

# Presentation on Results for FY2022

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# ■ Highlights

# Results for FY2022

## ■ Summary

- ✓ Operating + equity income (segment income) decreased sharply, by ¥141.1 billion y-o-y, due to a large decrease in inventory impact following the downtrend in crude oil prices
- ✓ Segment income excluding inventory impact increased by ¥36.4 billion y-o-y, as soaring coal market conditions in the resources business, partially offset by the impact of decreased margins on non-core products such as naphtha as well as increased fuel costs in the petroleum business
- ✓ Net income excluding inventory impact increased by ¥97.3 billion y-o-y, following a loss on write-down of long-term loans receivable to Nghi Son (NSRP) recorded in FY21 and due to proceeds from asset sales in FY22

[¥ billions]

	FY2021	FY2022	Change
<b>Operating Income + Equity Income</b>	449.5	308.4	(141.1)
<i>Inventory impact</i>	233.2	55.7	(177.5)
<i>Exc. inventory impact</i>	216.2	252.7	36.4
<b>Net Income Attributable to Owners of the Parent</b>	279.5	253.6	(25.9)
<i>Exc. inventory impact</i>	117.7	215.0	97.3

# Forecasts for FY2023 and Shareholder Returns

## ■ Summary

- ✓ While trends in the business environment remain unclear amid concerns of an economic slowdown due to global inflation and fiscal tightening by various countries in response, this has not affected our new medium-term plan (FY23-25) and operating + equity income excluding inventory impact of FY23 will exceed the medium-term plan target\*
- ✓ Forecasting a y-o-y decrease in income, in reaction to the rise in the coal market observed during FY22

[¥ billions]

	FY2022	FY2023	Change
<b>Operating Income + Equity Income</b>	308.4	155.0	(153.4)
<i>Inventory impact</i>	55.7	(30.0)	(85.7)
<i>Excluding inventory impact</i>	252.7	185.0	(67.7)
<b>Net Income Attributable to Owners of the Parent</b>	253.6	100.0	(153.6)
<i>Excluding inventory impact</i>	215.0	120.0	(95.0)

\* operating + equity income excluding inventory impact of FY2023 in medium-term plan is ¥175.0 billions

## ■ Shareholder Returns

### [FY22]

- ✓ Paid annual dividends of ¥120/share (interim: ¥60, FY end: ¥60)
- ✓ The 3-year payout ratio in FY 20-22 was 50.3% of net income excluding inventory impact, including the ¥60 billion share buyback announced in February 2023

### [FY23]

- ✓ We plan to continue providing a 3-year payout ratio of over 50% of net income excluding inventory impact in FY 2023-25, based on stable annual dividends of ¥120/share

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## ■ Results for FY2022

# Key Topics

## ■ Trends in Petroleum Demand and Sales

- ✓ Demand for both core products and jet fuel recovered in FY22 due to easing of COVID-related activity restrictions
- ✓ Total fuel demand will remain flat y-o-y in FY23, as the structural decrease in demand for gasoline will be offset by a diesel oil recovery in demand of cargo transportation
- ✓ Jet fuel has been on a recovery trend since FY20

	FY20	FY21	FY22	FY23 (forecast)
Core products	94.6%	98.6%	<b>100.9%</b>	<b>100.3%</b>
<i>Gasoline</i>	90.4%	99.6%	<b>101.3%</b>	<b>98.7%</b>
Jet fuel	54.2%	126.0%	<b>136.8%</b>	<b>98.5%</b>

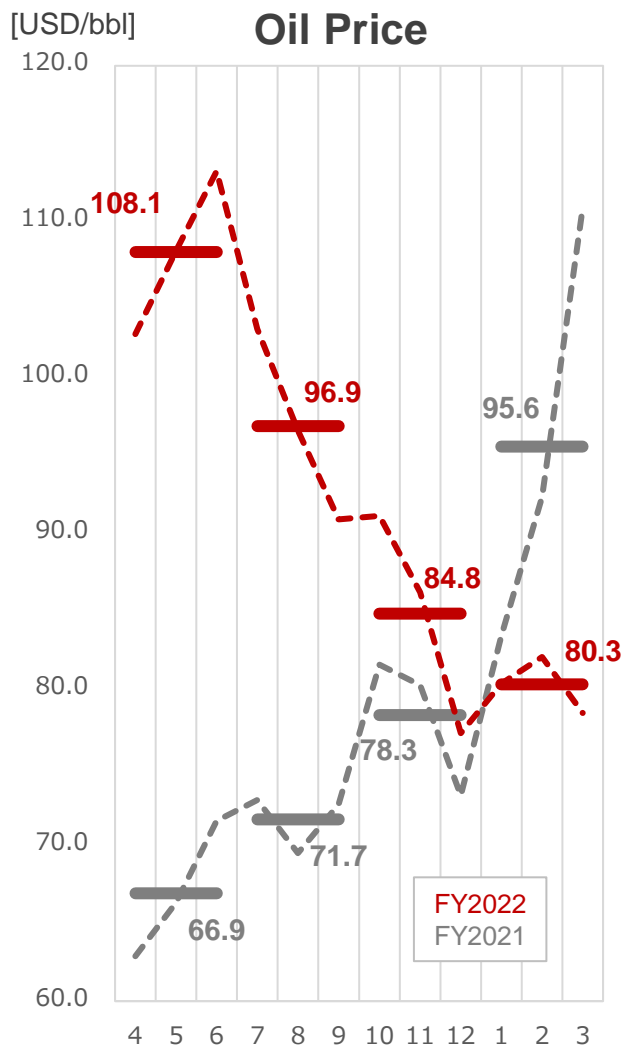
\*Idemitsu sales growth rate (y-o-y)

## ■ Situation of Nghi Son Refinery in Vietnam (FY22-23)

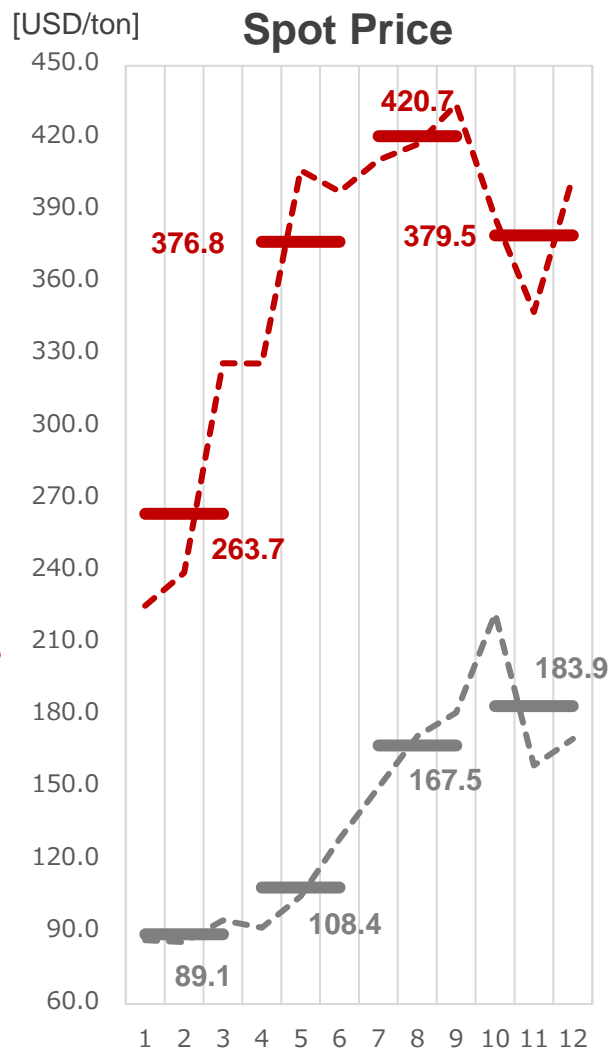
- ✓ Zero equity income/losses for reporting purposes due to gains on reversal of revaluation losses on write-down of long-term loans receivable from FY21
- ✓ Actual operating income excluding the accounting impact was positive, but losses were reported at net income due to an increase in financial expenses. Performance will deteriorate y-o-y in FY23 because of shut down maintenance planned for August-October
- ✓ Aiming to achieve profitability in FY25 by improving facilities through the shut down maintenance, increasing product yield, and increasing crude oil processing volume

# Operating Environment

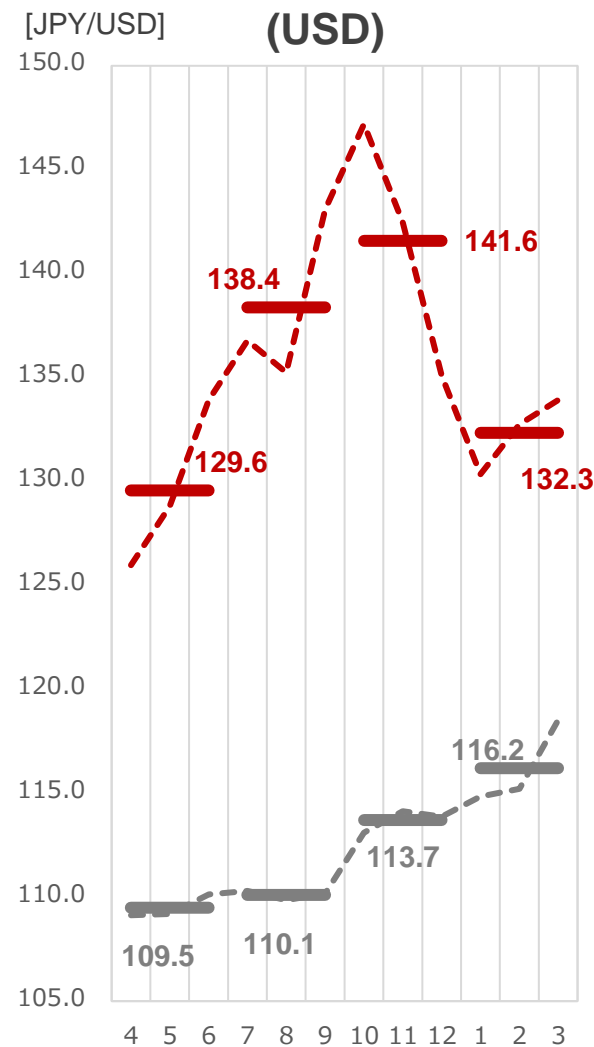
## Dubai Crude



## Australian Coal



## Exchange Rate





# Overview

## ■ Crude Oil/Coal/Exchange Rate

[USD/bbl, USD/ton, JPY/USD]

	FY2021	FY2022	Change	
Crude Oil (Dubai)	78.1	92.5	+14.4	+18.4%
Crude Oil (Brent)*	70.7	101.2	+30.5	+43.1%
Australian Coal Spot Price*	137.3	360.2	+222.9	+162.3%
Exchange Rate (TTM)	112.4	135.5	+23.1	+20.5%

\*Brent prices and Australian coal spot prices are averages based on the calendar year (Jan-Dec).

## ■ Consolidated Income Statement(Summary)

[¥ billions]

	FY2021	FY2022	Change	
Net Sales	6,686.8	9,456.3	+2,769.5	+41.4%
Operating Income	434.5	282.4	(152.0)	(35.0%)
<i>Inventory impact</i>	233.2	55.7	(177.5)	(76.1%)
Equity Income	15.0	26.0	+11.0	+72.9%
<b>Operating Income + Equity Income</b>	<b>449.5</b>	<b>308.4</b>	<b>(141.1)</b>	<b>(31.4%)</b>
<i>Excluding inventory impact</i>	<b>216.2</b>	<b>252.7</b>	<b>+36.4</b>	<b>+16.9%</b>
Ordinary Income	459.3	321.5	(137.7)	(30.0%)
Extraordinary Income/Losses	(71.2)	26.7	+98.0	—
<b>Net Income Attributable to Owners of the Parent</b>	<b>279.5</b>	<b>253.6</b>	<b>(25.9)</b>	<b>(9.2%)</b>
<i>Excluding inventory impact</i>	<b>117.7</b>	<b>215.0</b>	<b>+97.3</b>	<b>+82.7%</b>

# Segment Information

## ■ Operating + Equity Income

[¥ billions]

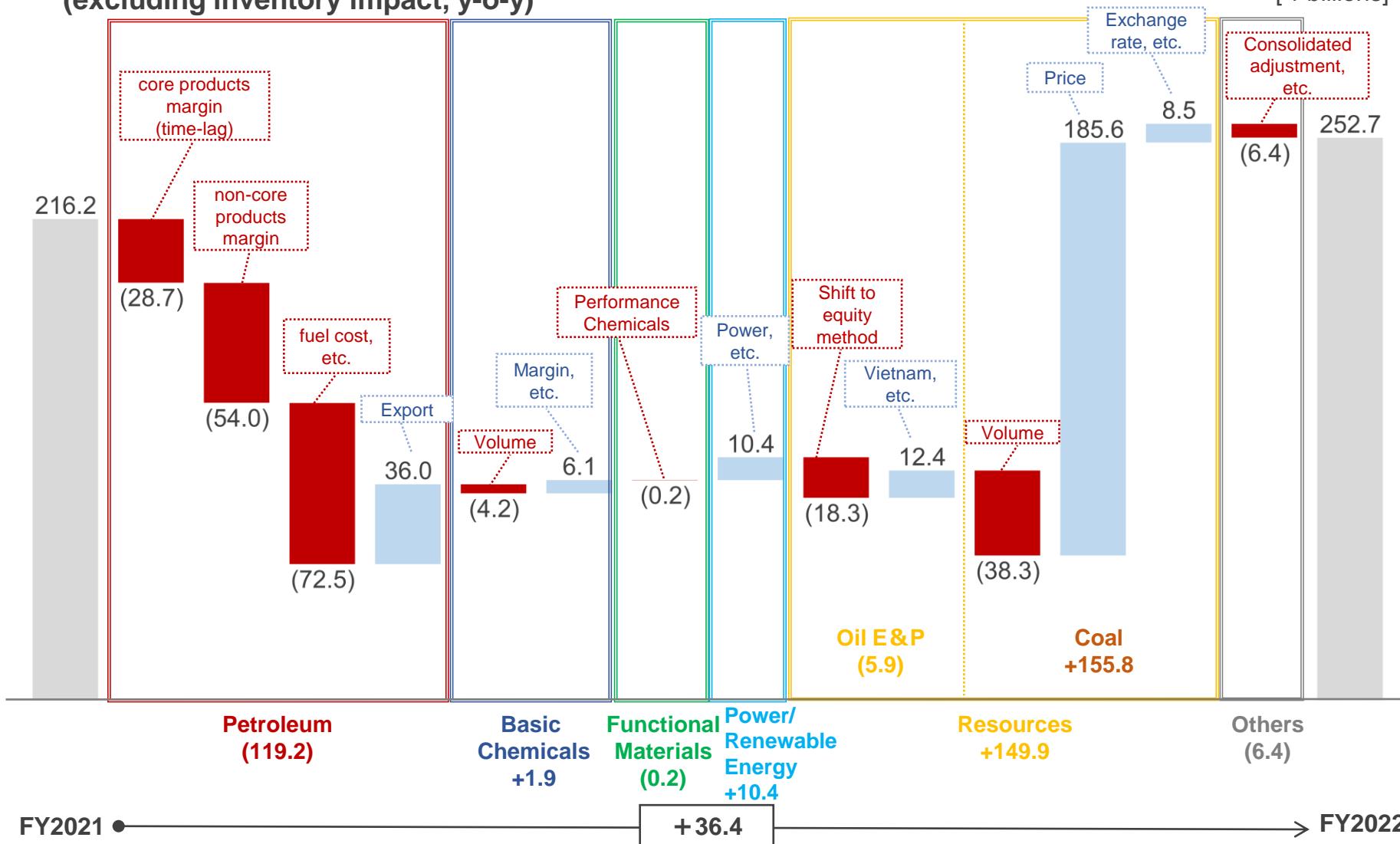
	FY2021	FY2022	Change	
<b>Petroleum</b>	369.7	73.0	(296.7)	(80.2%)
<i>Excluding inventory impact</i>	136.5	17.3	(119.2)	(87.3%)
<b>Basic Chemicals</b>	8.2	10.1	+1.9	+23.2%
<b>Functional Materials</b>	17.1	17.0	(0.2)	(1.0%)
<b>Power and Renewable Energy</b>	(9.9)	0.5	+10.4	—
<b>Resources*</b>	81.0	230.9	+149.9	+185.0%
<i>Oil Exploration and Production</i>	38.7	32.8	(5.9)	(15.3%)
<i>Coal</i>	42.3	198.1	+155.8	+368.4%
<b>Others/Reconciliation</b>	(16.6)	(23.0)	(6.4)	—
<b>Total</b>	449.5	308.4	(141.1)	(31.4%)
<i>Excluding inventory impact</i>	216.2	252.7	+36.4	+16.9%

\*Fiscal year for Coal Oil E&P and Coal included in the Resources Segment end in Dec.

