

# FY2022 Interim Report

KUREHA CORPORATION

November 9, 2022

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## FY2022 Overview

### Revenue and profit growth continues, absorbing impact of inflation and higher expenses

- ✓ Delivered half-year operating profit of ¥16.7bn, a 47% increase from a year ago, 29% above most recent forecast
- ✓ Full-year operating profit expected to reach ¥27.0bn (up 34% YoY; up 23% vs. initial forecast)

### 1Q-2Q FY22 business conditions

- Increased costs for coal (used at the Iwaki Factory) and basic chemicals (naphtha, benzene, VC monomers, etc.)
- Rising Inflation around the world, rapidly depreciating Japanese yen
- Continued market expansion for electric vehicles, partially offset by semiconductor shortages
- Strong agrochemicals demand propelled by increased farming activities and higher crop prices
- Limited impact of China's lockdowns on our local PVDF manufacturing operations

### Updates on potential business risks (reflected in our initial full-year forecast on May 12)

Risk factors	Impact	1Q-2Q FY22	3Q-4Q FY22
Higher fuel and raw material costs, including for coal	Significant	<ul style="list-style-type: none"> <li>- Increased Advanced Materials and Specialty Chemicals prices</li> <li>- Impact partially mitigated by using existing stock and favorable currency effects</li> </ul>	<ul style="list-style-type: none"> <li>- Increased Specialty Plastics prices in October (pricing actions completed for all key products)</li> <li>- Continued challenges for uncompetitive businesses</li> </ul>
The COVID pandemic affecting Advanced Materials businesses	Medium	<ul style="list-style-type: none"> <li>- Marginal impact of halted operations at the Shanghai carbon fiber plant</li> </ul>	<ul style="list-style-type: none"> <li>- Continued risk for local operations</li> </ul>
Slower EV/LiB market expansion in Europe (due to Russia-Ukraine war, energy shortages)	Medium	<ul style="list-style-type: none"> <li>- Continued EV market expansion</li> </ul>	<ul style="list-style-type: none"> <li>- Market expansion likely to slow down temporarily due to inflation and economic downturn</li> </ul>
Higher logistics and materials costs for Specialty Plastics	Mild	<ul style="list-style-type: none"> <li>- Pricing actions for each business</li> </ul>	

# **I. FY2022 Half-Year (2Q) Results**

**(April 1, 2022 through September 30, 2022)**

# 1Q-2Q FY2022 Financial Summary (1)

KUREHA CORPORATION

(in billions of yen)

	1Q-2Q FY21	1Q-2Q FY22	Changes vs. 1Q-2Q FY21	Most recent Forecast*	Changes vs. Forecast
Revenue	79.1	<b>101.8</b>	22.7 (+28.7%)	100.0	1.8 (+1.8%)
Core operating profit	11.1	<b>16.6</b>	5.5 (+49.0%)	13.3	3.3 (+24.6%)
Operating profit	11.4	<b>16.7</b>	5.4 (+47.3%)	13.0	3.7 (+28.7%)
Profit before taxes	11.5	<b>17.4</b>	5.9 (+51.8%)	13.5	3.9 (+28.7%)
Profit attributable to owners of Kureha	8.3	<b>12.2</b>	3.9 (+46.4%)	9.5	2.7 (+28.3%)
Basic profit per share (¥)	¥426.73	<b>¥624.60</b>		¥486.74	
(Currency exchange rates)					
1USD=	¥109.8	¥134.0		¥131.0	
1EUR=	¥130.9	¥138.8		¥141.0	
1CNY=	¥17.0	¥19.9		¥19.0	

## Vs. 1Q-2Q FY21

- Revenue increased with sales expansion of advanced plastics, particularly PVDF used as a binder material for lithium-ion batteries, and higher agrochemicals volumes resulting from front-loaded shipments
- Higher operating profit led by advanced plastics and agrochemicals

## Vs. Forecast

- Better-than-expected performances in advanced plastics, agrochemicals and home products

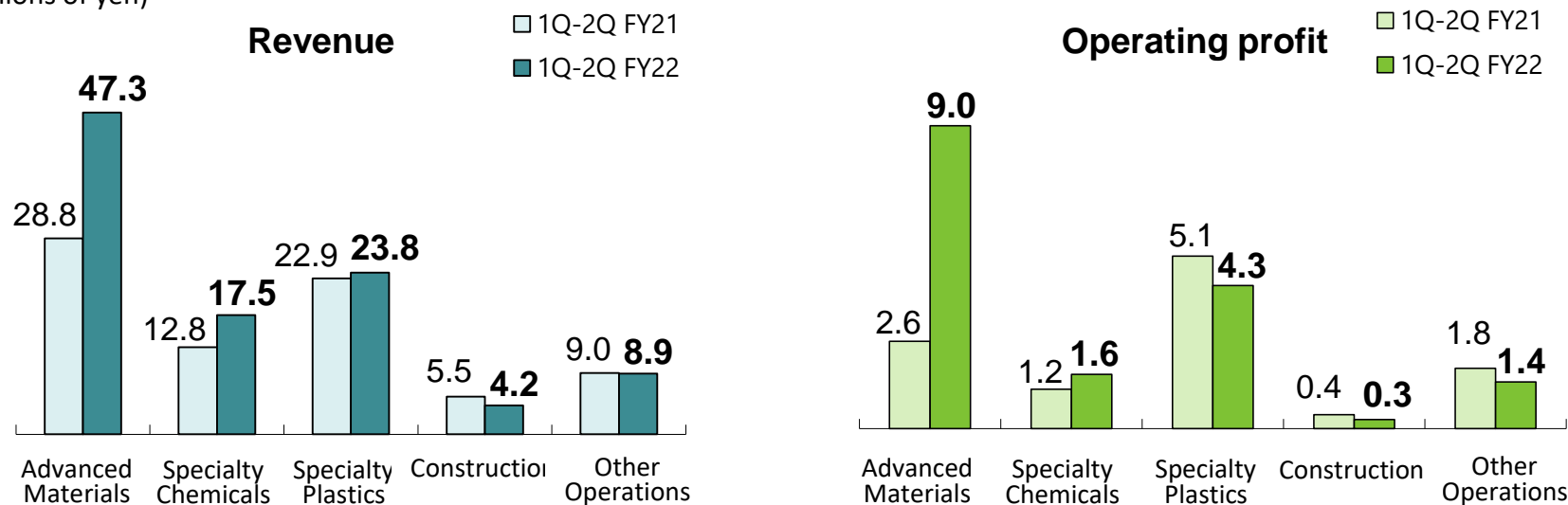
\*The most recent 1Q-2Q financial forecast was released on August 9, 2022.

