

Presentation on Results for the 1st Quarter FY2023

**August 8, 2023
Idemitsu Kosan Co.,Ltd.**

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■ Highlights

Results for the 1Q FY2023

■ Summary

- ✓ Operating + equity income (segment income) decreased by ¥191.4 billion y-o-y, due to reversal of inventory impact resulting from increased crude oil prices in the previous fiscal year, etc.
- ✓ Segment income excluding inventory impact decreased by ¥27.5 billion due to decreased exports in the petroleum business, etc.

[¥ billions]

	1Q FY2022	1Q FY2023	Change
Operating Income + Equity Income	244.1	52.7	(191.4)
<i>Inventory impact</i>	159.2	(4.7)	(163.9)
<i>Exc. inventory impact</i>	84.9	57.4	(27.5)
Net Income Attributable to Owners of the Parent	179.3	45.4	(133.9)
<i>Exc. inventory impact</i>	68.9	48.7	(20.2)

■ Forecasts for FY2023

- ✓ 1Q performance was basically in line with plan
- ✓ Despite fluctuations seen in coal prices and foreign exchange rates from the assumptions announced in May, forecasts are left unchanged as their impact on full-year performance is expected to be limited

■ Results for the 1Q FY2023

Key Topics(1/2)

■ Trends in Petroleum Demand and Sales

- ✓ Demand for core products, particularly gasoline, has stabilized after recovery from reduction under COVID-19
- ✓ Jet fuel demand has remained on a recovery trend since FY2020

	FY2020	FY2021	FY2022	1Q FY2023
Core products	94.6%	98.6%	100.9%	98.9%
<i>Gasoline</i>	90.4%	99.6%	101.3%	98.0%
Jet fuel	54.2%	126.0%	136.8%	110.4%

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

■ Situation of Nghi Son Refinery in Vietnam

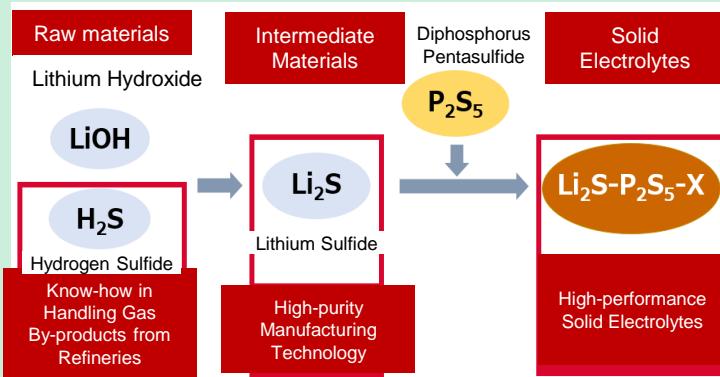
- ✓ Operating income was at break-even. Zero equity income/losses on consolidated basis due to loss on write-down of long-term loans receivable reported in FY2021
- ✓ Uptrend in profit because of high utilization ratio of the refinery and current product margin environment
- ✓ NSRP will experience regular maintenance for the first time from the end of Aug. During the time, measures are implemented that will enhance facility reliability and productivity
- ✓ For further improvement in profitability, talks among sponsors are continued

Key Topics(2/2)

■ Solid Electrolytes for Next-generation Batteries ~for early practical application of EVs ~

<Idemitsu's Strengths>

- ✓ Integrated manufacturing technology from raw materials to finished products based on long history of oil refining
- ✓ Competitive advantages in procurement and cost as hydrogen sulfide (H₂S) for raw materials is produced as by-product of refineries
- ✓ Top-class numbers of patent



<Initiatives towards Commercialization>

- ✓ Enhance performance of materials
 - ☞ Promote development in coordination with automakers and battery manufacturers
 - ☞ Joint development with materials manufacturers, etc.
- ✓ Establish volume production technology
 - ☞ Establish mass production technology with large pilot equipment after verification at small verification facilities to make way for subsequent commercialization

<Recent Initiatives and Outlook>



[plant #1, planned to expand capacity]

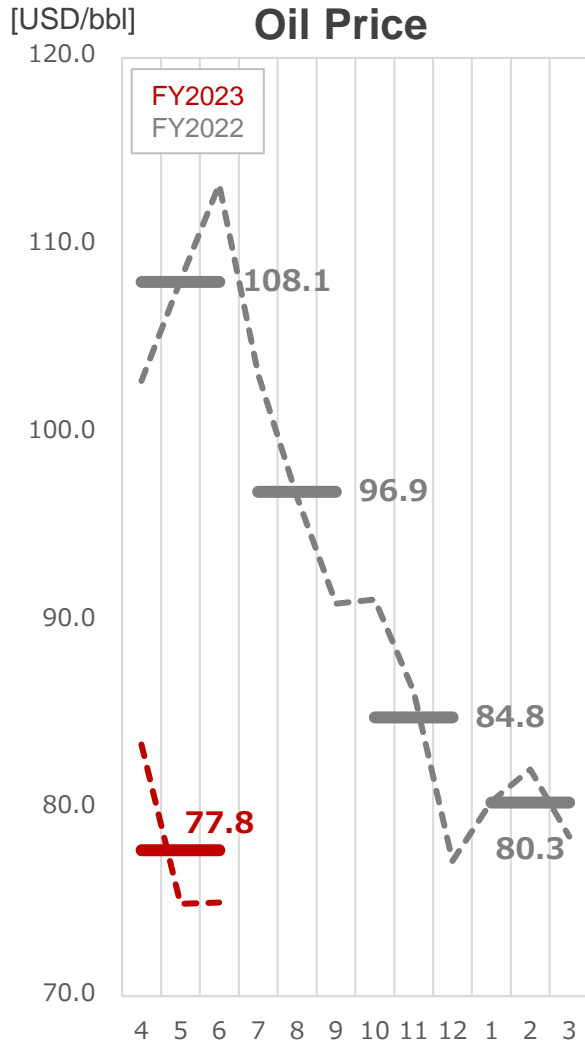
- Nov 2021 Commenced operations at small verification facility #1
- Apr 2022 “Development of mass production technology for sulfide solid electrolytes” selected for NEDO’s green innovation fund
- Jun 2022 Commenced development of high-performance materials with Umicore that combines positive electrode materials with solid electrolytes
- Jun 2023 Decided to increase supply capacity of small verification facility #1 (aimed or completion in FY2024)
- Jul 2023 Commenced operations at small verification facility #2

Mass Production in FY2027*

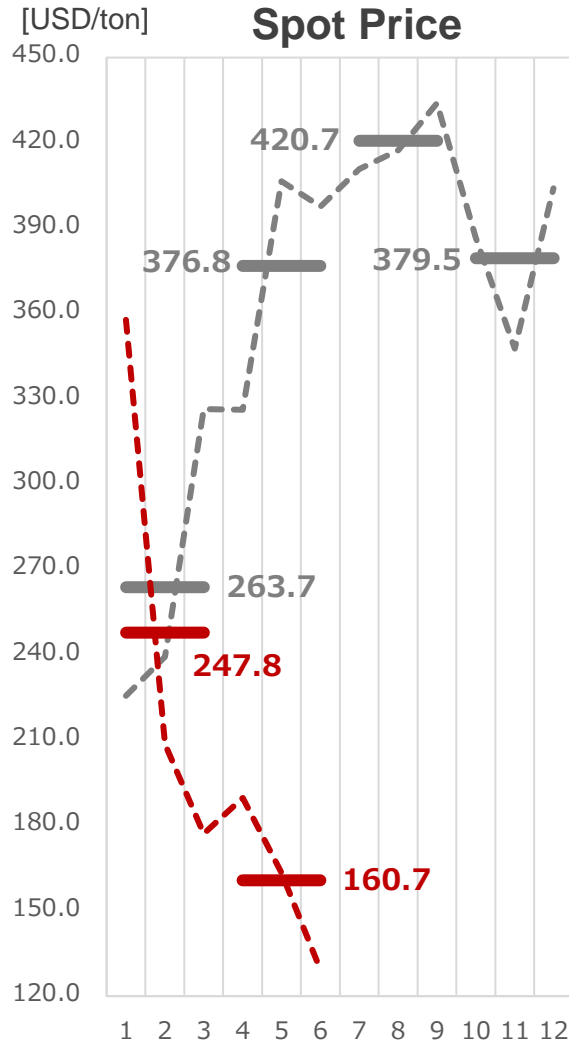
* Commence verification for mass production technology with large pilot equipment

