

COSMO REPORT 2023

Strategy



Strategy

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VALUE CREATION MODEL

The Cosmo Energy Group will enhance enterprise value while addressing the most important material issues, leveraging tangible and intangible management resources to realize the Seventh Consolidated Medium-Term Management Plan and Vision 2030, which integrate financial and non-financial initiatives.



Value Creation Model

Resources and Enterprise Value to Sustain Value Creation

Management resources

Financial capital

Total assets	¥ 2,120.8 billion
Net assets	¥ 663.4 billion
Free cash flow	-¥ 73.1 billion

Human capital

Number of employees (consolidated)	6,659 people
Average number of temporary workers	3,589 people

Intellectual capital

Intellectual property rights	
Number of patents held	1,362
	(Japan: 628, Overseas: 734)
Number of trademark rights held	471
	(Japan: 355, Overseas: 116)
Brand	
Company recognition rate	96% ¹

¹ Based on a nationwide survey of 2,000 men and women aged 16-69 years by an external research agency (as of August 2022)

Social and relationship capital

Number of Cosmo The Card holders	3.84 million
Cumulative number of Cosmo My Car Lease contracts	108,104 vehicles
Number of Carlife Square app downloads	5.95 million
Friendly relationship with oil-producing countries	Over 50 years

Manufacturing capital

Crude oil production	Approx. 42,000 barrels per day
	(comparison with crude oil processing capacity: approx. 11%)
Crude oil processing capacity	400,000 barrels/day
Refinery operating rate ¹	97.8%
Operational Management System (OMS) as a basis for safe operations and stable supply	
Number of service stations	2,649
Petrochemical production capacity ²	
Olefins	Ethylene ⁴ 1.29 million tons/year
Aromatics	Para-xylene 1.36 million tons/year
	Benzene 735,000 tons/year
	Mixed-xylene 618,000 tons/year
Wind power plant capacity ³	310 MW
	(No. 3 in Japan/7% domestic share)

¹ FY2022 result on a calendar day basis
² Includes production capacity of Keiyo Ethylene (consolidated subsidiary 55% owned by Maruzen Petrochemical)
³ As of June 30, 2023

Natural capital

Crude oil reserves	130 million barrels
	(equivalent to approx. 17 years worth of supply)
Wind, sunlight, and other natural energy sources	

*Unless otherwise specified, figures are actual results for FY2022 or as of March 31, 2023.

Enterprise value

Economic value

(FY2025 target under the Seventh MTMP)

Profitability	Ordinary profit (excl. impact of inventory valuation) ¥ 165.0 bil. Profit attributable to owners of parent ≥ ¥ 60.0 bil.
Growth potential	Investment in New fields ¥ 140.0 bil.
Shareholder returns	Total payout ratio ≥ 60% Dividend ≥ ¥ 250 per share
Capital efficiency	ROIC ≥ 6% ROE ≥ 10%
Financial health	Net D/E ratio 1.0 times (Net worth ≥ ¥600.0 bil.)

Social value

Stable energy supply

Contribution to a decarbonized society

Having achieved a certain degree of success in improving our financial position under the Sixth MTMP, the Seventh MTMP will take us to the next stage. We aim to continuously enhance enterprise value as we look to fulfill Vision 2030.

For further details of The Seventh Consolidated Medium-Term Management Plan, please refer to the following page on our corporate website.

<https://www.cosmo-energy.co.jp/en/about/ir/management/mediumterm.html>

2050
NET ZERO
carbon emissions



The Sixth Consolidated Medium-Term Management Plan

Oil & New

	2017	2022
Net worth	¥238.7 bil	¥527.9 bil
Net D/E ratio	2.30 times	1.10 times

Financial position improvement

The Seventh Consolidated Medium-Term Management Plan

Oil & New ~Next Stage~

Enterprise value enhancement

Profitability

Capital policy

Shareholder returns/
Financial health/
Capital efficiency

Expected growth

Management foundation transformation

HR/Digital/Green

Recap of the Sixth Medium-Term Management Plan (FY2018-2022)

We significantly increased our profitability by steadily implementing initiatives. The Seventh Consolidated Medium-Term Management Plan will take us to the next stage.

Basic policies

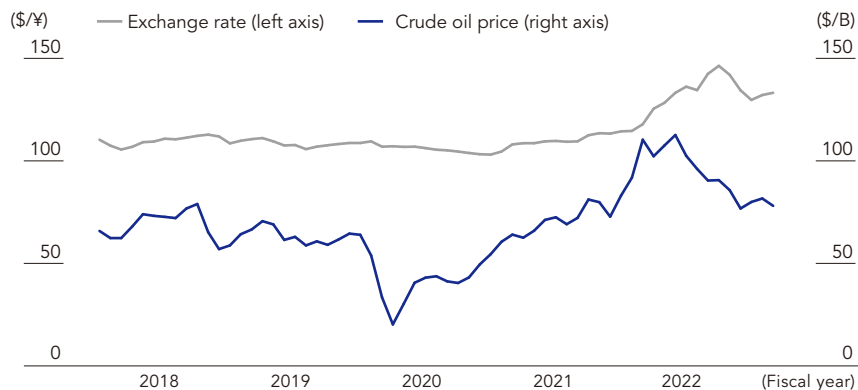
Under the slogan "Oil & New Everything About Oil – And Beyond," we implemented initiatives based on four basic policies.

- 1 Secure profitability to enable reinvestment
- 2 Expand growth driver toward the future
- 3 Improve financial condition
- 4 Strengthen Group management foundation

Key initiatives

- 1 **Build a safe and stable operational framework (take up a short position)**
Secure profitability to enable reinvestment
Started supplying oil to Kygnus Sekiyu K.K. Improved refinery operating rate to **91%** (FY2022*)
*Four-year average on calendar day basis
- 2 **Early development of offshore wind power (expand onshore wind power)**
Expand growth driver toward the future
Developed **150** MW new onshore wind farm
Commenced operation of Japan's first large-scale offshore wind farm
Developing multiple offshore pipelines
- 3 **Increase net worth based on profit**
Improve financial condition
Net worth **¥527.9** bil. (FY2022)
Net D/E ratio **1.10** times (FY2022)
- 4 **Implement sustainable management**
Strengthen Group management foundation
Established sustainability promotion framework
Issued 2050 Carbon Net Zero Declaration and disclosed roadmap

External environment during the Sixth MTMP (Trend in crude oil price and exchange rate)



Results vs. management goals

We significantly increased our average profitability under the Sixth MTMP by steadily implementing initiatives. In addition, we improved our financial position, which had been a long-standing issue, to a certain extent by strengthening profitability.

Management goals

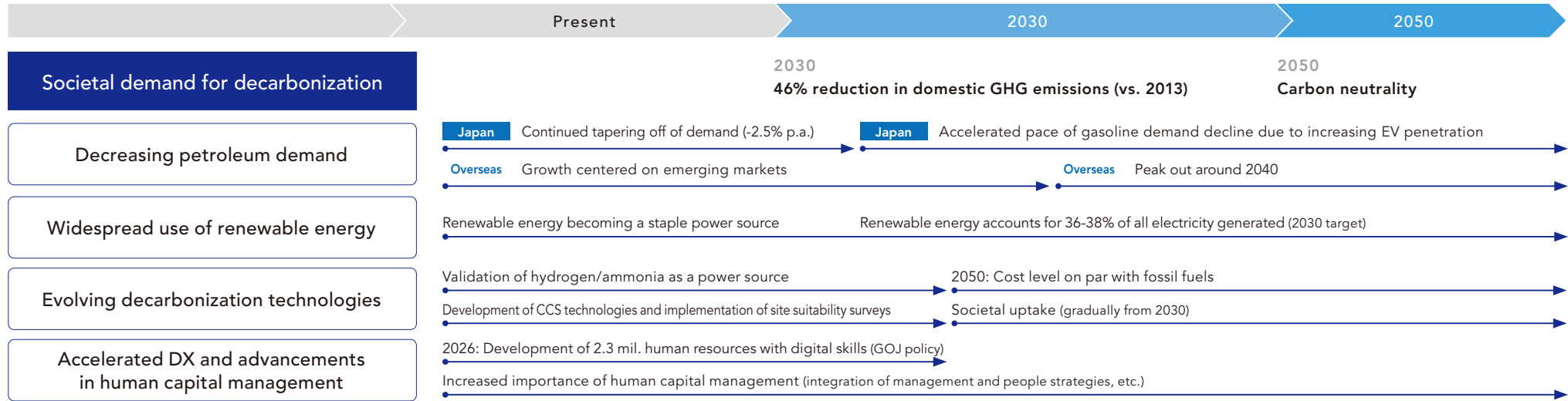
Ordinary profit (excl. the impact of inventory valuation)	≥¥120.0 bil.
Profit attributable to owners of parent	≥¥50.0 bil.
Free cashflow (five-year total)	≥¥150.0 bil.
Net worth (Net worth ratio)	≥¥400.0 bil.(≥20%)
Net D/E ratio	1.0-1.5 times
ROE	≥10% (excl. the impact of inventory valuation)

FY2022 results

Ordinary profit	¥142.9 bil.
Profit attributable to owners of parent	¥67.9 bil.
Free cashflow	¥84.1 bil.
Net worth (Net worth ratio)	¥527.9 bil. (24.9%)
Net D/E ratio	1.10 times
ROE	13.8% (10.7%)

Future External Environment and Vision 2030

Efforts to achieve carbon neutrality by 2050 will progress and the world will enter an era of energy transformation.



Vision 2030 To create energy that shapes the future, energy that sustains society, and new forms of value

Green Energy

Bolster green electricity supply chain

Build a high value-added supply chain that encompasses power generation, supply-demand adjustment and sales

Next-Generation Energy

Expand next-generation energy

Supply SAF and develop hydrogen and other energy businesses

Oil Business

Strengthen competitiveness of Oil Business and pursue low carbonization

Enhance competitiveness by digitizing refineries, etc., and shift to low-carbon operations through CCS/CCUS

Vision 2030

Three pillars: Bolster green electricity supply chain



As we look ahead toward 2030, the Group will expand its green electricity sales beyond the Renewable Energy Business, which is currently centered on wind power, by establishing a supply-demand adjustment and electricity storage system. We will maximize the value of green electricity by building and strengthening all green electricity-related supply chains.

Strategic investment (net)
 (~2030 eight-year cumulative)
¥300.0 bil.
(incl. ¥130.0 bil. in offshore wind power)

CO₂ reduction
 (vs. 2013)
-1.3 mil. tons

Present

The Seventh MTMP period

2030

Construction of green electricity supply chain

Increase renewable energy generation capacity
 Acquire offshore wind farms (total capacity 600MW)
 Expand onshore wind farms
 Consider expanding other renewable energy power sources (solar power, etc.)

Install storage batteries and build supply-demand management function
 Commence operation of storage batteries at power plants
 Commence operation of grid-scale storage systems (for market trading)

Increase sales of electricity
 Grow sales of green electricity
 Expand introduction of green electricity-driven EV solutions

Expand mobility business in anticipation of shift to EVs
 Develop vehicle sales (online/corporate) channels
 Start selling commercial EVs
 Increase sophistication of marketing science

Renewable energy generation capacity
310MW

Storage battery function
-MW

Electricity sales volume
300 mil. kWh

No. of lease contracts
12,000 vehicles/year

FY2025
Ordinary profit ¥8.0 bil.

Renewable energy generation capacity
390MW

Storage battery function
50MW

Electricity sales volume
1.0 bil. kWh

No. of lease contracts
20,000 vehicles/year

Maximize value of green electricity across entire supply chain

Renewable energy generation
2,000MW
 (wind power ≥1,500MW)

Supply-demand adjustment/storage
 Stored power **500MW**

Green electricity sales
4.0 bil. kWh

Electricity value

Supply-demand optimization
 Electricity value

Green electricity value + value of other services
 Supply-demand optimization
 Electricity value

Ordinary profit ¥40.0 bil.