# 1Q-2Q FY2022 Financial Summary (2)

KUREHA CORPORATION

## Revenue & Operating Profit by Segment (vs. 1Q-2Q FY21)

(in billions of yen)



### Factors affecting operating profit

AM: Sales increased across all product groups, including advanced plastics, carbon products and other resin products; higher profit primarily driven by PVDF

SC: Sales expansion for agrochemicals and industrial chemicals; higher profit led primarily by agrochemicals

SP: Slower home products sales partially offset by the expansion of packaging materials

CO: Fewer private construction projects; public construction remained on par with prior year

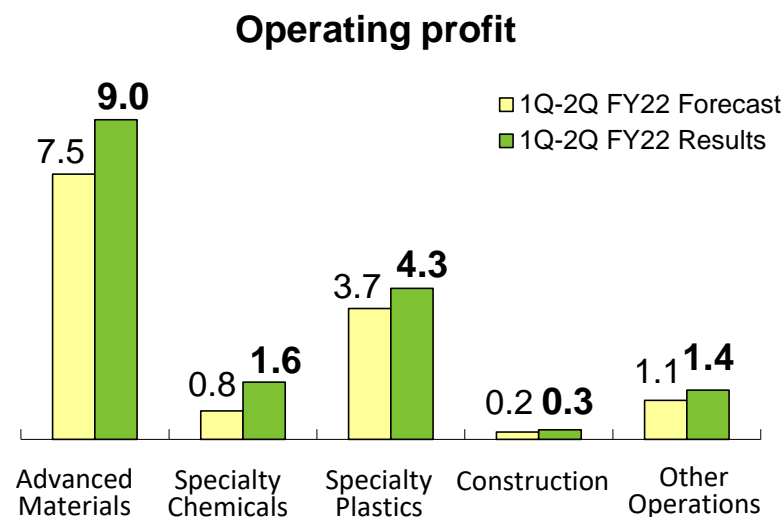
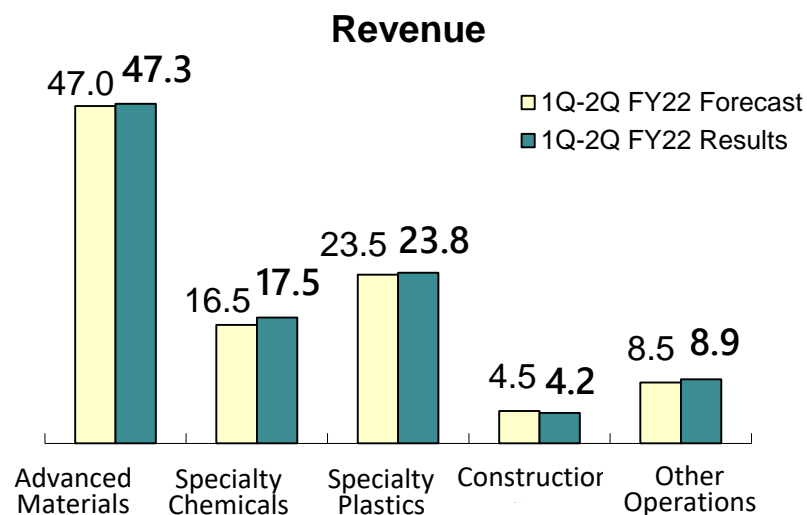
OO: Fewer industrial waste treatment volumes, including low-level PCB wastes

# 1Q-2Q FY2022 Financial Summary (3)

KUREHA CORPORATION

## Revenue & Operating Profit by Segment (vs. Most recent forecast)

(in billions of yen)



### Factors affecting operating profit

AM: Increased PVDF sales, narrowed PGA-related losses

SC: Front-loaded shipments for agrochemicals

SP: Increased sales of home products and PVDC film

CO: Increased high-margin construction projects

OO: Higher industrial waste treatment volume

# Segment Performance: Advanced Materials

(in billions of yen)