Operating Environment

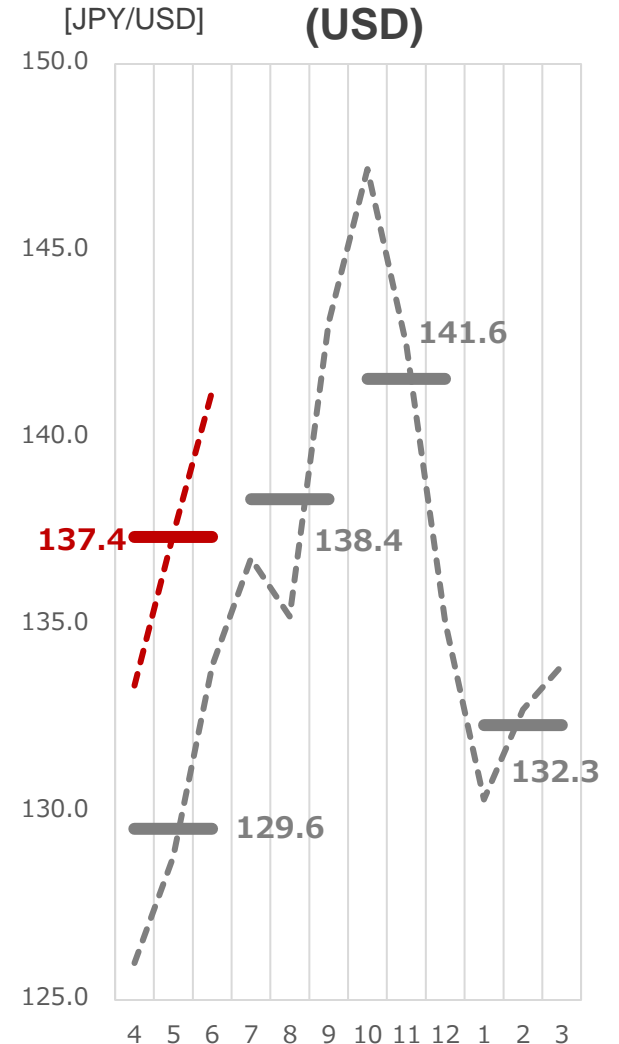
Dubai Crude



Australian Coal



Exchange Rate



Overview

■ Crude Oil/Coal/Exchange Rate

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

	1Q FY2022	1Q FY2023	Change	
Crude Oil (Dubai)	108.1	77.8	(30.3)	(28.0%)
Crude Oil (Brent)*	101.4	81.3	(20.2)	(19.9%)
Australian Coal Spot Price*	263.7	247.8	(15.9)	(6.0%)
Exchange Rate (TTM)	129.6	137.4	+7.8	+6.0%

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

■ Consolidated Income Statement(Summary)

[¥ billions]

	1Q FY2022	1Q FY2023	Change	
Net Sales	2,204.7	1,818.9	(385.8)	(17.5%)
Operating Income	233.6	44.9	(188.8)	(80.8%)
<i>Inventory impact</i>	159.2	(4.7)	(163.9)	—
Equity Income	10.5	7.8	(2.6)	(25.2%)
Operating Income + Equity Income	244.1	52.7	(191.4)	(78.4%)
<i>Excluding inventory impact</i>	84.9	57.4	(27.5)	(32.4%)
Ordinary Income	245.0	57.8	(187.2)	(76.4%)
Extraordinary Income/Losses	8.9	1.5	(7.4)	(82.9%)
Net Income Attributable to Owners of the Parent	179.3	45.4	(133.9)	(74.7%)
<i>Excluding inventory impact</i>	68.9	48.7	(20.2)	(29.3%)

Segment Information

■ Operating + Equity Income

[¥ billions]

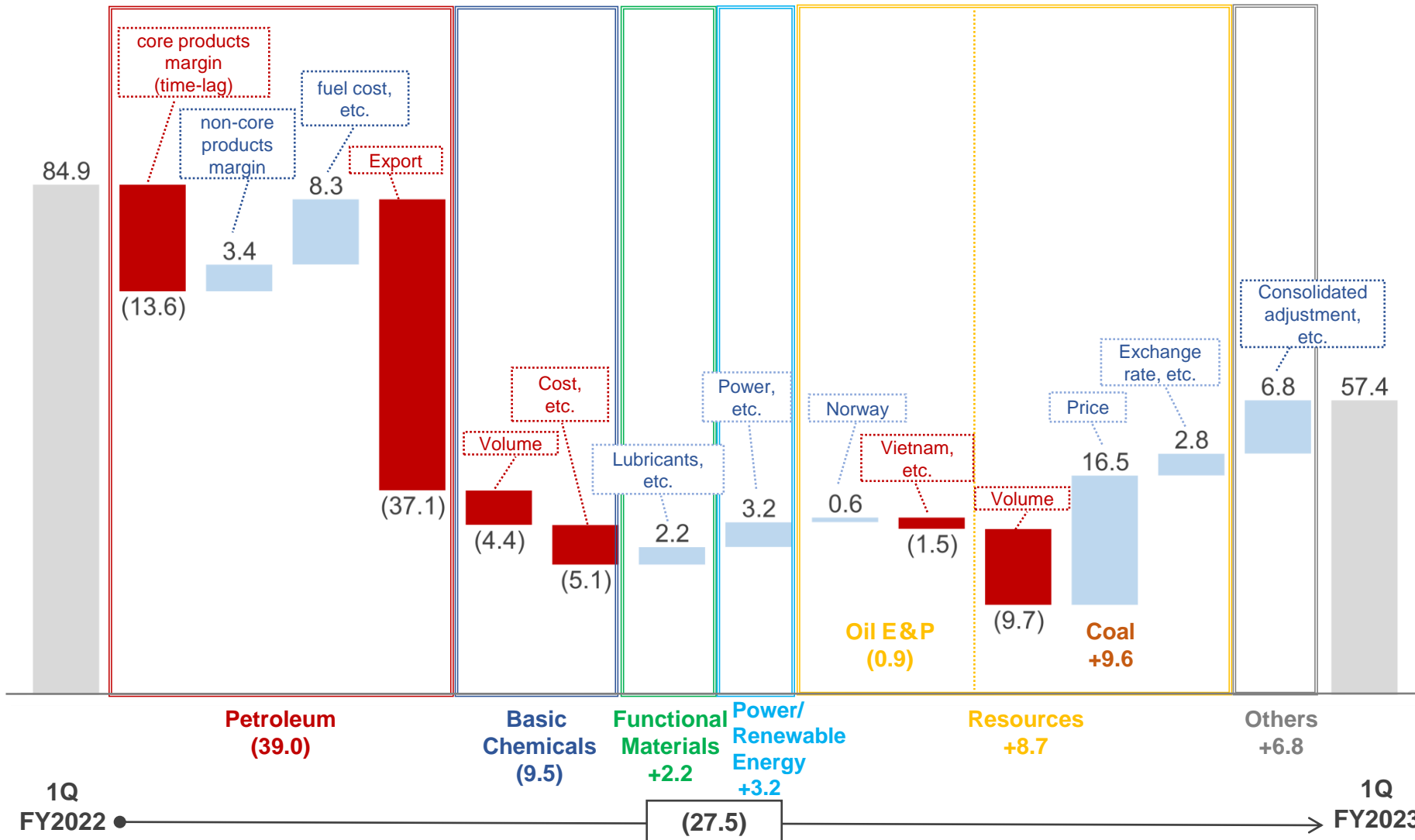
	1Q FY2022	1Q FY2023	Change	
Petroleum	216.6	13.7	(202.9)	(93.7%)
<i>Excluding inventory impact</i>	57.4	18.4	(39.0)	(67.9%)
Basic Chemicals	8.1	(1.4)	(9.5)	—
Functional Materials	3.3	5.5	+2.2	+68.4%
Power and Renewable Energy	(3.7)	(0.5)	+3.2	—
Resources*	31.7	40.4	+8.7	+27.5%
<i>Oil Exploration and Production</i>	6.5	5.7	(0.9)	(13.1%)
<i>Coal</i>	25.1	34.7	+9.6	+38.2%
Others/Reconciliation	(11.9)	(5.1)	+6.8	—
Total	244.1	52.7	(191.4)	(78.4%)
<i>Excluding inventory impact</i>	84.9	57.4	(27.5)	(32.4%)

*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)

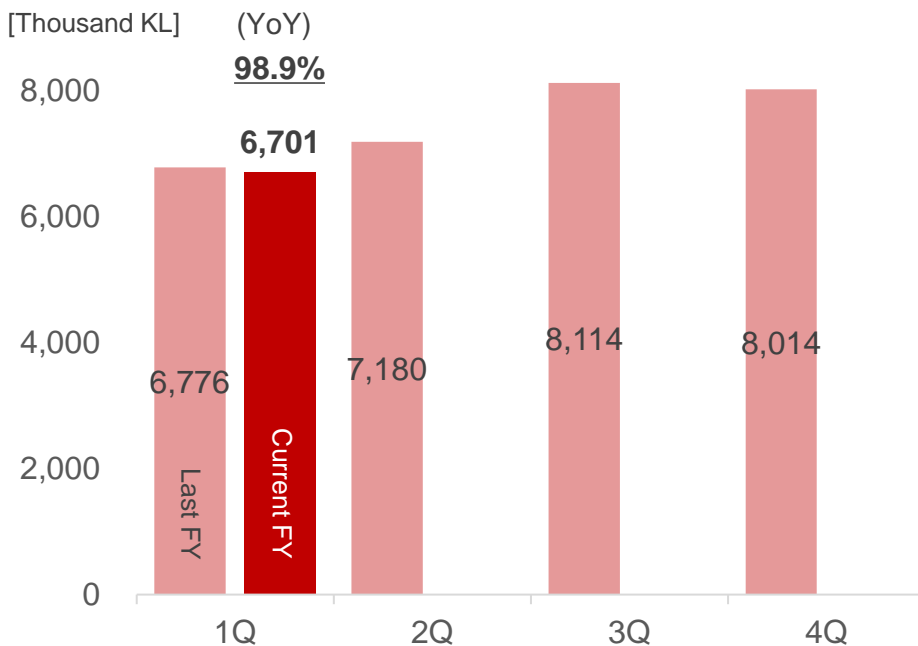
[¥ billions]