Vision 2030

Three pillars: Expand next-generation energy



The Cosmo Energy Group will realize mass production of Japan's first locally-made SAF, and steadily build a structure capable of supplying 300,000 kiloliters in 2030. Furthermore, we will promote hydrogen and next-generation energy initiatives, beginning with the operation of hydrogen stations.

Strategic investment
(~2030 eight-year cumulative)
¥100.0 bil.

CO₂ reduction
(vs. 2013)
-400,000 tons

The Seventh MTMP period

2030

Mass production of Japan's first locally-made SAF

Produce SAF from waste cooking oil

- Start construction of new manufacturing line by end of 2023
- Start commercial operations in second half of FY2024 - early FY2025
- Established SAFFAIRE SKY ENERGY LLC with JGC Holdings and Revo International in Nov. 2022



FY2025
Ordinary profit **¥1.0 bil.**

SAF supply
30,000KL

Expand production scale

SAF supply
300,000KL

Produce SAF using Alcohol-to-Jet (ATJ) technology

- Completed feasibility studies during FY2022
- After making a final investment decision in FY2024, aim to start construction from FY2025 and commence commercial operations in FY2027



Ordinary profit
¥10.0 bil.

Development of hydrogen and other energy businesses

Select and develop next-generation energy, considering feasibility and business viability

- Establish hydrogen stations for FCV trucks (planned for FY2024)
- Investigate use of hydrogen production technology that immobilizes carbon from fractions generated at refineries
- Develop olefin production technology through direct decomposition of waste plastics
- Validate ammonia fuel conversion technology in naphtha cracking furnaces, etc.

Vision 2030

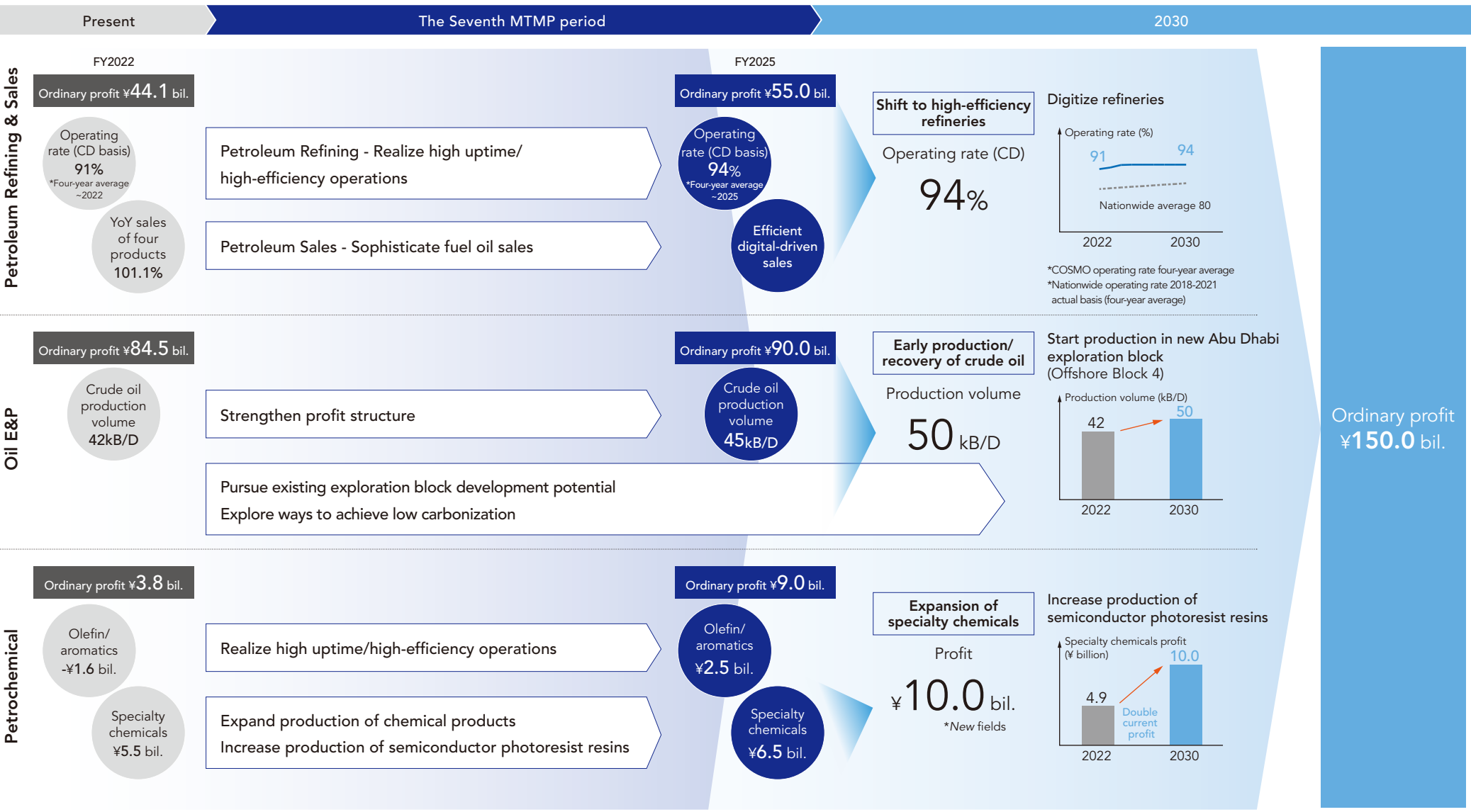
Three pillars: Strengthen *Oil* Business competitiveness and pursue low carbonization



To fulfill our mission of providing a safe and stable supply of energy, we will further strengthen our competitiveness in our Petroleum Refining and Sales, Oil Exploration and Production, and Petrochemical businesses. At the same time, we will steadily undertake efforts to realize low-carbon operations in each.

Strategic investment
(~2030 eight-year cumulative)
¥200.0 bil.

CO₂ reduction
(vs. 2013)
-300,000 tons + α



Ordinary profit
¥150.0 bil.

The Seventh Consolidated Medium-Term Management Plan

Toward Enhancement of Enterprise Value

We have defined the basic policies of our Seventh MTMP, "Oil & New ~Next Stage~," as: secure profitability, expand New fields to drive growth, realize a three-pronged capital policy, and transform our management foundation. In order to maximize enterprise value, we will realize our business strategy by utilizing non-financial capital, improve profitability through this effort, ensure a generous capital policy, and expand our growth businesses.

The Seventh MTMP basic policies

Oil & New ~Next Stage~

1 Secure profitability

- Ensure high uptime and high-efficiency operations at refineries
- Increase sophistication of fuel oil sales through marketing science
- Maximize production volume of Oil E&P Business

2 Expand New fields to drive growth

- Establish green electricity supply chain profit foundation
- Mass-produce Japan's first locally-made SAF
- Expand mobility business in anticipation of shift to EVs
- Increase specialty chemicals profit

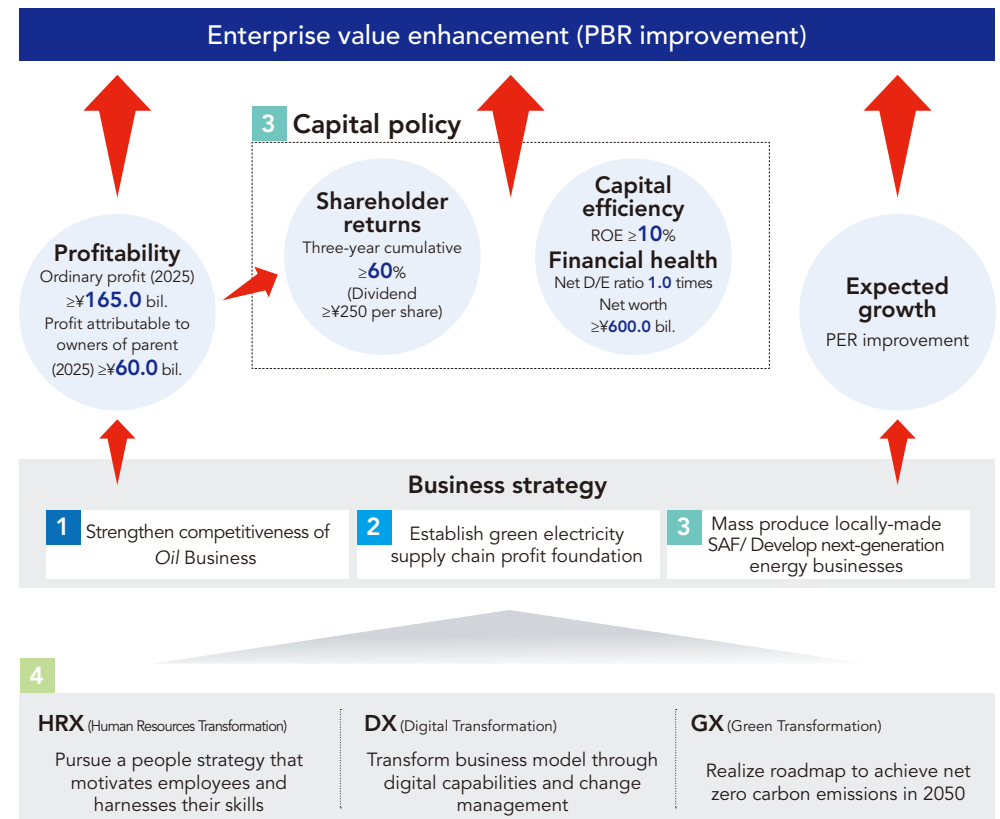
3 Realize three-pronged capital policy

- Proactively return profits to shareholders
- Secure sound financial health from multiple perspectives
- Achieve stable capital efficiency

4 Transform management foundation

- **HRX** Pursue a people strategy that motivates employees and harnesses their skills
- **DX** Transform business model through digital capabilities and change management
- **GX** Realize roadmap to achieve net zero carbon emissions