	1Q-2Q FY21	1Q-2Q FY22	Change %
<b>Advanced Materials</b>			
Advanced plastics	19.4	<b>36.5</b>	+88%
Carbon products	3.1	<b>3.5</b>	+12%
Other	6.3	<b>7.3</b>	+16%
<b>Revenue</b>	28.8	<b>47.3</b>	+64%
<b>Operating profit</b>	2.6	<b>9.0</b>	+247%

1Q-Q2 FY22 Forecast:

Revenue ¥47.0bn; Operating profit ¥7.5bn

**Vs. 1Q-2Q FY21**

**Revenue ↗ Operating profit ↗**

Advanced plastics revenue and profit up:

Sales expansion for PVDF (LiB binder), PPS and PGA; PVDF primarily driving profit growth

Carbon products revenue and profit up:

Higher carbon fiber insulation volumes for silicon ingot casting and other high-heat treatment furnaces

**Vs. Forecast**

**Revenue → Operating profit ↗**

- Improved PVDF product mix (increased volume of high-margin specialty polymers)
- Narrowed losses related to PGA



# Segment Performance: Specialty Chemicals

(in billions of yen)

	1Q-2Q FY21	1Q-2Q FY22	Change %
<b>Specialty Chemicals</b>			
Agrochemicals	3.3	<b>6.6</b>	+101%
Pharmaceuticals	2.3	<b>2.0</b>	-12%
Industrial chemicals	3.6	<b>4.7</b>	+29%
Other	3.6	<b>4.2</b>	+17%
<b>Revenue</b>	12.8	<b>17.5</b>	+37%
<b>Operating profit</b>	1.2	<b>1.6</b>	+38%

1Q-2Q FY22 Forecast:

Revenue ¥16.5bn; Operating profit ¥0.8bn

**Vs. 1Q-2Q FY21**

**Revenue ↗ Operating profit ↗**

Agrochemicals & Pharmaceuticals revenue and profit up:

Higher agrochemicals volumes partially offset by slower sales of Kremezin, a therapeutic agent for chronic kidney failures

Industrial chemicals revenue up, profit down:

Higher fuel and raw material costs leading to an operating loss, despite sales expansion of both organic and inorganic chemicals

**Vs. Forecast**

**Revenue ↗ Operating profit ↗**

- Agrochemicals revenue and profit swung upward due to front-loaded shipments
- Pharmaceuticals and industrial chemicals performed in line with our forecast

# Segment Performance: Specialty Plastics

(in billions of yen)

	1Q-2Q FY21	1Q-2Q FY22	Change %
<b>Specialty Plastics</b>			
Home products	12.1	<b>11.8</b>	-3%
Fishing lines	2.3	<b>2.4</b>	+7%
Packaging materials	6.5	<b>7.4</b>	+15%
Other	2.1	<b>2.2</b>	+2%
<b>Revenue</b>	22.9	<b>23.8</b>	+4%
<b>Operating profit</b>	5.1	<b>4.3</b>	-17%

1Q-2Q FY22 Forecast:

Revenue ¥23.5bn; Operating profit ¥3.7bn

Vs. 1Q-2Q FY21

**Revenue ↗ Operating profit ↘**

Home products & Fishing lines revenue and profit down:

Slower food wrap film sales and higher fuel and raw material costs partially offset by higher fishing lines sales

Packaging materials revenue and profit up:

Sales expansion for heat-shrink multilayer film and PVDC film

Vs. Forecast

**Revenue → Operating profit ↗**

- Better-than-expected performance of Home Products as the post-pandemic market didn't shrink as much as anticipated
- The fishing lines market remained weak
- Higher PVDC film sales in the East Asia market

# Segment Performance: Construction

(in billions of yen)

	1Q-2Q FY21	1Q-2Q FY22	Change %
<b>Construction</b>			
Construction	9.0	<b>8.6</b>	-4%
Elimination (Intercompany sale)	-3.5	<b>-4.4</b>	--
<b>Revenue</b>	5.5	<b>4.2</b>	-23%
<b>Operating profit</b>	0.4	<b>0.3</b>	-36%

1Q-2Q FY22 Forecast:

Revenue ¥4.5bn; Operating profit ¥0.2bn

Vs. 1Q-2Q FY21

Revenue ↘ Operating profit ↘

Construction revenue and profit down:

Fewer private construction projects; public construction remained at prior-year level

Vs. Forecast

Revenue ↘ Operating profit ↗

- Increased high-margin construction projects

# Segment Performance: Other Operations

(in billions of yen)

	1Q-2Q FY21	1Q-2Q FY22	Change %
<b>Other Operations</b>			
Environmental engineering	6.6	<b>6.3</b>	-5%
Logistics	4.1	<b>4.1</b>	-0%
Hospital operations	2.0	<b>2.1</b>	+5%
Others	1.2	<b>1.2</b>	-2%
Elimination (Intercompany sale)	-4.9	<b>-4.7</b>	--
<b>Revenue</b>	9.0	<b>8.9</b>	-1%
<b>Operating profit</b>	1.8	<b>1.4</b>	-23%

2Q FY22 Forecast:

Revenue ¥8.5bn; Operating profit ¥1.1bn

Vs. 1Q-2Q FY21

Revenue ↘ Operating profit ↘

Environmental engineering revenue and profit down  
Fewer industrial waste treatment volumes, including low-level PCB wastes

Logistics revenue and profit at prior-year levels

Hospital Operations revenue and profit at prior-year levels

Vs. Forecast

Revenue → Operating profit ↗

- Increased per-unit prices for general and medical waste treatment businesses

# Cash Flow

KUREHA CORPORATION

(in billions of yen)