# Segment Information

## Factors Affecting Operating + Equity Income (excluding inventory impact, y-o-y)

[ ¥ billions]



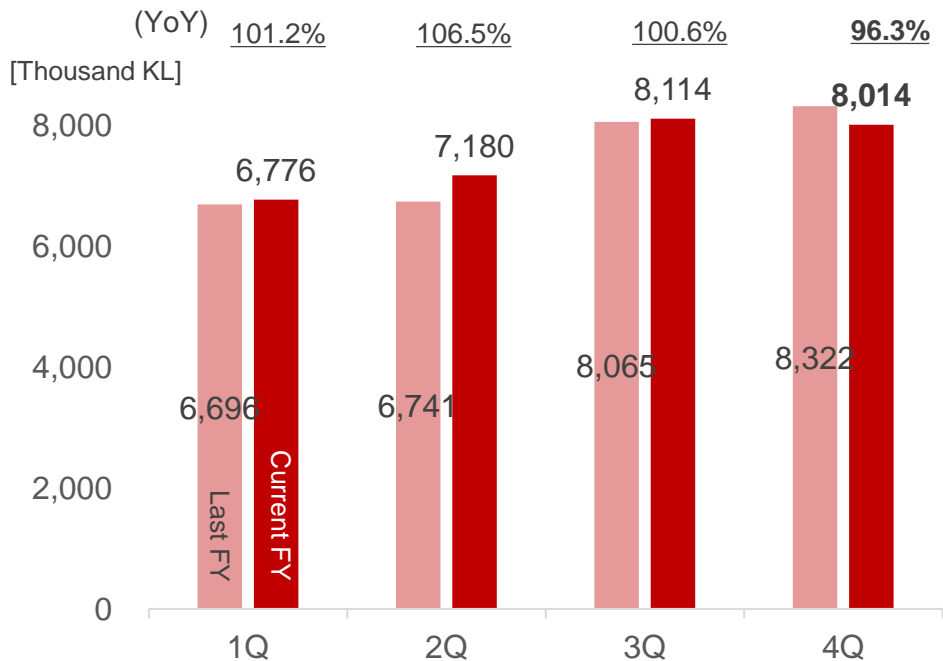
FY2021

FY2022

# Segment Information

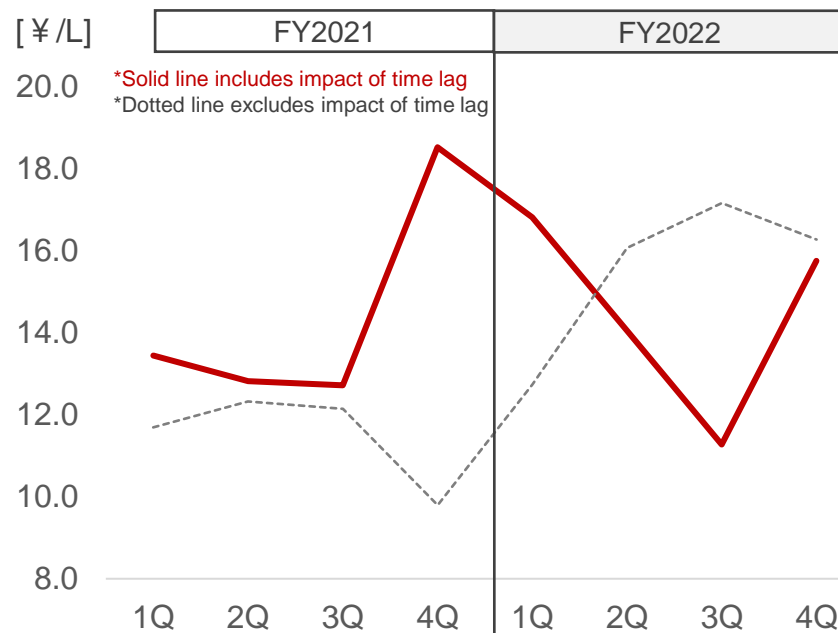
**[Petroleum]** YoY-¥119.2bn (FY21 : ¥136.5bn ➔ FY22 : ¥17.3bn)

[Y-o-y change in Petroleum sales volume (core products)]



[Trends in Domestic Petroleum Product Margin\*]

\*Average margin of gasoline, diesel oil, kerosene, and heavy oil A (domestic spot – crude oil)



- ✓ Core product sales volume decreased y-o-y due to reduced demand for kerosene and heavy fuel oil A under the cold weather in 4Q, but increased y-o-y for the full FY due to easing of COVID-related activity restrictions
- ✓ Income decreased y-o-y due to negative time-lag relating to the fall in crude oil prices, reduced margins on non-core products, increased fuel costs, etc.
- ✓ This was partially offset by improved profitability in exports from an increase in product margins in Singapore

# Segment Information

[Basic Chemicals] YoY +¥1.9bn (FY21: ¥8.2bn ➔ FY22: ¥10.1bn)

- ✓ PX and MX: Product margins improved due to tighter supply/demand balance
- ✓ Partially offset by reduced sales volume and increased fuel costs

[USD/ton]

Product	FY2021		FY2022		Change	
	Price	Margin	Price	Margin	Price	Margin
PX	940	214	1,090	352	+150	+138
MX	828	102	1,01	276	+185	+173
SM	1,231	505	1,180	442	(50)	(62)

[Functional Materials] YoY-¥0.2bn (FY21: ¥17.1bn ➔ FY22: ¥17.0bn)

- ✓ Performance chemicals: Decreased due to reduced spreads for some products
- ✓ Electronic materials: Decreased due to reduced sales volume following decrease in demand for smartphones and TV panels
- ✓ Asphalt: Increased due to reduced raw materials (heavy oil fraction) costs

[Power/Renewable Energy] YoY+¥10.4bn (FY21: -¥9.9bn ➔ FY22 : ¥0.5bn)

- ✓ Power business: Increased mainly due to initiatives towards supply/sale of internally generated power, while temporary improvement in sales price contributed as well
- ✓ Solar business: Increased due to cost reductions from structural reforms despite reduced panel sales
- ✓ Achieved profitability in the segment as a whole

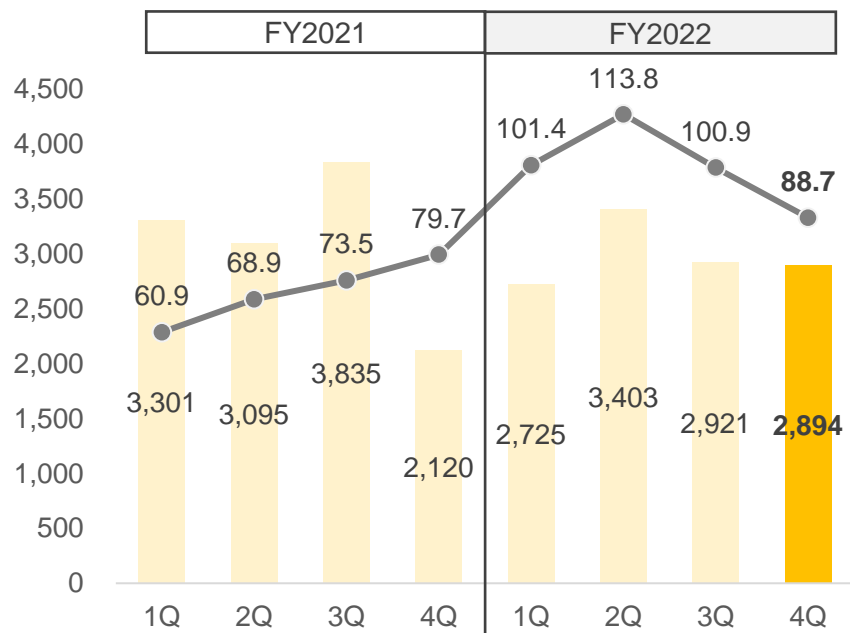
# Segment Information

**[Oil E&P]** YoY -¥5.9 bn

(FY21 : ¥38.7bn ➡ FY22 : ¥32.8 bn)

**<Crude Oil Production Volume and Brent Crude Oil Price Trends>**

[Thousand BOE] [USD/bbl]



- ✓ Decreased due to Norwegian subsidiary becoming an equity-method affiliate
- ✓ Production volume increased in Vietnam

\*Figures reflect share of rights owned in resource development affiliates

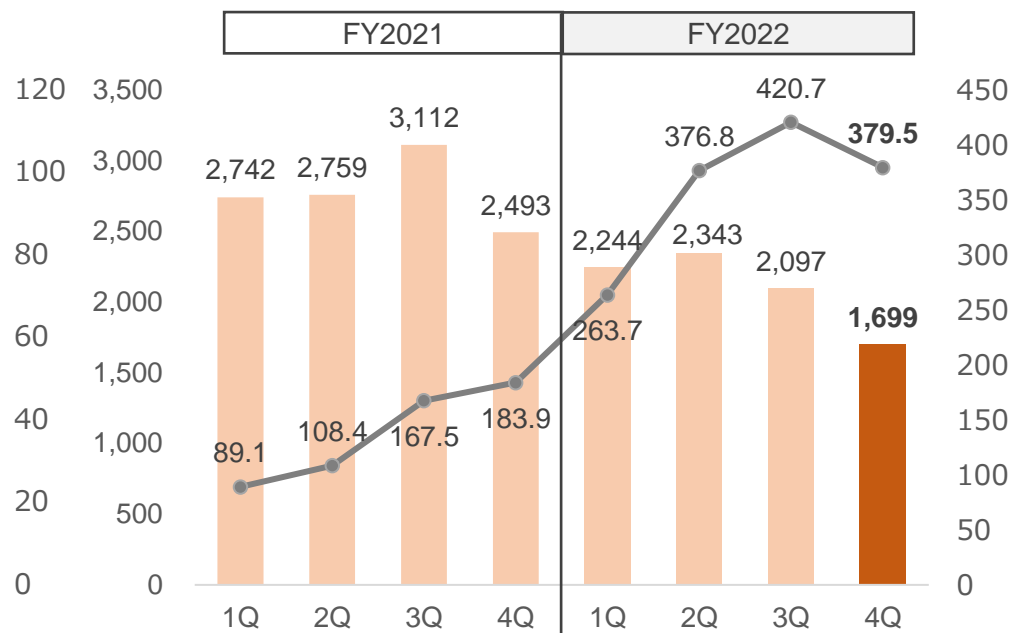
\*IIN became an equity-method affiliate in FY2021 4Q

**[Coal]** YoY +¥155.8 bn

(FY21 : ¥42.3bn ➡ FY22 : ¥198.1 bn)

**<Coal Production Volume and Australian Coal Spot Price Trends>**

[Thousand tons] [USD/ton]



- ✓ Increased due to soaring coal prices
- ✓ Production volume decreased due to poor weather and scale reduction of mines

\*Shares of Malinau mines in Indonesia (Mitrabara) sold during FY2021

# Balance Sheet

[¥ billions]

	3/31/2022	3/31/2023	Change		3/31/2022	3/31/2023	Change
Cash and Deposits	140.3	105.2	(35.1)	Total Current Liabilities	2,061.3	2,164.0	+102.7
Receivables, Inventory, etc.	2,227.8	2,626.9	+399.1	Total Fixed Liabilities	1,103.4	1,072.1	(31.3)
Total Current Assets	2,368.1	2,732.1	+364.0	Total Liabilities	3,164.7	3,236.1	+71.4
Tangible Fixed Assets	1,437.8	1,390.0	(47.8)	Shareholders' Equity and Other Comprehensive Income	1,412.1	1,614.5	+202.4
Other Fixed Assets	795.3	743.3	(52.0)	Noncontrolling Interests	24.4	14.8	(9.6)
Total Fixed Assets	2,233.1	2,133.3	(99.8)	Total Net Assets	1,436.5	1,629.3	+192.8
Total Assets	4,601.2	4,865.4	+264.2	Total Liabilities and Net Assets	4,601.2	4,865.4	+264.2

Net D/E ratio	0.87	0.87	(0.00)
Total Interest-bearing debt	1,364.9	1,503.4	+ 138.5
Equity ratio	30.7%	33.2%	+ 2.5%

# Statement of Cash Flows

[¥ billions]

<b>Cash Flows from Operating Activities</b>	<b>(32.8)</b>
Net Income before tax	348.3
Depreciation Expense	113.9
Change in Working Capital	(209.4)
Other	(285.6)
<b>Cash Flows from Investing Activities</b>	<b>70.1</b>
Purchase of tangible fixed assets	(85.6)
Other	155.7
<b>Cash Flows from Financing Activities</b>	<b>(90.4)</b>
Change in borrowings	(3.7)
Dividend payments	(50.6)
Other	(36.1)
Translation gains/losses	17.2
Change in cash and deposits	(36.0)
<b>Cash and Cash Equivalents - Beginning Balance</b>	<b>139.0</b>
<b>Cash and Cash Equivalents - Ending Balance</b>	<b>103.1</b>



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■ Results for the mid-term management plan  
(FY2020-22)

# Profits, Capital Efficiency, Total Return Ratio (FY2020-22)

- ✓ For FY2020-22, profits, ROIC, and ROE all exceeded medium-term plan targets

	FY2020-22 Medium-term Plan	FY2020-22 Actual	Change	[¥ billions]
Operating + Equity Income* <sup>1</sup>	410.0	561.8	+151.8	
Net Income* <sup>1</sup>	220.0	362.4	+142.4	
ROIC* <sup>1</sup> (FY2022)	4.2%	5.9%	+ 1.7%	
ROE* <sup>1</sup> (FY2022)	8.0%	14.2%	+6.2%	
Total Return Ratio	>50%	50.3%	—	

\*<sup>1</sup> Profits and indicators exclude inventory impact

- ✓ Implemented various initiatives that contributed to business structure reforms and capital efficiency

Reorganization of  
refineries:

- ◆ Decision to terminate refinery operations at Seibu Oil's refinery
- ◆ Whole subsidiarization of Toa Oil

Business  
restructuring :

- ◆ Withdrawal from functional chemical businesses such as acrylic acid and the L-MODU™
- ◆ Integration of I-MARV™ production sites
- ◆ Sale of North American gas

Asset sales :

- ◆ Decision to transfer interest in Ensham Coal Mine,
- ◆ sales of non-operating assets and cross shareholdings

initiatives related to  
CN :

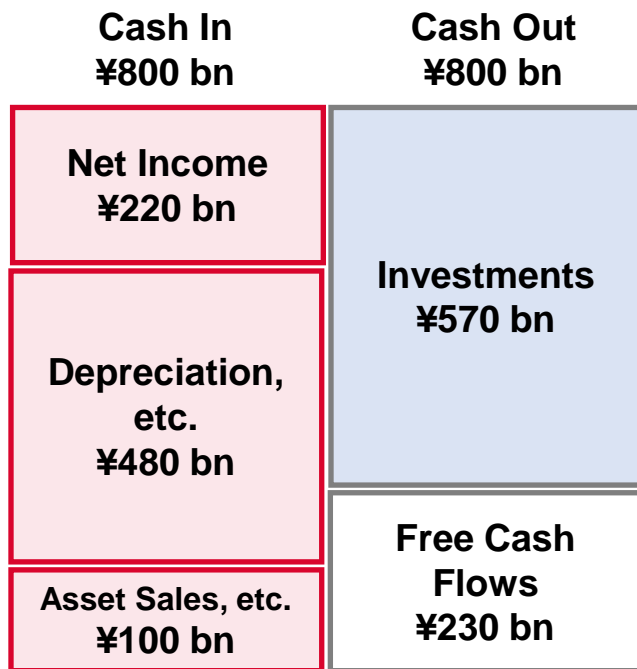
- ◆ Validation tests for Lithium battery materials
- ◆ Construction of commercial production plant for Idemitsu Green Energy Pellets

