

# FY2023 Financial Report

- FY2023 Financial Results / FY2024 Financial Outlook
- Kureha Mid-/Long-Term Management Plan(FY2023-2030)  
- The Rolling Plan 2025

KUREHA CORPORATION

May 13, 2024



KUREHA

I am Kobayashi, the President and Chief Executive Officer.

I will talk about how I see the current situation as president and what we would like to do in the future.

In April last year, we launched a new medium- to long-term management plan, "Toward Creating a New Future (FY2023-2030)".

The plan was launched with the aim of improving mid- to long- term corporate value and contributing toward a sustainable society.

The basic concept of that plan was to grow the polyvinylidene fluoride (PVDF) business as the core of the Company's operations until 2030.

However, from the first year, the business environment was very unstable, and so we formulated the "Kureha Group Medium to Long-Term Management Plan, the Rolling Plan 2025 (the Rolling Plan 2025)" as the plan until the fiscal year 2025.

Our market forecasts for electric vehicles (EVs) might not be sufficient and we were not prepared enough for the worst-case scenario in our original plan.

The issue we are facing is how to change the profit structure that has been overly dependent on the PVDF business.

We will create a structure that will generate stable profits as quickly as possible, PPS, and PGA. In addition, agrochemicals will also generate significant profits around 2030.

We will take on challenge to make our existing business a pillar of profit in the future.

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Another thing is a request from the Tokyo Stock Exchange for “action to implement management that is conscious of cost of capital and stock price”.

We thought we had incorporated such factors in the new medium-term management plan we announced last year. But looking at stock price movements, we feel that we may not have fully met the expectations of our shareholders.

In the Rolling Plan 2025, we have set new ROE and PBR targets for fiscal 2025, and have created a scenario to achieve these goals.

This time, we have reviewed shareholder returns and the dividend payout ratio, and we are aiming to create a new Kureha by shifting from a focus on stability to utilizing the capital and linking it to growth.

## FY2023 Results and FY2024 Outlook

## Revenue and Profit

	24/3		YoY	25/3	
	Result	Result		Forecast	YoY
Advanced Materials	64.5	82.7	-18.2	70.0	5.5
Specialty Chemicals	33.9	31.8	2.2	29.0	-4.9
Specialty Plastics	47.3	46.8	0.5	40.0	-7.3
Construction	13.9	11.3	2.6	14.5	0.6
Other Operation	18.2	18.7	-0.5	16.5	-1.7
<b>Revenue</b>	<b>178.0</b>	<b>191.3</b>	<b>-13.3</b>	<b>170.0</b>	<b>-8.0</b>
Advanced Materials	4.8	10.1	-5.3	5.7	0.9
Specialty Chemicals	1.7	1.8	-0.2	1.0	-0.7
Specialty Plastics	8.2	8.6	-0.4	5.2	-3.0
Construction	1.5	0.9	0.6	0.8	-0.7
Other Operation	2.5	2.8	-0.4	1.3	-1.2
<b>Core operating profit</b>	<b>18.6</b>	<b>24.3</b>	<b>-5.7</b>	<b>14.0</b>	<b>-4.6</b>
Adjustments	-5.8	-2.0	-3.9	-	5.8
<b>Operating profit</b>	<b>12.8</b>	<b>22.4</b>	<b>-9.6</b>	<b>14.0</b>	<b>1.2</b>
Profit attributable to owners of Kureha Corp.	9.7	16.9	-7.1	10.0	0.3

## VS FY2022

- Sales and profits of PVDF for LiB declined due to a drop in both volume and unit price as the EV market and customers' inventories continued to adjust, reversing a sharp increase in demand until the 1H of FY2022, when the EV market expanded rapidly.
- The PGA business returned to profitability as a result of progress in inventory liquidation and a gain on asset revaluation of approximately 6.2 billion yen.
- Equity in earnings of PPS business decreased.

## (Reference) Difference from the earnings forecast disclosed on March 27, 2024

- Core operating profit improved due to unrecognized expenses and sales increase as customers secured inventories following the withdrawal from the ML film business, as well as a decrease in activity expenses and allowances.
- Operating profit also improved due to a smaller-than-expected loss from the withdrawal from the ML film business, which was recorded in other expenses.

## FY2024 Outlook

- In the PVDF for LiB binder for automotive applications, sales are expected to increase due to gradual growth in the EV market, although customer inventory adjustments of LiB will continue. Profit margins in the PVDF business are expected to remain flat due to the sales of products produced from high price raw material will continue during 1H of FY2024 and lower plant utilization.
- PGA sales will increase due to higher sales volume. Despite a decrease in return gain from inventory revaluation, profitability is firmly established due to increased sales volume and restart of the resin plant in the U.S.
- Though plastic products business environment does not change, profit decrease due to higher fixed costs in household products and withdrawal from heat-shrinkable multilayer film business.
- Increase due to lower cost of PPS and increase in equity in earnings of affiliates.

I am Tanaka, the Senior Vice President and General Manager of Corporate Strategies & Accounting Division.

I will give an explanation based on the materials.

<Difference from the earnings forecast disclosed on March 27, 2024>

Last year, we made a second revision to our earnings forecast at the end of March.

We had forecasted 11 billion yen on an operating income, but the actual result was 12.8 billion yen, up 1.8 billion yen.

This is mainly because, customers secured inventories following the withdrawal from the ML film business and expenses related to ML withdrawal were lower than expected. Furthermore, group-wide activity expenses were also lower than expected.

### Rolling plan of Mid-to Long-term Management Plan

- The growth of the EV market is slowing down, and the environment for the PVDF business has changed drastically from what was expected at the start of the medium- to long-term management plan.
- Although the EV market is growing at a slower pace than initially expected, it continues to be a growing market, and inventory adjustments by customers are expected to be completed by FY2025.
- Under the Rolling Plan, we will further promote balance sheet management emphasizing return on capital, and have newly set ROE of at least 8% and PBR of at least 1x as key performance indicators (KPIs) for FY2025.
  - To improve profits, we will not only wait for the PVDF business to recover, but will also work to raise our profit base level by thoroughly improving profits in other existing businesses and reducing costs throughout the company.
  - In addition, the company will engage in M&A in earnest in areas surrounding existing businesses.
  - The Company will further strengthen shareholder returns by setting the minimum annual dividend at 86.7 yen/share through FY2025 and doubling the amount of share buybacks to 40 billion yen over the three-year period through FY2025.
- Performance targets and KPIs for FY2030 will be disclosed again at the time of the announcement of the next medium-term management plan starting from FY2026.

# I. FY2023 Financial Results

(April 1, 2023 – March 31, 2024)

**KUREHA**



	FY2023		FY2022		
	(\\$ billion)				
	FY2023	FY2022			
Revenue	178.0	191.3	-7.0%		
Core operating profit	18.6	24.3	-23.3%		
Adjustments	-0.5	-0.2			
Other income	1.9	1.2			
Other expenses	7.2	3.0			
Operating profit	12.8	22.4	-42.7%		
Financial income	1.3	0.9			
Financial expenses	0.2	0.2			
Profit before taxes	13.9	23.0	-39.5%		
Profit attributable to owners of Kureha Corp.	9.7	16.9	-42.3%		
Profit per share (¥)	173.03	288.10			
FOREX (¥/USD)	144.6	135.5			
(¥/EUR)	156.8	141.0			
(¥/CNY)	20.1	19.8			

## &lt; VS FY2022 &gt;

## 〔Revenue〕

Sales of PPS, PGA, specialty chemicals, and construction business increased, but PVDF binder sales for LiB declined sharply, resulting in a combined decline in revenue.

## 〔Core Operating Profit〕

Despite a gain of approximately 6.2 billion yen from inventory revaluation of processed PGA, income decreased due to lower sales of PVDF and lower equity income from PPS.

## 〔Operating Profit〕

Other expenses decreased from 3.0 billion yen to 7.2 billion yen due to the cancellation of the PVDF manufacturing facility expansion plan in China and expenses for withdrawal from the multilayer barrier shrink film business.

## 〔Profit Before Taxes〕

Decrease due to lower operating profit.

## 〔Profit attributable to owners of Kureha Corp.〕

Decrease due to lower profit before tax.

Comparison with the previous year (FY2023).

Both sales and profits were significantly lower than in FY2022.

## &lt;Revenue&gt;

The main reason for the decline in sales was a drop in both volume and unit price of PVDF, a binder for lithium-ion batteries, which had been very strong in 2021 and 2022.

## &lt; Core Operating Profit &gt;

In addition to the impact of PVDF on operating income by segment, the decrease in equity in earnings of the PPS business in the US, which was affected by the economic slowdown and other factors, also contributed to the decline in profits.

Despite an improvement in profits due to a gain from inventory revaluation of processed PGA, total core operating profit in FY2023 was lower than in FY2022.

## &lt;Operating Profit &gt;

Due to factors such as the cancellation of the PVDF expansion plan in China and the costs of withdrawing from the ML film business, ¥7.2 billion was recorded as other expenses, resulting in a total of ¥12.8 billion, which was significantly lower than in FY2022.

