.5+α \$/B in 2027

Supplementary Information

Performance by Business Segment

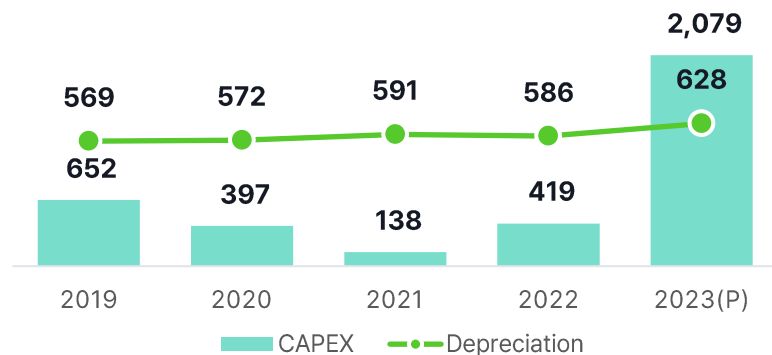
Segment	(Unit: bil. Won)	4Q 22	3Q 22	QoQ	4Q 21	2022	2021
Refining	Revenue	8,558.0	9,015.7	5.1%↓	6,322.1	34,004.9	20,190.8
	Operating Income	-379.6	78.8	Turn to loss↓	228.2	2,346.5	908.2
	(Margin)	-4.4%	0.9%		3.6%	6.9%	4.5%
Petrochemical	Revenue	1,195.5	1,161.5	2.9%↑	1,250.1	5,025.5	4,657.4
	Operating Income	-57.4	56.1	Turn to loss↓	-63.7	-48.9	243.8
	(Margin)	-4.8%	4.8%		-5.1%	-1.0%	5.2%
Lube	Revenue	840.4	945.4	11.1%↓	718.8	3,415.6	2,615.8
	Operating Income	279.5	376.7	25.8%↓	226.8	1,110.5	989.0
	(Margin)	33.3%	39.8%		31.5%	32.5%	37.8%
Total	Revenue	10,594.0	11,122.6	4.8%↓	8,291.1	42,446.0	27,463.9
	Operating Income	-157.5	511.7	Turn to loss↓	391.3	3,408.1	2,140.9
	(Margin)	-1.5%	4.6%		4.7%	8.0%	7.8%

Operating Income Trend (Unit: bil. Won)



CAPEX & Operation

CAPEX & Depreciation



(Unit: bil. Won)	2021	2022	2023(P)
Shaheen Project	31.0	40.6	1,483.3
Upgrade & Maintenance	66.6	272.0	451.6
Marketing related expenditure	21.8	39.1	60.0
Others	18.1	67.3	84.2
Total CAPEX	137.5	418.9	2,079.1
Depreciation	590.8	586.2	627.8

Maintenances

	2020	2021	2022	2023(P)
Refining	#1 CDU	-	#2 CDU	#3 CDU/CFU
	#2 RFCC	-	#1 RFCC	#2 RFCC/HYC
Petrochemical	PP/PO	-	#1 PX/PO	#2 PX/PP
Lube	#1 HDT	-	-	-

Utilization Rate

	2020	2021	2022	4Q 22
CDU	96.1%	97.8%	92.6%	93.8%
RFCC/HYC	91.9%	97.0%	92.3%	91.8%
PX Plants	88.0%	91.6%	80.2%	87.9%
PP/PO Plants	78.0%	102.8%	78.7%	88.2%
Lube Plants	88.4%	99.2%	94.6%	91.4%