- ✓ Profits exceeding plan will be allocated for investments in business structure reforms and shareholder return, aimed at achieving FY2025 targets

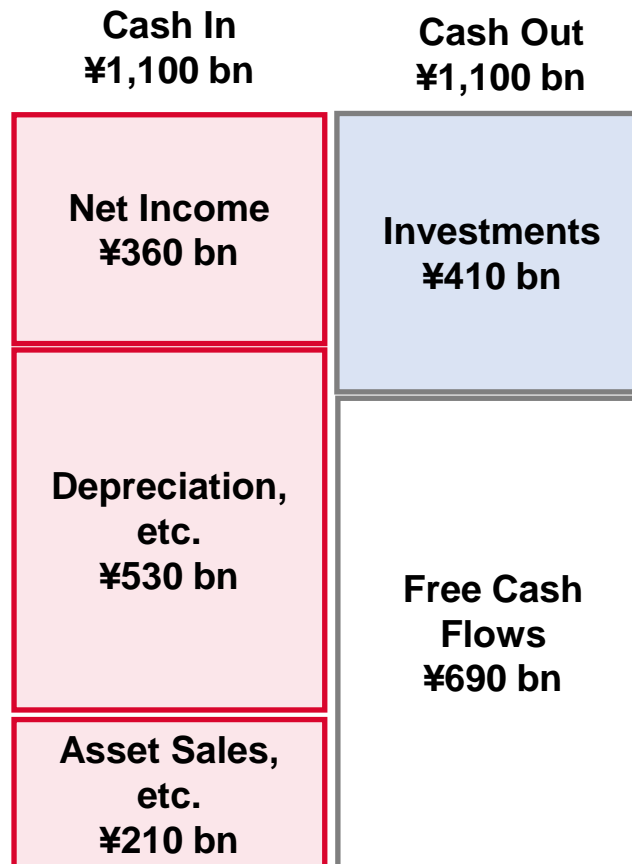
# Cash Flows (FY2020-22)

- ✓ Cash inflows increased to ¥1.1 trillion due to steady growth in net income and asset sales
- ✓ 3-year free cash flows increased to ¥690 bn, which was allocated to working capital, increased with soaring price of crude oil and depreciation of the yen, and shareholder returns

## The medium-term plan (FY2020-22)



## The actual (FY2020-22)



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## ■ Forecasts for FY2023

# Forecasts for FY2023

## ■ Crude Oil/Coal/Exchange Rate

[USD/bbl, USD/ton, JPY/USD]

	FY2022	FY2023	Change	
Crude Oil (Dubai)	92.5	80.0	(12.5)	(13.5%)
Crude Oil (Brent)*	101.2	85.0	(16.2)	(16.0%)
Australian Coal Spot Price*	360.2	170.0	(190.3)	(52.8%)
Exchange Rate (TTM)	135.5	130.0	(5.5)	(4.0%)

\*Brent prices and Australian coal spot prices are averages based on the calendar year (Jan-Dec).

## ■ Consolidated Income Statement(Summary)

[¥ billions]

	FY2022	FY2023	Change	
Net Sales	9,456.3	8,300.0	(1,156.3)	(12.2%)
Operating Income	282.4	140.0	(142.4)	(50.4%)
<i>Inventory impact</i>	55.7	(30.0)	(85.7)	—
Equity Income	26.0	15.0	(11.0)	(42.3%)
<b>Operating Income + Equity Income</b>	<b>308.4</b>	<b>155.0</b>	<b>(153.4)</b>	<b>(49.7%)</b>
<i>Excluding inventory impact</i>	<i>252.7</i>	<i>185.0</i>	<i>(67.7)</i>	<i>(26.8%)</i>
Ordinary Income	321.5	150.0	(171.5)	(53.3%)
Extraordinary Income/Losses	26.7	(8.0)	(34.7)	—
<b>Net Income Attributable to Owners of the Parent</b>	<b>253.6</b>	<b>100.0</b>	<b>(153.6)</b>	<b>(60.6%)</b>
<i>Excluding inventory impact</i>	<i>215.0</i>	<i>120.0</i>	<i>(95.0)</i>	<i>(44.2%)</i>

# Segment Information

## ■ Operating + Equity Income

[¥ billions]

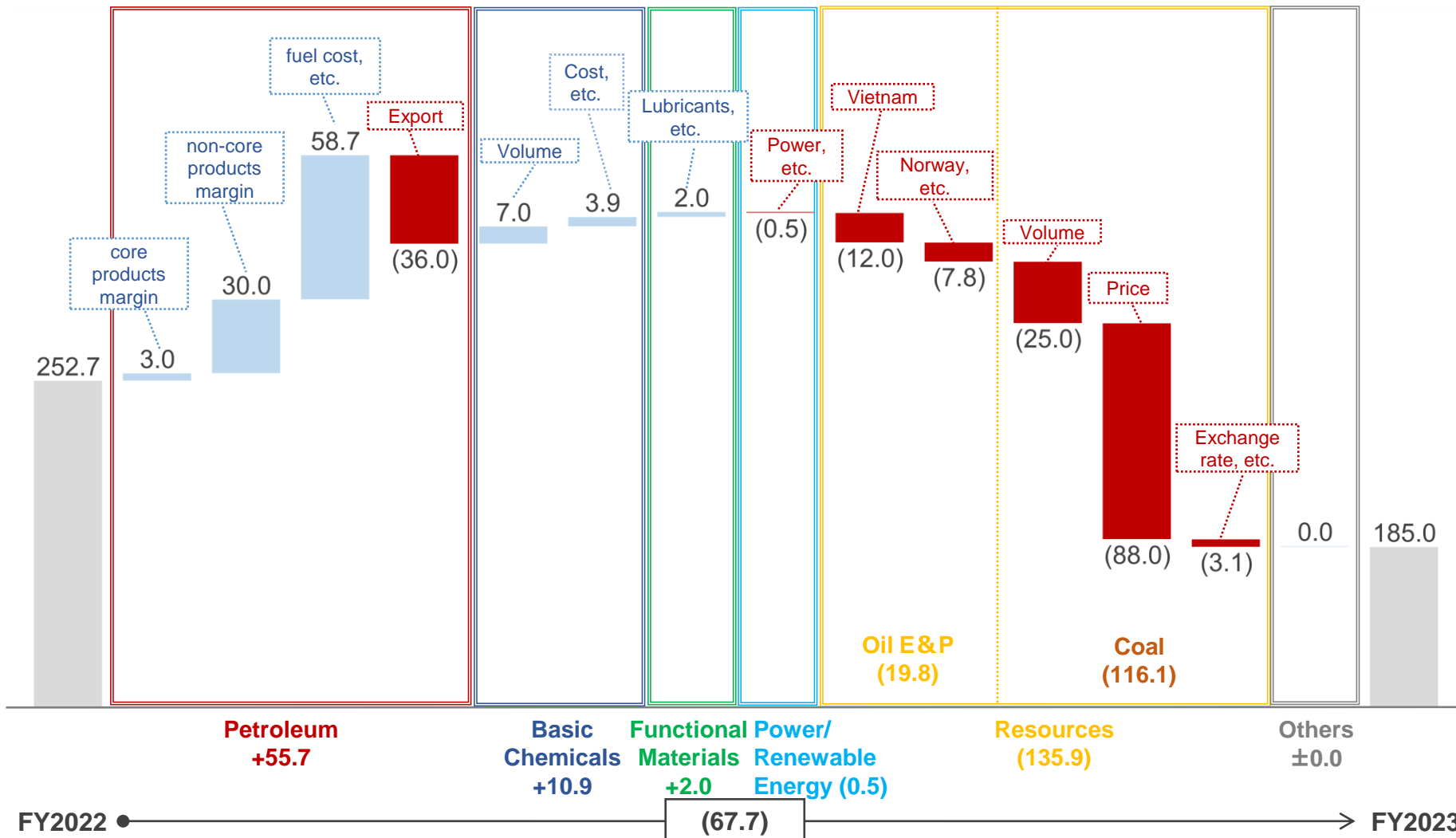
	FY2022	FY2023 (Forecast)	Change		medium-term plan FY2023
<b>Petroleum</b>	<b>73.0</b>	<b>43.0</b>	<b>(30.0)</b>	<b>(41.1%)</b>	<b>73.0</b>
<i>Excluding inventory impact</i>	<i>17.3</i>	<i>73.0</i>	<i>+55.7</i>	<i>+322.4%</i>	<b>73.0</b>
<b>Basic Chemicals</b>	<b>10.1</b>	<b>21.0</b>	<b>+10.9</b>	<b>+108.6%</b>	<b>21.0</b>
<b>Functional Materials</b>	<b>17.0</b>	<b>19.0</b>	<b>+2.0</b>	<b>+12.1%</b>	<b>19.0</b>
<b>Power and Renewable Energy</b>	<b>0.5</b>	<b>0.0</b>	<b>(0.5)</b>	<b>(100.0%)</b>	<b>0.0</b>
<b>Resources*</b>	<b>230.9</b>	<b>95.0</b>	<b>(135.9)</b>	<b>(58.9%)</b>	<b>85.0</b>
<i>Oil Exploration and Production</i>	<i>32.8</i>	<i>13.0</i>	<i>(19.8)</i>	<i>(60.4%)</i>	—
<i>Coal</i>	<i>198.1</i>	<i>82.0</i>	<i>(116.1)</i>	<i>(58.6%)</i>	—
<b>Others/Reconciliation</b>	<b>(23.0)</b>	<b>(23.0)</b>	—	—	<b>(23.0)</b>
<b>Total</b>	<b>308.4</b>	<b>155.0</b>	<b>(153.4)</b>	<b>(49.7%)</b>	<b>175.0</b>
<i>Excluding inventory impact</i>	<b>252.7</b>	<b>185.0</b>	<b>(67.7)</b>	<b>(26.8%)</b>	<b>175.0</b>

\*Fiscal year for Oil E&P and Coal included in the Resources Segment end in Dec.

# Segment Information

## Factors Affecting Operating + Equity Income (excluding inventory impact, y-o-y)

[¥ billions]



# Segment Information

**[Petroleum]** +¥55.7 bn (FY22: ¥17.3 bn ➔ FY23: ¥73.0 bn)

- ✓ Income will increase due to improved margins on non-core products and reduced fuel costs resulting from decreased oil prices
- ✓ Margins of core fuel products will remain flat y-o-y
- ✓ Export margins (particularly for jet and diesel) will decrease in reaction to the rise observed in the previous FY

**[Basic Chemicals]** +¥10.9 bn (FY22: ¥10.1 bn ➔ FY23: ¥21.0 bn)

- ✓ Sales volume will increase due to the launch of PX equipment at Chita as well as backlash from shut down maintenance in the previous FY
- ✓ Income will increase due to the increased sales volume, cost improvements and so on regardless of a decreased product margins

Product	FY2022		FY2023		Change	
	Price	Margin	Price	Margin	Price	Margin
PX	1,090	352	960	290	(130)	(62)
MX	1,01	276	870	200	(143)	(76)
SM	1,180	442	1,090	420	(90)	(22)

[USD/ton]

**[Functional Materials]** +¥2.0 bn (FY22: ¥17.0 bn ➔ FY23: ¥19.0 bn)

- ✓ Asphalt: will decrease due to the backlash increase in raw materials (heavy oil fraction) costs
- ✓ Performance chemicals: will decrease due to inventory impact and upfront costs for the launch of SPS factory in Malaysia
- ✓ Whole segment income will increase in response to the negative time-lag for lubricants observed in the previous FY and due to the growth in home and abroad sales volume, supported by the forecast of increased production of cars



## Segment Information

[Power/Renewable Energy] -¥0.5 bn (FY22: ¥0.5 bn ➔ FY23: ¥0.0 bn)

- ✓ Power business: will decrease in response to the one-time factor observed in the previous FY, despite profit contributions from initiatives done in the previous FY towards supply/sale of internally generated power
- ✓ Solar business: will increase due to cost improvements as a result of structural reforms

[Oil E&P] -¥19.8 bn (FY22: ¥32.8 bn ➔ FY23: ¥13.0 bn)

- ✓ Will decrease in both Vietnam and Norway due to reduced production volume, foreign exchange, and decreased oil prices

[Coal] -¥116.1 bn (FY22: ¥198.1 bn ➔ FY23: ¥82.0 bn)

- ✓ Will decrease due to price-related factors following the downtrend in the coal market and to reduced sales volume resulting from a reduction in the size of mine operations

# Financial forecasts (Balance Sheet, Cash Flows)

[¥billions]

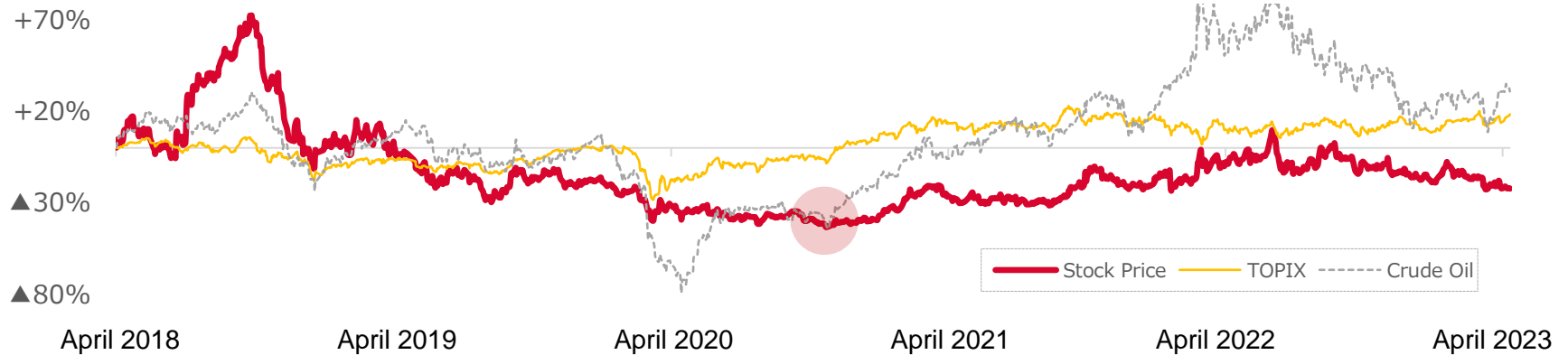
	3/31/2024		3/31/2024		
Current Assets	2,570	Liabilities	3,170	<b>Operating Cash Flows</b>	<b>396</b>
Fixed Assets	2,240	Net Assets	1,640	Net Income	142
Total Assets	4,810	Total Liabilities and Net Assets	4,810	Depreciation Expense	135
		Net D/E ratio	0.80	Other	119
		Total interest-bearing debt	1,400	<b>Investing Cash Flows</b>	<b>(216)</b>
		Equity ratio	33.9%	Strategic Investments	(140)
				Maintenance Investments	(102)
				Other	26
				<b>Financing Cash Flows</b>	<b>(185)</b>
				Change in borrowings /shareholder returns	(185)
				<b>Change in cash</b>	<b>(5)</b>

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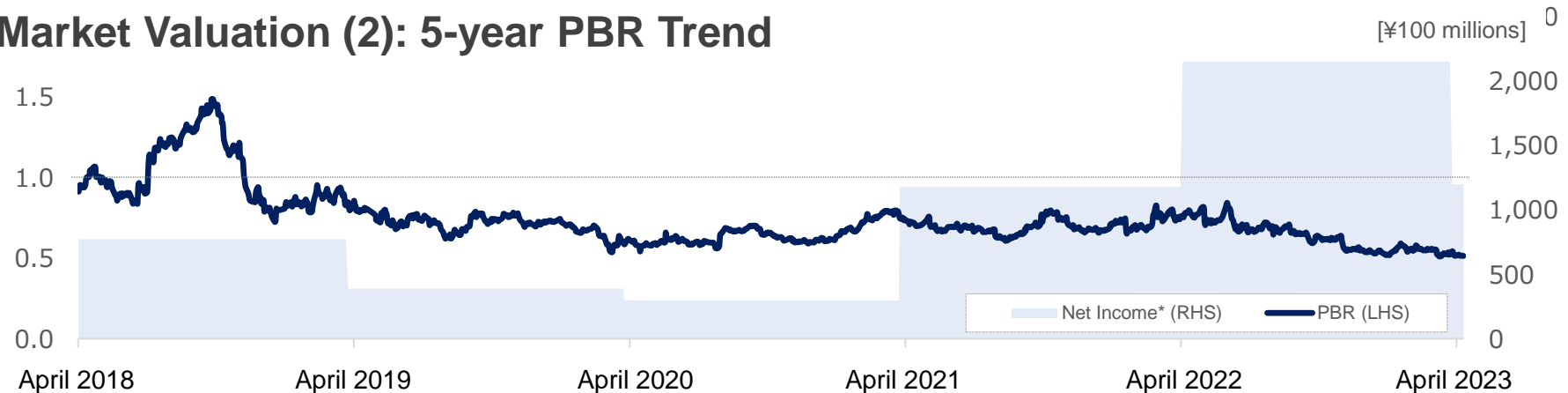
■ Market valuation,  
cost of capital, return on capital, etc.