# FY2023 Financial Summary (2)

KUREHA CORPORATION

## Revenue & Core Operating Profit by Segment

(\$ billion)

	FY2023 Results			FY2022 Results		
	1H	2H	Full-year	1H	2H	Full-year
<b>Revenue</b>	<b>88.5</b>	<b>89.5</b>	<b>178.0</b>	<b>101.8</b>	<b>89.5</b>	<b>191.3</b>
Advanced Materials	34.0	30.5	64.5	47.3	35.4	82.7
Specialty Chemicals	17.1	16.9	33.9	17.5	14.3	31.8
Specialty Plastics	23.4	23.9	47.3	23.8	23.0	46.8
Construction	5.4	8.6	13.9	4.2	7.1	11.3
Other Operations	8.6	9.7	18.2	8.9	9.8	18.7
<b>Core operating profit</b>	<b>9.2</b>	<b>9.5</b>	<b>18.6</b>	<b>16.6</b>	<b>7.7</b>	<b>24.3</b>
Advanced Materials	2.8	2.0	4.8	9.0	1.1	10.1
Specialty Chemicals	0.8	0.9	1.7	1.6	0.2	1.8
Specialty Plastics	4.3	3.9	8.2	4.3	4.3	8.6
Construction	0.2	1.3	1.5	0.3	0.6	0.9
Other Operations	1.1	1.4	2.5	1.4	1.4	2.8
Adjustments	-0.2	-0.4	-0.5	-0.0	-0.1	-0.2
Other income	0.5	1.4	1.9	0.5	0.6	1.2
Other expenses	0.4	6.9	7.2	0.4	2.6	3.0
<b>Operating profit</b>	<b>9.1</b>	<b>3.7</b>	<b>12.8</b>	<b>16.7</b>	<b>5.6</b>	<b>22.4</b>

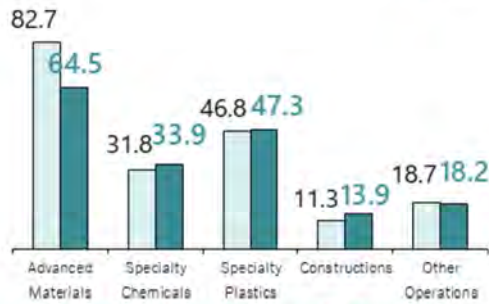


## Segment Revenue &amp; Core Operating Profit (vs. FY2022)

(¥ billion)

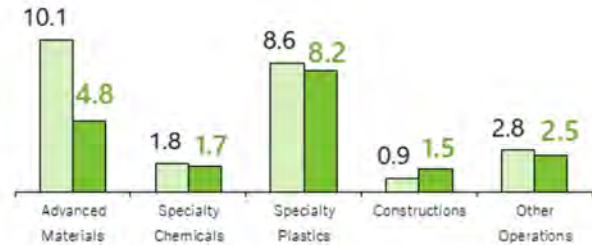
【Revenue】

□ FY2022  
■ FY2023



【Core Operating Profit】

□ FY2022  
■ FY2023



Factors affecting operating profit changes

- AM: Despite profit improvement due to return of inventory revaluation gain on processed PGA products, profit decreased due to lower sales of PVDF and lower equity income from PPS.
- SC: Sales revenue increased for all agrochemicals, pharmaceuticals, and industrial chemicals, but income decreased due to higher costs.
- SP: Although sales and earnings of household wrap increased due to price revisions, profits decreased due to a decline in sales of processed plastic products for industrial equipment.
- CO: Increase due to increase in private-sector construction work.
- OO: Profitability improved in the hospital operations, but declined in the environmental engineering and Logistics business.

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## &lt;Other income/expenses, financial income/expenses&gt;

	(¥ billion) FY2023    FY2022	
Core operating profit	18.6	24.3
Adjustment	-0.5	-0.2
Other income	*2 1.9	1.2
Other expenses	*3 7.2	*1 3.0
Operating profit	12.8	22.4
Financial income	1.3	0.9
Financial expenses	0.2	0.2
Profit before tax	13.9	23.0

\*1 2023/3 **Other Expenses**  
Packaging materials  
impairment of ML film business:                    ¥2.1bn

\*2 2024/3 **Other Incomes**  
Reversal gain of impairment loss on  
ML film business:                                        ¥0.9bn

\*3 2024/3 **Other Expenses**  
Cancellation of PVDF manufacturing  
facilities expansion in China:                        ¥2.3bn

Expense for withdrawal from ML film  
business:    ¥2.8bn

Expense for removal of existing  
facilities to increase PVDF production  
at the Iwaki Plant:                                        ¥1.2bn



## &lt;Other income&gt;

In FY2022, an impairment loss was recorded for the ML film business on the assumption that the business would continue to operate. In FY2023, the decision was made to withdraw from this business, and 0.9 billion yen was recorded as a gain on reversal of impairment loss, based on a market valuation of the equipment expected to be sold.

## &lt;Other Expenses&gt;

In FY2023, we recorded other expenses of 2.3 billion yen for the cancellation of the PVDF manufacturing facilities expansion plan in China, 2.8 billion yen for the withdrawal from the ML film business, and 1.2 billion yen for the removal of existing facilities to increase PVDF production at the Iwaki Plant.

(¥ billion)

	FY2023	FY2022	%
Advanced plastics	45.0	63.0	-29%
Carbon products	7.9	6.9	13%
Other	11.6	12.7	-9%
<b>Revenue</b>	<b>64.5</b>	<b>82.7</b>	<b>-22%</b>
<b>Operating profit</b>	<b>4.8</b>	<b>10.1</b>	<b>-52%</b>

## < VS FY2022 >

Revenue ↘ Operating profit ↘

### Advanced Plastics

Despite the increase in sales revenue of PPS and PGA products for shale oil and gas drilling applications, revenue and profit of PVDF for LiB binder for automotive applications decreased due to the EV market and inventory adjustments by customers, resulting in a decline in total revenue. Decrease in revenue of PVDF and decrease in equity profit of PPS, despite improvement in profit due to gain on revaluation of inventories of processed PGA products.

### Carbon Products

Sales and profit increased due to higher sales revenue of carbon fibers for insulation materials for high-temperature furnaces.



# Segment Performance: Specialty Chemicals

(¥ billion)

	FY2023	FY2022	%
Agrochemicals	9.7	9.3	4%
Pharmaceuticals	4.0	3.8	5%
Industrial chemicals	10.7	9.9	8%
Other	9.5	8.7	9%
<b>Revenue</b>	<b>33.9</b>	<b>31.8</b>	<b>7%</b>
<b>Operating profit</b>	<b>1.7</b>	<b>1.8</b>	<b>-11%</b>

## < VS FY2022 >

Revenue ↗ Operating profit ↘

### Agrochemicals, Pharmaceuticals

Sales of agrochemicals, horticultural fungicides, and pharmaceuticals increased, but income decreased due to worsening cost of sales of pharmaceuticals, etc.

### Industrial Chemicals

Both sales and income increased due to price transfer of raw material and fuel price hikes, etc.

(¥ billion)

	FY2023	FY2022	%
Home products	23.2	22.5	3%
Fishing lines	5.1	4.7	7%
Packaging materials	15.4	15.3	0%
Other	3.6	4.2	-13%
<b>Revenue</b>	<b>47.3</b>	<b>46.8</b>	<b>1%</b>
<b>Operating Profit</b>	<b>8.2</b>	<b>8.6</b>	<b>-5%</b>

## < VS FY2022 >

Revenue ↗ Operating profit ↘

### Home products, fishing lines

Increase in sales revenue and profit mainly due to the impact of the price revision of household wraps from the second half of FY2022.

### Other

Decrease in revenue and profit due to lower sales of processed plastic products for industrial equipment.

# Segment Performance: Construction and Other Operation

(¥ billion)

	FY2023	FY2022	%
<b>【Construction】</b>			
Revenue	13.9	11.3	23%
Operating profit	1.5	0.9	68%
<b>【Other Operation】</b>			
Environmental engineering	11.8	11.3	4%
Logistics	1.6	2.6	-39%
Hospital operations	4.3	4.1	4%
Others	0.5	0.6	-12%
Revenue	18.2	18.7	-2%
Operating profit	2.5	2.8	-13%

## < VS FY2022 >

### Construction

Revenue ↗ Operating profit ↗

Increase due to increase in private-sector construction work.

### Other Operation

Revenue ↘ Operating profit ↘

Sales in the environmental engineering business increased, but income decreased due to lower profitability resulting from a decrease in disposal of low-concentration PCB waste and higher costs resulting from soaring raw material and fuel price.

Sales and profit decreased in the logistics business.

Sales revenue increased and operating loss decreased in the hospital business.

## Financial Position

KUREHA CORPORATION

Assets				Liabilities and Equity (¥ billion)			
	Mar.31 2024	Mar.31 2023	Change		Mar.31 2024	Mar.31 2023	Change
Cash and cash equivalents	23.1	32.2	-9.1	Trades and other payables	20.5	27.7	-7.2
Trades and other receivables	40.6	31.9	8.8	Interest-bearing debt	54.9	26.3	28.6
Inventories	51.2	52.0	-0.8	Provisions	11.3	8.5	2.8
Other current assets	4.9	4.9	-0.0	Other liabilities	20.8	17.2	3.6
<b>Total current assets</b>	<b>119.9</b>	<b>121.0</b>	<b>-1.1</b>	<b>Total liabilities</b>	<b>107.5</b>	<b>79.6</b>	<b>27.9</b>
Property, plant and equipment	140.5	117.4	23.1	Shareholders' equity	18.2	18.2	-
Intangible assets	5.0	4.5	0.6 ※1	Capital surplus	14.7	14.7	-
Investments and other assets	65.2	53.5	11.6	Less: Treasury stock	-9.6	-8.7	-0.9
				Retained earnings	177.3	179.0	※2 -1.7
				Other components of equity	20.8	12.1	※3 8.7
<b>Total non-current assets</b>	<b>210.7</b>	<b>175.4</b>	<b>35.3</b>	Non-controlling interests	1.8	1.6	0.2
<b>Total assets</b>	<b>330.6</b>	<b>296.4</b>	<b>34.2</b>	<b>Total equity</b>	<b>223.1</b>	<b>216.8</b>	<b>6.4</b>
				<b>Total liabilities and equity</b>	<b>330.6</b>	<b>296.4</b>	<b>34.2</b>

Construction in progress increased in connection with the expansion of PVDF production facilities at the Iwaki site, and interest-bearing debt, including bonds, increased to fund this increase.