	1Q-2Q FY21	1Q-2Q FY22	Change
Profit before income tax	11.5	17.4	5.9
Depreciation	5.8	5.7	-0.1
Other	-3.8	-14.4	-10.6
<b>Cash flow from operating activities</b>	<b>13.5</b>	<b>8.7</b>	<b>-4.9</b>
<b>Cash flow from investing activities*</b>	<b>-4.8</b>	<b>-4.9</b>	<b>-0.1</b>
Free cash flow	8.7	3.8	-4.9
<b>Cash flow from financing activities</b>	<b>-4.5</b>	<b>-6.8</b>	<b>-2.3</b>
Effect of exchange rate changes on cash and cash equivalents	0.1	1.5	1.4
Increase/decrease in cash and cash equivalents	4.3	-1.5	-5.8
Cash and cash equivalents at beginning of period	17.8	30.6	12.8
Cash and cash equivalents at end of period	22.1	29.1	7.0

\*Trade receivables and inventory increased as revenue increased

# Financial Position

KUREHA CORPORATION

(in billions of yen)

## Assets

	Mar. 31 2022	Sept. 30 2022	Change
Cash and cash equivalents	30.6	<b>29.1</b>	-1.5
Trade and other receivables	35.8	<b>41.5</b>	5.7
Inventories	41.7	<b>46.8</b>	5.1
Other current assets	4.3	<b>4.6</b>	0.3
<b>Total current assets</b>	112.4	<b>122.0</b>	9.6
Property, plant and equipment	114.4	<b>118.6</b>	4.2
Intangible assets	4.0	<b>4.4</b>	0.4
Investments and other assets	51.7	<b>50.7</b>	-1.0
<b>Total non-current assets</b>	170.2	<b>173.8</b>	3.6
<b>Total assets</b>	282.6	<b>295.8</b>	13.1

## Liabilities and Equity

	Mar. 31 2022	Sept. 30 2022	Change
Trade and other payables	29.5	<b>29.2</b>	-0.3
Interest-bearing debt	28.5	<b>26.4</b>	-2.1
Provisions	8.2	<b>7.9</b>	-0.3
Other liabilities	15.7	<b>17.7</b>	2.0
<b>Total liabilities</b>	<b>81.9</b>	<b>81.1</b>	<b>-0.8</b>
Shareholders' equity	18.2	<b>18.2</b>	-
Capital surplus	14.7	<b>14.7</b>	-
Less: Treasury stock	-8.7	<b>-8.7</b>	0.0
Retained earnings	166.0	<b>175.2</b>	9.2
Other components of equity	9.0	<b>13.7</b>	4.7
Non-controlling interests	1.5	<b>1.5</b>	0.0
<b>Total equity</b>	<b>200.7</b>	<b>214.6</b>	<b>13.9</b>
<b>Total liabilities and equity</b>	282.6	<b>295.8</b>	13.1

## **II. FY2022 Full-Year Outlook**

**(April 1, 2022 through March 31, 2023)**

# FY22 Financial Forecast (1)

KUREHA CORPORATION

(in billions of yen)

	FY21 Results	FY22 Revised forecast	Changes vs. FY21	FY22 Initial forecast	Changes vs. Previous forecast
Revenue	168.3	<b>190.0</b>	21.7 (+12.9%)	180.0	10.0 (+5.6%)
Core operating profit	25.3	<b>27.0</b>	1.7 (+6.7%)	23.0	4.0 (+17.4%)
Operating profit	20.1	<b>27.0</b>	6.9 (+34.0%)	22.0	5.0 (+22.7%)
Profit before taxes	20.4	<b>28.0</b>	7.6 (+37.3%)	22.0	6.0 (+27.3%)
Profit attributable to owners of Kureha	14.2	<b>20.0</b>	5.8 (+41.2%)	16.0	4.0 (+25.0%)
Basic profit per share (¥)	¥725.73	<b>¥1024.72</b>		¥819.79	

## Vs. FY21

- Revenue increased in Advanced Materials, Specialty Chemicals and Specialty Plastics; revenue decreased in Construction and Other operations
- Core operating profit up in Advanced Materials and Specialty Chemicals and down in Specialty Plastics, Construction and Other operations

## Vs. Initial forecast

- Increases in revenue and profit led by PVDF, agrochemicals and specialty plastics

[Currency exchange rates and sensitivity]

	FY21 Actual	FY22 Initial estimate	1Q-2Q FY22 Actual	3Q-4Q FY22 New estimate	Forex sensitivity *Impact of an one-yen depreciation on operating profit per 6 months
1USD=	¥112.4	¥120.0	¥134.0	¥135.0	An increase of ¥20 million
1EUR=	¥130.5	¥132.0	¥138.8	¥135.0	An increase of ¥20 million
1CNY=	¥17.5	¥18.5	¥19.9	¥19.5	An increase of ¥70 million