# Market Valuation

## Market Valuation (1): 5-year Stock Performance [Indexed to April 2018]



## Market Valuation (2): 5-year PBR Trend



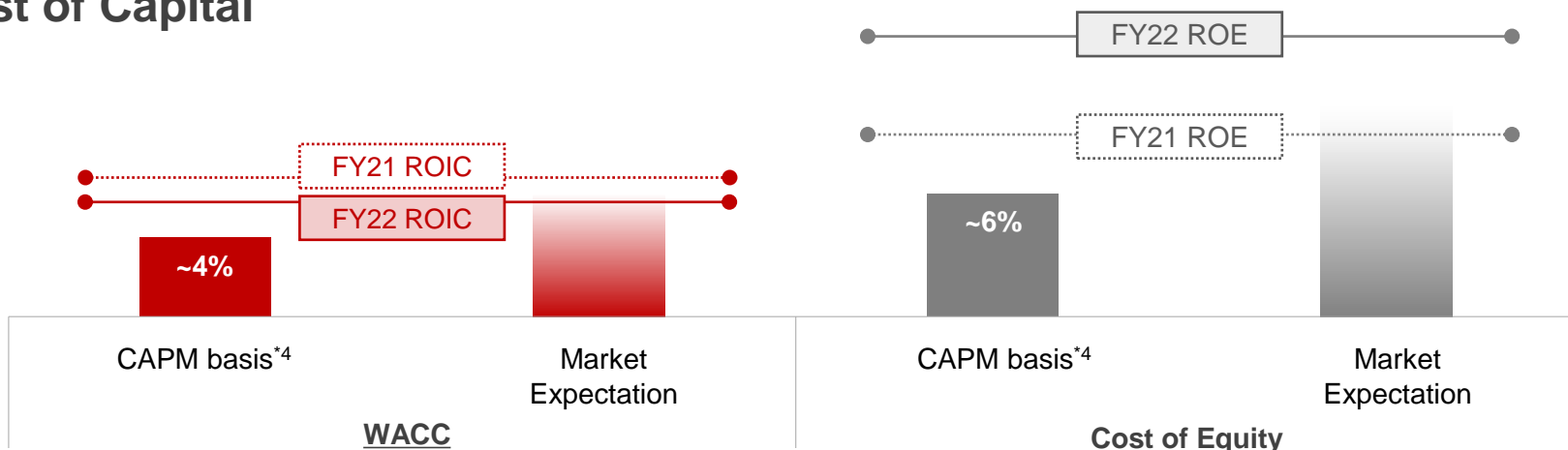
- ✓ Correlation between the stock price and crude oil prices began to decrease in late 2020. Despite reporting strong profitability from FY21 onward, this may not have been reflected in the stock price due to reduced petroleum demand and heightened momentum towards carbon neutrality
- ✓ PBR exceeded 1x up to 2019 when merger discussions were ongoing, but current PBR is about 0.5x

# Return on capital, cost of capital and Our Strategy

## Return on Capital

	FY21	FY22	FY23 Forecast	FY25 Target* <sup>1</sup>	FY30 Target* <sup>1</sup>
ROIC* <sup>2</sup>	6.8%	5.9%	4.6%	5.0%	7.0%
ROE* <sup>3</sup>	9.2%	14.2%	7.4%	8.0%	10.0%

## Cost of Capital



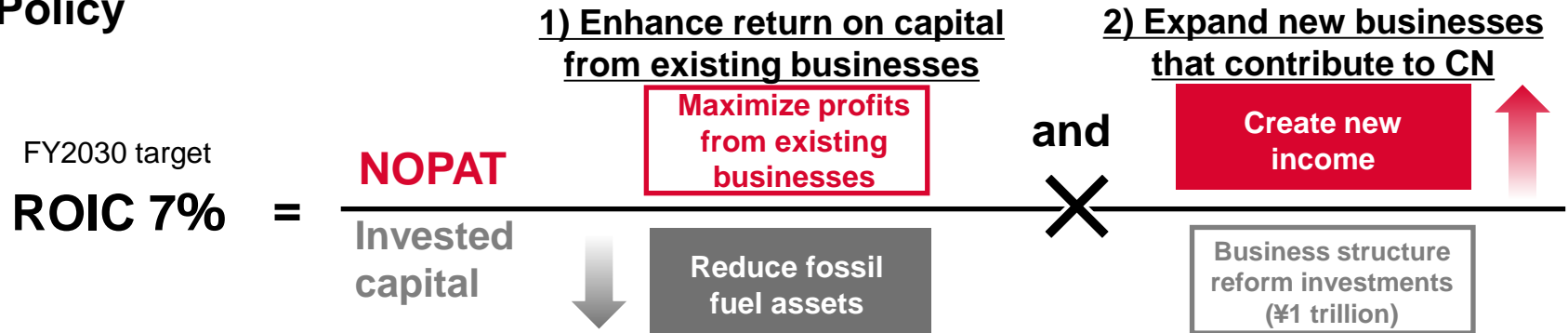
- ✓ Recent return on capital has exceeded CAPM-based cost of capital. However, there may be a discrepancy between our cost of capital and the market’s expected return
- ✓ **Pursuing 7% ROIC and improved capital efficiency aimed at improving PBR through business structure reforms towards 2030 based on the new medium-term plan starting April 2023 and considering an upward revision of ROE targets**
- ✓ We will continue to engage in active dialogue with the capital markets and reflect their opinions in our enterprise value creation efforts

\*1 Targets: Targets in the medium-term plan announced in Nov. 2022

\*2 ROIC: (Post-tax operating income excluding inventory impact + equity income) / (shareholders’ equity + interest-bearing debt)

# Towards Achieving 7% ROIC in 2030

## Policy



## Specific Initiatives

**Expand profits while maintain current invested capital to pursue 7% ROIC**

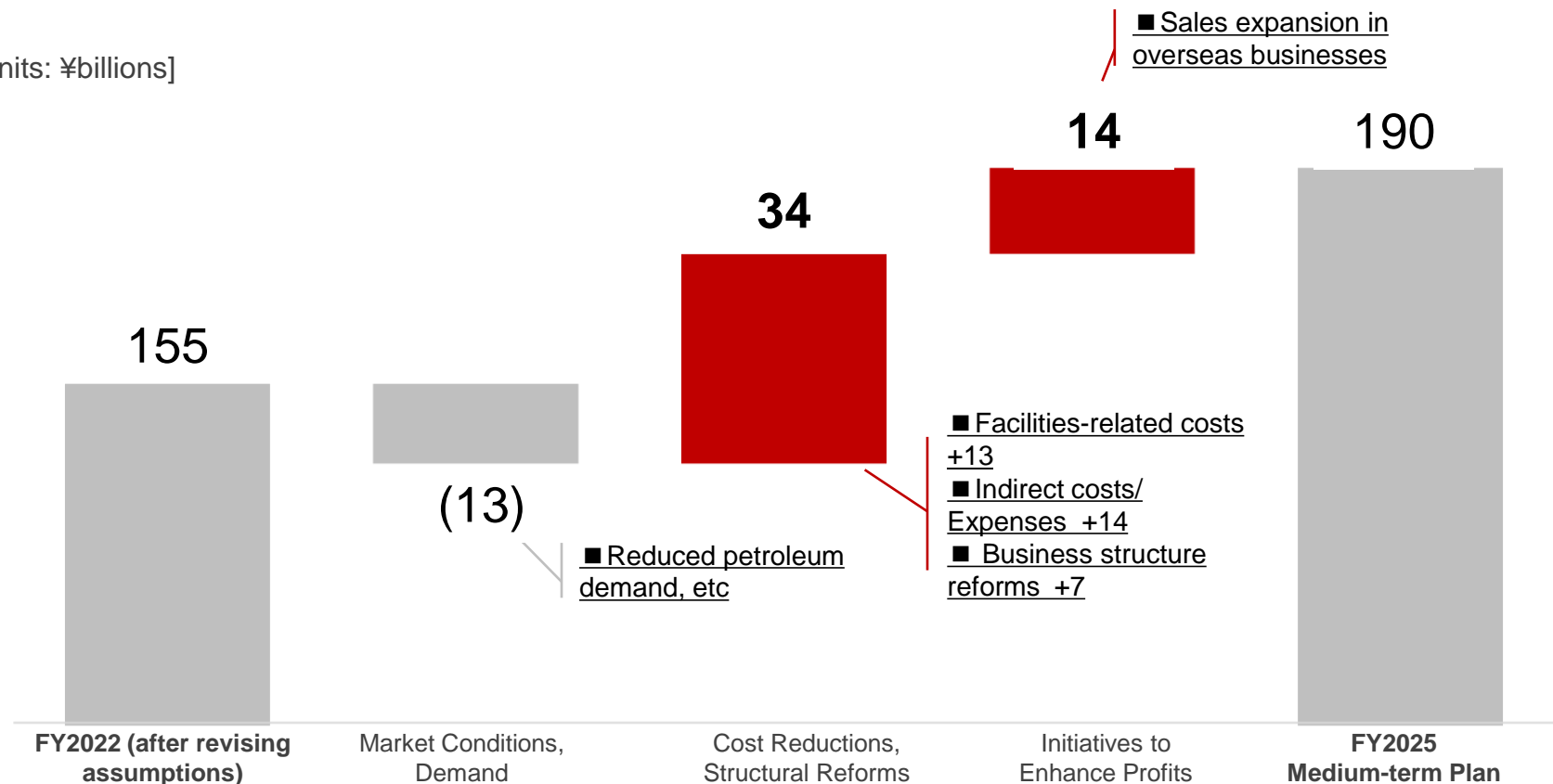
<p>1) Existing Businesses</p> <p><b>Reduce invested capital and maximize profits to improve ROIC</b></p>	<ul style="list-style-type: none"> <li>• Cost reduction and streamlining in response to shrinking domestic demand</li> <li>• Reduce refining capacity by 300 KBD by 2030 (maintain <math>\geq 90\%</math> operating ratio)</li> <li>• Expand earnings through M&amp;A in functional materials and other growth areas</li> <li>• Reduce production at coal mines, dispose of non-business and low-efficiency assets</li> </ul>
<p>2) New Businesses</p> <p><b>Select investment through screening</b></p>	<ul style="list-style-type: none"> <li>• Secure investment return by setting a hurdle rate</li> <li>• Consider not only of investment returns, but also timing of achieving profitability, total profits, etc.</li> <li>• Limit to areas in which we can leverage our operating assets, customer base, know-how, etc.</li> </ul>

# Key Initiatives towards Achieving FY25 Targets (Operating + Equity Income)

## ■ Summary

- ✓ FY2022 operating + equity income after adjustments for time-lag, coal prices, etc. was ¥155 billion
- ✓ Achieve ¥190 billion in the final FY of the medium-term plan through cost reductions in line with reduced petroleum demand and increasing profitability in existing businesses through business structure reforms

[Units: ¥billions]

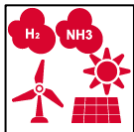


\*1 Revised assumptions: Revised to FY23 assumptions such as petroleum margin time-lag (FY22: -¥1.1/L→no time-lag impact), coal prices (FY22 \$360/t→\$170/t), etc.

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## ■ Reference

\*The icons on topics (from next page) related to progress in the medium-term plan shows business areas below



**Energy  
one step ahead**



**Diverse resource  
conservation  
/circulation solutions**



**Smart Yorozya**



## Topics related to Progress in the Medium-term Plan (1/7)

- Building of a SAF Supply Chain starting from plantation of non-edible oil feedstock trees (*Pongamia pinnata*) in Australia
- 
- ✓ Secure raw materials for sustainable aviation fuel (SAF) that are less competitive with food crops while achieving fixation of CO<sub>2</sub> emissions
  - ✓ Aiming to start small-scale cultivation verification in Queensland by the end of 2023



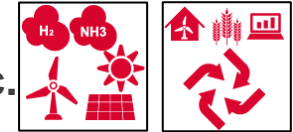
Pongamia pinnata (Trees, nuts and seeds, oil)

(Link to our disclosure document)

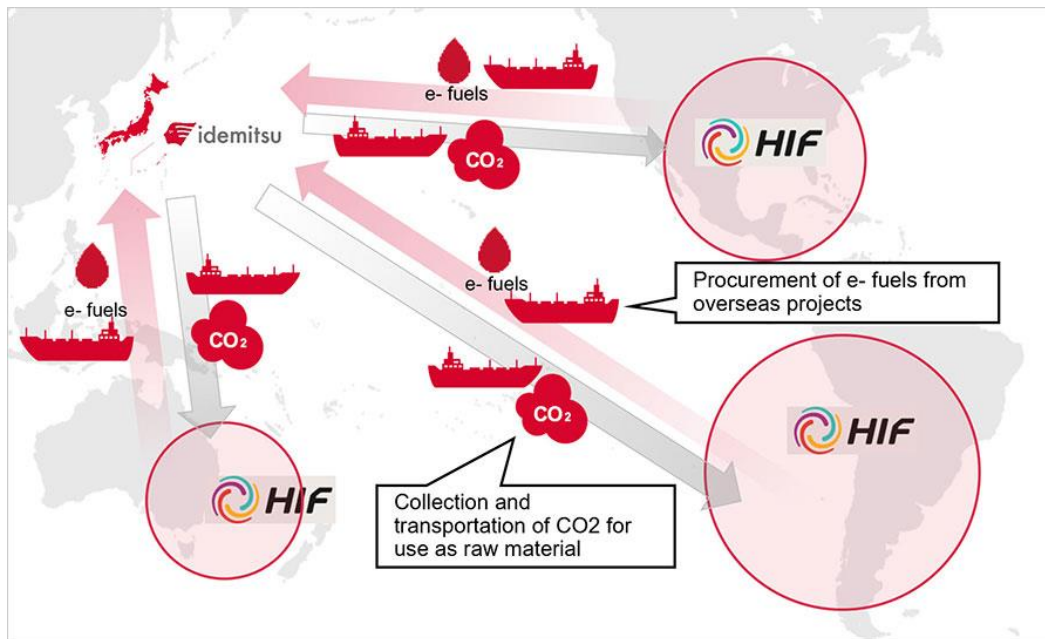
<https://www.idemitsu.com/en/news/2022/230308.html>

## Topics related to Progress in the Medium-term Plan (2/7)

- MOU for strategic partnership with HIF Global, which manufactures synthetic fuels (e-fuels) in South America, North America, Australia, etc.