\*1 ... construction in progress+13.0    \*2 ... treasury stock disposal+9.1, share buy back-10.0

\*3 ... treasury stock cancellation-9.1, net profit+9.7, dividend-5.3 etc.

Treasury stock of 1,280,000 stocks (before stock split) were disposed on June 30, 2023

## Cash Flow

KUREHA CORPORATION

(¥ billion)

	FY2023	FY2022	Change
Profit before income tax	13.9	23.0	-9.1
Depreciation	11.7	11.6	0.0
Other	-14.0	-11.9	-2.1
<b>Cash flow from operating activities</b>	<b>11.6</b>	<b>22.7</b>	<b>-11.1</b>
<b>Cash flow from investing activities</b>	<b>-34.3</b>	<b>-11.1</b>	<b>-23.2</b>
<b>Free cash flow</b>	<b>-22.7</b>	<b>11.6</b>	<b>-34.3</b>
<b>Cash flow from financing activities</b>	<b>12.1</b>	<b>-10.5</b>	<b>22.6</b>
Effect of exchange rate changes on cash and cash equivalents	1.5	0.4	1.1
Increase/decrease in cash and cash equivalents	-9.1	1.6	-10.6
Cash and cash equivalents at beginning of period	32.2	30.6	1.6
Cash and cash equivalents at end of period	23.1	32.2	-9.1



## II. FY2024 Financial Outlook

(April 1, 2024 – March 31, 2025)

KUREHA





## FY2024 Financial Forecast (1)

KUREHA CORPORATION

	FY2024e			FY2023	%
	1H	2H	FY	¥	
Revenue	85.0	85.0	<b>170.0</b>	178.0	-4.5%
Core operating profit	7.0	7.0	<b>14.0</b>	18.6	-24.9%
Adjustment	-	-	-	-0.5	
Other income	0.1	0.9	1.0	1.9	
Other expenses	0.6	0.4	1.0	7.2	
Operating profit	6.5	7.5	<b>14.0</b>	12.8	9.4%
Financial income	0.2	0.3	0.5	1.3	
Financial expenses	0.2	0.3	0.5	0.2	
Profit before taxes	6.5	7.5	<b>14.0</b>	13.9	0.6%
Profit attributable to owners of Kureha Corp.	5.0	5.0	<b>10.0</b>	9.7	2.7%
Profit per share (¥)			* <b>191.45</b>	173.03	
<b>FOREX</b>	FY2024e	FY2023	<b>Exchange sensitivity</b> (Operating profit, FY2024e)		
(¥/USD)	145.0	144.6	1USD ¥1depreciation +¥0.09bn		
(¥/EUR)	158.0	156.8	1EUR ¥1depreciation +¥0.02bn		
(¥/CNY)	20.0	20.1	1CNY ¥1depreciation +¥0.12bn		

## &lt;VS FY2023&gt;

## [Revenue]

Revenue of PVDF for automotive LiB binder and PGA will increase, but revenue of agrochemical customers will decrease due to inventory adjustments and withdrawal from ML film business.

## [Core operating profit]

Although revenue will increase due to lower cost of sales and higher equity in profit of PPS, profit will decrease due to higher fixed costs in household products and withdrawal from the ML film business.

## [Operating profit]

Increase due to the absence of expenses recorded in the previous fiscal year, such as the cancellation of the PVDF manufacturing facility expansion plan in China and withdrawal from the ML Film business.

## [Profit attributable to owners of Kureha Corp.]

Increase due to higher operating profit.

\*Calculated regarding the share repurchase plan disclosed on 5/13/2024

I will explain our earnings forecast for FY2024.

Although revenue is expected to be lower than in FY2023, operating income is expected to be 14 billion yen, which is higher than in FY2023.

## &lt;Revenue&gt;

We are planning based on the assumption that inventory adjustments by LiB manufacturers will continue in FY2024. However, we expect the EV market to expand gradually, and we forecast that sales of binder-type PVDF will bottom out in FY2023 and increase gradually in FY2024.

Sales of the PGA business are expected to increase, mainly due to an expansion of market share in the medium- to high underground temperatures market.

We forecast lower sales and profits for agrochemicals, as sales will decrease due to inventory adjustments at our customers. Then, including our withdrawal from the ML film business, our sales revenue for FY2024 will be lower than that of FY2023.

## &lt;Core Operating Profit&gt;

In the PPS business, we expect the profit improvement and an increase in equity in earnings of affiliates.

There is no significant changes in the business environment for household products, but we expect to be lower than in FY2023 due to an increase in fixed cost burden and then the withdrawal from the ML business.

Although the fixed cost burden is allocated to the entire company in terms of sales, the burden of household products increase due to the decline in PVDF sales. Although profits are down from a segment perspective, but from a company-wide perspective, it is just a matter of which segment will bear the fixed costs, and there is no problem.

## &lt;Operating Profit &gt;

We expect to see an increase in profits in FY2024 due to the absence of expenses such as the cancellation of the expansion of PVDF manufacturing facilities in China and the withdrawal from the ML business, which were recorded in FY2023.

## FY2024 Financial Forecast (2)

KUREHA CORPORATION

Revenue and Operating Profit by Segment				(¥ billion)		
	FY2024e			FY2023		
	1H	2H	FY	1H	2H	FY
<b>Revenue</b>	<b>85.0</b>	<b>85.0</b>	<b>170.0</b>	<b>88.5</b>	<b>89.5</b>	<b>178.0</b>
Advanced Materials	34.0	36.0	70.0	34.0	30.5	64.5
Specialty Chemicals	15.5	13.5	29.0	17.1	16.9	33.9
Specialty Plastics	21.0	19.0	40.0	23.4	23.9	47.3
Construction	6.5	8.0	14.5	5.4	8.6	13.9
Other Operations	8.0	8.5	16.5	8.6	9.7	18.2
<b>Core operating profit</b>	<b>7.0</b>	<b>7.0</b>	<b>14.0</b>	<b>9.2</b>	<b>9.5</b>	<b>18.6</b>
Advanced Materials	3.4	2.3	5.7	2.8	2.0	4.8
Specialty Chemicals	0.6	0.4	1.0	0.8	0.9	1.7
Specialty Plastics	2.2	3.0	5.2	4.3	3.9	8.2
Construction	0.4	0.4	0.8	0.2	1.3	1.5
Other Operations	0.4	0.9	1.3	1.1	1.4	2.5
Adjustments				-0.2	-0.4	-0.5
Other income	0.1	0.9	1.0	0.5	1.4	1.9
Other expenses	0.6	0.4	1.0	0.4	6.9	7.2
<b>Operating profit</b>	<b>6.5</b>	<b>7.5</b>	<b>14.0</b>	<b>9.1</b>	<b>3.7</b>	<b>12.8</b>



## &lt; Segment Revenue &amp; Core Operating Profit (vs. FY2023) &gt;

(¥ billion)

[Revenue]



[Core operating profit]



## &lt; Factors affecting operating profit changes &gt;

AM: Increase in sales of PVDF for automotive LiB binder and PGA, PPS cost decrease and increase in equity of affiliates.

SC: Sales and profit decrease due to inventory adjustment of agrochemicals, etc.

SP: Decrease due to higher fixed costs in household products and withdrawal from ML Film business.

CO: Revenue increase, but profit decrease due to a decrease in high-margin projects.

OO: Decrease in sales and profit due to decrease in industrial waste disposal, etc.

# Segment Performance Forecast: Advanced Materials

(¥ billion) < VS FY2023 >

	FY2024e	FY2023	Change %
Advanced plastics	50.0	45.0	11%
Carbon products	7.5	7.9	-5%
Other	12.5	11.6	7%
<b>Revenue</b>	<b>70.0</b>	<b>64.5</b>	<b>9%</b>
<b>Operating profit</b>	<b>5.7</b>	<b>4.8</b>	<b>18%</b>

Revenue ↗ Operating profit ↗

### Advanced plastics

Revenue of PVDF for automotive LiB binder will increase due to gradual growth in the EV market, Profit margins in the PVDF business are expected to remain flat due to the sales of products produced from high price raw material will continue during 1H of FY2024 and lower plant utilization.

PGA sales are expected to increase due to higher sales volume, while inventory revaluation gains are expected to decrease from approximately 6.2 billion yen to 2 to 3 billion yen, but the PGA business is expected to return to profitability due to higher sales volume and the resumption of operations at the US plant.

PPS profit increase due to lower raw material and fuel prices, cost reductions, and higher equity in profit of affiliates.

### Carbon products

Profit decrease due to lower sales and profit of carbon fibers for insulation materials for high-temperature furnaces, caused by water inventory adjustments.

### Other

Sales of advanced products (adhesives) of group companies increase, but profits remained flat.

# Segment Performance Forecast: Specialty Chemicals

(¥ billion)

	FY2024e	FY2023	Change %
Agrochemicals	6.5	9.7	-33%
Pharmaceuticals	3.5	4.0	-13%
Industrial chemicals	10.5	10.7	-2%
Other	8.5	9.5	-10%
<b>Revenue</b>	<b>29.0</b>	<b>33.9</b>	<b>-15%</b>
<b>Operating profit</b>	<b>1.0</b>	<b>1.7</b>	<b>-40%</b>

## < VS FY2023 >

Revenue ↘ Operating profit ↘

### Agrochemicals

Revenue and profits of fungdomestic market.