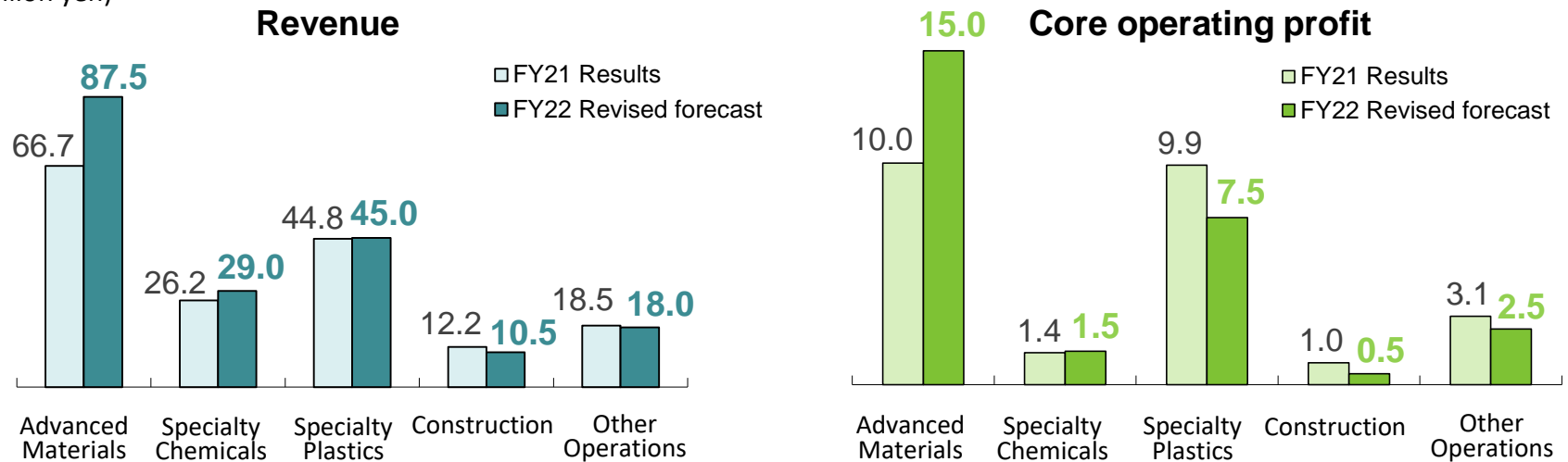


# FY22 Financial Forecast (2)

KUREHA CORPORATION

## Revenue & Operating Profit by Segment (vs. FY21)

(billion yen)



### Factors affecting operating profit

AM: Robust performances of PVDF (LiB binder) and carbon fiber furnace insulation materials

SC: Sales expansion for agrochemicals, higher pricing for industrial chemicals

SP: Slower home products sales partially offset by expansion of packaging materials

CO: Fewer high-margin construction projects, intensifying market competition

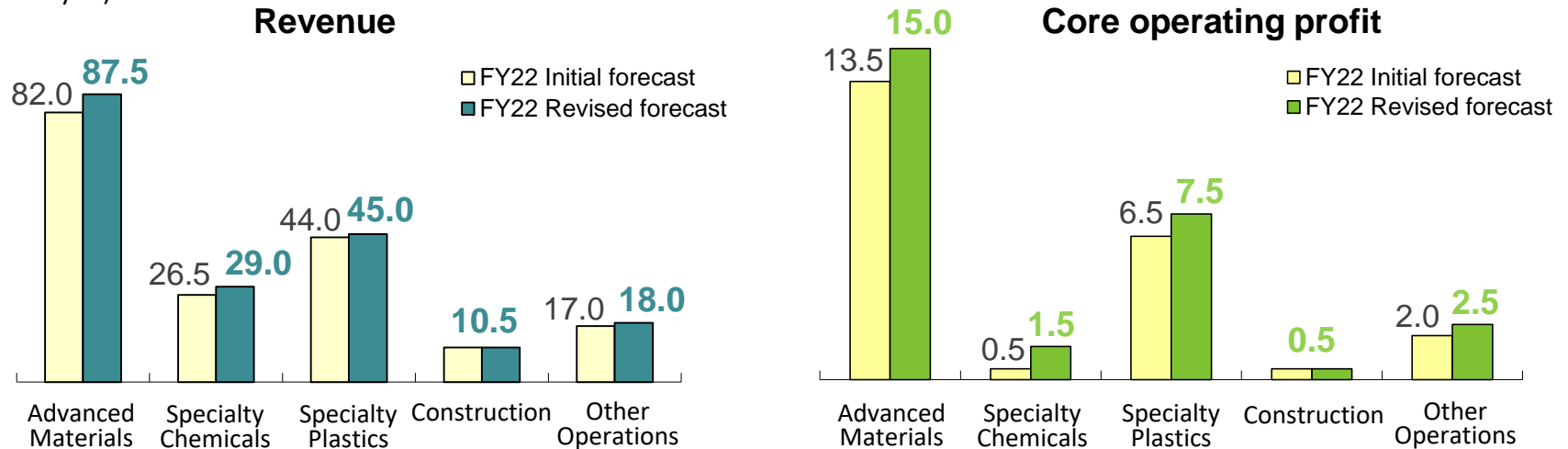
OO: Lower volumes for low-level PCB and other industrial wastes treatment

# FY22 Financial Forecast (3)

KUREHA CORPORATION

## Revenue & Operating Profit by Segment (vs. Initial forecast)

(billion yen)



### Factors affecting operating profit

AM: Higher PVDF sales partially offset by losses caused by suspension of production at a PGA manufacturing subsidiary

SC: Sales expansion for agrochemicals

SP: Higher pricing for food wrap film, higher packaging material volume

CO: (No change in performance forecast)