- ✓ Jointly consider procurement from overseas and domestic supply of e-fuels, investment in e-fuels production facilities in Japan and overseas, and international transportation and utilization of CO<sub>2</sub> collected in Japan (conversion into raw materials)
- ✓ Aiming to establish a system for the production and supply of e-fuels at our refineries and complexes in Japan by the late 2020's



(Link to our disclosure document)

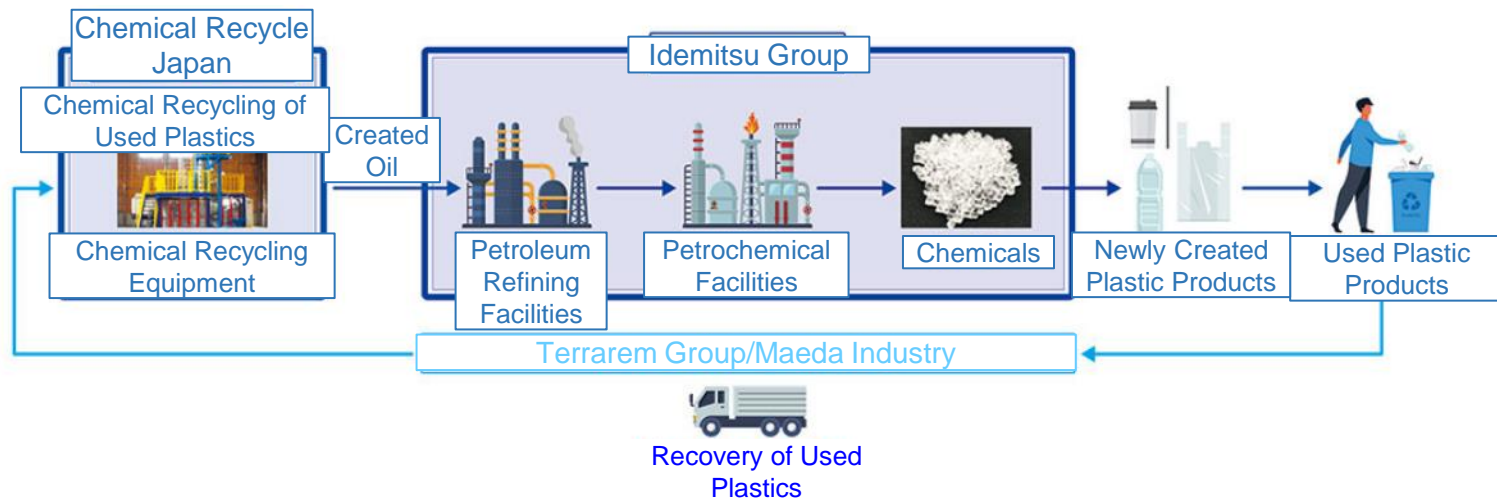
<https://www.idemitsu.com/en/news/2023/230405.html>

## Topics related to Progress in the Medium-term Plan (3/7)

### ■ Recycling of used plastics as a raw material ~Decision to invest in a chemical recycling commercial production facility in Chiba~



- ✓ Plastic processing capacity of 20,000 tons/year
- ✓ To be refined, degraded, and polymerized in our existing petroleum refinery and petrochemical facilities as a raw material to replace crude oil
- ✓ Will leverage 8.2 million tons/year of used plastic disposed in Japan
- ✓ Aiming to launch commercial operations in FY2025



Recycling Chain

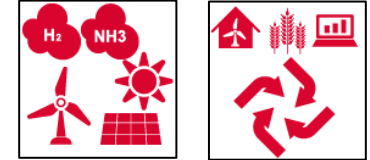
(Link to our disclosure document, Japanese only)

<https://www.idemitsu.com/jp/news/2023/230420.html>

## Topics related to Progress in the Medium-term Plan (4/7)

### ■ Launched a feasibility study for manufacturing of Japanese clean hydrogen from waste, including municipal waste

- ✓ Collaboration with a North American fund\* in which Idemitsu invests
- ✓ Contributes to reduction of CO<sub>2</sub> emissions through CCS (U) in the manufacturing process
- ✓ Aiming to launch a hydrogen plant capable of processing 200-300 tons of waste per day by the early 2030's



\*Fund launched by Azimuth Capital Management (headquarters: Calgary, Alberta, Canada), which specializes in technology-enabled energy transition opportunities

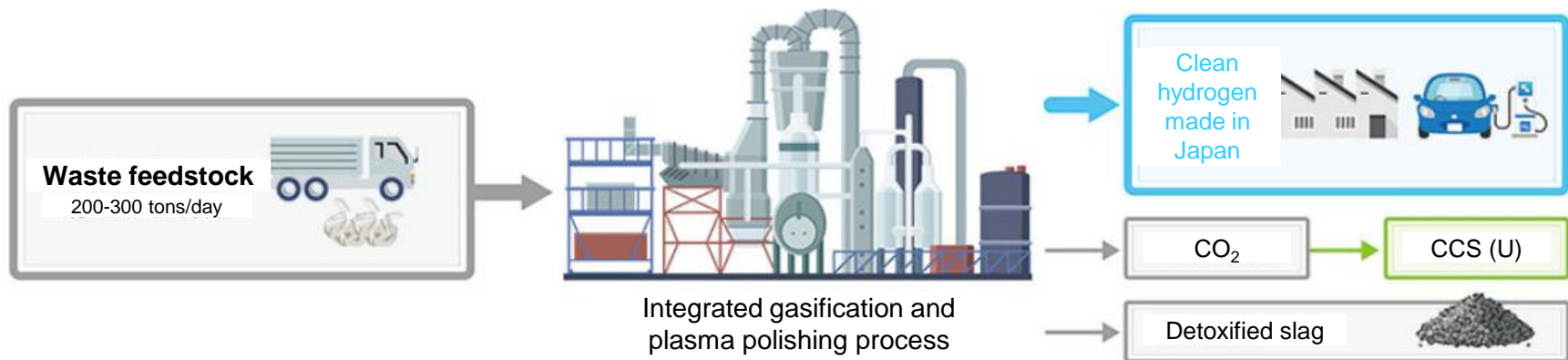


Illustration of Hydrogen Manufacturing, which is Currently Being Contemplated

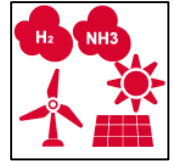
(Link to our disclosure document)

<https://www.idemitsu.com/en/news/2023/230413.html>

## Topics related to Progress in the Medium-term Plan (5/7)

### ■ Collaboration on the Establishment of a Blue/ Carbon-free Ammonia Supply Chain with KEPCO, Korea's largest power generator

- ✓ Engaging in discussions on procurement, marine transport, supply
- ✓ Idemitsu is planning an ammonia mixed combustion experiment using facilities at Tokuyama Complex
- ✓ Aiming to set up ammonia import bases using existing infrastructure to supply blue/carbon-free ammonia
- ✓ Will engage in discussions to jointly search for ammonia production projects around the world, to optimize marine fuel ammonia transportation costs through cooperative ship operations, and for mutual product exchange to accelerate the establishment of a blue/carbon-free ammonia supply chain in Japan and Korea



(Link to our disclosure document)

<https://www.idemitsu.com/en/news/2023/230421.html>

### ■ Establishment of an Advanced Materials Company in Korea

- ✓ Aimed at accelerating research and development of advanced materials such as lithium battery materials, crystalline oxide semiconductors, organic EL materials, and new agrochemicals and to strengthen the marketing system in Korea
- ✓ Also aiming to further strengthen cooperation with Korean global leading companies in advanced technology fields, including next-generation batteries, high-speed communications, next-generation displays, and environmentally friendly materials



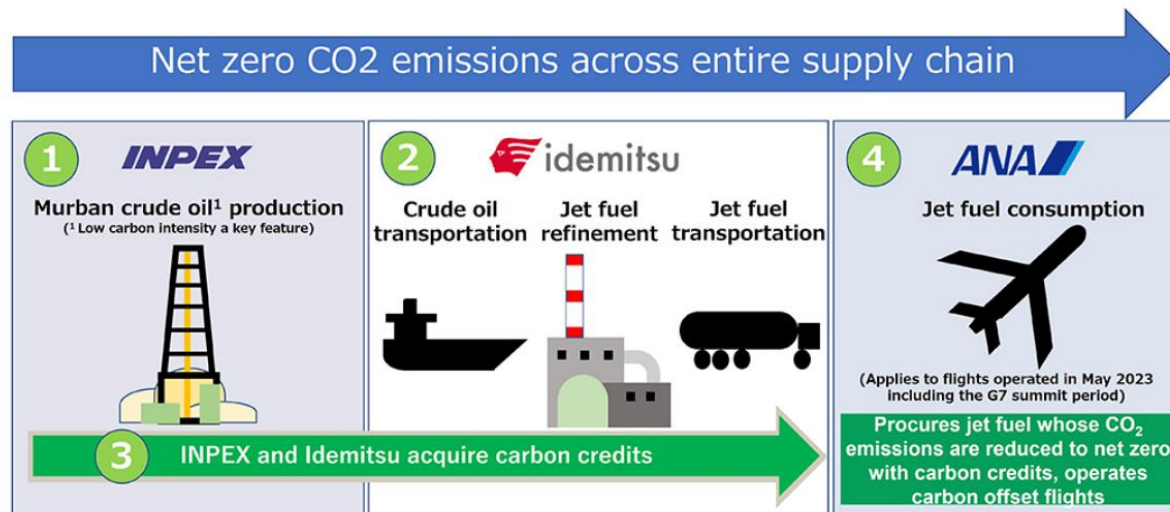
(Link to our disclosure document)

<https://www.idemitsu.com/en/news/2022/230313.html>



## Topics related to Progress in the Medium-term Plan (6/7)

- The Katatsumuri Yama Power Plant (Yuzawa City, Akita Prefecture), under construction, was designated as an Important Power Development Site to be the first geothermal power plant by the Ministry of Economy, Trade and Industry
- ✓ Site creation started this March, and operations are scheduled to start in March 2027  
(Link to our disclosure document)  
[https://www.idemitsu.com/en/news/2023/230425\\_2.html](https://www.idemitsu.com/en/news/2023/230425_2.html)
- Idemitsu to Supply ANA with Carbon-Neutralized Jet Fuel for G7 Hiroshima Summit
- ✓ Achieving net zero CO<sub>2</sub> emission across the entire supply chain



(Link to our disclosure document)

<https://www.idemitsu.com/en/news/2023/230501.html>

## Topics related to Progress in the Medium-term Plan (7/7)

- **Recognized as a company that encourages women's success and selected as a Nadeshiko Brand for the first time**
- ✓ 17 companies including Idemitsu were selected by the Ministry of Economy, Trading and Industry (METI) and the Tokyo Stock Exchange (TSE) from about 3,700 listed companies
- ✓ Idemitsu was selected based on its strong commitment to encouraging women's success as a part of its management strategy in order to create "interactions and chemical reactions between various talents" to reform its operating structure, its inclusion of percentage of women in managerial positions, etc. as clear KPIs, and its disclosure of such KPIs in its medium-term plans and integrated reports

(Link to our disclosure document)

<https://www.idemitsu.com/en/news/2022/230328.html>



**\*For further information on progress in the medium-term plan, please also refer to the materials from the ESG Top Seminar held on April 10**

(Presentation materials)

<https://ssl4.eir-parts.net/doc/5019/announcement4/88196/00.pdf>

# Financial Results

## ■ Net Sales by segment

[¥ billions]

	FY2021	FY2022	Change	
<b>Petroleum</b>	5,219.4	7,403.9	+2,184.4	+41.9%
<b>Basic Chemicals</b>	563.5	666.9	+103.4	+18.3%
<b>Functional Materials</b>	421.4	511.0	+89.6	+21.3%
<b>Power and Renewable Energy</b>	138.3	197.1	+58.8	+42.5%
<b>Resources*</b>	338.8	672.1	+333.3	+98.4%
<i>Oil Exploration and Production</i>	75.4	43.4	(32.0)	(42.4%)
<i>Coal</i>	263.4	628.7	+365.3	+138.7%
<b>Others/Reconciliation</b>	5.3	5.4	+0.1	+1.1%
<b>Total</b>	6,686.8	9,456.3	+2,769.5	+41.4%

\*Fiscal year for Oil E&P and Coal included in the Resources Segment end in Dec.



# Financial Results

## ■ Quarterly segment income (cumulative, exc. inventory impact)

[¥ billions]

	FY2021				FY2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Petroleum	29.6	45.1	73.7	136.5	57.4	61.1	1.2	17.3
Equity income	6.0	8.6	12.4	9.2	7.0	12.4	12.8	12.9
Basic Chemicals	6.7	10.9	7.6	8.2	8.1	14.2	11.4	10.1
Equity income	0.1	0.7	0.8	1.2	(0.1)	(0.1)	0.5	(0.1)
Functional Materials	4.3	10.2	14.2	17.1	3.3	8.6	16.4	17.0
Equity income	0.6	1.4	1.5	1.6	0.0	0.3	(0.3)	(0.7)
Power and Renewable Energy	(1.0)	(2.8)	(7.6)	(9.9)	(3.7)	(2.9)	1.1	0.5
Equity income	(0.0)	(0.1)	0.0	(1.7)	(0.4)	(0.7)	(0.4)	(1.6)
Resources								
-Oil Exploration and Production	12.4	17.3	34.9	38.7	6.5	17.1	26.4	32.8
Equity income	—	—	—	2.6	2.9	6.7	10.6	13.7
-Coal	0.6	4.2	21.5	42.3	25.1	83.0	151.3	198.1
Equity income	0.4	0.8	1.4	3.1	—	—	—	—
Others/Reconciliation	(2.3)	(3.6)	(10.2)	(16.6)	(11.9)	(14.9)	(22.5)	(23.0)
Equity income	1.2	1.3	2.1	(1.0)	1.1	1.7	1.7	1.8
<b>Total</b>	<b>50.3</b>	<b>81.3</b>	<b>134.2</b>	<b>216.2</b>	<b>84.9</b>	<b>166.2</b>	<b>185.4</b>	<b>252.7</b>
<b>Equity income</b>	<b>8.3</b>	<b>12.7</b>	<b>18.2</b>	<b>15.0</b>	<b>10.5</b>	<b>20.3</b>	<b>25.0</b>	<b>26.0</b>

\*For Oil E&amp;P, IIN became an equity method affiliated company from FY21 4Q

\*For Coal, shares of Malinau mines in Indonesia (Mitrabara) sold FY21 4Q

# Financial Results

## ■ Quarterly segment income (Q on Q, exc. inventory impact)

[¥ billions]

	FY2021				FY2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Petroleum	29.6	15.4	28.6	62.8	57.4	3.7	(59.9)	16.1
Equity income	6.0	2.6	3.8	(3.2)	7.0	5.4	0.4	0.1
Basic Chemicals	6.7	4.2	(3.3)	0.5	8.1	6.1	(2.8)	(1.3)
Equity income	0.1	0.5	0.1	0.5	(0.1)	(0.0)	0.6	(0.6)
Functional Materials	4.3	5.9	4.1	2.9	3.3	5.3	7.8	0.6
Equity income	0.6	0.8	0.1	0.1	0.0	0.3	(0.6)	(0.4)
Power and Renewable Energy	(1.0)	(1.8)	(4.8)	(2.3)	(3.7)	0.8	4.0	(0.7)
Equity income	(0.0)	(0.0)	0.1	(1.7)	(0.4)	(0.3)	0.3	(1.2)
Resources								
- Oil Exploration and Production	12.4	5.0	17.6	3.8	6.5	10.5	9.3	6.4
Equity income	—	—	—	2.6	2.9	3.8	3.9	3.1
-Coal	0.6	3.6	17.3	20.8	25.1	57.8	68.4	46.8
Equity income	0.4	0.4	0.6	1.7	—	—	—	—
Others/Reconciliation	(2.3)	(1.3)	(6.6)	(6.4)	(11.9)	(3.0)	(7.7)	(0.5)
Equity income	1.2	0.1	0.9	(3.1)	1.1	0.6	0.1	0.0
<b>Total</b>	<b>50.3</b>	<b>31.0</b>	<b>52.9</b>	<b>82.1</b>	<b>84.9</b>	<b>81.3</b>	<b>19.2</b>	<b>67.3</b>
<b>Equity income</b>	<b>8.3</b>	<b>4.4</b>	<b>5.6</b>	<b>(3.2)</b>	<b>10.5</b>	<b>9.8</b>	<b>4.7</b>	<b>1.0</b>

\*For Oil E&amp;P, IIN became an equity method affiliated company from FY21 4Q

\*For Coal, shares of Malinau mines in Indonesia (Mitrabara) sold FY21 4Q

# Sensitivity

## Major items affecting performance by changes in assumptions (FY2023)

	Assumption Items	Revised assumption (FY2023)	Range of fluctuation	Segment	Income impact (¥ billions)	Major Factors
Excluding inventory impact	Crude oil price	80.0\$/bbl	±10\$/bbl	Petroleum	±12.0	Fuel cost, time-lag
	Singapore product margin	—	±5\$/bbl		±34.0	Export
	Exchange rate	130.0¥/\$	±5¥/\$		±4.0	Fuel cost, time-lag
	Thermal coal price	170.0\$/t	±10\$/t	Resources (Coal)	±4.0	Thermal coal
Inventory impact	Crude oil price	80.0\$/bbl	±10\$/bbl	Petroleum	±49.0	
	Exchange rate	130.0¥/\$	±5¥/\$		±15.0	

\* In the petroleum segment, only performance impacts on products made in domestic refineries are shown. In addition to the above, income will also be affected by sales of overseas affiliates

\* 9-month impact during shown for the resources segment (coal), as its fiscal year ends in Dec. The assumption is averaged from Jan. to Dec.