### Industrial chemicals

icides for agricultural and horticultural use decrease due to inventory adjustments.

### Pharmaceuticals

Revenue and profit decrease due to drug price revision and shrinkage of the Revenue decline due to falling unit prices caused by price formulas, but profits remained unchanged.

**KUREHA**

# Segment Performance Forecast: Specialty Plastics

(¥ billion)

	FY2024e	FY2023	Change %
Home products	23.5	23.2	1%
Fishing lines	5.5	5.1	8%
Packaging materials	7.5	15.4	-51%
Other	3.5	3.6	-4%
<b>Revenue</b>	<b>40.0</b>	<b>47.3</b>	<b>-15%</b>
<b>Operating profit</b>	<b>5.2</b>	<b>8.2</b>	<b>-37%</b>

## < VS FY2023 >

Revenue ↘ Operating profit ↘

### Home products, fishing lines

Home products profit increase due to sales growth, but profit decrease due to higher fixed costs.  
Revenue of fishing lines increase due to sales expansion in overseas markets and leveraging in domestic markets, but profits remain flat.

### Packaging materials

Revenue and profit decreased due to withdrawal from ML Film business.

# Segment Performance Forecast: Construction and Other Operation

(¥ billion)

	FY2024e	FY2023	Change %	< VS FY2023 >
<b>Construction</b>				
<b>Revenue</b>	<b>14.5</b>	<b>13.9</b>	<b>4%</b>	<b>Revenue ↗ Operating profit ↘</b>
<b>Operating profit</b>	<b>0.8</b>	<b>1.5</b>	<b>-46%</b>	Revenue increases, but profit decreases due to a decrease in high-margin projects.
<b>Other Operation</b>				
<b>Environmental engineering</b>	<b>10.0</b>	<b>11.8</b>	<b>-15%</b>	<b>Revenue ↘ Operating profit ↘</b>
<b>Logistics</b>	<b>1.5</b>	<b>1.6</b>	<b>-8%</b>	Profit decrease in the environmental engineering business due to a decline in industrial waste disposal.
<b>Hospital operation</b>	<b>4.5</b>	<b>4.3</b>	<b>5%</b>	Revenue and profit in the logistics business remain unchanged.
<b>Other</b>	<b>0.5</b>	<b>0.5</b>	<b>-4%</b>	Hospital business increase revenue and returned to profitability.
<b>Revenue</b>	<b>16.5</b>	<b>18.2</b>	<b>-10%</b>	
<b>Operating profit</b>	<b>1.3</b>	<b>2.5</b>	<b>-47%</b>	

**KUREHA**

## Cash Flow Forecast

KUREHA CORPORATION

	(¥ billion)		
	FY2024e	FY2023	Change
Profit before income tax	14.0	13.9	0.1
Depreciation	13.4	11.7	1.7
Other	0.4	-14.0	14.3
<b>Cash flow from operating activities</b>	<b>27.8</b>	<b>11.6</b>	<b>16.2</b>
<b>Cash flow from investing activities</b>	<b>-51.8</b>	<b>-34.3</b>	<b>-17.5</b>
<b>Fee cash flow</b>	<b>-24.0</b>	<b>-22.7</b>	<b>-1.3</b>
<b>Cash flow from financing activities</b>	<b>22.5</b>	<b>12.1</b>	<b>10.4</b>
Effect of exchange rate changes on cash and cash equivalents	0.0	1.5	-1.5
Increase/decrease in cash and cash equivalents	-1.5	-9.1	7.6
Cash and cash equivalents at beginning of period	23.1	32.2	-9.1
Cash and cash equivalents at end of period	21.7	23.1	-1.5

<b>Main factors</b>	
<b>CF from operating activities</b>	<b>+16.2</b>
Improvement in working capital	+10.9
Decrease in income tax payment	+7.3
<b>CF from investing activities</b>	<b>-17.5</b>
Capital expenditure	-22.0
<b>CF from financing activities</b>	<b>+10.4</b>
Acquisition of treasury stock	-5.0
Increase in interest-bearing debt financing	+14.8

This is the cash flow forecast for FY2024.

Cash flow from operating activities will increase significantly due to improvements in working capital and a decrease in income tax payments.

Cash flow from investing activities includes approximately 33 billion yen of capital investment related to the expansion of PVDF manufacturing facilities at the Iwaki Plant.

Cash flow from financing activities will increase significantly from the previous year, due to the use of bonds and other financing instruments to meet capital investment and share buybacks.



### III. Key Indicators

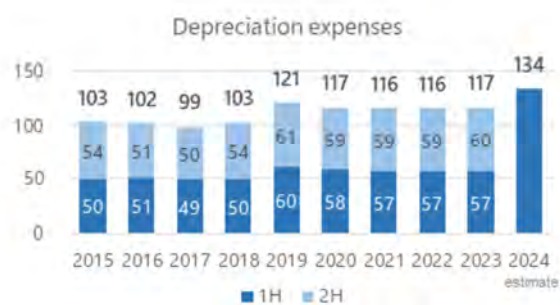
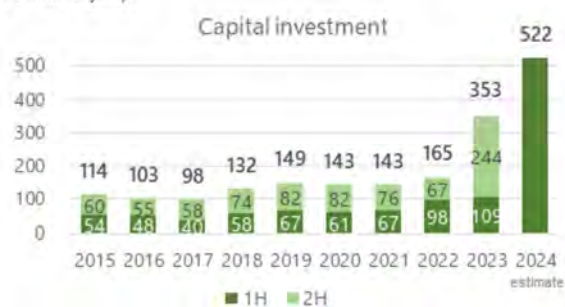
KUREHA

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## Key Indicators (1)

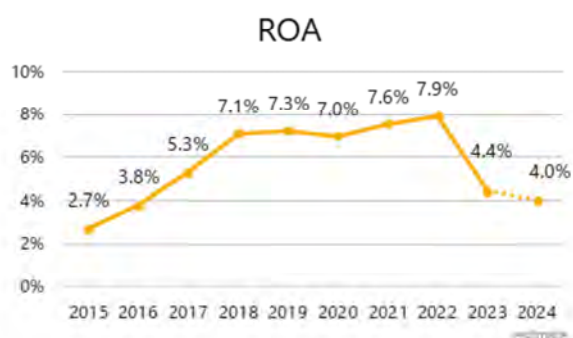
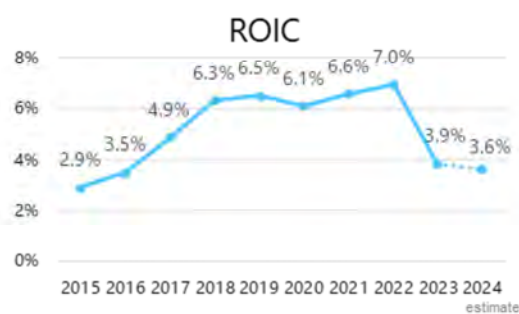
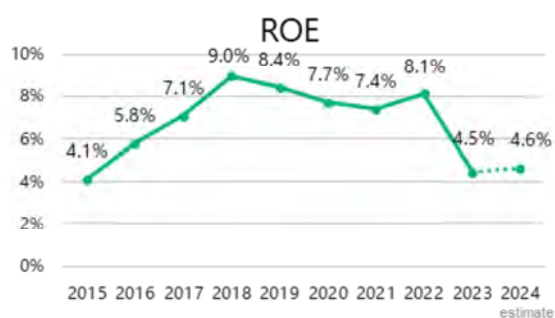
KUREHA CORPORATION

(in billions of yen)



## Key Indicators (2)

KUREHA CORPORATION



We will explain the main indicators.

All indicators dropped significantly in FY2023.

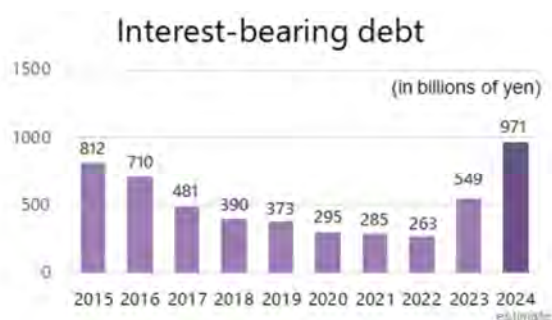
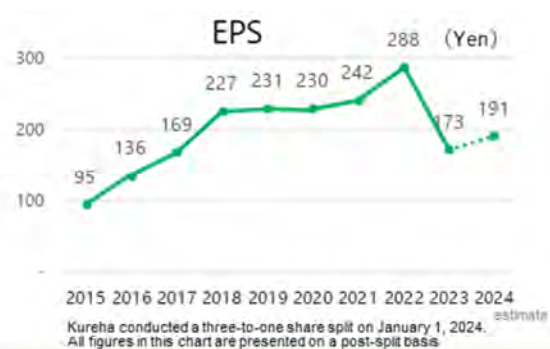
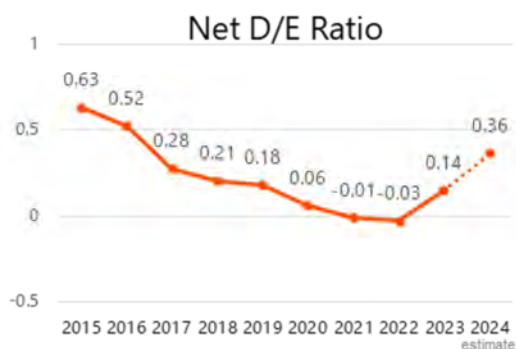
Each index other than PBR is due to the decline in profit, which is the numerator part of the calculation

We expect these indicators to recover in line with the gradual recovery of the PVDF business environment.