Long-term Margin Trend

Refining

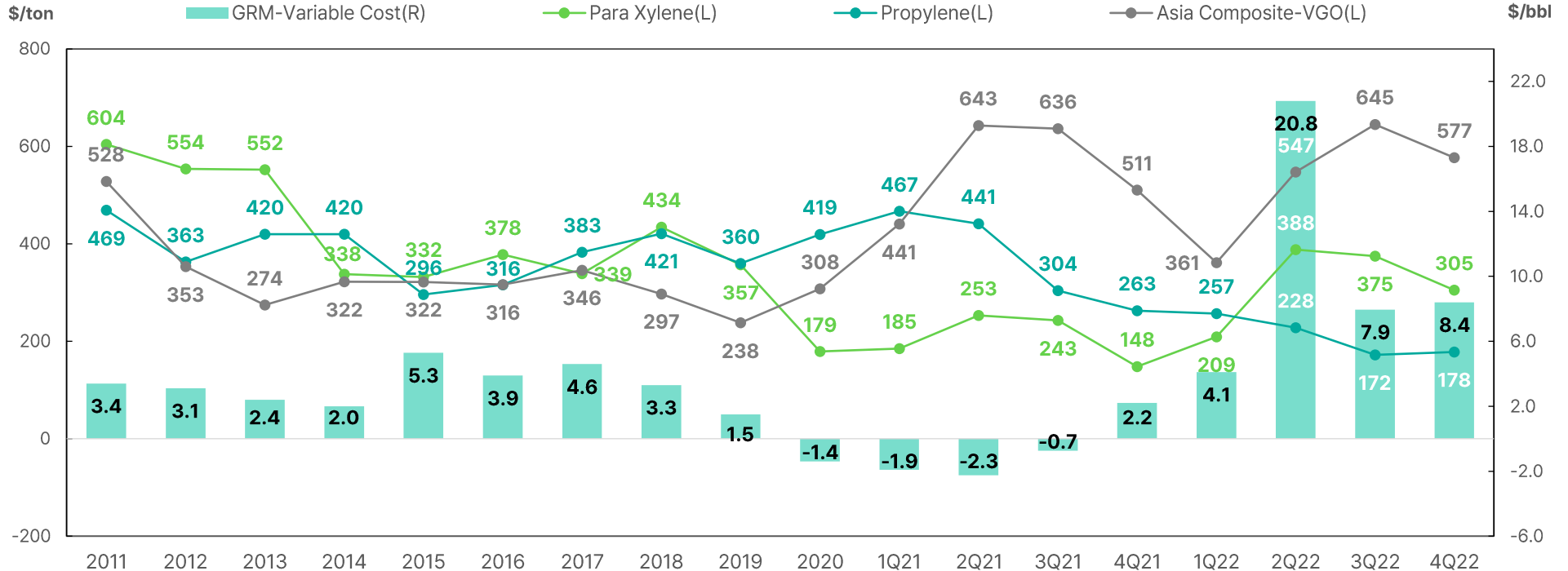
Singapore margin

Petrochemical

Product spread (vs. Naphtha)