Segment Information

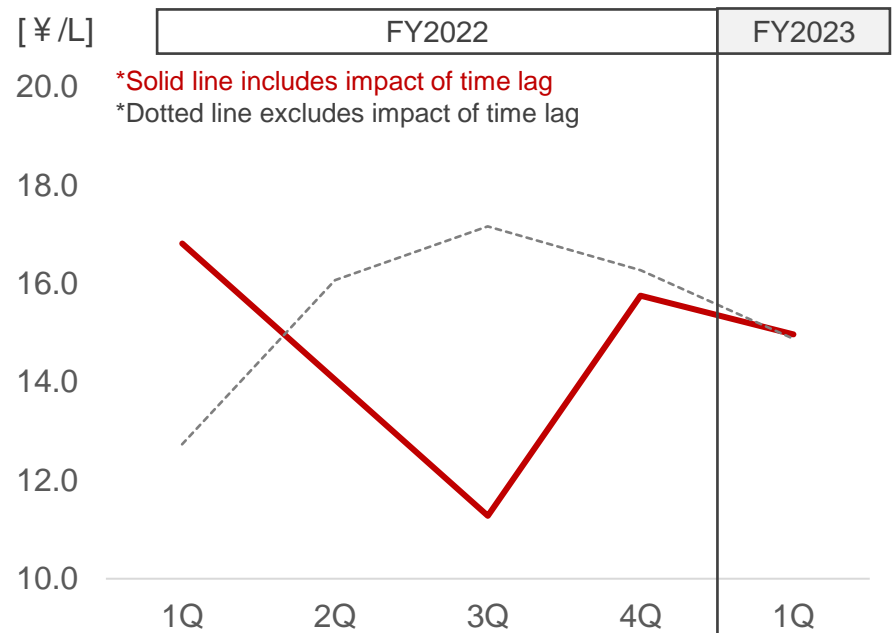
[Petroleum] YoY-¥39.0bn (1Q FY22 : ¥57.4bn ➔ 1Q FY23 : ¥18.4bn)

[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)



- ✓ Most depressing factor in income was export due to volume reduction in sales resulting from shut down maintenance and shrinking margins on products of Singapore
- ✓ Decreased contribution of positive time-lag effect also led to deterioration of domestic margins for core products
- ✓ Partially offset by reduced fuel costs due to lower crude oil prices

Segment Information

[Basic Chemicals] YoY-¥9.5bn (1Q FY22: ¥8.1bn ➔ 1Q FY23: -¥1.4bn)

- ✓ Decreased as a result of volume reduction in sales and cost increase due to shut down maintenance
- ✓ Product margin was unchanged in total [USD/ton]

Product	1Q FY22		1Q FY23		Change	
	Price	Margin	Price	Margin	Price	Margin
PX	1,259	384	1,030	429	(229)	+45
MX	1,200	324	930	329	(270)	+5
SM	1,417	541	1,013	411	(404)	(130)

[Functional Materials] YoY+¥2.2bn (1Q FY22: ¥3.3bn ➔ 1Q FY23: ¥5.5bn)

- ✓ Lubricants: Increased due to reversal of negative time-lag impact from the previous FY in spite of reduced sales volume
- ✓ Performance chemicals: Decreased due to reversal of soaring market prices in some products in the previous FY
- ✓ Electronic materials: Decreased due to reduced sales volume resulting from current weak demand for Smartphones and OLED-TVs

[Power/Renewable Energy] YoY+¥3.2bn (1Q FY22: -¥3.7bn ➔ 1Q FY23 : -¥0.5bn)

- ✓ Power: Improved mainly due to initiatives towards sales within self generation
- ✓ Solar: Improved due to cost reductions based on structural reforms

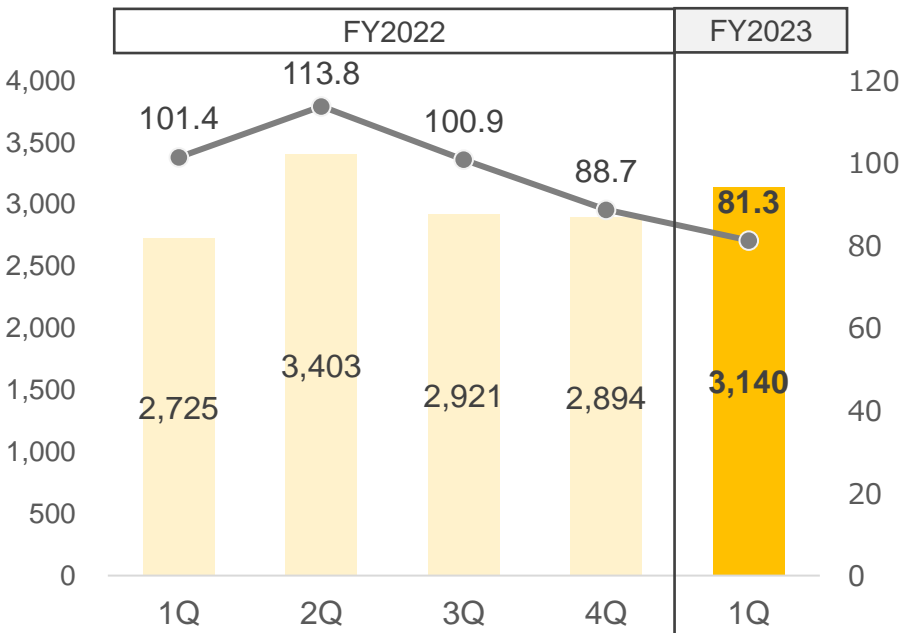
Segment Information

[Oil E&P] YoY -¥0.9 bn

(1Q FY22 : ¥6.5bn ➔ 1Q FY23 : ¥5.7 bn)

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

[Thousand BOE] [USD/bbl]



- ✓ Decreased due to a fall in crude oil prices as well as cost increase in spite of growing production volume in both Norway and Vietnam

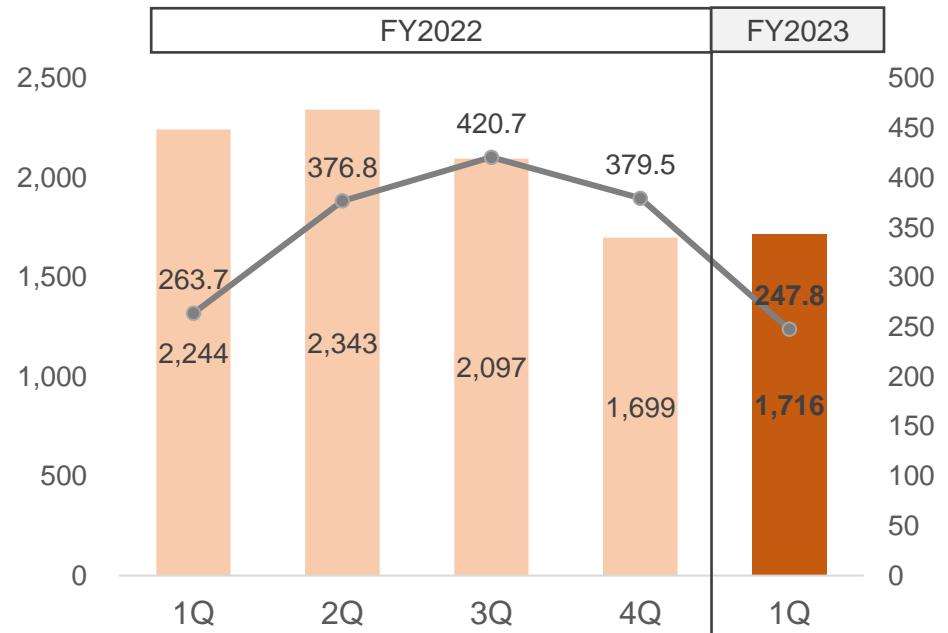
*Figures reflect share of rights owned in resource development affiliates

[Coal] YoY +¥9.6 bn

(1Q FY22 : ¥25.1bn ➔ FY23 : ¥34.7 bn)

<Coal Production Volume and Australian Coal Spot Price Trends>

[Thousand tons] [USD/ton]



- ✓ Production volume decreased in accordance with reduced number of mines
- ✓ Increased sales price due to time-lag under declining market condition

* Terminated mining at Muswellbrook mines in March 2023
 * (Reference) 4Q FY21 thermal coal spot price: 183USD/ton

Balance Sheet

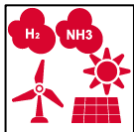
[¥ billions]