# Investments

[¥ billions]

	FY22 Results			FY23 Forecast		
	Strategic	Maintenance	Total	Strategic	Maintenance	Total
Existing Businesses	53.0	76.8	129.9	53.0	102.0	155.0
Business Structure Reforms	—	—	—	87.0	0.0	87.0
<b>Total</b>	<b>53.0</b>	<b>76.8</b>	<b>129.9</b>	<b>140.0</b>	<b>102.0</b>	<b>242.0</b>

\* Amounts based on expenditures

## [FY23 Outlook]

- ✓ Forecasting ¥140 billion for strategic investments
- ✓ Planning to invest business structure reforms amounting to 1/3 of the 3-year total of ¥290 billion set forth in the medium-term plan
- ✓ Selecting investment items through screening that secures investment return from a wide variety of options like SAF, hydrogen/ammonia, Recycling used plastics in addition to what we have tackled since the previous medium-term plan such as Lithium Solid Electrolytes and Idemitsu Green Energy Pellets.

# Sales Volume

## ■ Petroleum

[thousand KL,%]

	FY 2021	FY 2022	Change	
Gasoline	12,711	12,870	+159	+1.3%
Naphtha	266	374	+108	+40.7%
Jet Fuel	1,729	2,366	+637	+36.8%
Kerosene	3,920	3,701	(219)	(5.6%)
Diesel Oil	9,926	10,227	+302	+3.0%
Heavy Fuel Oil A	3,267	3,286	+18	+0.6%
Heavy Fuel Oil C	2,551	2,700	+150	+5.9%
<b>Total Domestic Sales Volume</b>	<b>34,370</b>	<b>35,525</b>	<b>+1,154</b>	<b>+3.4%</b>
Exported Volume	6,165	7,854	+1,690	+27.4%
<b>Total Sales Volume</b>	<b>40,535</b>	<b>43,379</b>	<b>+2,844</b>	<b>+7.0%</b>

\*Export includes bond sales of jet fuel and heavy fuel oil C

# Sales Volume

## ■ Basic Chemicals

[kt,%]

	FY 2021	FY 2022	Change	
Basic Chemicals	3,744	3,428	(315)	(8.4%)

## ■ Functional Materials

[KKL,kt,%]

	FY 2021	FY 2022	Change	
Lubricants	1,183	1,152	(31)	(2.6%)
Performance Chemicals	759	643	(116)	(15.3%)

\*Lubricants include sales overseas

## ■ Power/Renewable Energy

[Mkwh,%]

	FY 2021	FY 2022	Change	
Retail Power Sales	5,197	3,302	(1,896)	(36.5%)

# Production Volume

## ■ Resources (Oil E&P)

[KBOED,%]

	FY 2021	FY 2022	Change	
Vietnam	10.5	17.1	+6.6	+62.6%
Norway	23.3	15.6	(7.7)	(33.1%)
Total('000BOED)	33.8	32.7	(1.1)	(3.3%)
Total('000BOE)	12,351	11,944	(407)	(3.3%)

\*The numbers reflect our rights and ownership ratios based on our equity share

\*IIN became an equity method affiliated company from FY21 4Q

\*The number shows Jan-Sep volume as fiscal year for Oil E&P in the Resources Segment ends in Dec.

## ■ Resources (Coal)

[kt,%]

	FY 2021	FY 2022	Change	
Ensham	3,649	2,668	(981)	(26.9%)
Muswellbrook	1,090	1,130	+40	+3.6%
Boggabri	5,193	4,585	(608)	(11.7%)
<b>Subtotal</b>	<b>9,932</b>	<b>8,382</b>	<b>(1,550)</b>	<b>(15.6%)</b>
Malinau	1,174	—	(1,174)	—
<b>Total Production Volume</b>	<b>11,106</b>	<b>8,382</b>	<b>(2,724)</b>	<b>(24.5%)</b>

\*The numbers reflect our rights and ownership ratios

\*The number shows Jan-Sep volume as fiscal year for Coal in the Resources Segment ends in Dec.

# Sales Volume(Forecasts)

## ■ Petroleum

[KKL,%]

	FY 2022	FY 2023	Change	
Gasoline	12,870	12,700	(170)	(1.3%)
Naphtha	374	210	(164)	(43.9%)
Jet Fuel	2,366	2,330	(36)	(1.5%)
Kerosene	3,701	3,720	+19	+0.5%
Diesel Oil	10,227	10,530	+303	+3.0%
Heavy Fuel Oil A	3,286	3,230	(56)	(1.7%)
Heavy Fuel Oil C	2,700	2,720	+20	+0.7%
<b>Total Domestic Sales Volume</b>	<b>35,525</b>	<b>35,440</b>	<b>(85)</b>	<b>(0.2%)</b>
Exported Volume	7,854	8,500	+646	+8.2%
<b>Total Sales Volume</b>	<b>43,379</b>	<b>43,940</b>	<b>+561</b>	<b>+1.3%</b>

\*Export includes bond sales of jet fuel and heavy fuel oil C



# Sales Volume(Forecast)

## ■ Basic Chemicals

[kt,%]

	FY 2022	FY 2023	Change	
Basic Chemicals	3,428	3,780	+352	+10.3%

## ■ Functional Materials

[KKL,kt,%]

	FY 2022	FY 2023	Change	
Lubricants	1,152	1,220	+68	+5.9%
Performance Chemicals	643	720	+77	+12.0%

\*includes sales overseas

## ■ Power/Renewable Energy

[Mkwh,%]

	FY 2022	FY 2023	Change	
Retail Power Sales	3,302	2,060	(1,241)	(37.6%)

# Production Volume(Forecasts)

## ■ Resources (Oil E&P)

[KBOED,%]

	FY 2022	FY 2023	Change	
Norway	17.1	16.2	(1.0)	(5.6%)
Vietnam	15.6	12.8	(2.8)	(18.2%)
Total('000BOED)	32.7	28.9	(3.8)	(11.6%)
Total('000BOE)	11,944	10,555	(1,389)	(11.6%)

\*The numbers reflect our rights and ownership ratios based on our equity share

## ■ Resources (Coal)

[kt,%]

	FY 2022	FY 2023	Change	
Ensham	2,668	1,190	(1,478)	(55.4%)
Muswellbrook	1,130	—	(1,130)	—
Boggabri	4,585	5,200	+615	+13.4%
<b>Total</b>	<b>8,382</b>	<b>6,390</b>	<b>(1,992)</b>	<b>(23.8%)</b>

\*Fiscal year for Oil E&P and Coal included in the Resources Segment end in Dec.

\*The numbers reflect our rights and ownership ratios

\*Muswellbrook was ceased in FY22. Ensham is scheduled to be sold in the mid FY23 (depending on the schedule of government's approval)

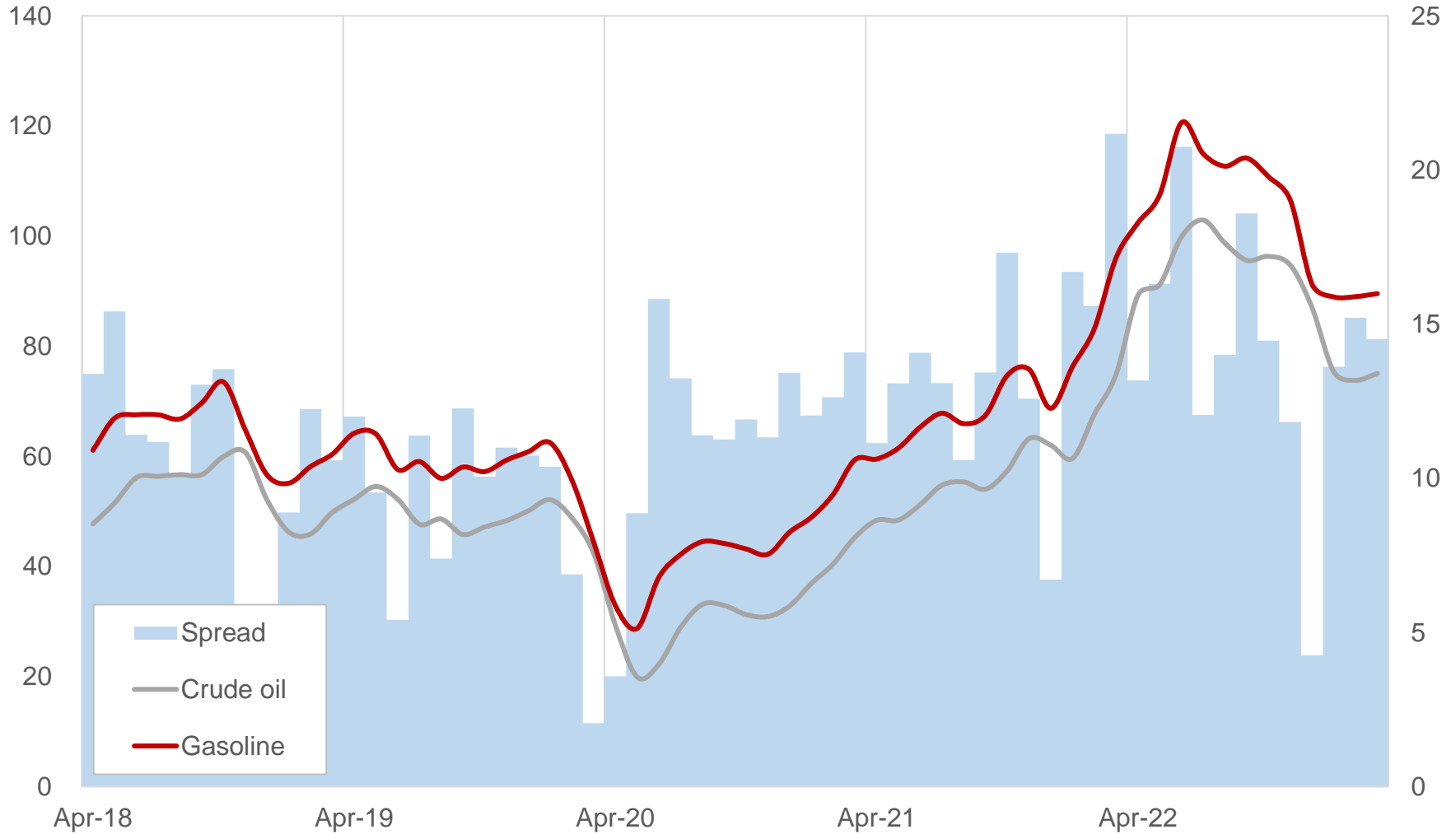
# Crude Oil Prices(Dubai and Brent)



# Gasoline-Crude Oil (Domestic spot price and spread)

[Price : JPY/L]

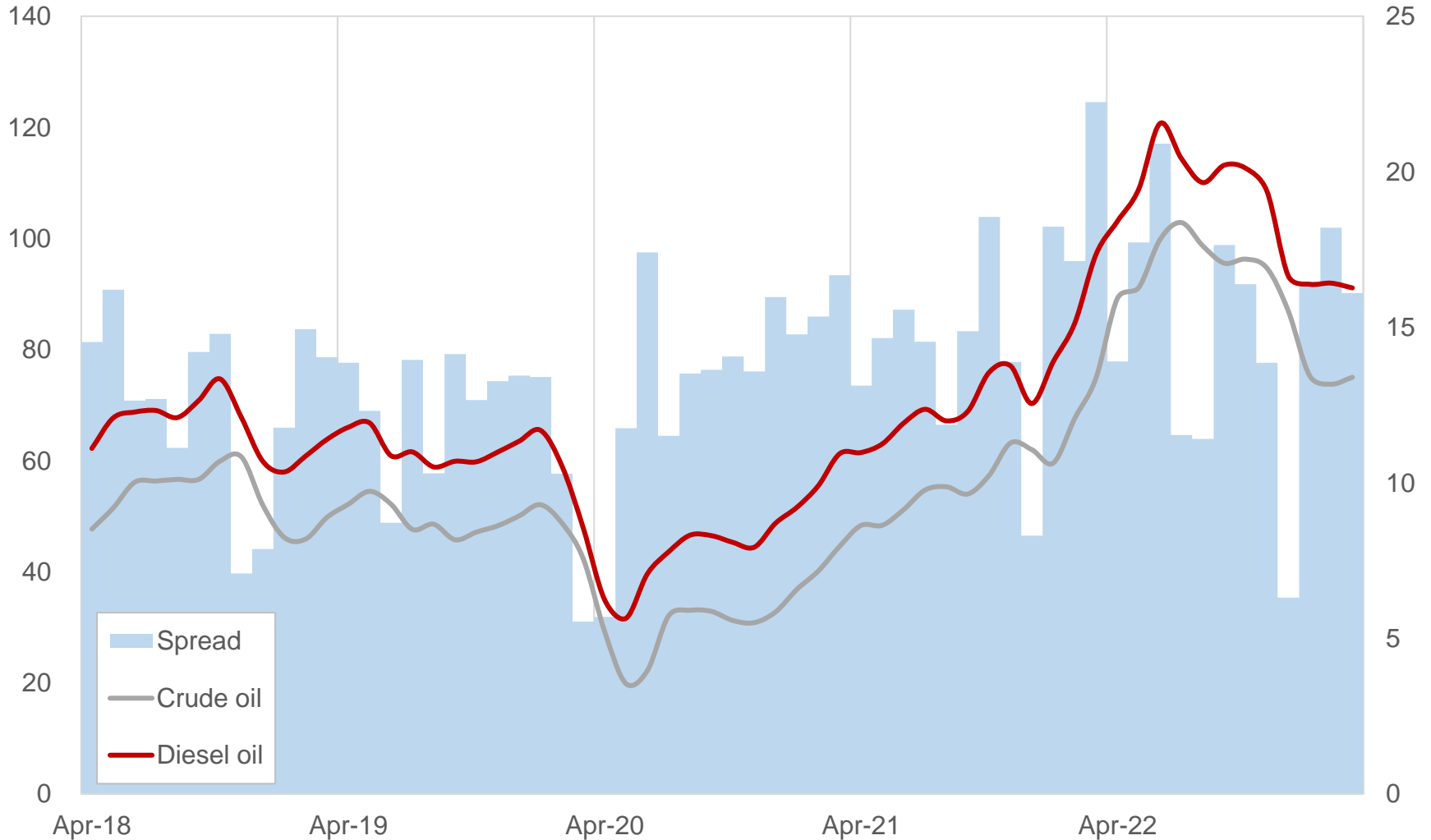
[Spread : JPY/L]