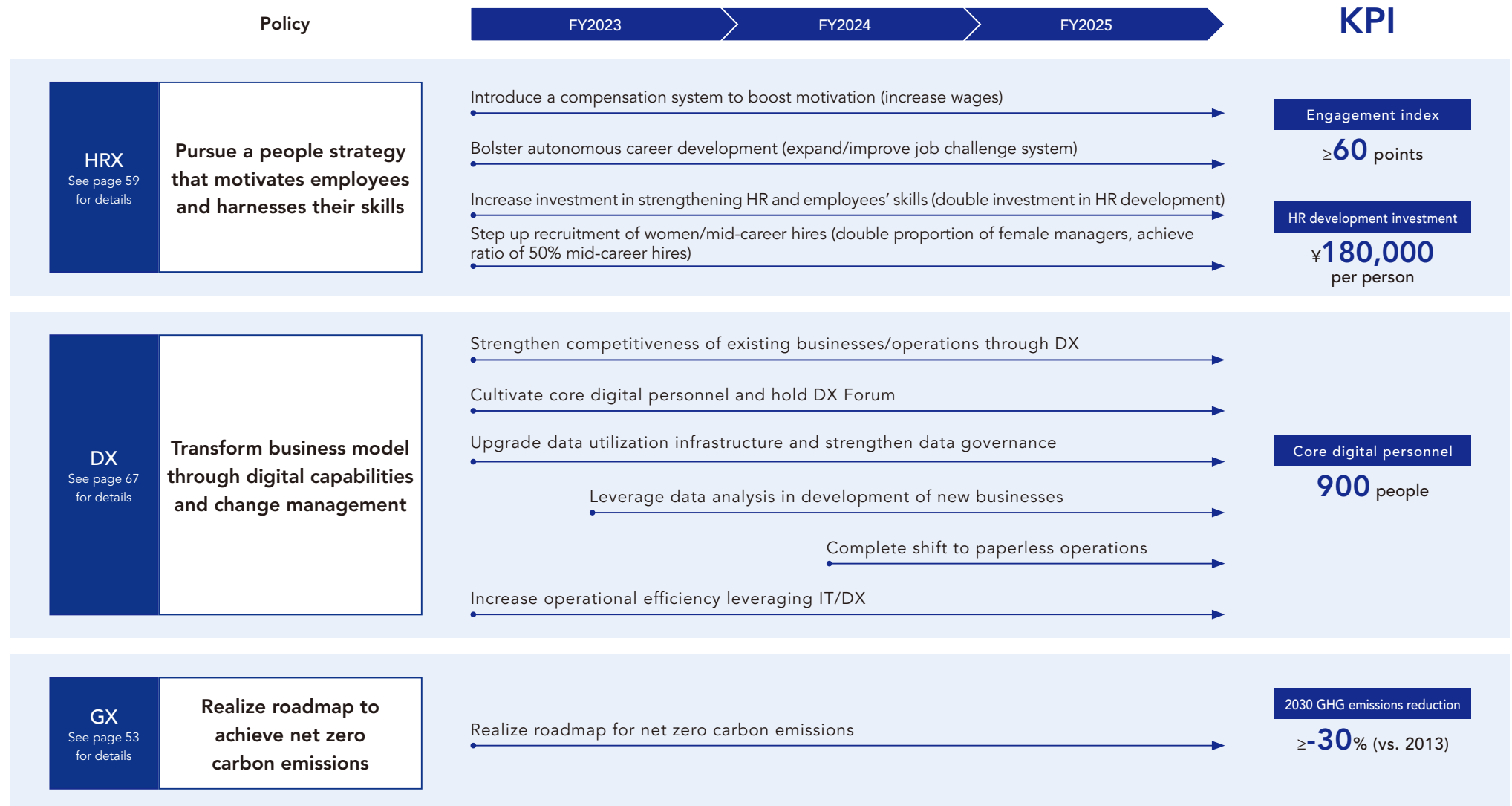
Roadmap to enterprise value enhancement



The Seventh Consolidated Medium-Term Management Plan

Management Foundation Transformation

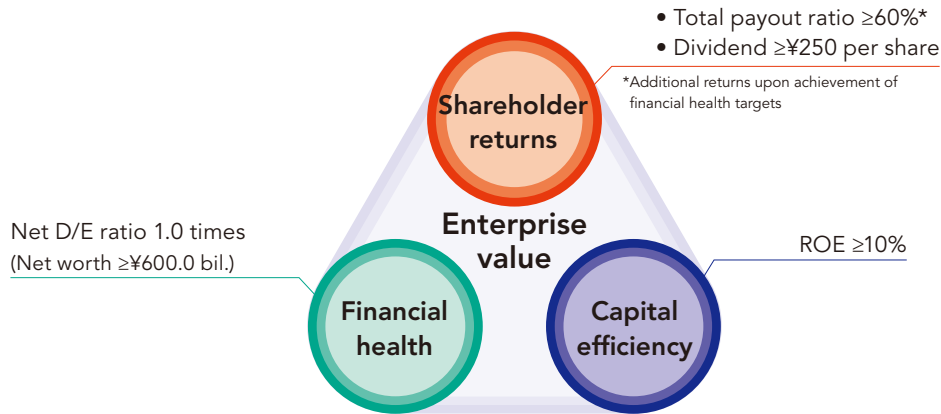
To transform our management foundation under the Seventh MTMP, we will undertake efforts in the areas of HRX, DX, and GX.



The Seventh Consolidated Medium-Term Management Plan

Capital Policy

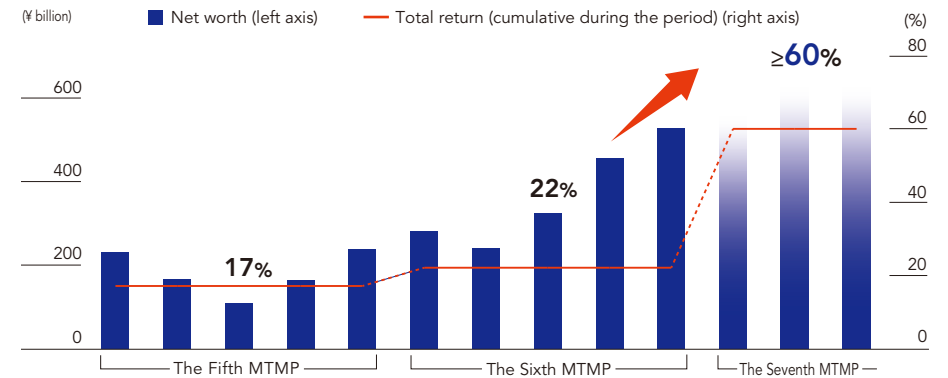
We aim to maximize enterprise value through a three-pronged approach that places equal emphasis on shareholder returns, financial health, and capital efficiency.



Shareholder returns

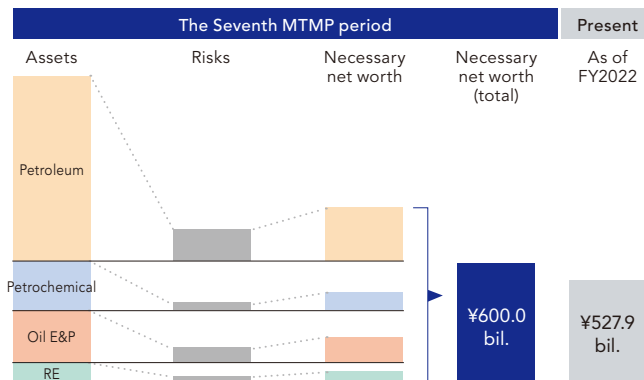
We are committed to maximizing the expansion of shareholder returns as we realize our three-pronged capital policy. We have set a total payout ratio of 60% or more of net profit (excluding the impact of inventory valuation) and will pay a stable dividend of at least ¥250 per share. If we achieve our targets in terms of financial health, we will, in principle, provide additional returns.

Trend in net worth and total payout ratio



Financial health

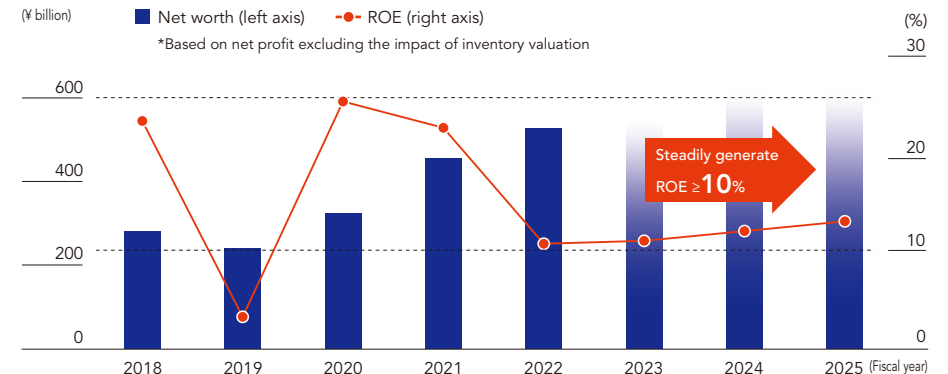
We set a target net debt-to-equity ratio of 1.0 times and a net worth of ¥600.0 billion or more based on the assumption that we can continue to maintain a balance between debt and net worth on par with current levels. In setting our necessary net worth, we analyzed the performance of about 130 companies in total, 30 to 40 companies per segment, and used objective data as the basis for our calculations.



Capital efficiency

We project that net worth, which increased significantly under the Sixth MTMP, will improve further toward our target. Meanwhile, we aim to steadily generate ROE of 10% or more.

Trend in ROE and net worth



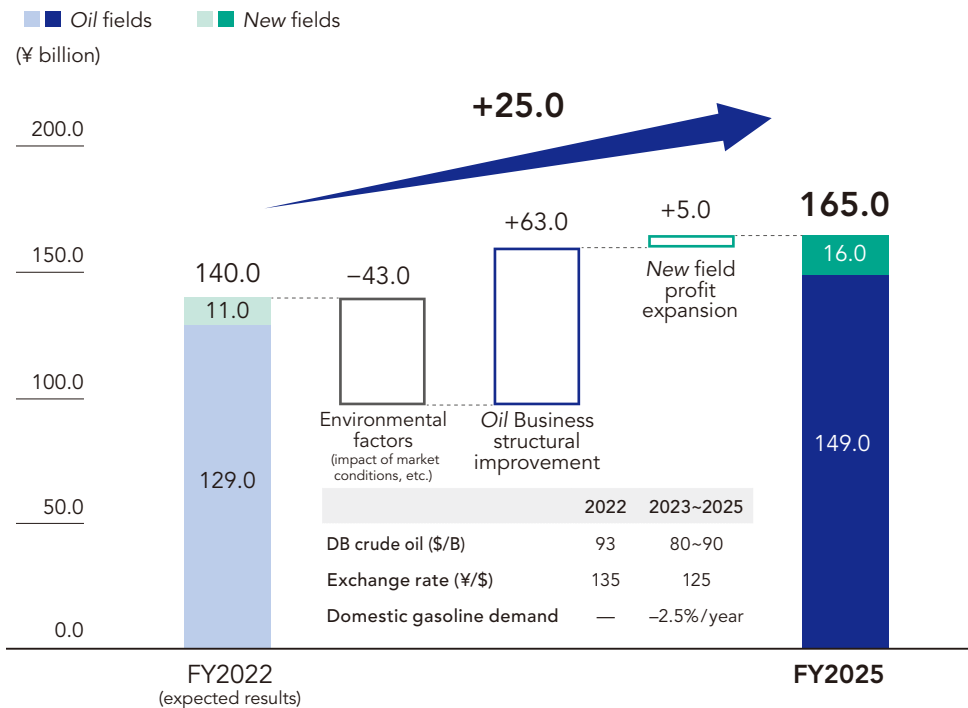
The Seventh Consolidated Medium-Term Management Plan

Profit and Investment Plans

Profit plan

In our profit plan laid out in the Seventh MTMP, we aim to achieve ordinary profit excluding the impact of inventory valuation of ¥165.0 billion in FY2025. In addition to structural improvements in our *Oil Business*, we anticipate a ¥25.0 billion increase in profit compared to FY2022 due to profit expansion in our *New fields*.

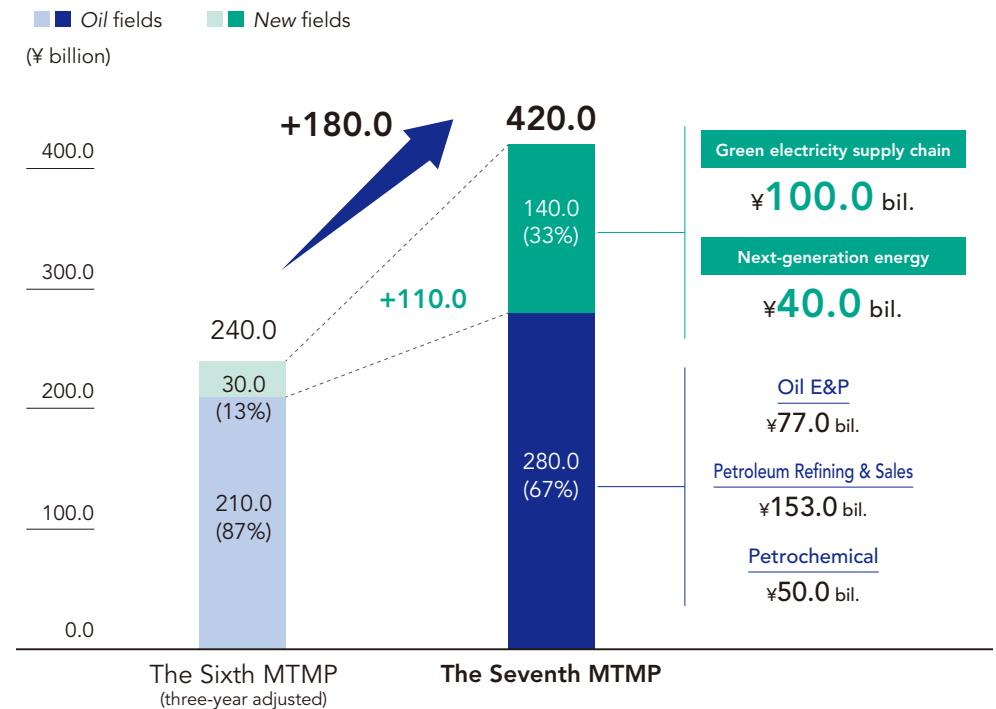
Ordinary profit (excluding the impact of inventory valuation)



Investment plan

Total investment during the Seventh MTMP is expected to be ¥420.0 billion, an increase of ¥180.0 billion from the Sixth MTMP. We will greatly expand investment in *New fields*, centered on the green electricity supply chain, with investment in *New fields* accounting for about 30% of the total. In the *Oil fields*, although investment cost has increased due to large-scale periodic maintenance at our refineries and inflation, we will make necessary investments to realize a safe and stable supply.