	3/31/2023	6/30/2023	Change		3/31/2023	6/30/2023	Change
Cash and Deposits	105.2	133.7	+28.5	Total Current Liabilities	2,164.0	1,981.4	(182.5)
Receivables, Inventory, etc.	2,626.9	2,421.8	(205.1)	Total Fixed Liabilities	1,072.1	1,071.3	(0.7)
Total Current Assets	2,732.1	2,555.5	(176.6)	Total Liabilities	3,236.1	3,052.8	(183.3)
Tangible Fixed Assets	1,390.0	1,383.1	(6.9)	Shareholders' Equity and Other Comprehensive Income	1,614.5	1,629.5	+15.0
Other Fixed Assets	743.3	757.5	+14.2	Noncontrolling Interests	14.8	13.8	(1.0)
Total Fixed Assets	2,133.3	2,140.6	+7.3	Total Net Assets	1,629.3	1,643.3	+14.0
Total Assets	4,865.4	4,696.1	(169.3)	Total Liabilities and Net Assets	4,865.4	4,696.1	(169.3)

Net D/E ratio	0.87	0.80	(0.07)
Total Interest-bearing debt	1,503.4	1,433.9	(69.5)
Equity ratio	33.2%	34.7%	+ 1.5%

■ Progress on the Medium-Term Plan

*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 on the Medium-term Plan (1/4)

■ Additional investment in an Australia-based lithium exploration

- ✓ Australia is rich in mineral resources and has reserves of many kinds of rare metals, including lithium and vanadium
- ✓ Leveraging the business base it has developed through coal mining operations in Australia over the past 40 years, Idemitsu is promoting entry into the rare metals business, which has an affinity with coal mining operations
- ✓ Investing in Delta Lithium Limited to respond to the increasing demand for lithium in conjunction with the electrification of mobility and demand for large-scale stationary storage batteries



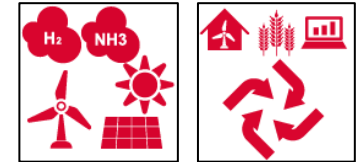
Photograph of DLI's Project

(Link to our disclosure document)

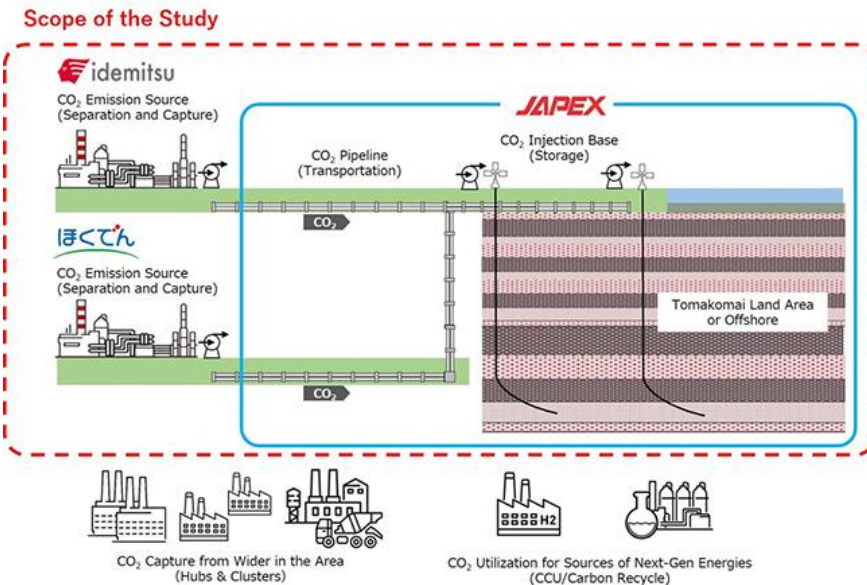
<https://www.idemitsu.com/en/news/2023/230616.html>

Topics related to Progress on the Medium-term Plan (2/4)

■ Commission a CCS Study in Tomakomai Area as JOGMEC's Business Feasibility Study



- ✓ JAPEX, HEPSCO, and Idemitsu signed a contract
- ✓ The public solicitation is held by JOGMEC, based on the policy of the Japanese Government to support advanced projects as role models for developing the business environment toward the launch of CCS projects by 2030



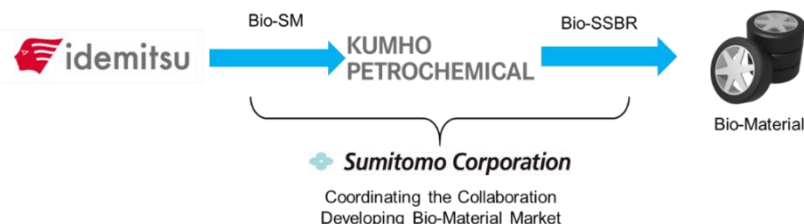
(Link to our disclosure document)

<https://www.idemitsu.com/en/news/2023/230719.html>

Topics related to Progress on the Medium-term Plan (3/4)

■ Create a Bio Material Supply Chain

- ✓ Idemitsu, KUMHO and Sumitomo Corp. have signed MOU
- ✓ Producing styrene monomers made from bio-naphtha (biomass SM) and synthetic rubber made from solution styrene butadiene (biomass SSBR)
- ✓ Planning to commence production of biomass SSBR in 2024



Supply Chain Diagram

(Link to our disclosure document)

https://www.idemitsu.com/en/news/2023/230517_1.html

■ Commercialization of Domestic Drone in Service Stations

- ✓ Drone development technology that takes advantage of Idemitsu's SS network and personnel with maintenance techniques as well as Futaba Corporation's cutting-edge wireless telecommunications technology
- ✓ Promoting integrated operations from airframe development to operations and training
- ✓ Aiming to solve regional challenges through inspections, logistics, and disaster response through Service Stations (SS)



Drone currently being co-developed

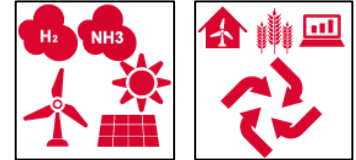
(Link to our disclosure document, Japanese only)

<https://www.idemitsu.com/jp/news/2023/230703.html>

Topics related to Progress on the Medium-term Plan (4/4)

■ Study on Producing and Supplying System of Synthetic Fuel (e-fuel)

- ✓ Signed MOU with Saudi Aramco and ENEOS
- ✓ Engaging in joint discussions for technological cooperation relating to synthetic fuel (e-fuel) in Japan and its commercialization and dissemination
- ✓ Idemitsu will consider producing synthetic fuels in its domestic group refineries and plants, aiming to establish a production and supply system for synthetic fuels by the late 2020s



Signing of the MOU with Aramco and ENEOS

(Link to our disclosure document, Japanese only)

<https://www.idemitsu.com/jp/news/2023/230802.html>

■ Reference

Financial Results

■ Net Sales by segment

[¥ billions]

	1Q FY2022	1Q FY2023	Change	
Petroleum	1,754.2	1,422.9	(331.3)	(18.9%)
Basic Chemicals	187.7	126.6	(61.1)	(32.5%)
Functional Materials	120.4	122.3	+1.9	+1.6%
Power and Renewable Energy	36.4	32.2	(4.1)	(11.4%)
Resources*	105.4	114.2	+8.8	+8.3%
<i>Oil Exploration and Production</i>	8.3	10.1	+1.8	+21.7%
<i>Coal</i>	97.1	104.1	+7.0	+7.2%
Others/Reconciliation	0.6	0.7	+0.1	+16.4%
Total	2,204.7	1,818.9	(385.8)	(17.5%)

*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]

	FY2022				FY2023
	1Q	2Q	3Q	4Q	1Q
Petroleum	57.4	61.1	1.2	17.3	18.4
Equity income	7.0	12.4	12.8	12.9	4.9
Basic Chemicals	8.1	14.2	11.4	10.1	(1.4)
Equity income	(0.1)	(0.1)	0.5	(0.1)	(0.6)
Functional Materials	3.3	8.6	16.4	17.0	5.5
Equity income	0.0	0.3	(0.3)	(0.7)	(0.2)
Power and Renewable Energy	(3.7)	(2.9)	1.1	0.5	(0.5)
Equity income	(0.4)	(0.7)	(0.4)	(1.6)	0.3
Resources					
-Oil Exploration and Production	6.5	17.1	26.4	32.8	5.7
Equity income	2.9	6.7	10.6	13.7	3.5
-Coal	25.1	83.0	151.3	198.1	34.7
Equity income	-	-	-	-	(0.0)
Others/Reconciliation	(11.9)	(14.9)	(22.5)	(23.0)	(5.1)
Equity income	1.1	1.7	1.7	1.8	0.0
Total	84.9	166.2	185.4	252.7	57.4
Equity income	10.5	20.3	25.0	26.0	7.8

Financial Results

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

[¥ billions]

	FY2022				FY2023
	1Q	2Q	3Q	4Q	1Q
Petroleum	57.4	3.7	(59.9)	16.1	18.4
Equity income	7.0	5.4	0.4	0.1	4.9
Basic Chemicals	8.1	6.1	(2.8)	(1.3)	(1.4)
Equity income	(0.1)	(0.0)	0.6	(0.6)	(0.6)
Functional Materials	3.3	5.3	7.8	0.6	5.5
Equity income	0.0	0.3	(0.6)	(0.4)	(0.2)
Power and Renewable Energy	(3.7)	0.8	4.0	(0.7)	(0.5)
Equity income	(0.4)	(0.3)	0.3	(1.2)	0.3
Resources					
-Oil Exploration and Production	6.5	10.5	9.3	6.4	5.7
Equity income	2.9	3.8	3.9	3.1	3.5
-Coal	25.1	57.8	68.4	46.8	34.7
Equity income	-	-	-	-	(0.0)
Others/Reconciliation	(11.9)	(3.0)	(7.7)	(0.5)	(5.1)
Equity income	1.1	0.6	0.1	0.0	0.0
Total	84.9	81.3	19.2	67.3	57.4
Equity income	10.5	9.8	4.7	1.0	7.8