# Diesel-Crude Oil (Domestic spot price and spread)

[Price : JPY/L]

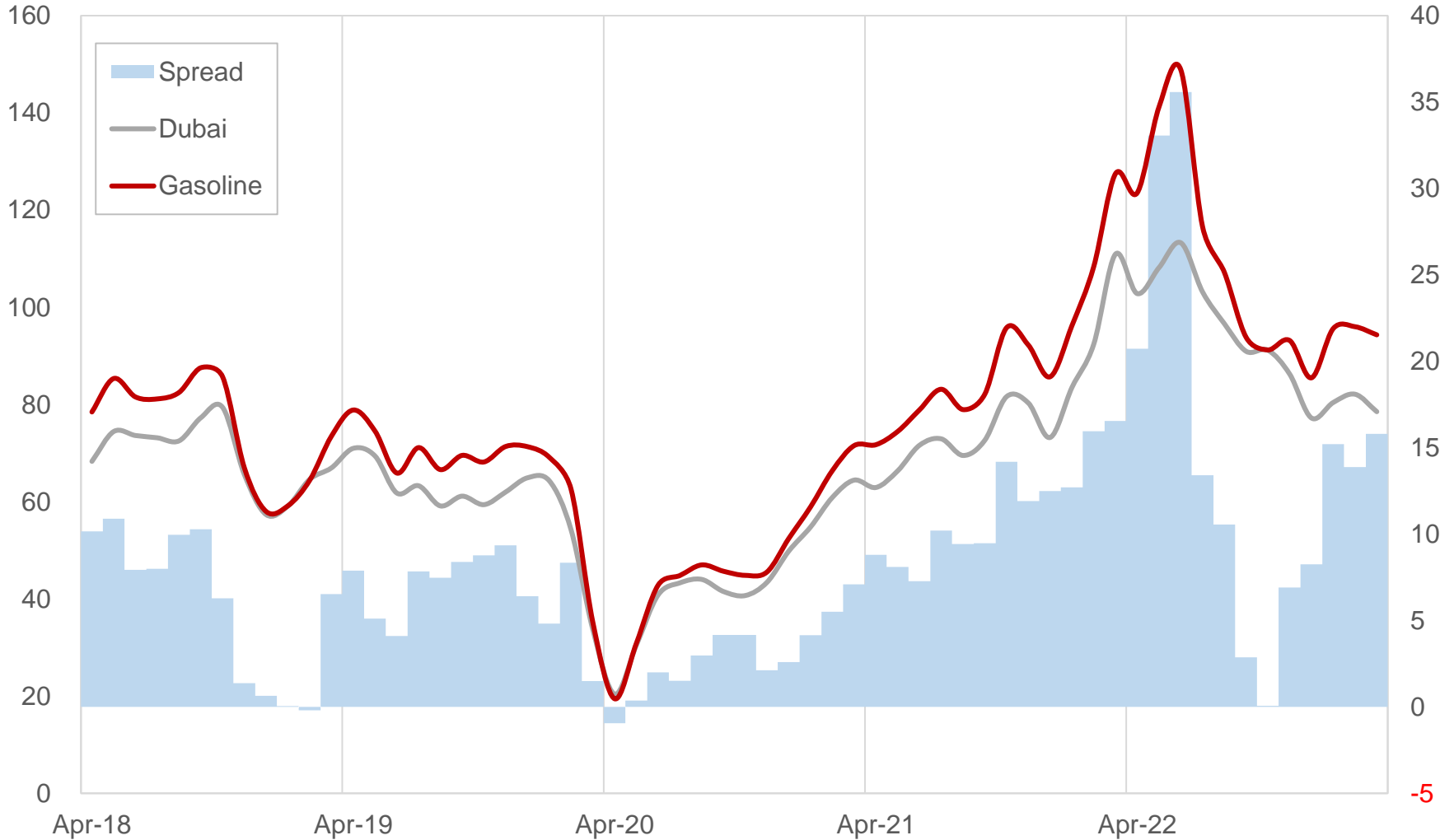
[Spread : JPY/L]



# Gasoline-Crude Oil (Singapore spot price and spread)

[Price :USD/bbl]

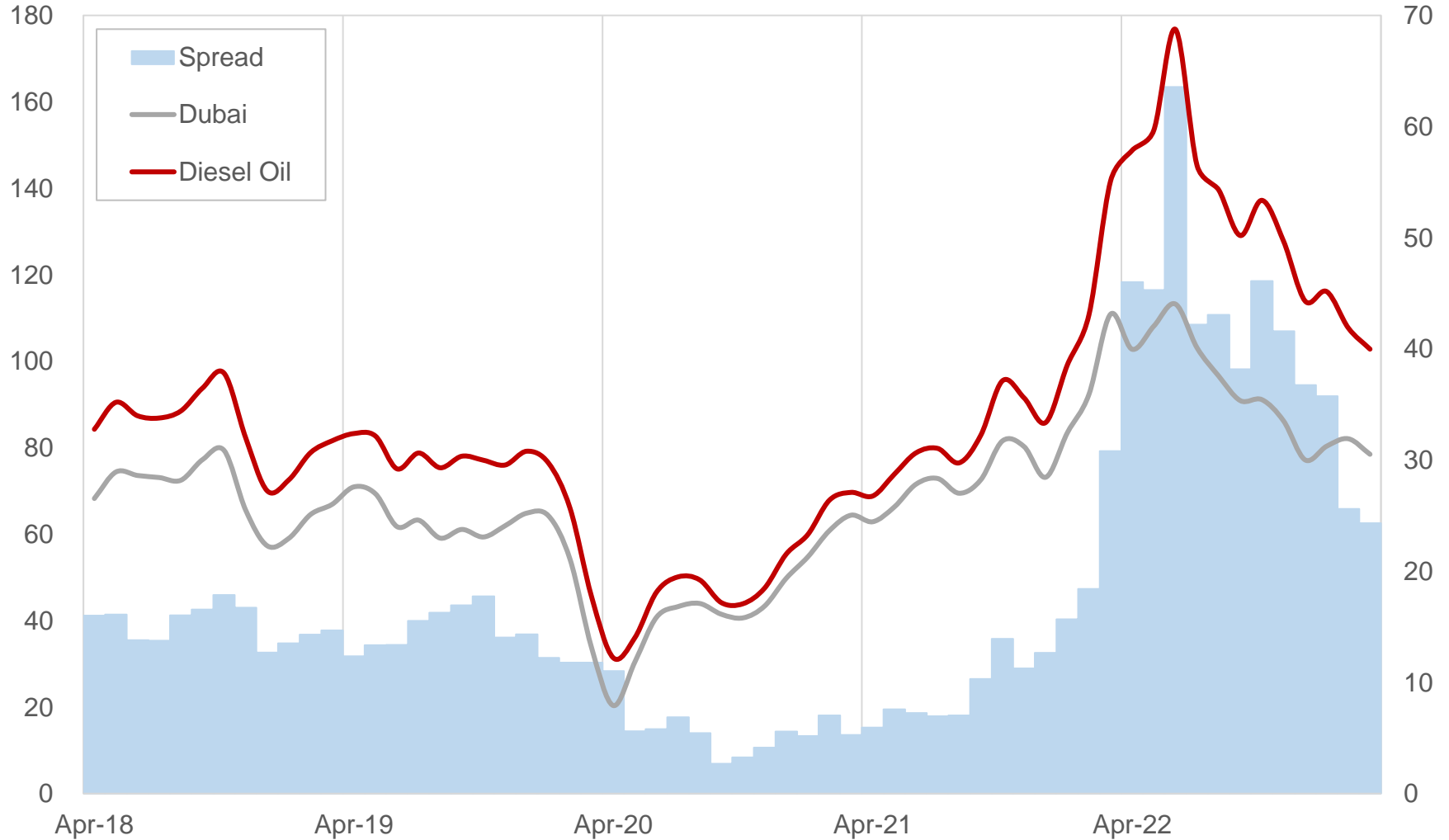
[Spread : USD/bbl]



# Diesel-Crude Oil (Singapore spot price and spread)

[Price :USD/bbl]

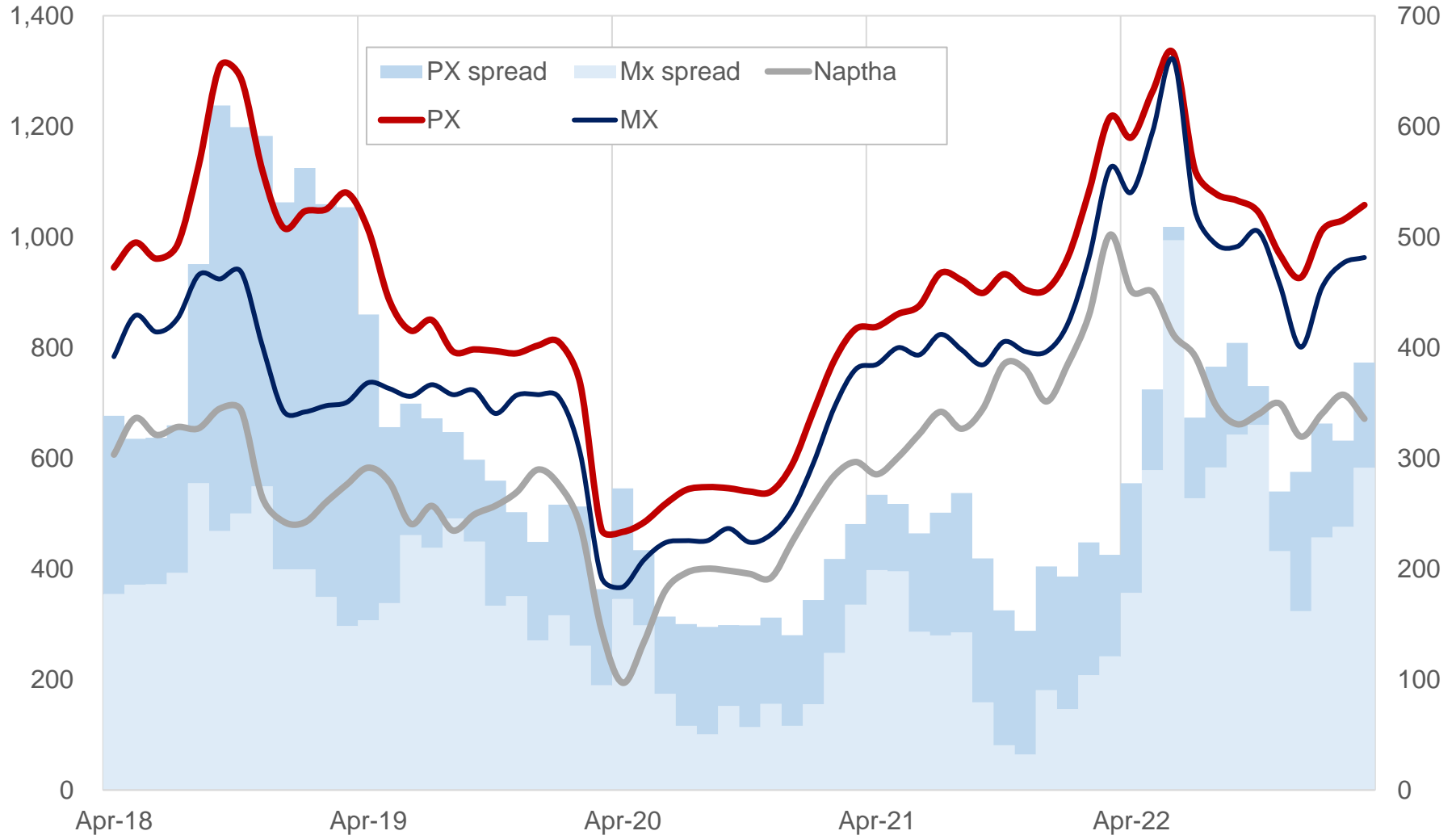
[Spread : USD/bbl]



# Para-Xylene, Mixed Xylene-Naphtha (price and spread)

[Price :USD/ton]

[Spread : USD/ton]

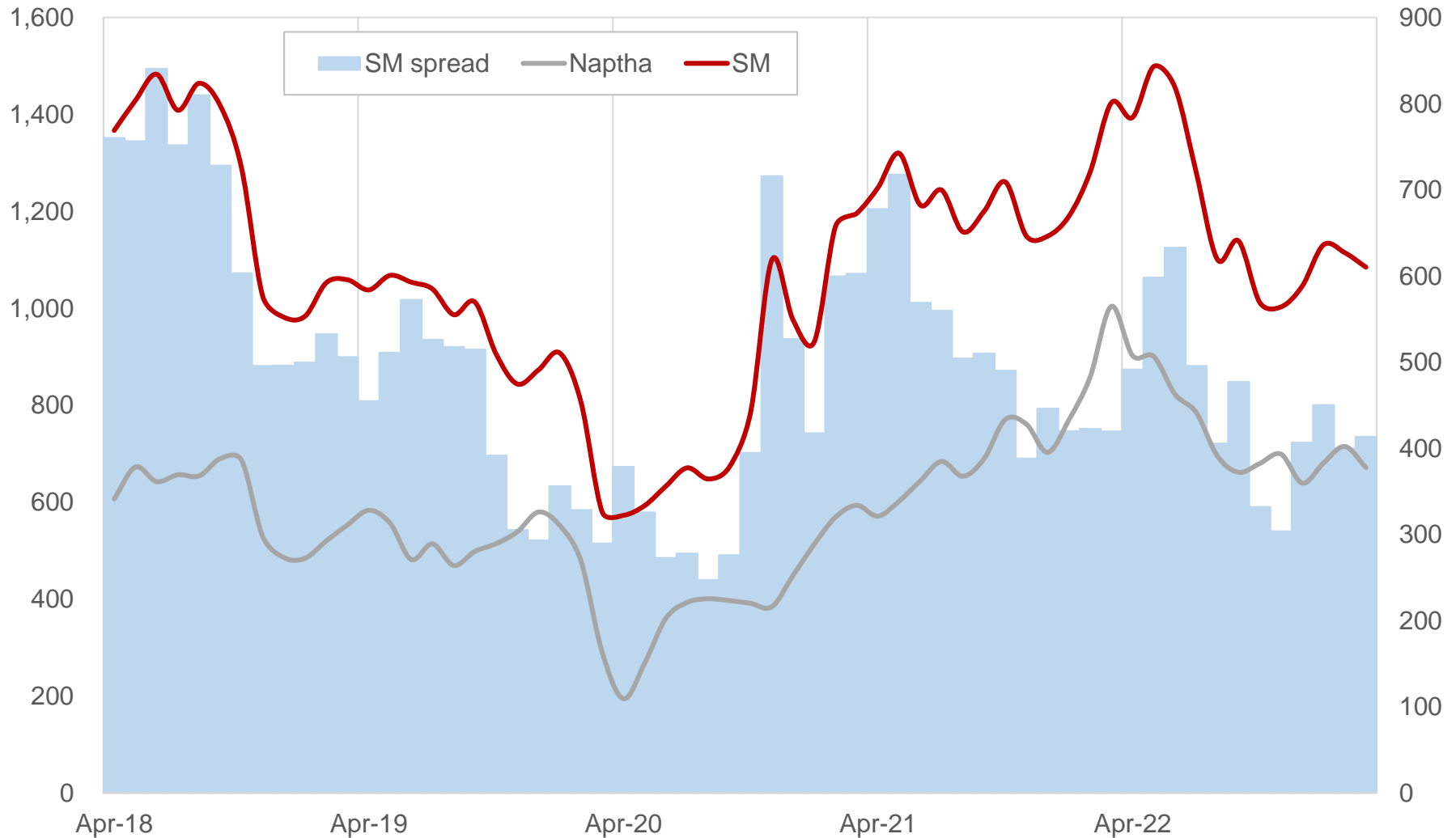




# Styrene Monomer-Naphtha (price and spread)

[Price :USD/ton]