Lube base oil

Product spread

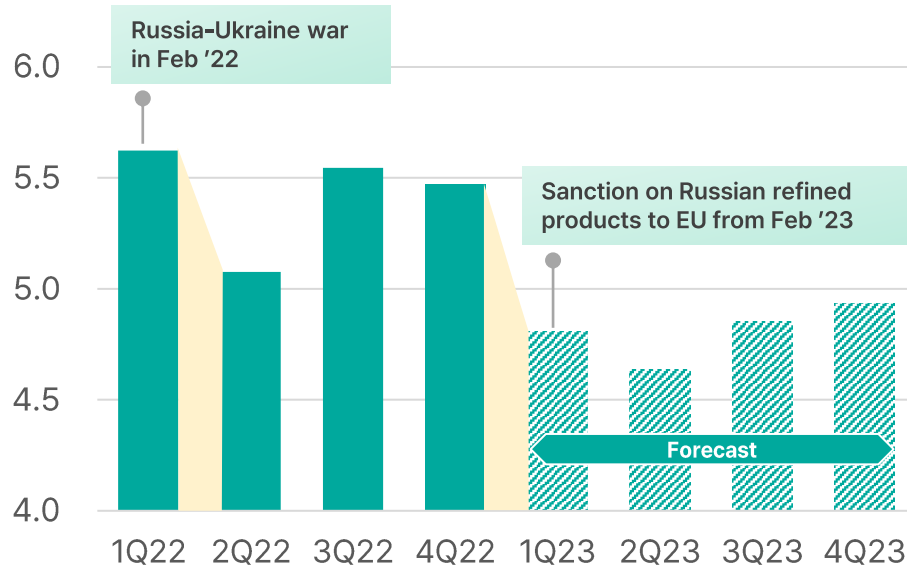


Potential Reduction of Russian Refining Production

- Once EU's embargo on Russian refined product takes effect on Feb 5th, Russia is forecast to reshuffle some diesel exports but be forced to reduce refining production as well

Russian Refining Production Forecast by Institutions

(Unit : mil. B/D)



Source: IHS, FACTS, WoodMac, ESI, The Company

EU Embargo on Russian Oil/Refined Products Imports

Crude Oil

Effective 5 December 2022

- Waterborne crude: banned
- Pipeline crude: Partially allowed to some in-land countries

Refined Products

Effective 5 February 2023

- Products under HS 2710 code: banned
 - Naphtha, gasoline, diesel, kerosene, residual fuel oil, base oils, lubricants, asphalt, vacuum gasoil, coke, etc.

Insurance Ban

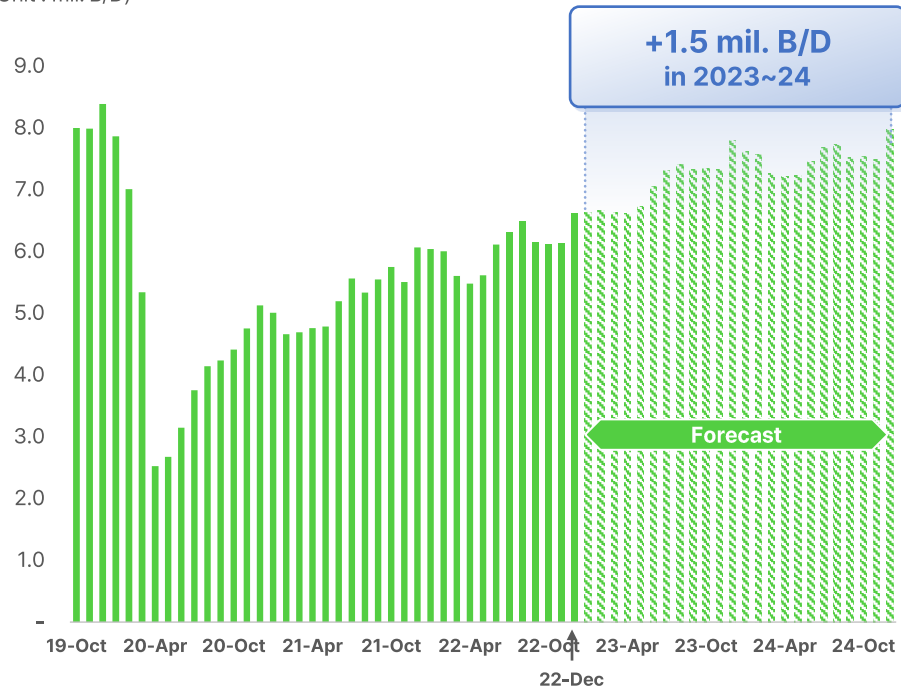
- Prohibition to provide insurance and reinsurance services to ships carrying Russian crude oil (exceeding \$60/B price cap) and refined products (price cap under discussion) to 3rd-party countries

Refined Product Demand Forecast Update

- Centered on China's local demand and global jet fuel demand, global oil demand is continuing recovery to the pre-pandemic
- Driven by the re-opening demand recovery, global oil demand growth is expected to exceed pre-pandemic averages until '24