We believe that the full-fledged market recovery will start in FY2025, and we recognize that FY2024 is a temporary decline phase following FY2023.

## Key Indicators (3)

KUREHA CORPORATION



The net debt/equity ratio and equity ratio have changed due to an increase in borrowings such as corporate bonds and the acquisition of treasury stock.

EPS has fallen due to a decline in profits, but we expect to see an increase due to improved profits and share buybacks as the PVDF business environment gradually recovers.

## **IV. Kureha Mid-/Long-Term Management Plan (FY2023-2030) - The Rolling Plan 2025**

Note: The performance targets and key performance indicators for FY2030 will be released at the time of the announcement of the next medium-term management plan starting from FY2026..



**KUREHA**

Next, I will explain the "Kureha Group Medium to Long-Term Management Plan, the Rolling Plan 2025 (the Rolling Plan 2025)".

In April 2023, we started our new medium- to long-term management plan, "Toward Creating a New Future".

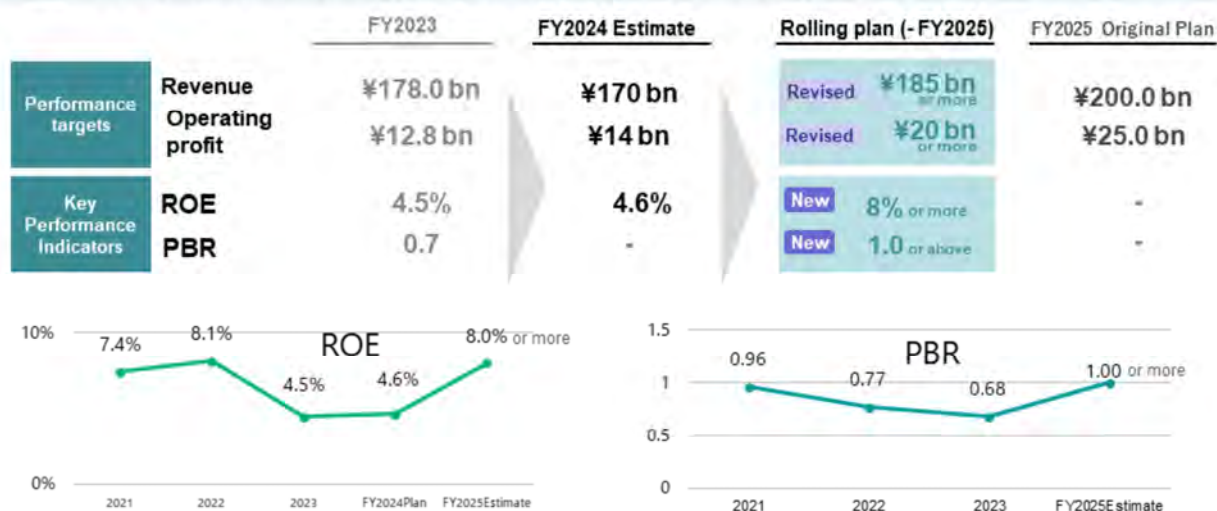
We have been working to achieve both "improving medium- to long-term corporate value" and "contributing to a sustainable society", but the PVDF business, which is a growth driver, was forced to stagnate from the first year due to the slowdown in the EV market growth.

However, this slowdown in growth does not mean that the market is shrinking, but rather that it is growing more slowly than expected.

We are confident that growth will be sustained over the long term.

However, our performance has declined in the short term, and we have formulated growth measures for each business, including PVDF, and cost reduction measures for the entire company.

- To promote balance sheet-focused management with greater emphasis on capital returns, Kureha sets a new ROE target for FY2025
  - Improves 'numerators' of ROE by executing extensive business expansion measures and corporate-wide cost reduction
  - Mitigates business risks by revising our investment plans, particularly for the PVDF business (to be later described)
  - Reviews our capital structure while mitigating business risks, enhances shareholder returns and promotes balance sheet-focused management (a minimal annual dividend of ¥86.7 per share, three-year share buybacks to double, and more details on shareholder returns described in the latter section)
- Kureha also sets a new KPI target, PBR of 1 or above, to be achieved by FY2025 end.



### <Performance Targets and Key Performance Indicators (KPIs) for FY2025>

Due to the unexpected PVDF outlook, we will not be able to reach the operating profit of 25 billion yen we announced last year, but we have formulated this rolling plan with the strong intention of making Kureha a company with a 20 billion yen level in an operating profit.

In addition, we have also set new targets for key performance indicators and capital strategies to implement a balanced management approach that emphasizes return on capital.

The performance targets and key performance indicators for FY2030 will be released at the time of the announcement of the next medium-term management plan starting from FY2026.

In the rolling plan, the performance targets for FY2025 were set at sales revenue of 185 billion yen or more and operating profit of 20 billion yen or more.

ROE declined to 4.5% in FY2023. We aim to improve profitability by expanding profits in existing businesses and implementing company-wide cost reductions.

An optimal equity ratio of approximately 50% is set by reviewing the investment plan for the PVDF business and reducing business risks.

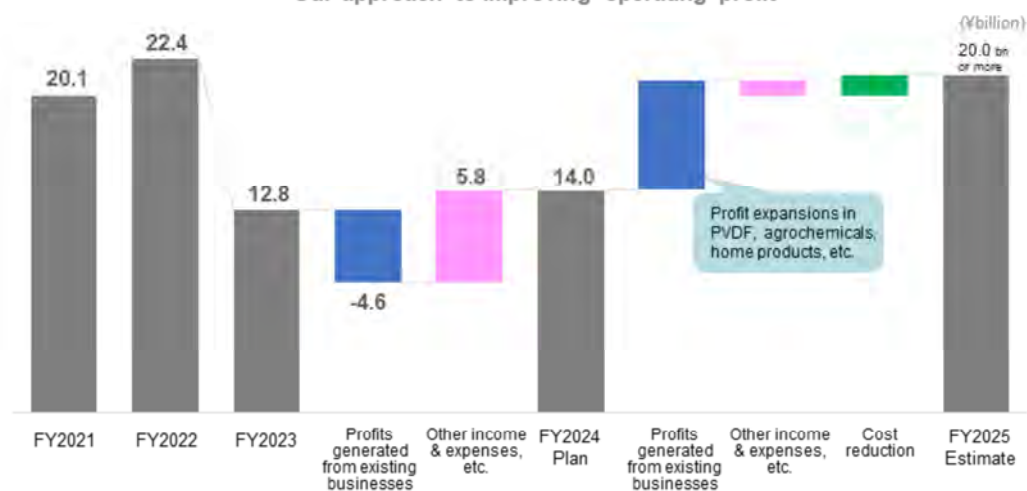
As a result of these measures, we have set a new ROE target of 8% or more for FY2025. In addition, we have also set a new target of achieving a PBR of 1x or above in FY2025 by improving ROE.

# Operating Profit Growth Scenario

KUREHA CORPORATION

- Will strengthen and expand the profit base by executing thorough measures to revamp the PVDF business and expand other existing businesses
- Will implement across-the-board measures to further reduce costs in order to ensure profit improvement in case PVDF-related business conditions are not improving as projected. Specifically, our cost-cutting efforts are similar to the initiatives successfully achieved under our Cost Reduction Project during FY2013 and 2022.

Our approach to improving operating profit



## FY2025 Performance Targets by Segment

KUREHA CORPORATION

Revenue & Core Operating Profit by Segment					(¥ billion)
	FY2023 Results	FY2024 Plan	FY2025 Estimate	FY2025 Original Plan	
<b>Revenue</b>	<b>178.0</b>	<b>170.0</b>	<b>185.0</b> or more	<b>200.0</b>	
Advanced Materials	64.5	70.0	81.0	100.0	
Specialty Chemicals	33.9	29.0	30.0	30.0	
Specialty Plastics	47.3	40.0	44.0	40.0	
Construction/Other Operations	32.1	31.0	30.0	30.0	
	-	-	-	-	
<b>Core operating profit</b>	<b>18.6</b>	<b>14.0</b>	<b>20.0</b> or more	<b>25.0</b>	
Advanced Materials	4.8	5.7	10.0	16.0	
Specialty Chemicals	1.7	1.0	1.0	1.0	
Specialty Plastics	8.2	5.2	7.0	6.0	
Construction/Other Operations	4.0	2.1	2.0	2.0	
	-	-	-	-	
Adjustments/Other income and expenses	-5.8	-	-	-	
	-	-	-	-	
<b>Operating profit</b>	<b>12.8</b>	<b>14.0</b>	<b>20.0</b> or more	<b>25.0</b>	





- A new minimal yearly dividend is set at ¥86.7 per share
- Share repurchases to double from ¥20 billion to ¥40 billion for the three-year period from FY2023 to FY2025
- The Board of Directors to determine each year on the cancellation of treasury shares which are considered as surpluses after deducting the number of shares required for stock compensation, M&As, etc., in addition to its decision regarding the acquisition of treasury shares
- An optimal equity ratio is set at around 50%, down 10 points from the previous 60%
- Policy stockholdings are periodically reviewed by the Board of Directors by scrutinizing the purpose, benefits, risks, and returns for each stock. Stocks that have lost their significance will be sold gradually after considering the relationship with business relationship, impact on the market, effective use of funds, and other factors.

		FY2025 Original Plan	Rolling plan (- FY2025)
Cash dividend	Payout ratio	30% or more	Continued 30% or more
	Minimal yearly dividend per share	(None)	New ¥86.7 or more
Total payout ratio	Total payout ratio	50% or more	Continued 50% or more
Treasury shares	Treasury shares to be acquired (- FY2025)	Approx. ¥20 billion	Revised Approx. ¥40 billion
	Method of cancellation	To be determined in accordance with Article 178, Companies Act	New To be determined in accordance with Article 178 of the Companies Act, AND the cancellation of treasury shares deemed surpluses after considerations for stock compensation, M&As, etc., to be also determined
Equity ratio	Equity ratio	Approx. 60%	Revised Approx. 50%

We will explain our capital strategies.