Sensitivity

■ Major items affecting performance by changes in assumptions (2-4Q)

	Assumption Items	Revised assumption (5/9 Forecast)	Range of fluctuation	Segment	Income impact (¥ billions)	Major Factors
Excluding inventory impact	Crude oil price	80.0\$/bbl	±10\$/bbl	Petroleum	±9.0	Fuel cost, time-lag
	Singapore product margin	—	±5\$/bbl		±30.0	Export
	Exchange rate	130.0¥/\$	±5¥/\$		±3.0	Fuel cost, time-lag
	Thermal coal price	170.0\$/t	±10\$/t	Resources (Coal)	±3.0	Thermal coal
Inventory impact	Crude oil price	80.0\$/bbl	±10\$/bbl	Petroleum	±37.0	
	Exchange rate	130.0¥/\$	±5¥/\$		±11.0	

* 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

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

Sales Volume

■ Petroleum

[thousand KL,%]

	1Q FY2022	1Q FY2023	Change	
Gasoline	3,148	3,084	(64)	(2.0%)
Naphtha	111	101	(9)	(8.4%)
Jet Fuel	534	589	+55	+10.4%
Kerosene	479	455	(24)	(5.0%)
Diesel Oil	2,456	2,434	(22)	(0.9%)
Heavy Fuel Oil A	694	728	+35	+5.0%
Heavy Fuel Oil C	652	580	(72)	(11.0%)
Total Domestic Sales Volume	8,073	7,972	(101)	(1.3%)
Exported Volume	1,711	1,064	(647)	(37.8%)
Total Sales Volume	9,784	9,036	(748)	(7.6%)

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

Sales Volume

■ Basic Chemicals

[kt,%]

	1Q FY2022	1Q FY2023	Change	
Basic Chemicals	890	714	(176)	(19.7%)

■ Functional Materials

[KKL,kt,%]

	1Q FY2022	1Q FY2023	Change	
Lubricants	293	279	(14)	(4.6%)
Performance Chemicals	184	148	(37)	(20.0%)

*Lubricants include sales overseas

■ Power/Renewable Energy

[Mkwh,%]

	1Q FY2022	1Q FY2023	Change	
Retail Power Sales	897	479	(419)	(46.7%)

Production Volume

■ Resources (Oil E&P)

[KBOED,%]

	1Q FY2022	1Q FY2023	Change	
Vietnam	14.7	19.0	+4.3	+29.4%
Norway	15.6	15.9	+0.3	+1.9%
Total('000BOED)	30.3	34.9	+4.6	+15.2%
Total('000BOE)	2,725	3,140	+415	+15.2%

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

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

■ Resources (Coal)

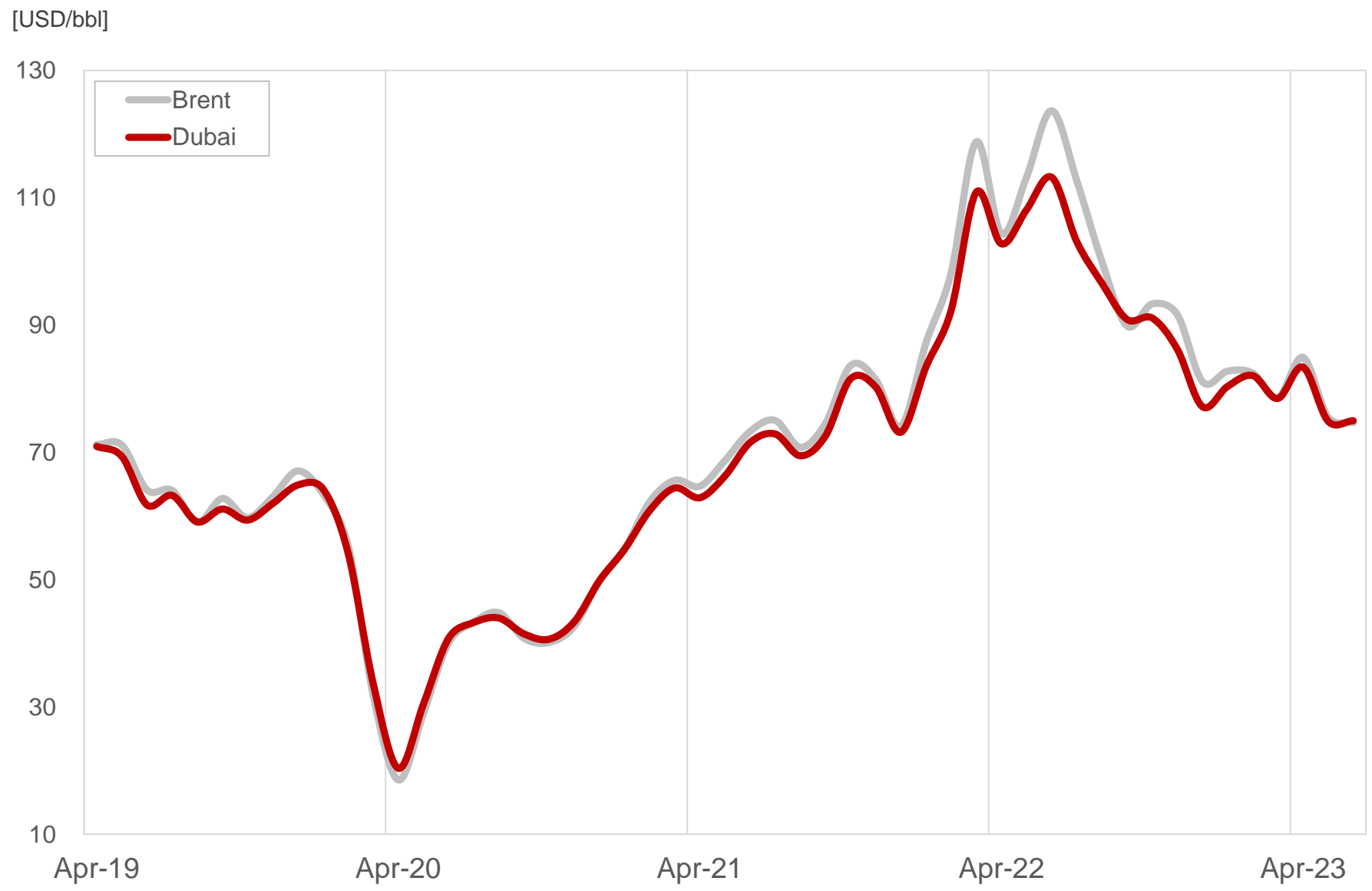
[kt,%]

	1Q FY2022	1Q FY2023	Change	
Ensham	618	568	(50)	(8.1%)
Muswellbrook	376	15	(361)	(96.0%)
Boggabri	1,249	1,133	(116)	(9.3%)
Total	2,244	1,716	(528)	(23.5%)

*The numbers reflect our rights and ownership ratios

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

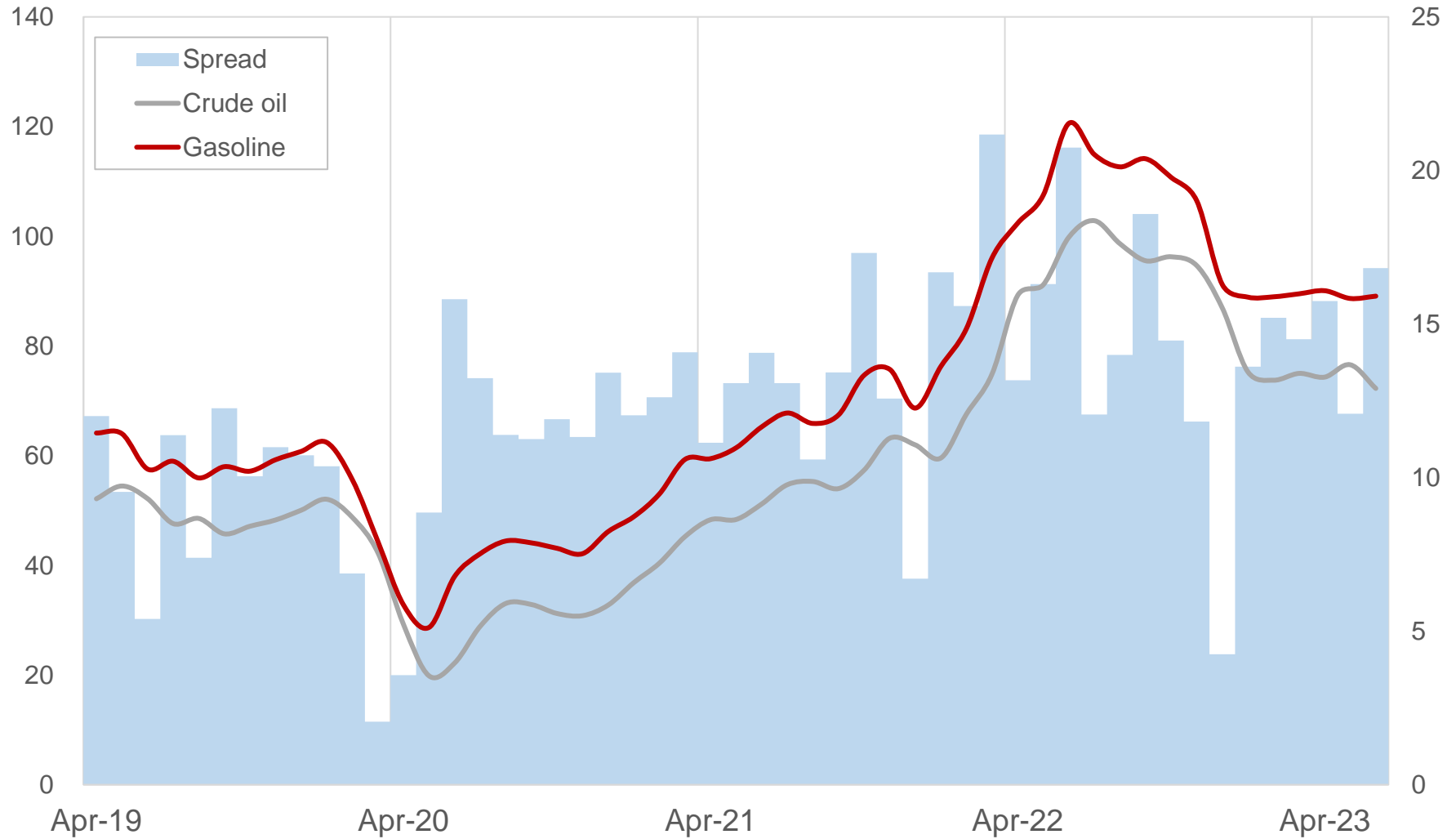
Crude Oil Prices(Dubai and Brent)