OO: Higher industrial waste treatment volume

# Segment Forecast: Advanced Materials

(in billions of yen)

	FY21 Results	FY22 Revised forecast	Change %
<b>Advanced Materials</b>			
Advanced plastics	47.8	<b>67.0</b>	+40%
Carbon products	5.9	<b>6.5</b>	+10%
Other	13.0	<b>14.0</b>	+7%
	<hr/>		
<b>Revenue</b>	66.7	<b>87.5</b>	+31%
<b>Operating profit</b>	10.0	<b>15.0</b>	+51%

FY22 Initial forecast:

Revenue ¥82.0bn; Operating profit ¥13.5bn

## Vs. FY21

**Revenue ↗ Operating profit ↗**

Advanced plastics revenue and profit up:

- Robust PVDF sales in the automotive LiB market
- Higher pricing for PPS

Carbon products revenue and profit up:

- Higher carbon fiber volumes in the high-heat furnace insulation market
- Favorable currency effect
- Higher prices

## Vs. Initial forecast

**Revenue ↗ Operating profit ↗**

- Limited impact of China's lockdowns on our local PVDF production
- Sales expansion for carbon fiber
- Impact of suspended PGA resin production (same as in FY21)

# Segment Forecast: Specialty Chemicals

(in billions of yen)

	FY21 Results	FY22 Revised forecast	Change %
<b>Specialty Chemicals</b>			
Agrochemicals	7.1	<b>9.0</b>	+28%
Pharmaceuticals	4.2	<b>3.5</b>	-17%
Industrial chemicals	7.4	<b>9.0</b>	+21%
Other	7.5	<b>7.5</b>	+0%
<b>Revenue</b>	26.2	<b>29.0</b>	+11%
<b>Operating profit</b>	1.4	<b>1.5</b>	+5%

FY22 Initial forecast:

Revenue ¥26.5bn; Operating profit ¥0.5bn

**Vs. FY21**

**Revenue ↗ Operating profit →**

Agrochemicals & Pharmaceuticals revenue up, profit down:

- Higher pricing for agrochemicals
- Favorable currency effect
- Impact of mandatory drug price revisions
- Increased cost for fuel and raw materials

Industrial chemicals revenue and profit up:

- Higher pricing for organic and inorganic chemicals

**Vs. Initial forecast**

**Revenue ↗ Operating profit ↗**

- Higher agrochemicals volumes
- Higher prices

# Segment Forecast: Specialty Plastics

(in billions of yen)

	FY21 Results	FY22 Revised forecast	Change %
<b>Specialty Plastics</b>			
Home products	23.2	<b>22.5</b>	-3%
Fishing lines	4.6	<b>4.5</b>	-1%
Packaging materials	13.0	<b>14.5</b>	+11%
Other	4.0	<b>3.5</b>	-12%
<b>Revenue</b>	44.8	<b>45.0</b>	+1%
<b>Operating profit</b>	9.9	<b>7.5</b>	-24%

FY22 Initial forecast:

Revenue ¥44.0bn; Operating profit ¥6.5bn

## Vs. FY21

**Revenue → Operating profit ↘**

Home products revenue and profit down:

- Lower food wrap film volume
- Higher pricing for food wrap film (starting in October)

Fishing lines revenue and profit down:

- Slower fishing lines market

Packaging materials revenue up, profit leveling off:

- Expansion of PVDC film in the East Asia market
- Increased costs for fuel and raw materials

## Vs. Initial forecast

**Revenue ↗ Operating profit ↗**

- Sales expansion for PVDC film
- Fewer expenses

# Segment Forecast: Construction

(in billions of yen)

	FY21 Results	FY22 Revised forecast	Change %
<b>Construction</b>			
Construction	20.2	<b>20.8</b>	+3%
Elimination (Intercompany sale)	-8.0	<b>-10.3</b>	--
<b>Revenue</b>	12.2	<b>10.5</b>	-14%
<b>Operating profit</b>	1.0	<b>0.5</b>	-49%

FY22 Initial forecast:

Revenue ¥10.5bn; Operating profit ¥0.5bn

**Vs. FY21**

**Revenue ↘ Operating profit ↘**

Construction revenue and profit down:

- Fewer high-margin construction projects

**Vs. Initial forecast**

**Revenue → Operating profit →**

(Performs in line with the initial forecast)

# Segment Forecast: Other Operations

(in billions of yen)

	FY21 Results	FY22 Revised forecast	Change %
<b>Other Operations</b>			
Environmental engineering	13.4	<b>12.9</b>	-4%
Logistics	8.2	<b>8.1</b>	-2%
Hospital operations	4.1	<b>4.3</b>	+5%
Others	2.3	<b>2.3</b>	-1%
Elimination (Intercompany sale)	-9.5	<b>-9.5</b>	--
<b>Revenue</b>	18.5	<b>18.0</b>	-3%
<b>Operating profit</b>	3.1	<b>2.5</b>	-19%

FY22 Initial forecast:

Revenue ¥17.0bn; Operating profit ¥2.0bn

## Vs. FY21

**Revenue ↘ Operating profit ↘**

Environmental engineering revenue and profit down:

- Decreased unit price and sales volume for low-level PCB waste treatment

Logistics revenue and profit at prior year's levels

Hospital Operations revenue and profit at prior year's levels

## Vs. Initial forecast

**Revenue ↗ Operating profit ↗**

- Higher unit prices for general and medical wastes treatment

# Cash Flow

KUREHA CORPORATION

(in billions of yen)