In this rolling plan, We will not be changing the dividend payout ratio of 30% or more. We have set a new minimal yearly dividend of 86.7 yen per share.

There will be no change in the total return ratio of 50% or more.

In addition, we have decided to double the amount of treasury shares to be acquired from approximately 20 billion yen to approximately 40 billion yen over the three years from FY2023 to FY2025. However, this is our premise that we will never fail to invest in growth for the future.

We have set a policy for the cancellation of treasury stock.

To address market concerns about holding acquired treasury stock within the company, we have decided that the Board of Directors will determine each year on the cancellation of treasury shares which are considered as surpluses.

We have decided to lower the equity ratio by 10 points from the previous level of approximately 60%, to an appropriate level of approximately 50%.

With regard to policy stockholdings, the Board of Directors periodically review by scrutinizing the purpose, benefits, risks, and returns for each stock. Stocks that have lost their significance will be sold gradually after considering the relationship with business relationship, impact on the market, effective use of funds, and other factors.

Kureha's basic policy on the distribution of earnings is to maintain stable dividends with a target dividend payout ratio of 30% or more, while enhancing internal reserves to enable active investment in future business expansion. Moreover, a minimal annual dividend is set at ¥86.7 per share until FY2025. To further meet shareholders' expectations and improve stock prices, we aim for a total payout ratio of 50% or more through share buybacks and acquire approximately ¥40 billion in treasury stock during the three-year period from FY2023 through FY2025.

Yearly Dividends and Dividend Payout Ratio



## Notes:

- Kureha conducted a ten-to-one share consolidation on October 1, 2016 and then conducted a three-to-one share split on January 1, 2024. All figures in this chart are presented on a post-split basis
- Kureha's accounting standards have changed from the Japanese GAAP to IFRS in and after FY2016

Our basic policy on the distribution of earnings is to maintain stable dividends, while enhancing internal reserves to enable active investment in future business expansion.

## V. Business Strategies

KUREHA

The logo for KUREHA features the word "KUREHA" in a bold, blue, sans-serif font. A thick green horizontal line extends from the left edge of the page towards the right, ending just before the logo. The line has a slight upward curve at its right end, which then continues as a thin green line that underlines the text "KUREHA".

Global EV sales volumes and growth rates



Sales volumes of New Energy Vehicles (NEV) in Europe— a primary market for Kureha PVDF



**Growth of EV and PHEV sales has slowed down..**

I am Natake, and the Senior Vice President and Managing Director of Business Division. I would like to provide a more detailed explanation of the PVDF business, which is undergoing significant changes in the business environment.

The largest application for our PVDF is as a binder for the cathode material in lithium-ion secondary batteries for electric vehicles.

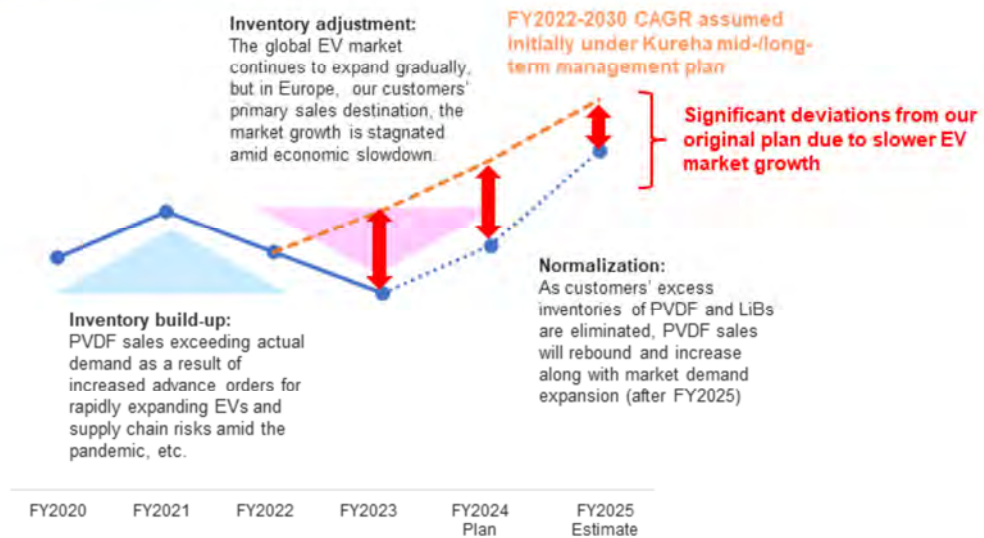
As shown in the graph on the left, global EV sales volumes are increasing, but the growth rate compared to the previous year is slowing down. Although there is growth on a global scale, much of it is in the Chinese market, and in Europe, which is our main destination for PVDF, growth has been slowing.

There are several factors, one of which is that subsidies from European countries will be reduced or suspended in FY2023. There is also high inflation, and the European economy is sluggish. In addition, the early adopters have generally purchased, and there is a barrier to the expansion of sales from early adopters to the early majority, or what is called a chasm.

We understand that the incentive of subsidies still has a significant impact on sales in Europe.

We believe that eco-friendly vehicles will continue to grow in the future, but that the growth will be balanced between plug-in hybrids and hybrids rather than EVs alone.

Kureha PVDF sales volume trends



**With customer destocking completed in FY2025, our sales volume begins to increase proportionately with actual market demand**

We show the sales volume of PVDF.

Sales volume in FY2022 and FY2023 has decreased compared to FY2021.

In addition to the sluggish European market, we are entering an inventory adjustment phase in 2021 and 2022 due to the production of electric vehicles and batteries that exceeded actual demand, resulting in excess inventory.

We believe that this inventory adjustment phase may be prolonged until the end of FY2024.

We expect that the overstock of EVs and batteries in the market will be eliminated after 2025 and sales will increase in proportion to the growth of actual demand.

In Europe as well, due to the slowdown in the growth rate of the EV market, there is a significant divergence from the beginning of the medium- to long-term plan.

## Business performance trends



- An upward trend of the EV market is unchanged both in the US and Europe, although the market growth has slowed.
- Customers' excess stock, resulting from more-than-demand purchases up to FY2022, led to inventory adjustments in and after the second half of the year.
- Their plans to build new US LiB manufacturing plants are unchanged and proceeding as scheduled.
- Actual market demand for PVDF is increasing during the period of inventory adjustments, although its growth is slower than initially projected.
- Raw material prices have stabilized, and their impact on PVDF pricing is now limited.
- In FY2024, profit margin will likely remain at a prior-year level as we continually sell inventories manufactured previously with high-priced raw materials for the first half of the year and also due to reduced manufacturing plant operations.
- Going forward, Kureha expects to see profit margin and operating profit to improve along with recovering sale volumes.
- Profit margin will likely return to a pre-pandemic level after FY2025.

We show PVDF sales trends.

In FY2021 and FY2022, sales revenue grew significantly. One of the reasons for this was special demand resulting from sales that exceeded actual demand. The other reason is the price pass-through of the high raw material prices that occurred during this period.

In FY2023, the European market was sluggish, the inventory adjustment was underway, and unit prices also fell in response to the rapid decline in raw material prices. As a result, the decline in FY2023 is very large.

Although the speed of market growth is slowing, we believe that the growth trend in both Europe and the US remains unchanged. In addition, we continue to believe that electric vehicles are the key to meeting strict fuel efficiency and environmental standards in Europe and the US. Once the inventory adjustment phase is over, we expect both sales volume and sales amount to increase in line with actual demand.

In addition, our customers, lithium-ion battery manufacturers, are planning new construction and expansion in the US, which will be concentrated around FY2025. At present, the expansion plans are generally progressing as planned.

In FY2024, we have remaining inventories produced at a time of high raw material prices, and we expect that these inventories will continue to be discharged until H1. In addition, due to the impact of production adjustments, we expect the profit margin in FY2024 to remain at the same level as in FY2023.

On the other hand, we expect the profit margin to improve and return to the pre-COVID-19 pandemic level from FY2025, as the factory utilization ratio improves due to the recovery in sales volume.

## PVDF facility expansion projects proposed under the mid-/long-term management plan

	Capacities (in metric tons)	
	Existing facilities	Expansion projects
1) Iwaki Factory (Debottlenecking)	6,500	+8,000 (+2,000)
2) China plant	5,500	Cancelled
3) A 3 <sup>rd</sup> manufacturing base (new location)	--	To be determined based on future market demands

- Our Iwaki Factory capacity expansion project is proceeding as scheduled
- Kureha PVDF manufacturing capacities, including by debottlenecking the existing facilities, totaled to approx. 20,000tpa in FY2026

Iwaki Factory capacity expansion:  
Profitability of investment

- Kureha effectively secures profitability while the payback period was extended by one year
- The new facility is expected to become fully operational before FY2030, two years later than originally planned
- Our investment of approx. 70 billion yen is partly supported by two types of governmental funds:
  - One is ¥6.8bn but amount from the other fund is not disclosed.

Page 38 describes the expansion plan in the medium- to long-term plan.

We plan to increase our production capacity of 20,000 tons by adding the 8,000 tons expansion planned to be operational in FY2026 to the existing facilities.

In July 2021, we announced the construction of a second plant in China. However, there have been delays in approval process due to changes in China's environmental policies. In addition, the US Inflation Reduction Act has made it difficult to exports from China to the US. We have decided to expand the Iwaki Plant, which was initially considered as a backup. In March of this year, we announced the cancellation of the plan to build a second plant in China.