Gasoline-Crude Oil (Domestic spot price and spread)

[Price :JPY/L]

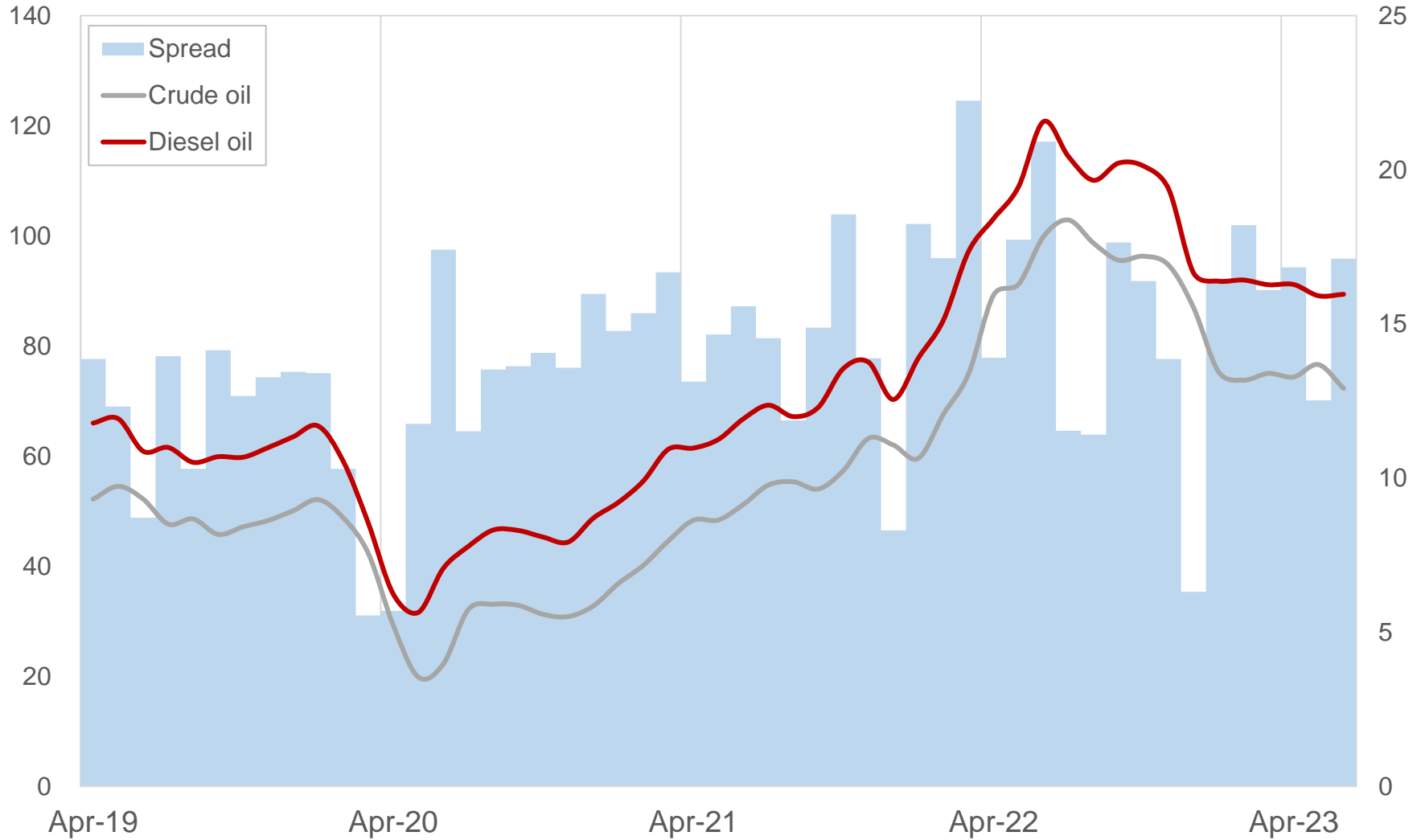
[Spread : JPY/L]



Diesel-Crude Oil (Domestic spot price and spread)

[Price : JPY/L]

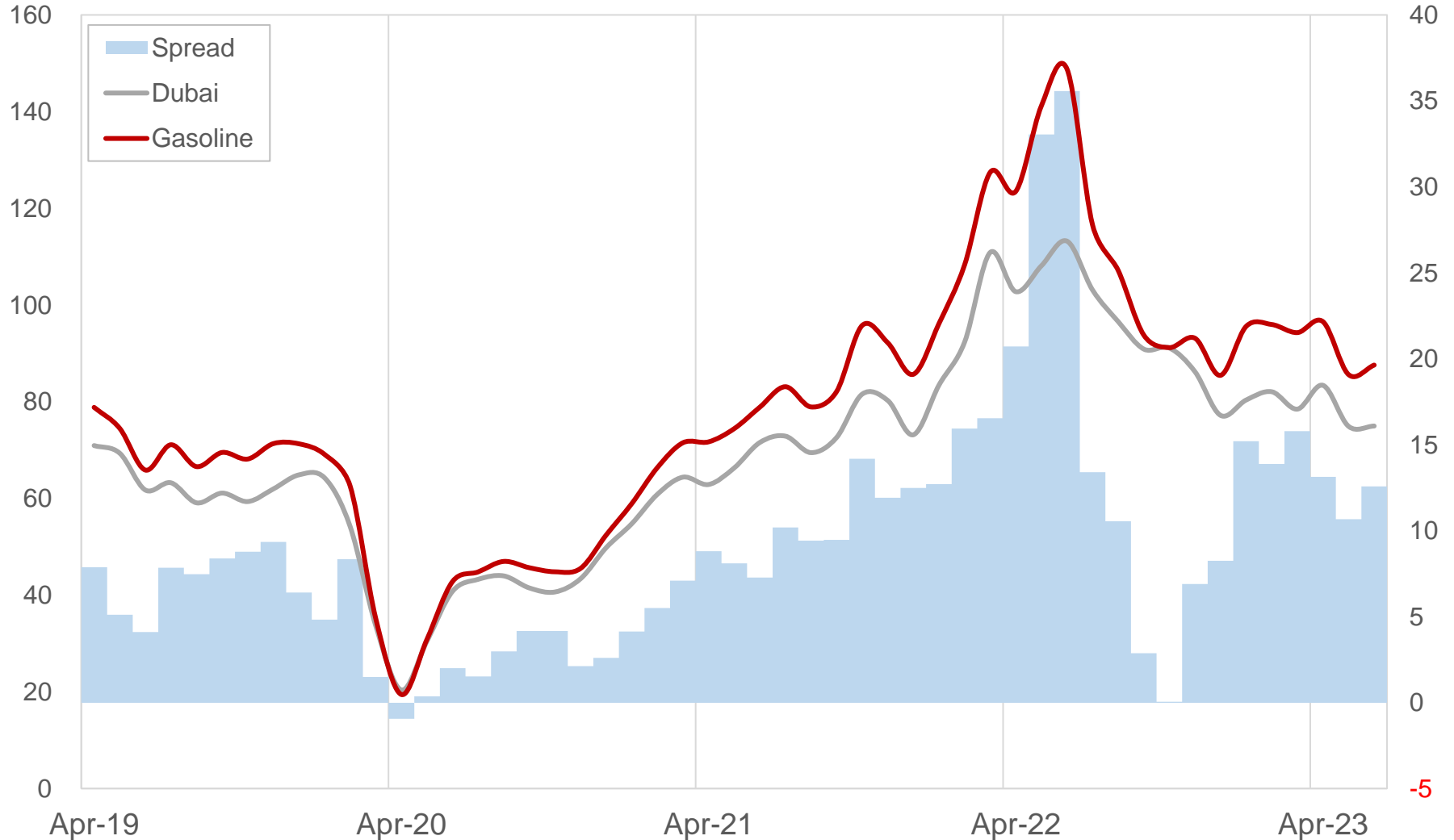
[Spread : JPY/L]