Global Jet Fuel Demand Recovery

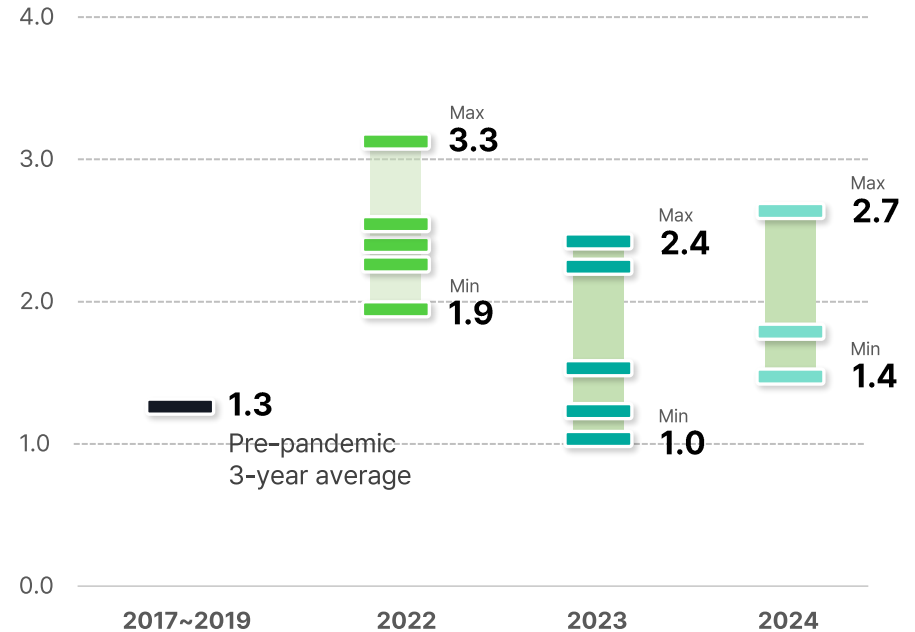
(Unit : mil. B/D)



Source: IHS, FACTS, WoodMac, The Company

Global Oil Demand Growth Outlook by Major Institutes

(Unit : mil. B/D)



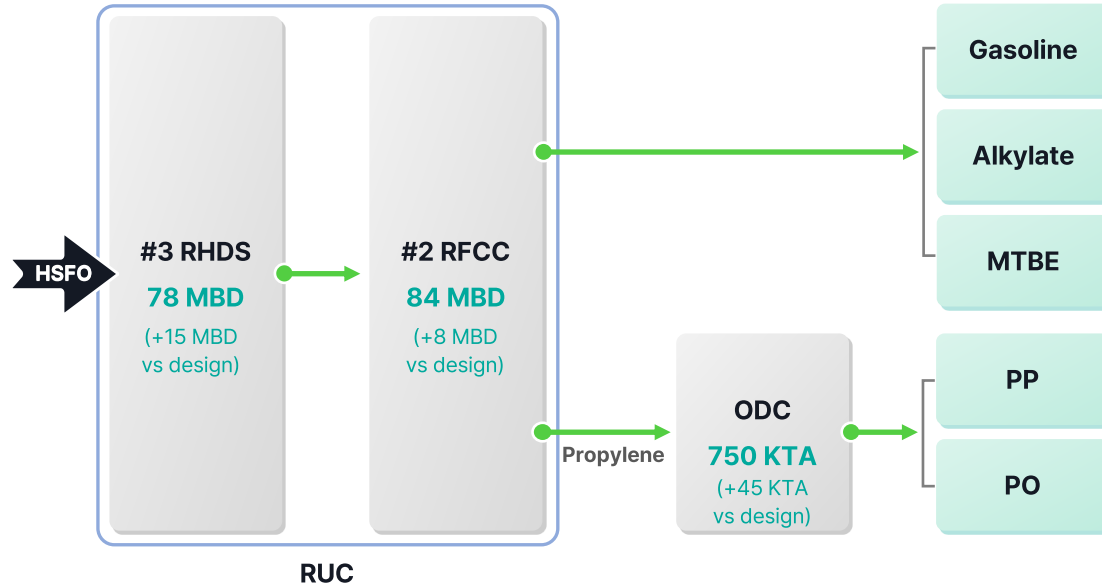
Source: EIA (Jan), OPEC (Jan), IHS (Dec), FACTS (Jan), WoodMac (Jan)