Total investment



The Seventh Consolidated Medium-Term Management Plan

Management Goals



Shareholder returns

Total payout ratio
(excl. the impact of inventory valuation)

≥ **60** %

Three-year cumulative

Dividend

≥ **¥250** per share



Financial health

Net D/E ratio

1.0 times

Net worth ≥¥600.0 bil.



Capital efficiency

ROE

≥ **10** %

ROIC

≥ **6** %



Profitability

Ordinary profit
(excl. the impact of inventory valuation)

≥ **¥165.0** bil.

Profit attributable to owners of parent ≥¥60.0 bil.



Future investment

Investment in New fields

¥140.0 bil.

Three-year cumulative



DX

Development of core digital personnel

900 people



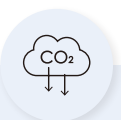
HRX

Engagement index

≥ **60** points

Human capital investment

¥180,000
per person



GX

GHG emission reduction

2030 vs. 2013
(incl. Scope 1, 2 and reduction contribution)

-30 %

Message from the CFO



We are committed to enhancing enterprise value by realizing our three-pronged capital policy.

Takayuki Uematsu

Representative Director,
Senior Managing Executive Officer
In charge of Sustainability Initiative Dept.,
Accounting Dept., and Finance Dept.

Message from the CFO

Summary of the Sixth MTMP and looking toward the Seventh MTMP

Looking back at the external environment during the period for our Sixth Consolidated Medium-Term Management Plan (hereafter, "the Sixth MTMP"), crude oil prices fluctuated considerably. For example, prices fell sharply from 2019 to 2020 due to the spread of COVID-19, but soared due to economic normalization and geopolitical risks beginning in 2021. In addition, with the rise in US interest rates triggered by global inflation, it was an absolute period of VUCA¹ given factors such as the exchange rate proceeding largely in the direction of a weaker yen and the rise in energy and steel costs.

Despite large fluctuations in the external environment, we faithfully implemented measures written in its four basic policies: secure profitability to enable reinvestment, expand growth drivers toward the future,

improve financial condition, and strengthen Group management foundation. These included taking up a short position and proceeding with early development of offshore wind power generation. This allowed the Company to significantly increase its profitability and improve its financial position to a certain degree.

As more realistic transitions are required, enhancing the enterprise value of the Company remains our most important management agenda and a clear capital policy to support this effort is necessary.

Given that we achieved a certain degree of success in improving our financial position under the Sixth MTMP and are now able to hold even higher-level discussions, we have newly outlined our capital policy in the Seventh Consolidated Medium-Term Management Plan (hereafter, "the Seventh MTMP").

Company performance is significantly affected by trends in crude oil prices; however, even in times of large fluctuations in the external environment, we must balance

the transition in our *Oil Business*, which produces a large amount of carbon dioxide, with growth in *New fields*, such as our *Renewable Energy Business*.

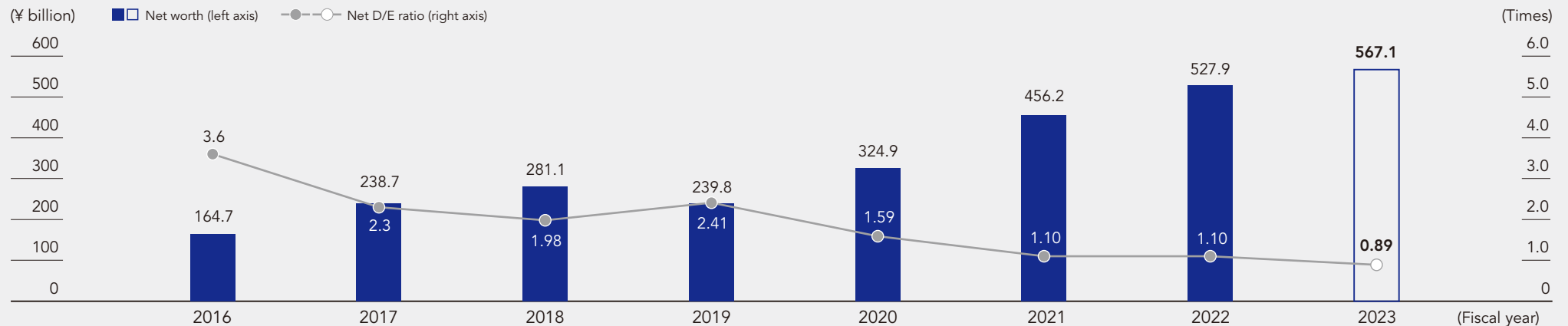
Both will require large investments over the medium to long term, but if we do not maintain a certain level of financial health, flexible financing may prove difficult. On the other hand, we are fully aware that if we do not consider shareholder returns and the capital efficiency required of us by the stock market, we will not be able to enhance enterprise value.

Thus, as part the Company's capital policy, we have chosen to strike a balance between shareholder returns, financial health, and capital efficiency aiming to maximize enterprise value without compromising any of these aspects.

In addition, we have worked to diversify our financing by improving our financial position and boosting our ratings, and in FY2022, we obtained A- ratings. These

¹ VUCA: Abbreviation of Volatility, Uncertainty, Complexity, Ambiguity; refers to a situation in which the way forward is unclear, and the future is difficult to predict.

Trend in net worth and net D/E ratio



Message from the CFO

ratings make it possible to receive financing through bond issuance and opens the doors to a wider range of financing options for the upcoming transition.

Providing greater shareholder returns

If we look back at the corporate action we took in FY2022, in terms of shareholder returns, the Company increased the dividend per share by ¥50 (from ¥100 to ¥150) and conducted a ¥20.0 billion share buyback. The dividend payout ratio based on profit attributable to owners of parent excluding the impact of inventory valuation, which demonstrates the Company's capability, was over 20%. However, the total payout ratio, including share buyback, reached over 60%.

In terms of necessary net worth, in my position as CFO, I keep a close eye on the balance between shareholder returns, financial health, and capital efficiency including the repurchase of a portion (¥24.15 billion) of zero-coupon convertible bonds (CB) in November 2022.

The capital market commented that the Company's capital policy is becoming much more refined. As CFO, I

Bolstering shareholder returns

Annual dividend per share

FY2023 forecast	FY2022	YoY
¥250	¥150	¥100

am committed to realizing a capital policy that will benefit shareholders and investors from a medium- to long-term perspective while consistently monitoring the Company's financial situation.

Achievements in FY2022 and forecast for FY2023

FY2022 was the final fiscal year of the Sixth MTMP, and in this fiscal year, ordinary profit excluding the impact of inventory valuation was ¥142.9 billion and profit attributable to owners of parent was ¥67.9 billion.

In the Oil E&P Business, while we saw a large increase in profits due to rising crude oil prices, profits decreased compared to the previous fiscal year's record-breaking profit due to rising in-house fuel costs, increasing energy costs brought on by inflation, and the impact of issues at refineries in the Petroleum Business.

In FY2023, the first fiscal year of the Seventh MTMP, while we anticipate improvements in margins for the four products²

² Four products: The four main petroleum products (gasoline, kerosene, diesel oil, heavy fuel oil A)

and elimination of the impact of trouble at refineries in FY2022, we project a decrease in profit compared to the previous fiscal year due to large-scale periodic maintenance at our refineries and the fall in crude oil prices. Ordinary profit excluding the impact of inventory valuation is expected to be ¥125.0 billion and profit attributable to owners of parent is expected to be ¥55.0 billion.

In closing

Given that we are now able to hold even higher-level discussions having achieved a certain degree of success in improving our financial position, we have taken a new step forward by disclosing our capital policy. Going forward, firmly applying this policy to meet capital market expectations will be our number one priority.

In addition to further expanding dialogue regarding medium- to long-term enterprise value enhancement, as CFO, I will continue to emphasize healthy communication with the capital market.

Consolidated profit and loss compared to previous fiscal year

(¥ billion)

	FY2022	FY2021	YoY	FY2023 forecast	YoY
Ordinary profit (excluding the impact of inventory valuation)	142.9	160.8	-17.9	125.0	-17.9
Profit attributable to owners of parent	67.9	138.9	-71.0	55.0	-12.9
Profit attributable to owners of parent (excluding the impact of inventory valuation)	52.8	88.3	-35.5	55.0	2.2
Net worth	527.9	456.2	71.7	567.1	39.2
Net worth ratio (%)	24.9	23.5	1.4	25.9	1.0
Net D/E ratio (times)	1.10	1.10	0.00	0.89	-0.21

Management Discussion and Analysis

Summary of consolidated profit and loss

FY2022 results

In FY2022, ordinary profit stood at ¥164.5 billion, down ¥68.6 billion year on year, and profit attributable to owners of parent was ¥67.9 billion, down ¥71.0 billion year on year. Substantial ordinary profit excluding the impact of inventory valuation was ¥142.9 billion, down ¥17.9 billion year on year.

In terms of the breakdown of ordinary profit excluding the impact of inventory valuation for each segment, profit in the Petroleum Business was ¥44.1 billion, down ¥49.6 billion year on year due primarily to the impact of the unplanned outage, higher in-house fuel costs, and rising energy costs owing to inflation, despite improved overseas market conditions. In the Petrochemical Business, ordinary profit decreased ¥9.8 billion year on year to ¥3.8 billion due mainly to a decline in sales volume owing to deteriorating olefin market conditions. In the Oil E&P Business, ordinary profit increased ¥39.7 billion year on year to ¥84.5 billion due to a rise in crude oil prices. In the Renewable Energy Business, ordinary profit was down ¥0.9 billion year on year to ¥2.6 billion due to unfavorable wind conditions and upfront costs associated with the development of offshore wind power by Cosmo Eco Power.

FY2023 forecast

In FY2023, we forecast ordinary profit to decline ¥39.5 billion year on year to ¥125.0 billion, profit attributable to owners of parent to decrease by ¥12.9 billion to ¥55.0 billion, and substantial ordinary profit excluding the impact of inventory valuation to decrease by ¥17.9 billion to ¥125.0 billion. We do not expect any impact from inventory valuation for the fiscal year.

Regarding the breakdown of forecasted ordinary profit excluding the impact of inventory valuation for each segment, in the Petroleum Business, despite plans to undertake large-scale periodic maintenance at the Chiba and Sakai refineries, improvement in the margins of the four main products and the absence of the unplanned refinery outage we faced in the previous fiscal year are expected to contribute to ordinary profit of ¥56.0 billion, an increase of ¥11.9 billion year on year. In the Petrochemical Business, ordinary profit is projected to decline by ¥1.8 billion year on year to ¥2.0 billion due to deteriorating market conditions, even though sales volume is forecast to improve. In the Oil E&P Business, ordinary profit is expected to decrease by ¥29.5 billion year on year to ¥55.0 billion due to falling crude oil prices. In the Renewable Energy Business, ordinary profit is forecast to decrease by ¥0.6 billion year on year to ¥2.0 billion due to upfront costs such as personnel expenses associated with the full-fledged development of offshore wind power by Cosmo Eco Power.