[Spread : USD/ton]



# Operational Data

## ■ Refineries Utilization

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Idemitsu Kosan	88%	88%	87%	78%	77%	83%
Former Showa Shell	88%	93%				

\*on BCD basis

## ■ Number of Service Stations

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Idemitsu Kosan	3,545	3,501	3,446	3,426	3,382	3,358
Former Showa Shell	3,028	2,964	2,938	2,885	2,834	2,778
Total	6,573	6,465	6,384	6,311	6,216	6,136

# Overview of the Company

FY2022, actual or  
as of the end of March 2023

## ■ Petroleum Segment

- Refining Capacity **945 KBD** \*1,2)
- Domestic fuel oil sales volume  
**35 million KL/year** \*3)
- Number of service stations **6,100**

## ■ Basic Chemicals Segment

(Production Capacity\*2) )

- Ethylene **1 mil tons/year**
- Para-Xylene **0.84 mil tons/year**
- Mixed Xylene **0.94mil tons/year**
- Styrene monomers **0.79 mil tons/year**

## ■ Power and Renewable Energy Segment

- Power generation capacity **1.94GW**  
- Renewable energy **0.83GW**

## ■ Functional Materials Segment

(Lubricants, Performance Chemicals, Electronic Materials, Bitumen (High Performance Asphalt), Pesticides and Functional Feed, Lithium Solid Electrolytes)

- Lubricants (sales volume):**1.2 mil KL/year**
- Engineering plastics(sales volume):**150,000 tons/year**
- Adhesive materials(production capacity): **65,000 tons/year**
- OLED materials(production capacity): **26 tons/year**

## ■ Resources Segment \*4)

- Crude oil production **29,000 BD**
- Thermal coal production **6 mil tons/year**

\*1 1,090 KBD when adding the refining capacity of Fuji Oil, Co.,Ltd. with which a petroleum products trade agreement has been signed

\*2 excluding Nghi Son's capacity

\*3 Bond jet fuel and Bond heavy fuel oil C are included in the exports

\*4 For resources segment, the numbers are based on forecasts for FY2023. Muswellbrook was ceased in FY22. Ensham is decided to be sold

# Petroleum Segment

as of the end of March 2023

[KB/D]

Operating Company	Refinery	Refining Capacity	RH	FCC	RFCC	FLG	Equity Ratio
Idemitsu Kosan	<b>Japan</b> Hokkaido	150	42		33		
	Chiba	190	40		45		
	Aichi	160	60		50		
Showa Yokkaichi Sekiyu	Yokkaichi	255	45		61		75.0%
Toa Oil	Keihin	70		42		27	100.0%
Seibu Oil	Yamaguchi	120	52	30			100.0%
		<b>945</b>	<b>239</b>	<b>72</b>	<b>189</b>	<b>27</b>	
Nghi Son Refinery and Petrochemical LLC	<b>Overseas</b> Nghi Son *1,2 (Thanh Hoa, Vietnam)	200	105		80		35.1%
		<b>200</b>	<b>105</b>		<b>80</b>		

\*1 Capacity before equity ratio reflection

\*2 Yamaguchi refinery is scheduled to stop operation by the end of March 2024.

# Basic Chemicals Segment

as of the end of March 2023

[mil tons/year]

Operating Company	Complex/Factory/Refinery	Production Capacity for core products				Equity Ratio
		Ethylene	Para-Xylene	Mixed Xylene	Styrene Monomer	
Idemitsu Kosan	<b>Japan</b> Chiba	0.374	0.265		0.210	
	Aichi		0.357	0.170		
	Tokuyama	0.623	0.214		0.340	
Showa Yokkaichi Sekiyu	Yokkaichi			0.518		75.0%
Seibu Oil	Yamaguchi			0.250		100.0%
	<b>Total</b>	<b>0.997</b>	<b>0.836</b>	<b>0.938</b>	<b>0.550</b>	
Idemitsu SM (Malaysia) Sdn. Bhd.	<b>Overseas</b> Pasir Gudang (Johor, Malaysia)				0.240	70.0%
	Nghi Son Refinery and Petrochemical LLC		0.700			35.1%
	<b>Total</b>		<b>0.700</b>		<b>0.240</b>	

# Functional Materials Segment

## Lubricants

- ◆ Product categories
  - Automotive lubricants (engine oil, etc.)
  - Grease
  - Industrial lubricants (hydraulic actuation oil, cutting oil, etc.)
  
- ◆ Global business with a focus on automotive lubricants
  - #8 global share
  - Over 50% overseas sales
  
- ◆ R&D centers
  - Japan and overseas (US, China, etc.)
- ◆ Global lubricant network



- Manufacturing/sales/R&D network in 28 countries
- Strengthening existing facilities and developing new facilities

## Performance Chemicals

- ◆ Product categories
  - Engineering plastics, adhesives materials, derivative products, solvents and functional materials
  
- ◆ Major products, applications, features
  - Engineering plastics

(Product) PC/Polycarbonates  
 (Applications) smartphones, lenses, automotive lights, etc.  
 (Features) highest impact resistance among plastics

(Product) SPS/ Syndiotactic Polystyrene resin  
 (Applications) automotive electronic parts, kitchen appliances, etc.  
 (Features) lightweight and offers excellent heat resistance, electrical properties, chemical resistance, and hydrolysis resistance



Daytime Running Lamp (DRL)



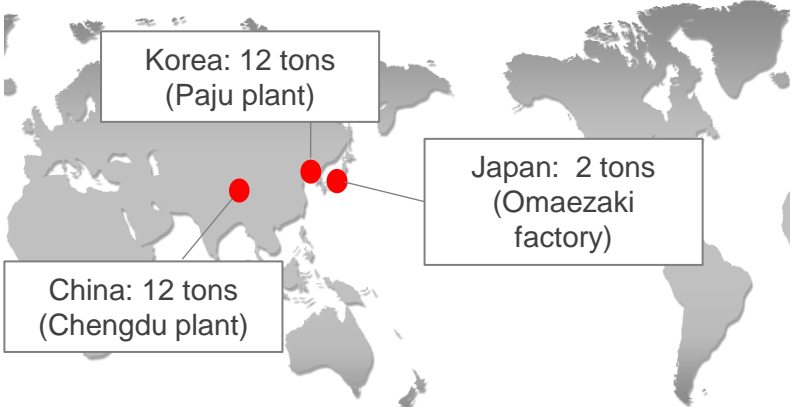







Automotive parts

- Adhesive materials
- (Product) Hydrogenated petroleum resin  
 (Applications) Tackifier for hot-melt adhesives



Disposable diapers and other hygiene products

# Functional Materials Segment

Electronic Materials	Bitumen (High Performance Asphalt)				
<p>◆ Product categories</p> <ul style="list-style-type: none"> <li>• Organic EL materials</li> <li>• Display semiconductor materials etc.</li> </ul> <p>◆ OLED manufacturing/customer support</p>  <p>• Establishing factories and customer support centers in Asia and reinforcing relationships with display manufacturers, etc. to further expand the organic EL materials business in Asia</p> <p>• Aiming to develop and commercialize oxidative semiconductor materials which are expected to conserve energy and enhance image quality of display products</p>	<p>◆ Asphalt manufacturer which aims to develop state-of-the-art technologies</p> <ul style="list-style-type: none"> <li>• Recycling, longer life, carbon neutrality</li> </ul> <p>◆ Product categories</p> <ul style="list-style-type: none"> <li>• Engineering/construction asphalt</li> <li>• Industrial asphalt</li> <li>• Value-added asphalt for roads</li> </ul>  <p><b>Maybright</b> (Value-added asphalt for roads)</p> <tr> <th colspan="2" data-bbox="962 611 1864 661">Pesticides and Functional Feed</th> </tr> <tr> <td colspan="2" data-bbox="962 661 1864 1278"> <p>◆ Product categories</p> <ul style="list-style-type: none"> <li>• Chemical pesticides</li> <li>• Plant-derived pesticides</li> <li>• Functional Feeds (RUMINUP*1, etc.)</li> </ul>  <p><b>RUMINUP</b></p>  <p><b>Swirmite</b> (Biological control agent)</p> </td> </tr>	Pesticides and Functional Feed		<p>◆ Product categories</p> <ul style="list-style-type: none"> <li>• Chemical pesticides</li> <li>• Plant-derived pesticides</li> <li>• Functional Feeds (RUMINUP*1, etc.)</li> </ul>  <p><b>RUMINUP</b></p>  <p><b>Swirmite</b> (Biological control agent)</p>	
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\*1 An animal husbandry material containing cashew nut shell liquid that has the effect of reducing methane gas in cattle burps

# Power /Renewable Energy Segment

Power	Category	Power Plant	Operating Company	Stake Owned (%)	Power generation capacity* (10,000 KW)
	Solar	34 domestic locations	Idemitsu, other	—	18.7
	Biomass	Keihin Biomass Power Plant (Kanagawa)	Keihin Biomass Power	100	4.9
		Tosa Power Plant (Kochi)	Tosa Green Power	50	0.3
		Fukui Green Power (Fukui)	Fukui Green Power	10	0.1
		Tokuyama Biomass Power Plant (Yamaguchi)	Idemitsu	—	5.0
	Wind	Rokkasho Village Wind Farm (Aomori)	Futamata Wind Development	40	2.0
	Geothermal	Tagigami Binary Power Plant (Oita)	Idemitsu Oita Geothermal	100	0.5
	Renewable (Japan)				31.5
	Fire	Ohgishima Power Station (Kanagawa)	Ohgishima Power	25	30.5
		Mizue Thermal Power Plant (Kanagawa)	Toa Oil	100	27.6
		Aichi Refinery Power Plant (Aichi)	Idemitsu	—	25.0
	<b>Domestic</b>				<b>114.9</b>
	Solar	Overseas (North America, Vietnam, etc.)	—	—	52.1
	Fire	Overseas	—	—	27.1
	<b>Overseas</b>				<b>79.2</b>
	<b>Total</b>				<b>194.1</b>

\*Reflects Idemitsu's stake

- ◆ Owing 836 thousand KL(Japan:315, Overseas:521) of renewable energy generation capacity
- ◆ Operating businesses such as wholesale and retail sales for high and low pressure, based on the company's own generation.

## Solar

- ◆ Panel production was terminated in June 2022 with transition to a system integrator which engages in solar power generator design, construction, maintenance and recycling.



# Resources Segment (Gas and Oil E&P)

## Business Overview

1. Producing and selling crude oil/gas in Vietnam and Norway
2. Exploration and development of gas in Vietnam and other parts of Southeast Asia to shift to production of natural gas, which will become an important energy source in a decarbonized society

### ◆ Rights owned in oil/gas fields and sales destinations

as of the end of March 2023

		Rights owned (%) <sup>*1</sup>	Destination
<b>Sao Vang and Dai Nguyet gas field (Vietnam)</b>		43.08	Asia
<b>Norway</b>	Snorre	9.60	Europe
	Tordis/Vigdis	9.60	
	Statfjord/East	4.80	
	Sygna	4.32	
	Fram	15.00	
	H-Nord	28.80	
	Byrding	15.00	
	Vega	3.30	
Duva	30.00		

<sup>\*1</sup> Companies in which Idemitsu owns rights

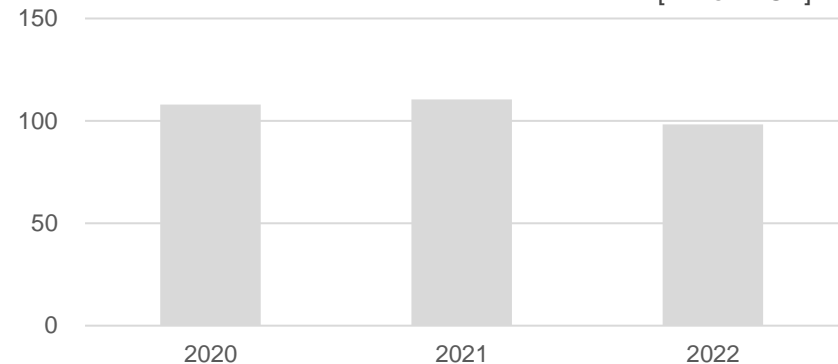
Norway : INPEX Idemitsu Norge AS

Vietnam : Idemitsu Gas Production (Vietnam) Co.,Ltd.

## Production Oil/Gas Reserves

### ◆ Reserves <sup>\*2,3</sup>

[million BOE]



<sup>\*2</sup> Total reserves in Norwegian oil fields and Vietnamese gas fields

<sup>\*3</sup> Reserves reflect Idemitsu's rights and ownership ratios

#### ◆ Reserve Estimation Standards

- Idemitsu's reserves estimation is conducted based on PRMS (Petroleum Resources Management System) standards
- PRMS standards were established jointly by the Society of Petroleum Engineers (SPE), the World Petroleum Congress (WPC), the American Association of Petroleum Geologists (AAPG), and the Society of Petroleum Evaluation Engineers (SPEE) and is recognized as an international standard
- Reserves defined by PRMS standards are categorized into 1) proved, 2) probable, and 3) possible reserves. Idemitsu's reserves estimate is calculated as the total of proved and probable reserves (1+2)




#### ◆ Proved Reserves

- The definition of proved reserves is recognized as the most conservative among definitions used widely in the petroleum/gas industry
- Proved reserves are those quantities of petroleum/gas which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable under current economic conditions and operating methods
- When probabilistic methods are used, there should be at least a 90% probability of recovery that the quantities actually recovered will equal or exceed proved reserves

#### ◆ Probable Reserves

- Probable reserves are those unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable
- When probabilistic methods are used, there should be at least a 50% probability that the quantities actually recovered will equal or exceed the sum of estimated proved plus probable reserves

# Resource Segment (Coal)

Business Overview	Business Structure Reforms
<p>[Business Strategy]</p> <ul style="list-style-type: none"> <li>◆ Stable supply and profit maximization by leveraging the highly competitive Boggabri Mine</li> <li>◆ Engage in low-carbon solution businesses such as Idemitsu Green Energy Pellets</li> <li>◆ Leverage management resources built up over years of experience in Australia to transition to new businesses such as rare metals, renewable energy, hydrogen/ammonia, etc.</li> </ul> <p>1. Mining Operations</p> <p>Owning an Australian coal mine (Boggabri Mine) and has established a whole supply chain from production to sales, providing a stable supply of high-quality coal mainly to Japan</p> <p>[Overview of Boggabri Mine]</p> <p>Location: New South Wales</p> <p>Coal quality: thermal coal (80%), raw coal (SS/PCI) (20%)</p> <p>Port for shipments: Newcastle Harbor (about 360 km by train)</p>  <p>*Mining operations at Muswellbrook Mine were terminated in 2022 and a decision to sell Ensham Mine has been finalized</p>	<p>◆ <b>Idemitsu Green Energy Pellets (black pellets)</b></p> <ul style="list-style-type: none"> <li>• CO<sub>2</sub> emissions can be reduced by replacing coal with black pellets in fuel used at coal-fired power stations</li> <li>• Succeeded in a mixed combustion to replace 20-30% of coal fuel with black pellets</li> <li>• Planning to operate a commercial plant that produces 120,000 tons/year in Vietnam in FY23. Aiming to reach 3,000,000 tons/year by 2030</li> </ul>   <p><b>Vietnam Commercial Plant</b></p> <p>◆ <b>New businesses in Australia</b></p> <ul style="list-style-type: none"> <li>• Rare metals: Invested in Vecco, which engages in vanadium operations in Australia</li> <li>• Renewable energy: Commercialization verification of pumped storage hydroelectric power generation at the post-mining Muswellbrook coal mine site</li> </ul>

## Precaution statement about forecasts

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Any information about forecasts for the Company's operating results, management strategy and management policy contained in this documents other than historical facts is prepared, according to judgments made by the top management of the Company based on information available as of the publication of the document.

Actual business environments contain potential risk factors and uncertainties including economic situations, crude oil prices, trends in petroleum products, market conditions, currency exchange rates and interest rates.

Consequently, actual operating results of the Company may substantially differ from forecasts due to changes in the important factors mentioned above.