Enhanced Profitability by RUC/ODC

- S-OIL is one of the best positioned to benefit from refining margin strength with superior facility competitiveness
- Profitability of RUC has remarkably widened by upgrading heavily discounted HSFO

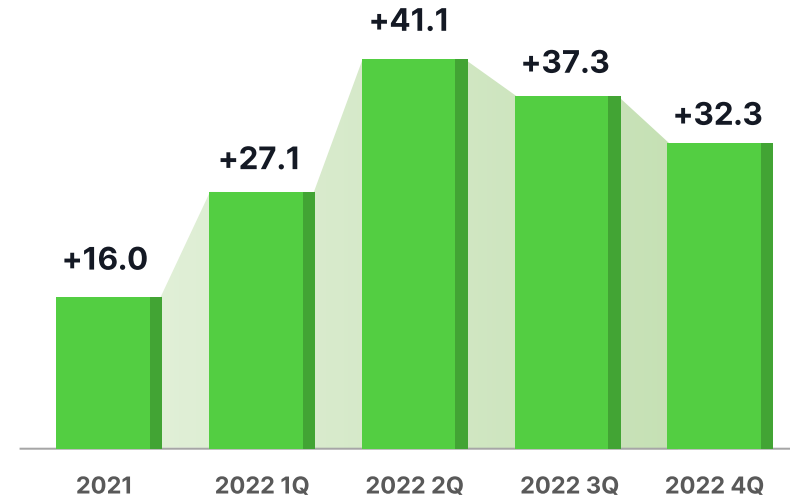
RUC/ODC Project

(Residue Upgrading Complex & Olefin Downstream Complex)



Gasoline Spread over HSFO

(Unit : \$/bbl)



S-OIL's Green Initiatives

- Green Initiatives set forth strategic directions to deliver sustainable and competitive returns as we transition to a greener future maintaining focus on our unique capabilities



MOU with Saudi Aramco on Low Carbon Energy Solutions

In January 2022, S-OIL signed four MOUs with Saudi Aramco to enhance mutual partnership and alignment in pursuing carbon neutral and eco-friendly energy business covering clean hydrogen, thermal crude-to-chemical(TC2C), venture investment, and R&D



Collaboration for Clean Hydrogen Business

- Conduct feasibility study for blue ammonia and blue hydrogen supply and distribution in Korea
- Evaluate potential partnership models, and development plans for cooperation of the production and supply of blue ammonia and blue hydrogen

Deployment of the First Commercial Scale TC2C Technology

- Exchange information related to Saudi Aramco's TC2C technology
- Explore feasibility of potential collaboration related to Shaheen project's development & execution
- Explore Value Engineering opportunities and share operational experience



Mutual Investment into Ventures in New Energy & De-carbonization Sectors

- Explore promising Korean ventures and co-investment with Aramco Ventures in areas such as hydrogen value chain, carbon capture utilization & storage (CCUS)

R&D Collaboration on Low Carbon Energy Solutions

- Explore opportunities and feasibility of high-efficient hydrogen production with CCUS, carbon neutral e-fuel, and plastic recycling

**Dow Jones
Sustainability Indices**

In Collaboration with RobecoSAM



S-OIL is the only company named to DJSI World for the 12th consecutive year among Asia Pacific refiners and the winner of Best Excellence Company in 2021 ESG awards from Korean Corporate Governance Service.

S-OIL Investor Relations

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