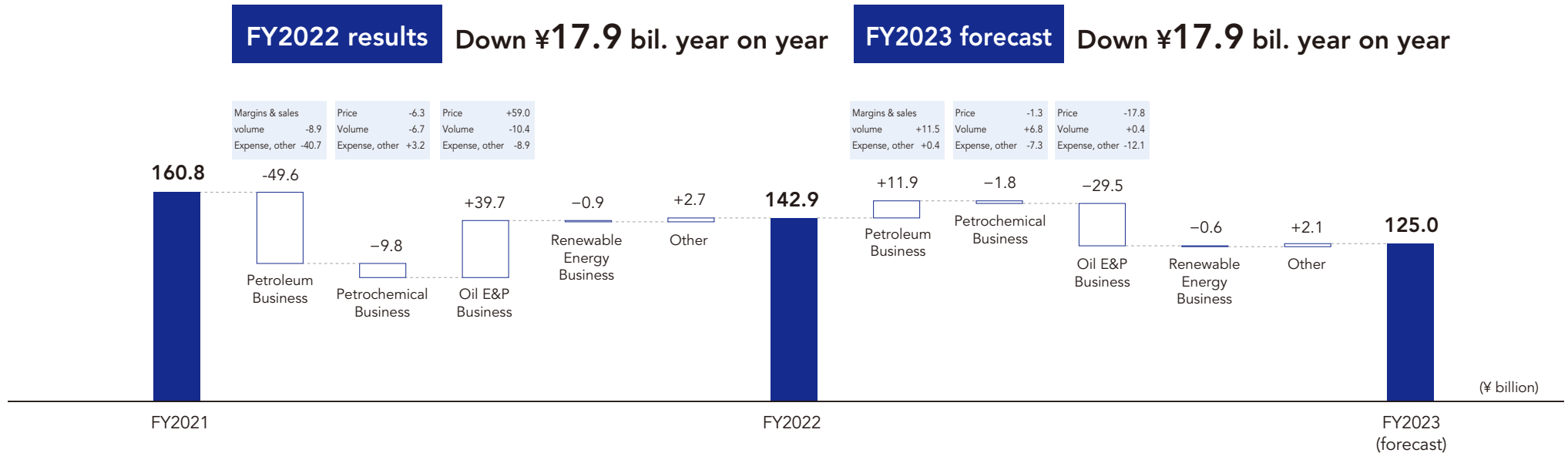
Consolidated statement of income (year-on-year comparison)

	FY2022	YoY	FY2023 Forecast	YoY
				(¥ billion)
Net sales	2,791.9	351.4	2,670.0	-121.9
Operating profit	163.8	-71.5	123.5	-40.3
Ordinary profit	164.5	-68.6	125.0	-39.5
Impact of inventory valuation	21.6	-50.7	0	-21.6
Ordinary profit (excluding the impact of inventory valuation)	142.9	-17.9	125.0	-17.9
Petroleum Business	44.1	-49.6	56.0	11.9
Petrochemical Business	3.8	-9.8	2.0	-1.8
Oil E&P Business	84.5	39.7	55.0	-29.5
Renewable Energy Business	2.6	-0.9	2.0	-0.6
Other	7.9	2.7	10.0	2.1
Profit attributable to owners of parent	67.9	-71.0	55.0	-12.9
Dubai crude oil price (US\$/barrel, Apr. to Mar.)	93	15	85	-8
Foreign exchange rate (¥/US\$, Apr. to Mar.)	135	23	130	-5
For reference				
Dubai crude oil price (US\$/barrel, Jan. to Dec.) ¹	95	26	83	-12
Foreign exchange rate (¥/US\$, Jan. to Dec.)	131	21	131	0

¹ The Dubai crude oil price two months ago is listed, as ICE Murban crude oil price, which is the index price used for the Oil E&P Business, is assessed with reference to the Dubai crude oil price two months ago.
E.g., In the case of full-year results (January-December), the average Dubai crude oil price from November of the previous year to October of the current year is shown.

Management Discussion and Analysis

Consolidated ordinary profit (excluding the impact of inventory valuation)



Overview of consolidated cash flows and consolidated balance sheet

Financial position

In FY2022, free cash flows decreased from the previous fiscal year due to a decrease in cash flows from operating activities caused primarily by the temporary impact of subsidies to curb the surge in gasoline and other fuel prices, while cash flows from investing activities increased due primarily to the construction of onshore wind power sites and secondary recovery investment in the Hail Oil Field.

Regarding financial indicators, net worth and the net worth ratio increased year on year due to the posting of profit, contributing to improved financial health.

In FY2023, net worth, the net worth ratio, and the net

debt-to-equity ratio (D/E ratio) are all forecast to improve from the previous fiscal year.

Consolidated cash flows

	¥ billion	
	FY2021	FY2022
Cash flows from operating activities (1)	108.4	8.1
Cash flows from investing activities (2)	-67.5	-81.2
Free cash flow (1+2)	40.9	-73.1
Cash flows from financing activities	-42.0	81.1
Cash and cash equivalents at end of the period	48.1	61.8

*Cash flows from operating activities for FY2022 includes one-time factors such as the impact of subsidies for gasoline and other fuels and the provisional payment of corporate income taxes, as well as the impact of holidays on gasoline tax payments, decreasing the total by ¥38.0 billion.

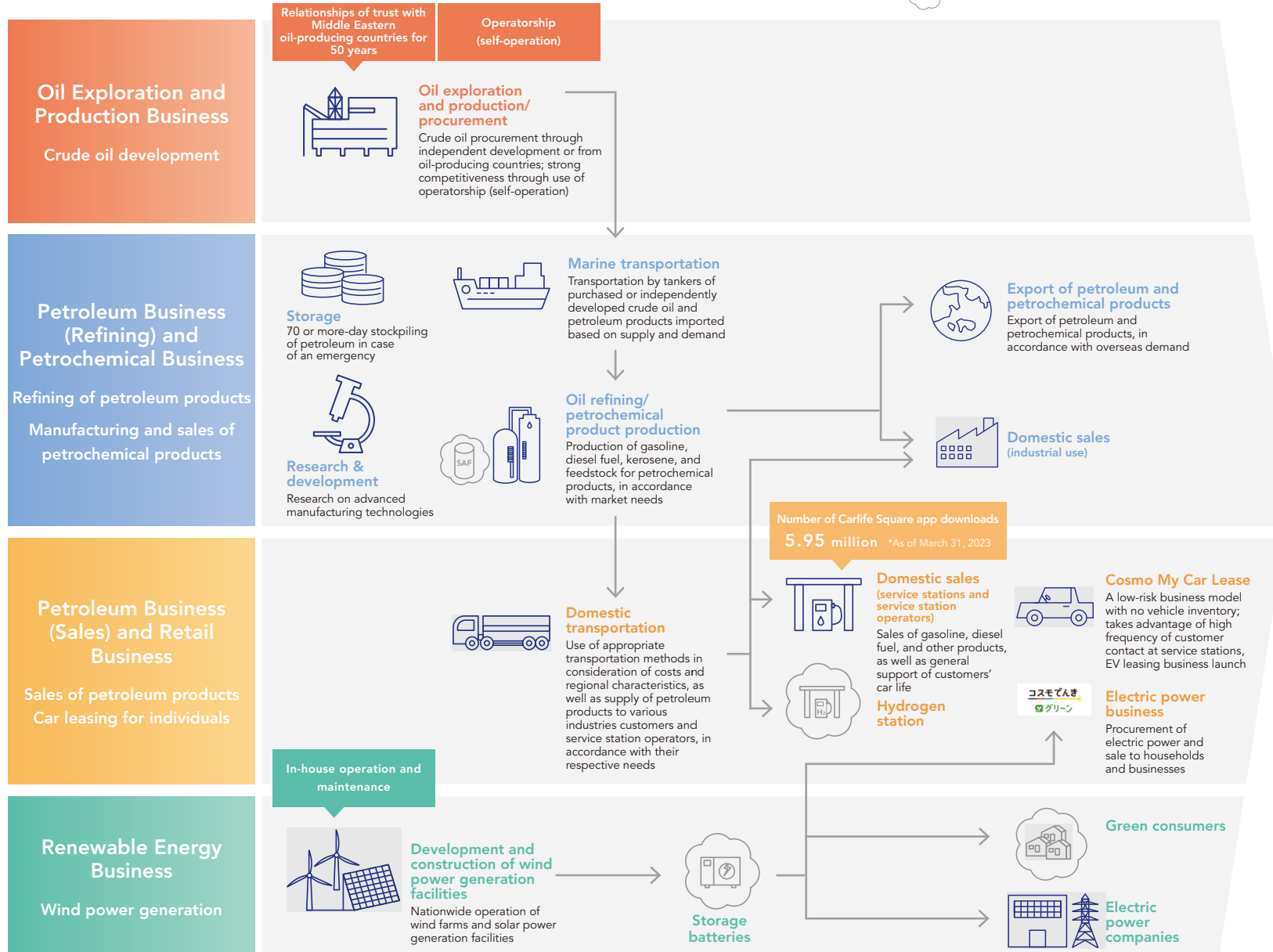
Consolidated balance sheet

	¥ billion		
	Mar. 31, 2022	Mar. 31, 2023	YoY
Total assets	1,938.4	2,120.8	182.4
Net assets	584.0	663.4	79.4
Net worth	456.2	527.9	71.7
Net worth ratio (%)	23.5	24.9	1.4
Net interest-bearing debt*	503.3	581.9	78.6
Net debt-to-equity ratio (times)	1.10	1.10	0.00

*Total interest-bearing debt less cash and deposits, etc., as of the end of the period

Cosmo Energy Group Businesses ~Present and Future~

Specific initiatives/potential under consideration



Products and services

Petroleum products

Gasoline, kerosene, diesel fuel, fuel oil, etc.



Petrochemical products (materials for products for daily life)

Shopping bags, plastic bottles, clothes, tires, electric appliance frames, etc.



Car life solutions

Car leasing for individuals, etc.



Electric power



Business Overview

	Petroleum Business (Refining and Sales)	Petrochemical Business	Oil Exploration and Production Business	Renewable Energy Business	Total *Including other businesses
Net sales (FY2022 results)	¥2,451.5 billion	¥440.2 billion	¥138.0 billion	¥12.2 billion	¥2,791.9 billion
Ordinary profit (FY2022 results)	¥44.1 billion (excluding the impact of inventory valuation)	¥3.8 billion	¥84.5 billion	¥2.6 billion	¥164.5 billion/¥142.9 billion (excluding the impact of inventory valuation)
Number of employees (as of March 31, 2023)	4,189 people	1,129 people	318 people	227 people	6,659 people
Major operating companies and affiliated companies	Cosmo Oil Cosmo Oil Lubricants GYXIS Corporation Cosmo Oil Marketing Cosmo Oil Sales Cosmo Energy Solutions Kygnus Sekiyu	Maruzen Petrochemical Cosmo Matsuyama Oil CM Aromatics HD Hyundai Cosmo Petrochemical	Cosmo Energy Exploration & Production Abu Dhabi Oil Qatar Petroleum Development United Petroleum Development Cosmo E&P Albahriya Limited	Cosmo Eco Power CSD Solar	

Impact of inventory valuation

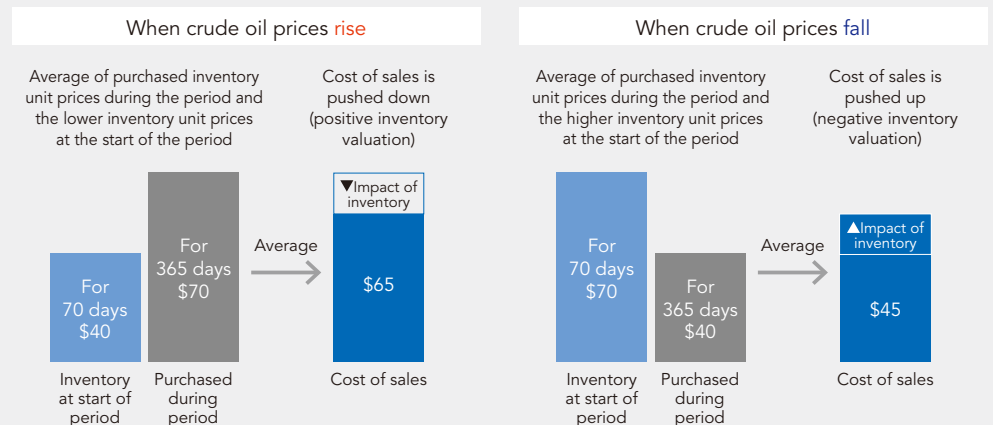
The impact of inventory valuation refers to the impact on the cost of sales in the financial statements, according to the inventory valuation method, when there is a change in the price of crude oil. It can be separated into the following two categories:

① Inventory valuation impact based on reduction in book value

If the market value of inventory at the end of the term falls below the book value, it is necessary to reduce the book value to the market value, and this indicates that a resulting loss is incurred.