Gasoline-Crude Oil (Singapore spot price and spread)

[Price :USD/bbl]

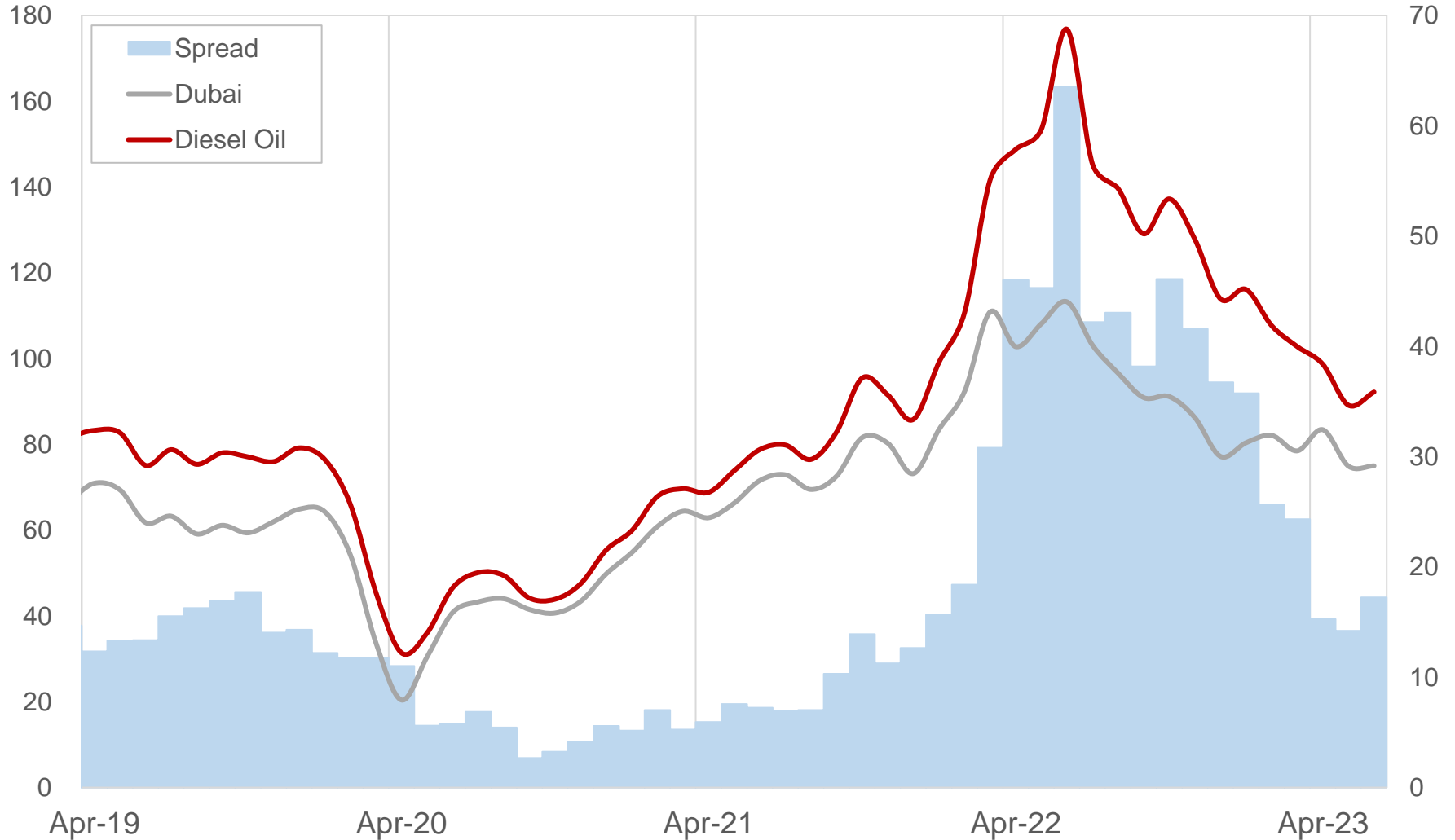
[Spread : USD/bbl]



Diesel-Crude Oil (Singapore spot price and spread)

[Price :USD/bbl]

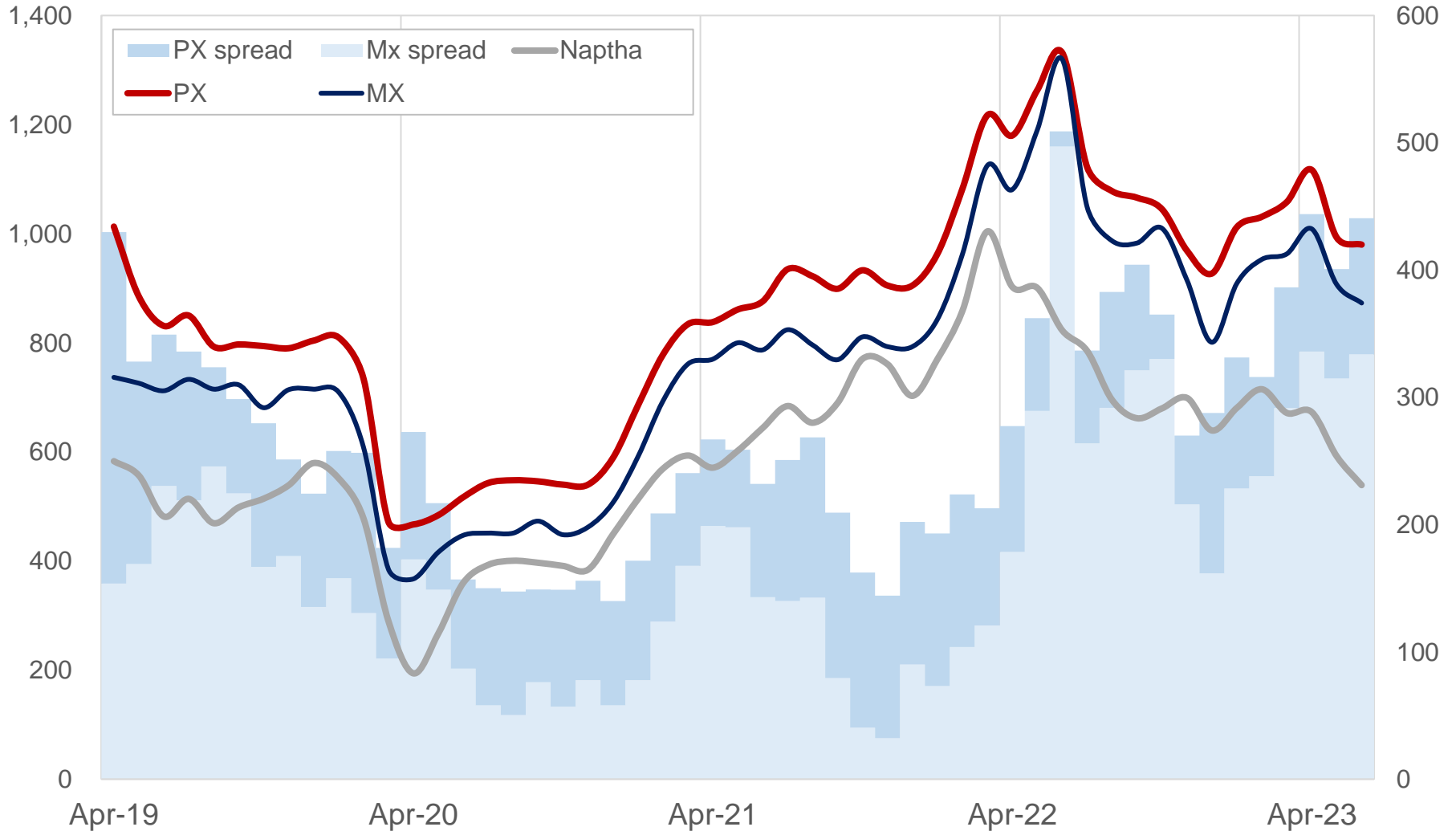
[Spread : USD/bbl]



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

[Price :USD/ton]