	FY21 Results	FY22 Revised forecast	Change
Profit before income tax	20.4	28.0	7.6
Depreciation	11.6	11.5	-0.1
Other	-3.4	-15.6	-12.2
<b>Cash flow from operating activities</b>	<b>28.6</b>	<b>23.9</b>	<b>-4.6</b>
<b>Cash flow from investing activities</b>	<b>-11.0</b>	<b>-17.6</b>	<b>-6.6</b>
Free cash flow	17.6	6.4	-11.2
<b>Cash flow from financing activities</b>	<b>-6.1</b>	<b>-7.9</b>	<b>-1.8</b>
Effect of exchange rate changes on cash and cash equivalents	1.3	0.0	-1.3
Increase/decrease in cash and cash equivalents	12.8	-1.6	-14.4
Cash and cash equivalents at beginning of period	17.8	30.6	12.8
Cash and cash equivalents at end of period	30.6	29.1	-1.6

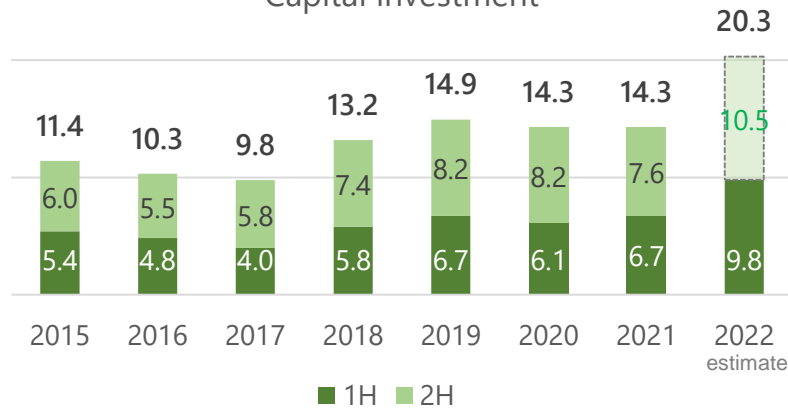


# Key Indicators (1)

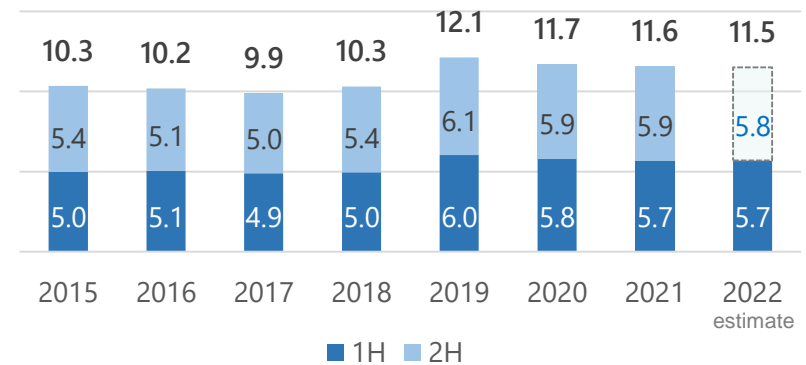
KUREHA CORPORATION

(in billions of yen)