② Inventory valuation impact based on the periodic average method

This refers to the impact in terms of income based on the periodic average method, which is an inventory valuation method. During periods when crude oil prices rise, the cost of sales is pushed down because purchased inventory unit prices that have risen during the period are averaged with the lower inventory unit prices at the beginning of the period. Conversely, during periods when crude oil prices fall, the cost of sales is pushed up because purchased inventory unit prices that have fallen during the period are averaged with the higher inventory unit prices at the start of the period.



PETROLEUM BUSINESS



Overview

In the Petroleum Business, Cosmo Oil, a core operating company of the Cosmo Energy Group, is mainly engaged in crude oil procurement, as well as the manufacturing, distribution, and importation and exportation of petroleum products. Meanwhile, Cosmo Oil Marketing, which is also a core operating company, sells Group products, including petroleum products, to corporate and individual customers.

Identified risks

- Risks related to crude oil prices and procurement
- Risks related to petroleum product prices and demand
- Risks related to accidents at and leakage from refineries and other facilities
- Business continuity risks associated with rapid environmental changes
- Risks related to book value depreciation of inventories due to a decline in profitability

Competitive advantages

- Maintaining high operating rates at refineries despite declining demand (a supply shortage position associated with fuel supply to Kygnus Sekiyu)
- Reinforcing connections with customers, and solid connections with service station operators and partners in other industries
- Development of brand products (Cosmo My Car Lease, Commitment Compulsory Car Inspection, Cosmo Denki (Electricity), Cosmo Zero Carbon Solution)
- High level of customer satisfaction, diversification of payment methods, and value creation centered on branding activities

Opportunities

- Globally accelerating trend toward carbon neutrality and measures to support the shift to a decarbonized society (shift to EVs, green electricity, and new fuels)
- Recovery in demand for jet fuel attributed to the lifting of COVID-19 border controls
- CASE* trends (mobility supply, maintenance, etc.)
- Changes in customer trends, digitalization, and the wider acceptance of cashless payments

*CASE: An acronym for Connected, Autonomous, Shared & Services, and Electric

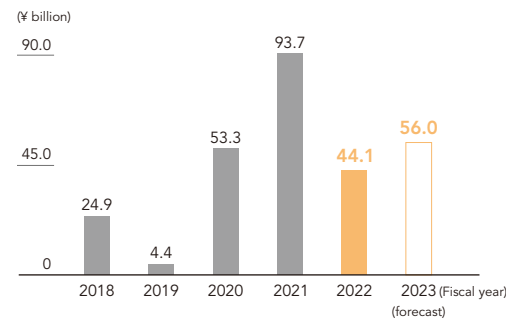
FY2022 results and FY2023 forecast

In FY2022, ordinary profit excluding the impact of inventory valuation was ¥44.1 billion, down ¥49.6 billion year on year, due primarily to the impact of issues at refineries, higher in-house fuel costs, and rising energy costs owing to inflation, despite improved overseas market conditions.

In FY2023, despite plans to undertake large-scale periodic maintenance at the Chiba and Sakai refineries, improvement in the margins of the four major products and the absence of the refinery issues we faced in FY2022 are expected to contribute to ordinary profit excluding the impact of inventory valuation of ¥56.0 billion, an increase of ¥11.9 billion year on year.

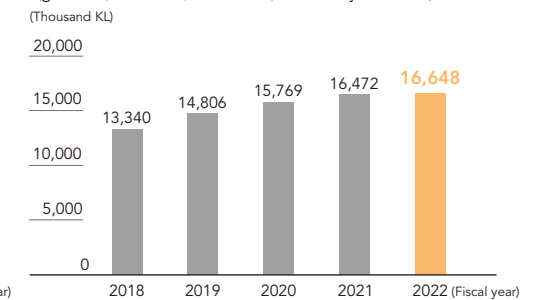
Segment ordinary profit

(excluding the impact of inventory valuation)



Four product sales volume

*The four products are the main petroleum products (gasoline, kerosene, diesel fuel, and heavy fuel oil A).



As a manufacturer and distributor of petroleum products, we are committed to achieving world-class stable operations and ensuring a consistent supply to our customers.



Petroleum Business

Business strategy

Key concepts of the Seventh Consolidated Medium-Term Management Plan

- 1 Ensure high uptime and high-efficiency operations at refineries
- 2 Utilize IT and digital technologies
- 3 Conduct initiatives for next-generation businesses (sustainable aviation fuel (SAF), hydrogen, and biodiesel fuel)
- 4 Enable efficient digital-driven sales
- 5 Maintain services stations and establish a business category conversion model

1 Ensure high uptime and high-efficiency operations at refineries

With the aim of enhancing the reliability of facilities at our refineries, we are striving to improve operational and maintenance capabilities and further increase refinery operating rates by introducing an Asset Performance Management (APM) system. Additionally, by shifting from periodic maintenance that involves equipment shutdowns to daily maintenance while equipment is operational, we aim to improve Operational Availability (OA) and achieve even higher operational efficiency.

2 Utilize IT and digital technologies

To achieve higher precision and safety in terms of operations and maintenance, we are committed to undertaking efforts towards the digitization of our refineries through the use of AI and VR technologies. Furthermore, we will focus on optimizing our supply chain by sophisticating production planning systems, automating shipping schedules, and other measures, harnessing IT and digital technologies.

4 Enable efficient digital-driven sales

By leveraging the Group's extensive customer data, including data from Cosmo The Card and app users, and ensuring data linkage with partners from other industries, we will be able to connect with a customer base larger than our current service station share. Utilizing this wealth of data, we will expand our offerings beyond fuel oil to encompass a wide range of services, including Cosmo My Car Lease, Commitment Compulsory Car Inspection, Cosmo Denki (Electricity), to cater to diverse customer needs.

5 Maintain services stations and establish a business category conversion model

As part of our strategy to address the aging of our service station facilities, we will implement planned preventive maintenance to proactively avert major accidents. Furthermore, at service stations that have traditionally focused on fuel oil sales, we will establish a business category conversion model to create new sources of revenue beyond fuel oil sales through remote business consultations, thus effectively utilizing the assets of the Group's service station network.

Key strategies under the Seventh Consolidated Medium-Term Management Plan

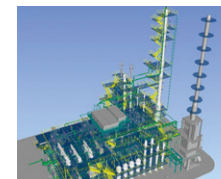
As part of our efforts to expand next-generation energy sources, we are actively validating and establishing a supply chain model for SAF¹, which uses waste cooking oil as feedstock. This initiative was adopted as a New Energy and Industrial Technology Development Organization (NEDO) project in FY2021 and is aimed at establishing a supply chain model for biojet fuel production from domestic waste cooking oil. In FY2025, we aim to become the first company in Japan to embark on large-scale domestic production of SAF. Looking toward the future, we also initiated studies on SAF production using ethanol as feedstock, diversifying our approach in terms of feedstock and manufacturing processes, etc. As announced in July 2022, we are working on establishing a supply chain in Japan with the goal of supplying 300,000 kiloliters of SAF annually by 2030.

In addition, we are planning to establish hydrogen stations that enable the quick refueling of both small and large fuel cell commercial vehicles in partnership with Iwatani Corporation. This initiative marks the beginning of our efforts to build a hydrogen supply chain, starting with the installation of the first hydrogen station at a truck terminal in Japan.

As for biofuels, we have started using Cosmo CF-5, a domestically produced diesel fuel blended with 5% biodiesel fuel, in our own deliveries, and we plan to expand sales of it to general consumers in the future.

¹ Sustainable Aviation Fuel (SAF): fuel produced mainly from biomass-derived raw materials, including plants, as well as waste and waste cooking oil from restaurants and households. It enables the reduction of carbon dioxide emissions compared to fossil fuels.

Large-scale SAF manufacturing facility



Rendering of the completed facility



Planned construction site
Cosmo Oil Sakai Refinery

Hydrogen station



PETROCHEMICAL BUSINESS



Overview

In the Petrochemical Business, Maruzen Petrochemical, a Group company, provides a stable supply of petrochemical products as an ethylene center in the petrochemical complex it is part of. Additionally, HD Hyundai Cosmo Petrochemical (Head Office and plant: Seosan, South Korea), a joint venture with HD Hyundai, supplies competitive petrochemical products from its paraxylene production facility, which boasts one of the highest production capacities in Asia.

Identified risks

- High volatility of petrochemical product prices
- Decreased domestic demand and export limitations due to China's economic slowdown and increased in-house manufacturing
- Relaxation of supply and demand resulting from new construction/expansion of overseas plants
- Sharp increase in raw material prices attributed to the situation in Ukraine and a weaker Japanese yen

Opportunities

- Increasing long-term semiconductor demand due to the growth of the carbon neutral and digital transformation markets
- Growing global demand for petrochemical products
- Net zero carbon emissions (acceleration of the global move towards decarbonization)

Competitive advantages

- Maintaining a world-leading market share in photoresist¹ polymers
- A diverse range of polymers, including those for photoresists and anti-reflection coating, cutting-edge EUV² photoresists, and thick-film photoresists for redistribution layers
- The ability to meet high-quality requirements from customers and increased production volume through state-of-the-art manufacturing and analytical technologies, as well as quality assurance
- Two ethylene production facilities in the Chiba area, and ethylene production capacity that is among the largest in Japan
- Promoting cooperation in oil refining with the Cosmo Oil Chiba Refinery (Petroleum Business) and coordination within the petrochemical complex
- Paraxylene production facilities located adjacent to the world's largest demand market, China

¹ Photoresist: Photosensitive material used in photolithography to create fine patterns on semiconductor devices, etc.

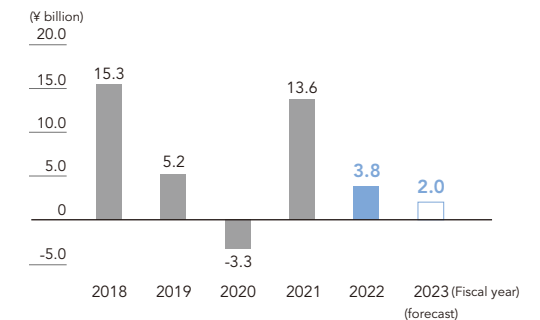
² EUV (Extreme Ultraviolet): A next-generation light source used in exposure technology for semiconductor manufacturing

FY2022 results and FY2023 forecast

In FY2022, ordinary profit decreased ¥9.8 billion year on year to ¥3.8 billion due mainly to a decline in sales volume owing to deteriorating olefin market conditions. Additionally, Maruzen Petrochemical partially shut down manufacturing equipment at its Chiba Plant in May due to the expected long-term decline in product market conditions and other factors. Conversely, in the field of specialty chemicals, we enjoyed favorable business performance due to strong customer demand, resulting in increased sales in this segment compared to the previous fiscal year.