Previously, we had plans to increase production capacity to approximately 30,000 tons by FY2030, but the business environment has become uncertain, we are now considering that an approximately 20,000 tons facilities would be sufficient. Furthermore, we have room for debottlenecking.

This investment has also been supported by two types of governmental funds from the Ministry of Economy, Trade and Industry as described in the materials.

According to the latest estimates, we expect a delay of two years compared to the original plan until the plant is in full operation. The payback period was extended by one year compared to the original plan, but we effectively secures profitability.

Risk related to:	Recognition & Response measures
Risks of European PFAS regulations	<ul style="list-style-type: none"> <li>• In the EU, the proposed restrictions for PFAS substances are scheduled to be verified in as early as 2025 and enacted partly for substances with no grace period in 2027. However, as of April 2024, the verification process has been delayed by a year.</li> <li>• The proposed restrictions will, in principle, collectively regulate more than 10,000 PFAS compounds, which are each different in terms of toxicity and potential safety risks, and Kureha believes this is an excessive measure and lacks scientific basis.</li> <li>• We maintain our stance that fluoropolymers, including PVDF, should be exempted from the proposed restrictions and are lobbying with chemical and other industrial organizations in Japan and the EU.</li> </ul>
the US Inflation Reduction Act and the use of raw materials produced in China for Kureha PVDF	<ul style="list-style-type: none"> <li>• The amount of critical minerals used for a lithium-ion battery is small (less than 2% in value). Also, for certain battery materials (including electrode binders) which origins are not readily traceable, a transition period was given until December 31, 2026.</li> </ul>
Shrinkage of the NMC LiB market as a result of LFP LiB expansion	<ul style="list-style-type: none"> <li>• We believe NMC batteries, with their advantages in operating stability in cold environments and per-charge mileage, will stay mainstream in the global market excluding China.</li> <li>• Recycling issues have been pointed out with LFP batteries, which use iron phosphate as a cathode material that is difficult and costly to recycle. If recycling battery materials becomes mandatory, the cost difference between NMC and LFP batteries will be narrower than it is now.</li> <li>• Kureha is also working to develop a PVDF binder for LFP batteries, which account for half of the global battery market, with an aim to win market share.</li> </ul>
Fluctuations in raw material prices to affect sales prices	<ul style="list-style-type: none"> <li>• We acknowledge raw materials prices have stabilized for now. As a measure to mitigate impact when their prices fall, we negotiate prices for each order and will strive to improve profits.</li> </ul>
Emerging new-generation batteries	<ul style="list-style-type: none"> <li>• There still are technological and cost-reduction challenges to commercializing new-generation batteries.</li> <li>• Although we don't expect suppliers of new-gen batteries to emerge immediately, at least not until LiB makers recover some of their investments, we are already working to develop binder materials for new-gen batteries.</li> </ul>
The US presidential election	<ul style="list-style-type: none"> <li>• We believe no drastic decision will be made to impair operations and cause job loss at manufacturing factories for LiB materials, LiBs and BEVs, which turns to be a serious political issue.</li> <li>• Many investments are being made in Republican states.</li> </ul>

I would like to explain two points regarding our awareness of the risks of the PVDF business and how we are responding to them.

In the EU, the proposed restrictions will, in principle, collectively regulate more than 10,000 PFAS compounds, which are each different in terms of toxicity and potential safety risks, and Kureha believes this is an excessive measure and lacks scientific basis. We maintain our stance that fluoropolymers, including PVDF, should be exempted from the proposed restrictions because they are stable substances and are lobbying with chemical and other industrial organizations in Japan and the EU.

Next is iron phosphate (LFP) batteries, which are rapidly growing in China, and the expansion of this market share poses the risk of a shrinking market share for our NMC batteries. We believe NMC batteries will maintain an advantage in operating stability in cold environments and per-charge mileage.

From the perspective of recycling, We believe NMC batteries will stay mainstream in the US and European market, where recycling is important, because LFP batteries use iron phosphate as a cathode material that is difficult and costly to recycle.

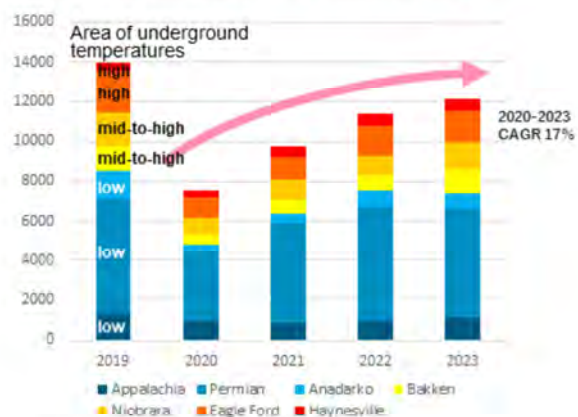
On the other hand, the LFP market has grown to account for half of the global battery market, and we are also working to develop a PVDF binder for LFP batteries.

We were unable to anticipate the rapid slowdown in the growth of the EVs in the US and European markets, resulting in a significant deviation from our plan. We believe that there will be no doubt about the medium- to long-term growth of the EV market in the US and Europe, and we will continue to take advantage of the U.S. market, where our customers are constructing new plants, to achieve a path of growth in FY2025 and beyond.

On the other hand, we will increase the number of customers by developing new grades of binders, while assuming the risk of a further leveling off. We will continue to strengthen our PVDF business by expanding sales to applications other than binders.



US Oil and Gas Wells Completed by Region



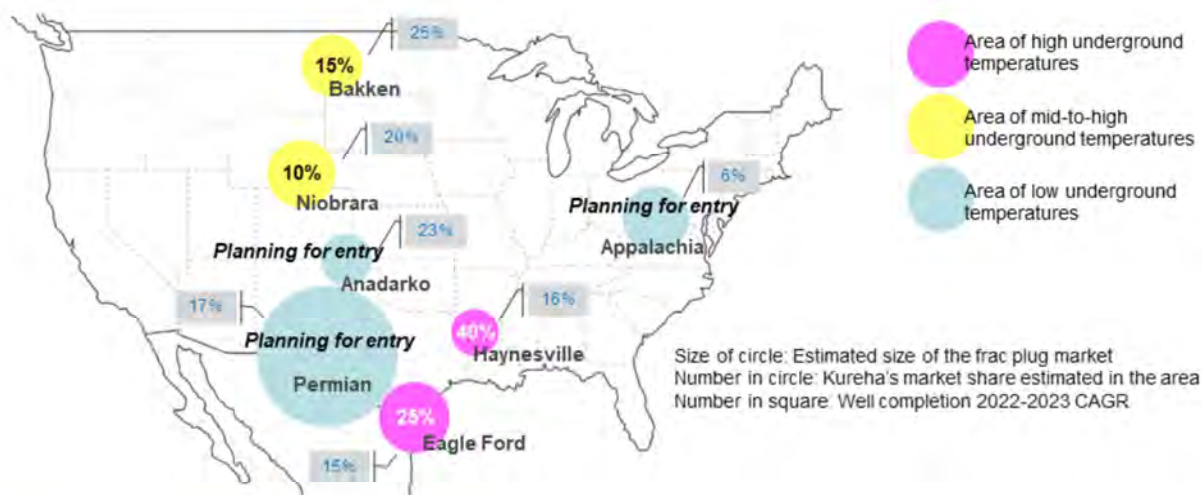
Data source: EIA Drilling Productivity Report

Crude Oil Prices



Data source: The U.S. Energy Information Administration (EIA) Cushing, OK WTI Spot Price FOB

- The number of completed oil and gas wells (= the frac plug market) is increasing steadily after a rapid post-pandemic recovery.
- Crude oil prices remain at high levels. The prices are expected to be stable over a medium term, although there are still some geopolitical risks.



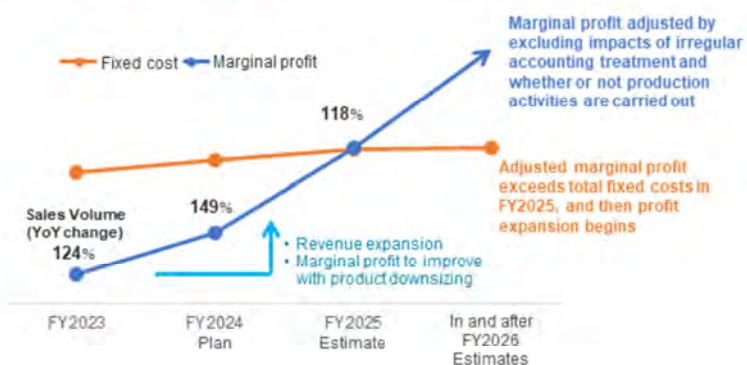
**Areas of mid-to-high underground temperatures**

Further business expansion is possible in this key market.