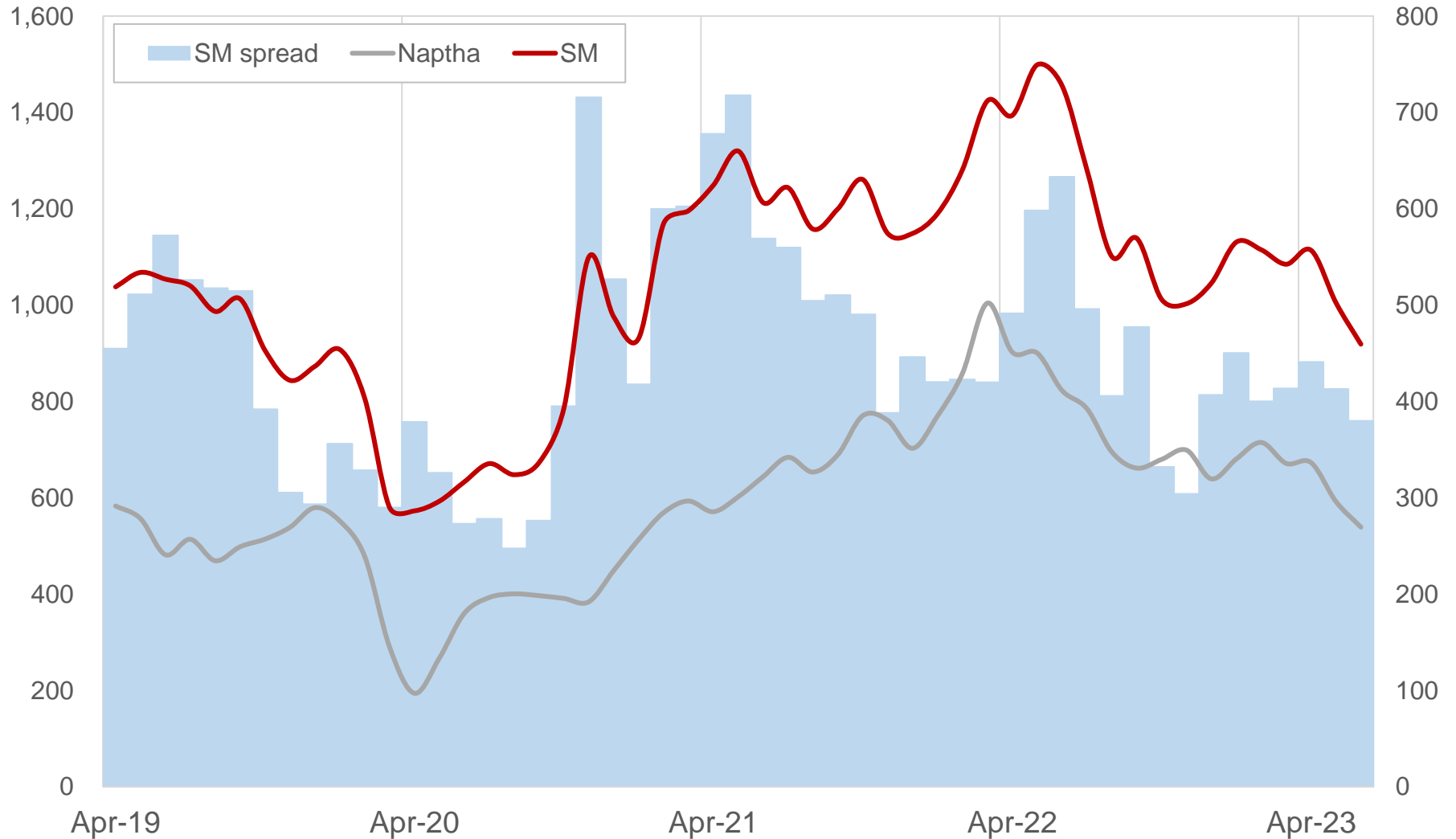
[Spread : USD/ton]



Styrene Monomer-Naphtha (price and spread)

[Price :USD/ton]

[Spread : USD/ton]



Operational Data

■ Refineries Utilization

FY2019	FY2020	FY2021	FY2022	FY2023 (1Q)
87%	78%	77%	83%	64%

*on BCD basis

■ Number of Service Stations

FY2019	FY2020	FY2021	FY2022	FY2023 (1Q)
6,384	6,311	6,216	6,136	6,122

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	Japan 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%
		945	239	72	189	27	
Nghi Son Refinery and Petrochemical LLC	Overseas Nghi Son *1,2 (Thanh Hoa, Vietnam)	200	105		80		35.1%
		200	105		80		

*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	Japan 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%
	Total	0.997	0.836	0.938	0.550	
Idemitsu SM (Malaysia) Sdn. Bhd.	Overseas Pasir Gudang (Johor, Malaysia)				0.240	70.0%
	Nghi Son Refinery and Petrochemical LLC		Nghi Son (Thanh Hoa, Vietnam)	0.700		35.1%
	Total		0.700		0.240	

Functional Materials Segment (1/2)

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)



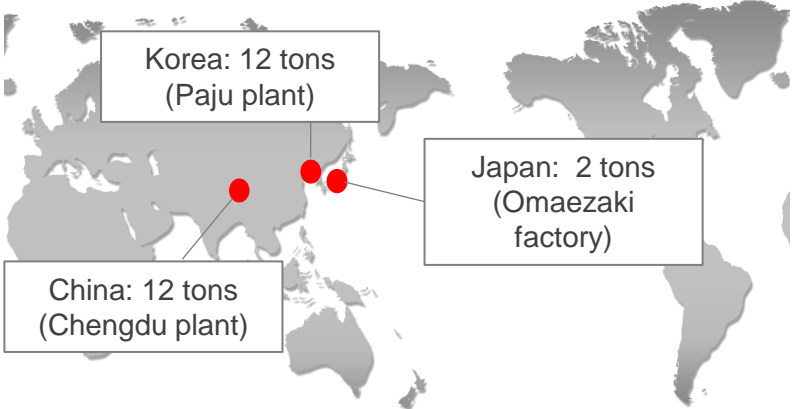



Automotive parts

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



Disposable diapers and other hygiene products

Functional Materials Segment (2/2)

Electronic Materials	Bitumen (High Performance Asphalt)
<ul style="list-style-type: none"> ◆ Product categories <ul style="list-style-type: none"> • Organic EL materials • Display semiconductor materials etc. ◆ OLED manufacturing/customer support  <ul style="list-style-type: none"> • 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 • Aiming to develop and commercialize oxidative semiconductor materials which are expected to conserve energy and enhance image quality of display products 	<ul style="list-style-type: none"> ◆ Asphalt manufacturer which aims to develop state-of-the-art technologies <ul style="list-style-type: none"> • Recycling, longer life, carbon neutrality ◆ Product categories <ul style="list-style-type: none"> • Engineering/construction asphalt • Industrial asphalt • Value-added asphalt for roads  <p style="text-align: center;">Maybright (Value-added asphalt for roads)</p>
Pesticides and Functional Feed	
<ul style="list-style-type: none"> ◆ Product categories <ul style="list-style-type: none"> • Chemical pesticides (Daconil 1000*1, etc.) • Plant-derived pesticides • Functional Feeds (RUMINUP*2, etc.) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Daconil 1000</p> </div> <div style="text-align: center;">  <p>RUMINUP® M</p> </div> </div>	

*1 Protective disinfectants less affecting organism that has the stable effect toward various crops and damage owing to disease

*2 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	Takigami 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
	Domestic				114.9
	Solar	Overseas (North America, Vietnam, etc.)	—	—	52.1
	Fire	Overseas	—	—	27.1
	Overseas				79.2
	Total				194.1

*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

- ◆ Terminated production in June 2022
- ◆ Shifting 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 (%) ^{*1}	Destination
Sao Vang and Dai Nguyet gas field (Vietnam)		43.08	Asia
Norway	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		

^{*1} Companies in which Idemitsu owns rights

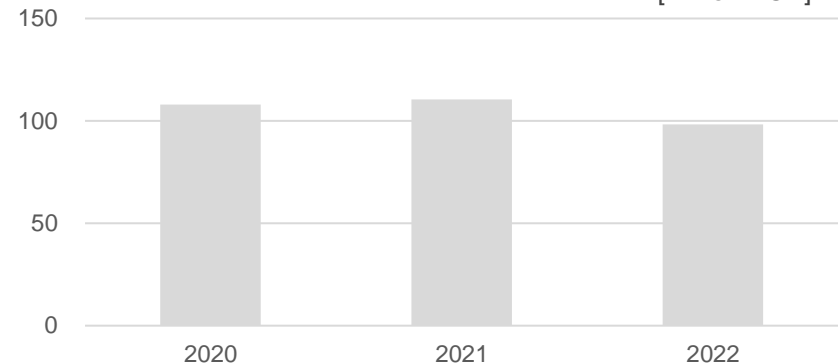
Norway : INPEX Idemitsu Norge AS

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

Production Oil/Gas Reserves

◆ Reserves ^{*2,3}

[million BOE]



^{*2} Total reserves in Norwegian oil fields and Vietnamese gas fields

^{*3} 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"> ◆ Stable supply and profit maximization by leveraging the highly competitive Boggabri Mine ◆ Engage in low-carbon solution businesses such as Idemitsu Green Energy Pellets ◆ 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. <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>◆ Idemitsu Green Energy Pellets (black pellets)</p> <ul style="list-style-type: none"> • CO₂ emissions can be reduced by replacing coal with black pellets in fuel used at coal-fired power stations • Succeeded in a mixed combustion to replace 20-30% of coal fuel with black pellets • 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   <p>Vietnam Commercial Plant</p> <p>◆ New businesses in Australia</p> <ul style="list-style-type: none"> • Rare metals: Invested in Vecco, which engages in vanadium operations in Australia • Renewable energy: Commercialization verification of pumped storage hydroelectric power generation at the post-mining Muswellbrook coal mine site

Precaution statement about forecasts

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.