In FY2023, we project ordinary profit of ¥2.0 billion, down ¥1.8 billion year on year, due to deteriorating market conditions. In addition to continuing to make necessary capital investments in photoresist polymers, Maruzen Petrochemical's propylene rectifying tower, which commenced commercial operation in 2022, is expected to yield synergies between the Petroleum Refining and Petrochemical businesses, benefitting the Cosmo Energy Group as a whole.

Segment ordinary profit



We will enhance competitiveness and work toward carbon neutrality in the basic chemicals sector, while expanding revenue in chemical products and specialty chemicals such as photoresist polymers.



Toshiomi Baba
President, Representative
Director and CEO
Maruzen Petrochemical Co., Ltd.

Petrochemical Business

Business strategy

Key concepts of the Seventh Consolidated Medium-Term Management Plan

- 1 Realize high uptime and high-efficiency operations
- 2 Expand production of chemical products
- 3 Increase production of semiconductor photoresist resins

1 Realize high uptime and high-efficiency operations

We will continue to make appropriate investments to achieve high uptime and high-efficiency operations, including obtaining Super Accredited Operator certification (planned for FY2024), promoting digital transformation (DX) and smart factories to enhance competitiveness in the manufacturing process, and ensuring a safe and stable operational foundation. In addition, we will also deepen collaboration between our Petroleum Refining and Petrochemical businesses and strengthen competitiveness by taking measures such as optimizing production through oil refining and petrochemicals and effectively utilizing unused fractions.

2 Expand production of chemical products

We are confident in securing steady revenue by expanding the production of chemical products. We will increase the production of methyl ethyl ketone (MEK) by converting unused fractions, currently consumed as in-house fuel, into feedstock. Additionally, we will boost the production of eco-friendly products such as Mercazole R (Isododecane).

3 Increase production of semiconductor photoresist resins

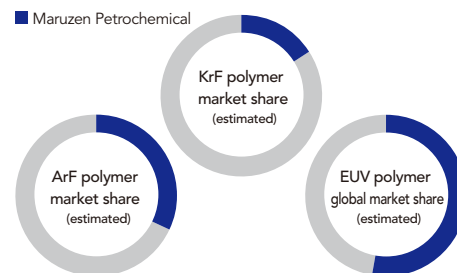
In response to increased sales of thick-film photoresist resins and ArF¹ resins used in semiconductor photoresists, we are actively increasing our production facilities and ensuring a stable supply of raw materials. This will help build our production capacity as we look ahead to 2024 and 2025. In addition, we will focus on human resource acquisition and development to prepare for facility expansion in line with rising demand.

¹ ArF (argon fluoride) is an excimer laser used as an exposure light source with a wavelength of 193nm.



Cutting-edge photoresist polymer manufacturing facility exterior

Photoresist polymer market shares



Key strategies under the Seventh Consolidated Medium-Term Management Plan

Maruzen Petrochemical will further expand its lineup of chemical products and specialty chemicals, which have grown into key revenue drivers. In the chemical products business, we are witnessing robust demand for MEK, which is used as a paint and ink solvent, as well as a resin finishing solvent. To meet this demand, we will implement measures to increase production, including securing raw materials from unused fractions that were previously consumed as fuel.

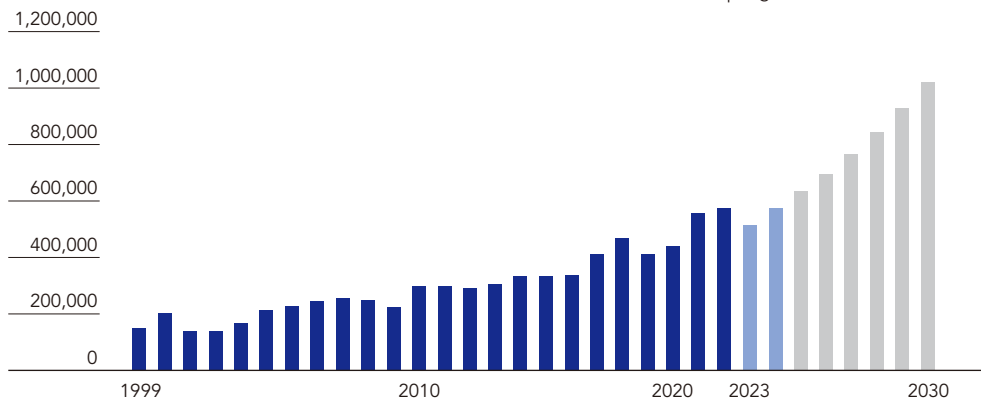
Moreover, as the sustainability and ethical movements gain momentum, we expect to see an increase in demand for eco-friendly products. For instance, there is growing demand for the use of Mercazole R (Isododecane) in cosmetics as a substitute for certain chemicals impacted by the EU REACH regulation*. We plan to increase and expand our facilities to meet the demand for increased production. The specialty chemicals business, as one of the *New field* pillars under "Oil & New," is an area we are particularly committed to. With demand for photoresist polymers expected to grow at approximately 10% per year, it is imperative that we strengthen our capabilities, secure raw materials, and focus on acquiring and developing the necessary human resources to meet this demand. We are planning to increase production for thick-film photoresist resins and ArF resist resins. Additionally, for EUV resist polymers, for which demand is expected to grow going forward in line with advancements in cutting-edge technology, we have established and commenced operation of new manufacturing facilities.

In our research division as well, we are collaborating with Cosmo Oil to pursue environment-related themes aimed at achieving carbon neutrality. We are also working in conjunction with our business divisions to develop new business themes that expand upon our existing operations. These efforts are aimed at achieving commercialization while creating both social and economic value.

*EU (European Union) regulation on the Registration, Evaluation, Authorization, and Restriction of chemicals

Semiconductor market forecast

(Million US dollars)



*Created by the Cosmo Energy Group with reference to World Semiconductor Trade Statistics (WSTS) forecasts

OIL EXPLORATION AND PRODUCTION BUSINESS



Overview

The Oil Exploration and Production Business (hereafter, "Oil E&P Business") is a revenue driver within the Cosmo Energy Group's business portfolio. The Group is promoting safe and stable operations in existing concession areas in the core area of the Middle East, centered on Abu Dhabi in the United Arab Emirates (UAE) and the State of Qatar, with which we have built long-standing relationships of trust.

Identified risks

- Risk of stranded assets associated with the shift to a fossil fuel-free society
- Risks related to crude oil prices and production
- Risk of accidents in oil fields and at production facilities
- Risks related to exploration and development

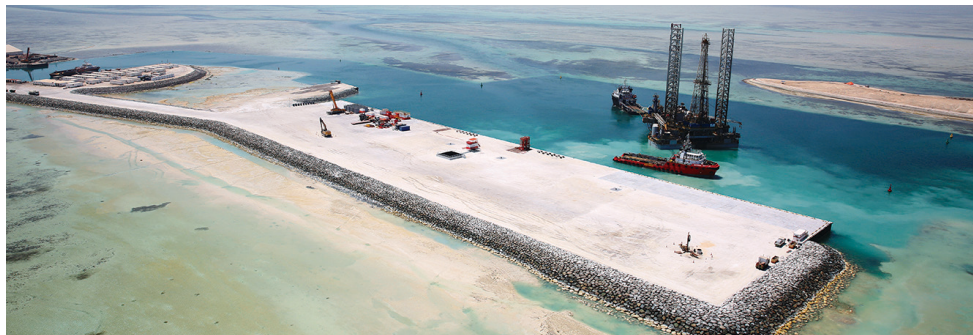
Competitive advantages

- Strong relationship with the Emirate of Abu Dhabi
- Highly competitive oil fields through in-house operations
- Advantages in CCS/CCUS*

Opportunities

- Realization of a stable energy supply during the period of transition to decarbonization
- Expectations for global advancements in and popularization of CCS and CCUS* technologies
- Potential for collaboration with oil-producing countries in the field of decarbonization

*CCS: Carbon Capture and Storage
CCUS: Carbon Capture, Utilization, and Storage (use of separated and stored CO₂)

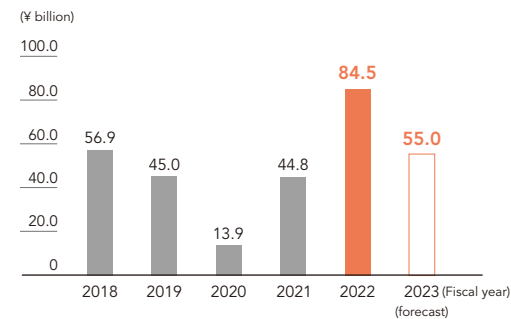


FY2022 results and FY2023 forecast

In FY2022, ordinary profit increased ¥39.7 billion year on year to ¥84.5 billion due to a rise in crude oil prices (Dubai crude oil price between November 2021 and October 2022: US\$95/barrel, up US\$26/barrel year on year), offsetting a decrease in sales volume.

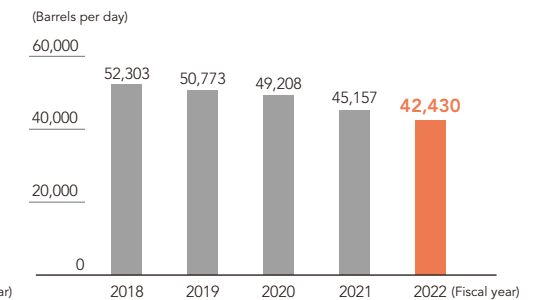
In FY2023, ordinary profit is projected to decrease by ¥29.5 billion year on year to ¥55.0 billion due to the impact of falling crude oil prices (assumed Dubai crude oil price between November 2022 and October 2023: US\$83/barrel, down US\$12/barrel year on year).

Segment ordinary profit



Crude oil production volume

*Production volume is the total for key oil development companies: Abu Dhabi Oil, Qatar Petroleum Development, and United Petroleum Development.



In addition to our achievements in crude oil development spanning half a century, we strive to expand business based on our relationships of trust with Middle Eastern oil-producing countries.



Katsushi Nishi
President, Representative Director and CEO
Cosmo Energy Exploration & Production Co., Ltd.

Oil Exploration and Production Business

Business strategy

Key concepts of the Seventh Consolidated Medium-Term Management Plan

- ① Strengthen profit structure further based on safe and stable operations
- ② Generate additional projects with a focus on actualizing exploration in existing concession areas and undeveloped projects
- ③ Consider measures to realize decarbonized businesses and explore ways to achieve low carbonization

① Strengthen profit structure further based on safe and stable operations

With a focus on safe and stable operations, we aim to maximize production volume through measures such as waterflooding (reservoir pressure recovery through water injection) in the Hail Oil Field and maintaining and enhancing production facility processing capacity in other existing oil fields. Simultaneously, we will work towards streamlining operational costs and reducing the cost per barrel, with the ultimate goal of improving profitability.