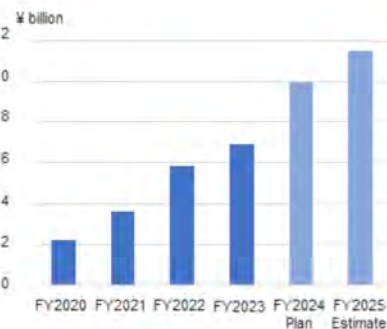
**Areas of low underground temperatures**

Kureha aims to complete engineering a new frac plug for use in the area of low /extremely low underground temperatures by late FY2024 and move toward full-scale business expansion in FY2026

## Break-even analysis

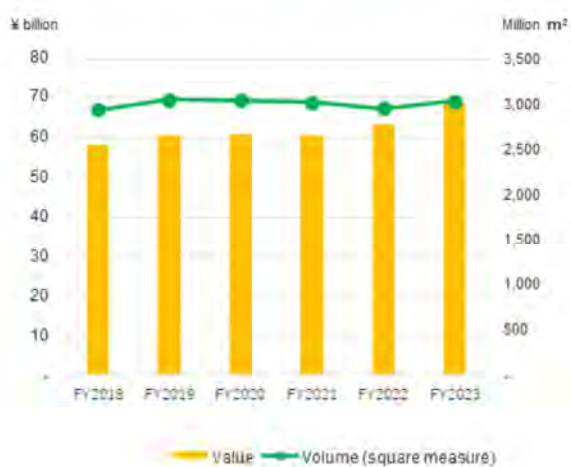


## Business revenue



- As our PGA frac plugs are increasingly used in the oilfield, our product reliability is also increasing.
- This reliability is enabling us to acquire new customers and bulk orders for full-bore application (for use in an entire well) – Nearly 80% of FY2023 sales is full-bore applications
- In FY2024, we aim to increase profits by expanding sales and saving costs through product downsizing (short-sized frac plugs).

### Domestic Food wrap film market



Data source: INTAGE SRI+ "Wrapping Film Market"  
April 2018-March 2024 Market Value/Volume

### A shift in our business strategy

- Although Japan's population is decreasing, there is an increasing need to streamline housework in more dual-income households, suggesting potential growth in home products business expansion.
- Kureha is strengthening sales and marketing efforts to all sales channels where there are growth opportunities, including overseas markets and E-commerce.
- To reflect consumer feedback on product development and further enhance value, we will also enhance consumer research and development capabilities.
- Kureha is investing resources necessary to achieve sustainable growth in the business (facilities, human resources, etc.) and aims to generate profits which will exceed the cost increase.
- We expect to see effects of the above growth measures on the business earnings in two to three years.

**KUREHA**

### Agrochemicals business revenue



Operating profit is forecast to improve largely after FY2025 as sales volume rebounds after inventory adjustments, and while R&D expenses related to our new agricultural product are currently increasing, they will peak out in FY2025.

### Business environment

- Kureha's agrochemical shipment in FY2022 was far more than the actual demand due to a surge in grain prices and global supply chain risks.
- In FY2023, inventory adjustments began in the end-agrochemical market, while our shipping volume continued to increase. We expect shipping adjustments during FY2024 and a volume recovery in FY2025.
- Kureha's started preparations for the supply of Metconazole fungicide, presuming that our product is re-registered in Europe.

### About our new agrochemical product:

Type of product: Agricultural fungicide

Product launch: Around 2030

Area of sales: Global

Targeted crops: wheats, corns, fruits, vegetables

Expected annual sales (at peak): ¥20 billion or more

**KUREHA**

We are exploring development themes in the areas of Environment & Energy, Life, and Digital Communications with a market-in perspective and a future global expansion in mind, while actively incorporating third-party technologies in our development.

<Digital Communications>

3D Touch  
Screen  
Panel

- A 3D touch screen panel with a simple configuration helps reduce production costs
- Differential features including minimal malfunction, energy saving and superior transparency
- Targeted applications are wearable devices, smartphones, notebook PCs, and other high-volume products.
- Kureha aims for sales of ¥2-3 billion in late 2020s.

A prototype using Kureha PVDF Piezo Film demonstrated at a tradeshow



KUREHA

## &lt;Environment&gt;

**PFAS Capture & Destruction**

- Our corroborative initiative with US startup, Claros Technologies, Inc., to provide technology solutions and services that capture and destroy PFAS substances in waste water, including low-molecular-weight perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA)
- Kureha participated in the Series B round of funding for Claros Technologies.
- The Kureha Group promotes their technology and services in Japan and other Asia markets for business launch targeted around 2026, building a new business model to reduce negative impact on the environment.

## &lt;Life&gt;

**Biostimulant**

- Biostimulants (non-protein amino acids) are agrochemical materials that promote crop growth and increase yields by stimulating natural growth processes.
- Kureha has developed a new biostimulant and confirmed its effects to improve yields of tomatoes and other vegetables and fruits in our field tests.
- We will aim for market entry in late 2020s and contribute this new technology to support agricultural production and improve global food supply.

**FY2023**

- Kureha further optimized its business portfolio by:
  - Proceeding to withdraw from the heat shrink multilayer film business, a part of Kureha's food packaging business
  - Reconstructing two businesses in the Kureha Group (effective as of April 1, 2024) to promote efficiency and strengthen the Group structure
    - ✓ Kureha Engineering Co. merged into Kureha Construction Co.
    - ✓ Kureha Staff Service Co. merged into Kureha Service Co.

**Our initiatives to further improve the business portfolio**

- Promoting ROIC-focused management
  - Will monitor the return on invested capital (ROIC) in each business and make improvement plans for underperforming businesses
  - When an expected ROIC is unlikely to be achieved within a certain time period, such business is subject to structural reform and Kureha will reconsider the direction of this business
- Advancing M&A activity
  - In addition to funding startup companies, Kureha will upscale M&A activity with views to developing downstream applications for our existing businesses as well as exploring growth opportunities in the areas of digital communications and agrochemicals
  - M&A-related funds are set at ¥10 billion for the period until FY2025 end.



- Kureha's policy to actively invest for growth is unchanged. Our investment plan for the PVDF business is however revised in light of significant changes in the business environment.
- The decrease in capital expenditures related to PVDF is redeployed for expanding profits of existing businesses and as M&A funds

(¥ billion)

	FY2025 Rolling plan	FY2025 Original plan
Plant & equipment	95	105
R&D, New businesses	5	5
M&A	10	-
Environment	5	5
DX	5	5
<b>Total</b>	<b>120</b>	<b>120</b>

## **VI. Progress toward Environmental Load Reduction Targets**

**KUREHA**



**CO<sub>2</sub> emission reduction**

(FY2030 target) **30% or more**  
vs. FY2013 actual

Working to **establish the technology that enables the use of CO<sub>2</sub>-free, regenerative energy**, partially replacing coal, at our primary power plant of the Iwaki Factory

**Zero waste emission ratio**

(FY2025 target) **1.5%**

- Reduce the amount of waste sent to landfill by **recycling plastic wastes** generated from our manufacturing activities
- Improve our manufacturing processes** with aims to **further reduce waste generation** and convert wastes into valuable resources

Energy-derived CO<sub>2</sub> emissions

- This presentation material is provided for a deeper understanding of our company, and is not intended to be used as a solicitation for investment or other activities.
- This material has been prepared by our company based on the information available at the time of the presentation. Actual results may differ materially from those presented in this material due to various factors.
- Please utilize this material using your own judgment and responsibility.

## Major Questions and Answers

**Q:** What are the major reasons that Specialty Plastics segment is expected to see a significant decrease in operating profit by 3 billion yen in FY2024?

**A:** The majority of the decrease in sales is due to the withdrawal from the multilayer barrier shrink film business. There are two main factors behind the decrease in profits.

One is that the sales of household wrap have become relatively large portion among segments due to the decline in sales in the Advanced Material segment, and the burden of company-wide overhead costs has been allocated onto the Specialty Plastics segment.

The other is unexpected sales increase from the ML film business. In FY2023, there was a demand for customers to build up their final inventories before the withdrawal, but in FY2024, we are anticipating a loss due to the withdrawal, and a difference between FY2023 and FY 2024 is more than 1 billion yen.

**Q:** What is the breakdown of the 5 billion yen increase in sales and 900 million yen increase in profits in the Advanced Materials segment?

**A:** Of the increased revenue, about 3 billion yen is from PGA. The majority of the remainder is from PVDF. In terms of profit, we are expecting about half of the profit to come from the PVDF, and we are also expecting to improve the profitability of PPS. So an overall increase in profit of 900 million yen, including those that will see a decrease in profit.

**Q:** In the medium- to long-term management plan rolling plan, the forecast for sales of the Advanced Materials has decreased by 19 billion yen, and operating profit has decreased by 6 billion yen. Is it correct to assume that PVDF accounts for the majority of this?

**A:** You can assume that PVDF makes up the majority of the figure.

**Q:** Regarding PGA, I think the plan is for it to break even in FY2025, but if you separate out the factors contributing to the increase in sales, the resumption of resin production, and other improvements, what is the contribution rate?

What share of the market can we expect to gain in the Permian Basin, which is a new market for us? What is the maximum share we can expect to gain in the Bakken, which is a medium- to high-temperature oil field?

**A:** In our plan PGA business will be profitable in FY2025 even without gain from inventory revaluation, but the main factors behind the improvement from FY2024 to FY2025 will be the contribution of sales expansion.

While we had not manufactured PGA resin for three years, we have started production again in FY 2024 and we plan to produce PGA resin in line with demand. In addition, by producing resin, we expect to improve our profitability by roughly 3 billion yen.

Regarding your second question, at the moment, our market share is as shown on page 41. We have the largest share, particularly in the high-temperature area, Haynesville. However, as it is a gas field, it has a vulnerable aspect in that it is affected by gas prices.

On the other hand, we have been focusing on the Bakken and Niobrara areas for several years now, and our market share in these areas is steadily increasing. While it may be difficult to reach 40%, we are aiming for a market share of around 20% to 30%.

In addition, the Permian region, which has a large market, is an oil-rich area with low temperatures. This fiscal year, we will increase our market share in this region by introducing plugs for low and ultralow temperatures. Due to its characteristics, no company has adopted the full well bore as degradable solution. In particular, if we can develop PGA plugs for low and ultralow temperatures, we will be able to expand the sales with differentiated products into this area, so we plan to focus on this in the future.