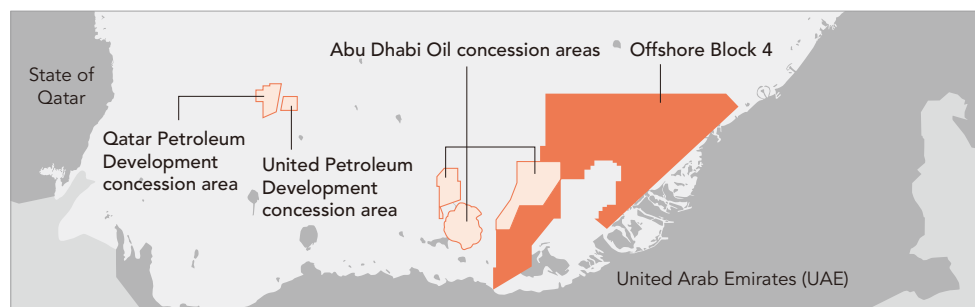
② Generate additional projects with a focus on actualizing exploration in existing concession areas and undeveloped projects

In an effort to improve crude oil recovery rates in our concession areas, we will undertake various initiatives, including exploration and development activities in Offshore Block 4, a concession area located in the Emirate of Abu Dhabi in the United Arab Emirates, which we acquired in 2021. Additionally, we will implement strategies to address the decline in production levels in our existing operational oil fields.

③ Consider measures to actualize decarbonized businesses and explore ways to achieve low carbonization

To realize the Group's goal of net zero carbon emissions by 2050, we will proactively explore business and technology development in fields that are compatible with our Oil E&P Business, such as CCS/CCUS and geothermal power generation. In our operating companies, we will continue our efforts to operate in an environmentally conscious manner, with a focus on reducing CO₂ emissions and zero-flaring operations.

Cosmo Energy Group concession areas



Key strategies under the Seventh Consolidated Medium-Term Management Plan

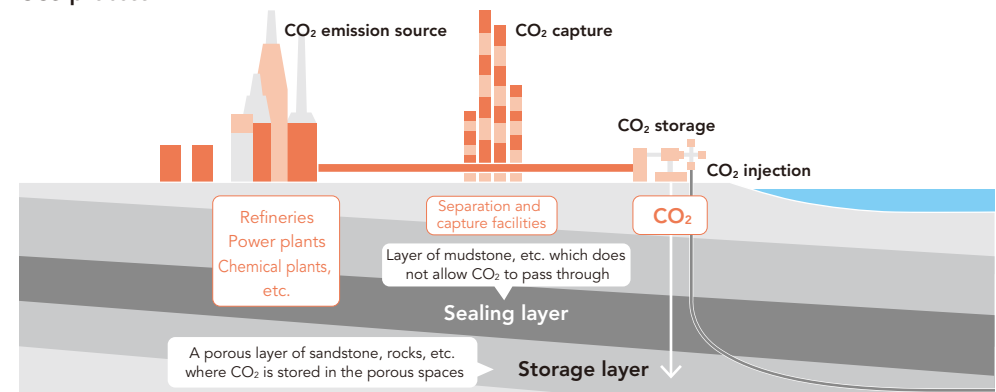
Amid a broader societal shift towards decarbonization and energy transition, the Oil E&P Business must meet energy demand during this transitional period. From an energy security perspective as well, it has an important social mission to fulfill in terms of continuing to ensure a stable energy supply. The Group aims to maximize production swiftly by implementing water flooding techniques in the Hail Oil Field and maintaining and enhancing processing capacity in the production facilities of existing oil fields. Our target is to achieve crude oil production of 45,000 barrels per day by FY2025.

In addition, we aim to achieve ordinary profit of ¥90.0 billion for the Oil E&P Business in FY2025 by optimizing operational costs and reducing cost per barrel while capitalizing on the cost competitiveness of the Group's oil fields.

From the perspective of maximizing production volume, in addition to these efforts, we will explore the development potential of our own concession areas to improve crude oil recovery rates. In particular, in the exploration area, Offshore Block 4, we will vigorously advance exploration and evaluation activities to determine the reserves and commercial potential of oil and gas.

We will actively explore areas that are compatible with our Oil E&P Business in order to realize decarbonized businesses and achieve low carbonization. Especially in the case of CCS/CCUS, based on the memorandum of understanding signed with the Abu Dhabi National Oil Company (ADNOC) in 2022, we will continue joint investigations to assess the feasibility of CCS/CCUS in the Emirate of Abu Dhabi.

CCS process



RENEWABLE ENERGY BUSINESS



Overview

In the Renewable Energy Business, specifically the wind power generation business, Group company, Cosmo Eco Power, has been a pioneering force in Japan since its inception in 1997. Looking ahead, we plan to grow our wind power generation business, and as a Group, expand development of new renewable energy sources, such as solar power generation, and sales of green electricity. Additionally, we aim to strengthen our green electricity supply chain by building supply-demand adjustment and energy storage systems.

Identified risks

- Changes to government policies and systems related to renewable energy
- Decline in profitability resulting from intensified competition
- The domestic offshore wind power generation industry is still in its infancy and not yet mature

Competitive advantages

Onshore wind power

- Third-largest market share in Japan (with a capacity of about 300MW, spanning over 25 locations)
- Industry-leading utilization rate through strong in-house technical capabilities in wind turbine maintenance and the installation of failure prediction systems

Offshore wind power

- Commenced commercial operations of offshore wind power generation in Akita Prefecture
- Partnered with Iberdrola, S.A. to acquire overseas expertise

1 Under the Feed-in Tariff (FIT) scheme, the Japanese government guarantees that power companies will be able to purchase electricity generated from renewable sources at a fixed price for a specified period with the aim of promoting the adoption of renewable energy.

2 Under the Feed-in Premium (FIP) scheme, in addition to the revenue from selling electricity, a subsidy is provided to power generation companies. When electricity is sold to the market, the income from selling electricity can vary due to market price fluctuations. However, the payment of a premium helps ensure a certain level of income for power generation companies.

Since revenue may vary depending on the method of electricity sales, this system encourages power generation companies to be mindful of market price fluctuations attributable to the supply-demand balance.

3 Source: Ministry of Economy, Trade and Industry, Energy Supply and Demand Outlook for FY2030 (Related Documents), October 2021

4 Source: Ministry of Economy, Trade and Industry, Basic Energy Plan, October 2021)

Opportunities

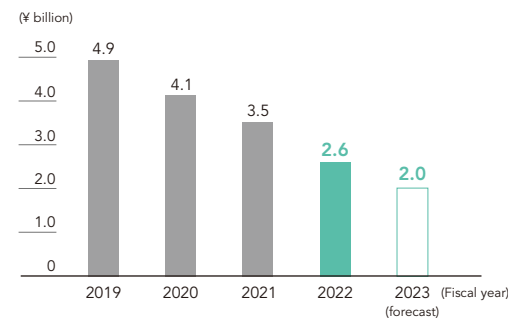
- Renewable energy will be the main power source as we look to achieve carbon neutrality by 2050
- Adjustment function centered on storage batteries to address market volatility resulting from the expansion of renewable energy
- Government-led promotion of wind power generation (including power grid development, changing rules on power feeding, and the easing of regulations)
- Diversification of electricity customers due to the transition from the FIT scheme¹ to the FIP scheme²
- Expansion of the onshore wind power market (expected total capacity: 15.9GW³ in 2030)
- Expansion of the offshore wind power market (establishing projects with a total capacity of 10GW by 2030 and 30GW to 45GW, including floating wind turbines, by 2040⁴)

FY2022 results and FY2023 forecast

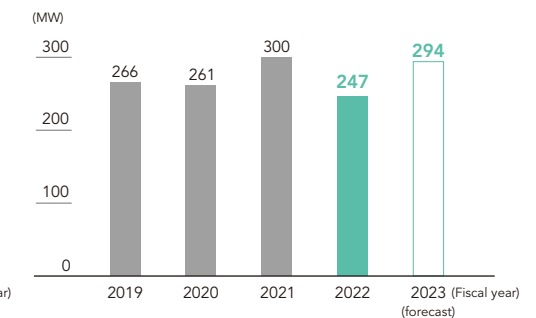
In FY2022, net sales were ¥12.2 billion, down ¥0.9 billion year on year, and ordinary profit was ¥2.6 billion, down ¥0.9 billion year on year, due to unfavorable wind conditions, despite achieving the highest-ever utilization rate.

In FY2023, although we are planning upfront investments for capacity expansion and further improvements in operations and maintenance, and forecast ordinary profit to decrease ¥0.6 billion year on year to ¥2.0 billion, we will steadily advance the business to achieve capacity exceeding 1,500MW.

Segment ordinary profit



Wind power plant capacity



We will continue our efforts to realize a sustainable society through the expansion of our wind power generation business.



Masayoshi Noji
President, Representative
Director and CEO
Cosmo Eco Power Co., Ltd.

Renewable Energy Business

Business strategy

Key concepts of the Seventh Consolidated Medium-Term Management Plan

- ① Increase renewable energy generation capacity (acquire offshore wind farms and expand onshore wind farms)
- ② Build a supply-demand adjustment function that helps strengthen the green electricity supply chain

① Increase renewable energy generation capacity (acquire offshore wind farms and expand onshore wind farms)

The Cosmo Energy Group aims to become a leading company in a carbon-neutral society by achieving a combined capacity of over 1,500MW in onshore and offshore wind power by 2030. In onshore wind power, we aim to achieve a power generation capacity of over 900MW by 2030 through development of new facilities and the replacement of existing ones. In offshore wind power as well, we aim to establish a strong business foundation and achieve a power generation capacity of over 600MW by 2030.

② Build a supply-demand adjustment function that helps strengthen the green electricity supply chain

Due to the increasing use of renewable energy sources, the power grid has become less stable. Also, global resource prices have remained high, leading to a surge in electricity prices. This has resulted in increased price volatility in the wholesale electricity market, and there are high expectations in terms of the role of storage batteries in ensuring grid stability. In the future, we will continue to develop renewable energy, with a focus on wind power generation, to address societal challenges and establish a supply chain to optimally adjust and supply green electricity. As renewable energy becomes a main power source, we will utilize storage batteries with a regulating function to replace thermal power generation in providing grid stabilization, contributing to the further integration of renewable energy into the grid.

Key strategies under the Seventh Consolidated Medium-Term Management Plan

Commencement of Kamiyuchi Wind Farm and Oita Wind Farm operations

In line with our commitment to promoting renewable energy, we have been making significant progress in terms of our onshore wind farm development initiatives. Notably, in April 2023, we commenced operations at two key sites: the Kamiyuchi Wind Farm in Hokkaido (capacity: about 49MW) and the Oita Wind Farm in Oita Prefecture (capacity: about 14MW). The Mutsu Ogawara Wind Farm in Aomori Prefecture (capacity: about 33MW) and the Iwaya Wind Park, also in Aomori Prefecture (capacity: about 27MW), are set to begin operations in FY2024. This achievement came after a replacement period that began in March 2023, resulting in a shorter

construction period of just two years instead of the planned three. Our commitment to FIT-certified projects, such as the Abukuma Minami Wind Farm in Fukushima Prefecture (capacity: about 89MW)* and the Chuki No. 2 Wind Farm in Wakayama Prefecture (capacity: about 39MW), remains steadfast. Through these efforts, we aim to achieve a power generation capacity of over 900MW by 2030.

In the offshore wind power business, we commenced operations in January 2023 at the Akita Port and Noshiro Port offshore wind farms in Akita Prefecture (capacity: 140MW)*. For offshore wind power projects, operators are selected through public bidding. As of July 2023, preparations are underway for operator selection from among the 14 sea areas designated as promotion or promising areas. We aim to establish a solid foundation in our offshore wind power business and achieve a power generation capacity of over 600MW by 2030.

*Total project capacity

Outlook for energy storage projects

We plan to install and validate solar power generation and grid-connected storage batteries on Group premises from FY2023 to FY2024.

We will charge the storage batteries during the daytime when solar power generation peaks to reduce the burden on the power grid, which becomes unstable, and discharge them during high demand times, such as in the evening when power companies often struggle to meet demand. This will contribute to the stabilization of the power grid. We will also consider the optimal combination of battery storage systems relative to the scale of power procurement from solar power generation in the future.

Going forward, as the government proceeds with the design of detailed systems and with the prospect of profitability being ensured through factors such as a decrease in equipment installation costs, we will work on acquiring expertise through this validation project and commercializing energy storage solutions.

Map of wind farms in Japan