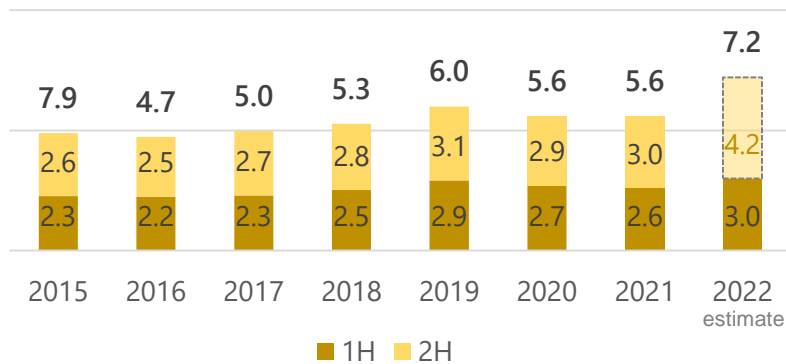
## Capital investment



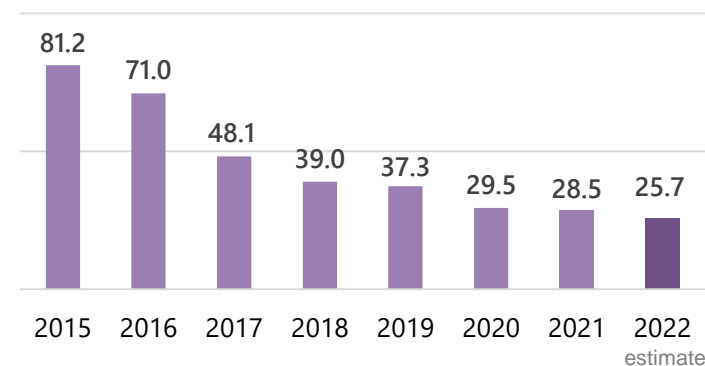
## Depreciation expenses



## R&D expenditures



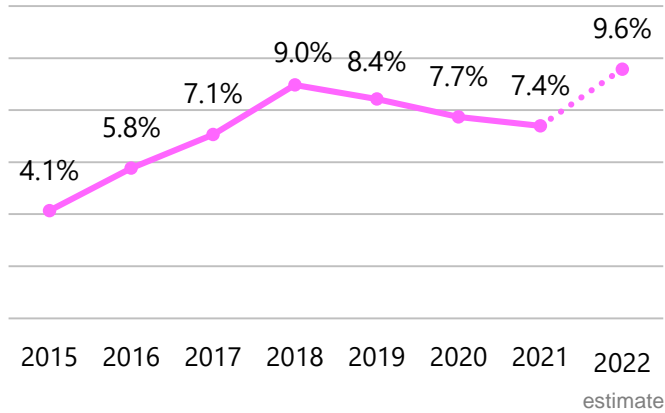
## Interest-Bearing debt



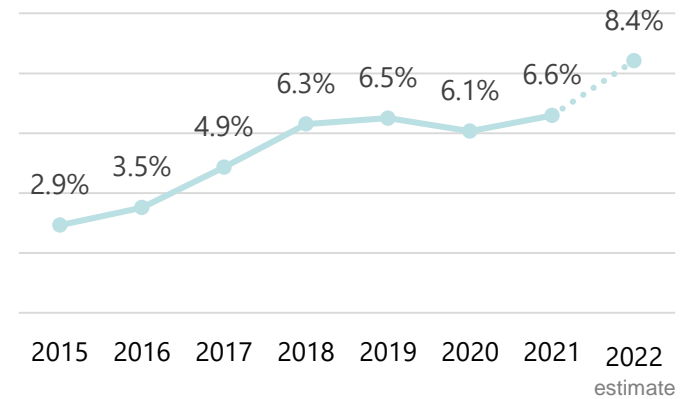
# Key Indicators (2)

KUREHA CORPORATION

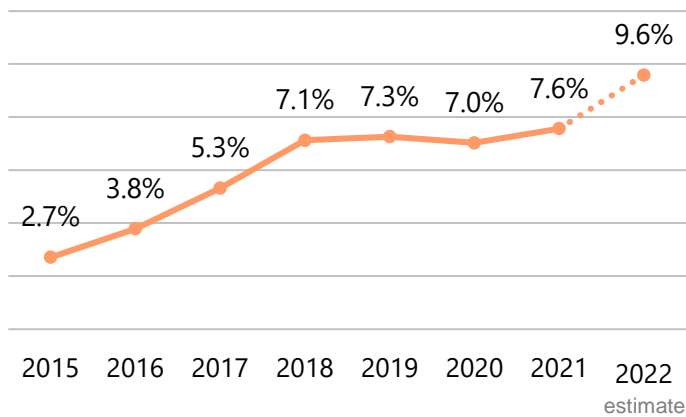
## ROE



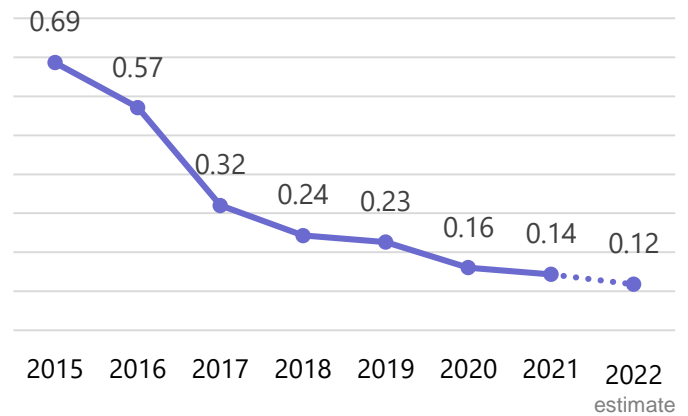
## ROIC



## ROA



## DE Ratio

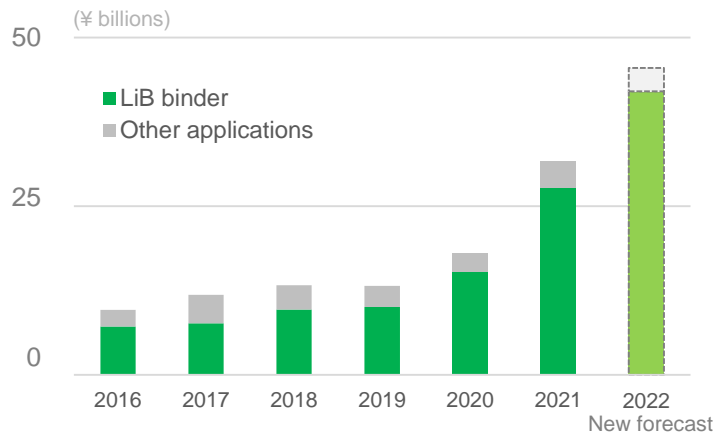


## III. Appendix

# Polyvinylidene Fluoride (PVDF) Business

KUREHA CORPORATION

## PVDF Business Revenue



### 1Q-2Q FY22 Results

Recorded strong YoY growth in revenue and operating profit driven by:

- Higher prices
- Improved product mix (increased sales of specialty polymers)
- Continued manufacturing operations at the China plant (no impact of the pandemic lockdowns)

### 3Q-4Q FY22 Forecast

Revenue and operating profit expected to in line with initial forecast

- EV market expansion likely to slow down temporarily in a down economy

## Business conditions

- Continued robust demand for automotive LiB binder during 1Q-2Q, partially impacted by chip shortages and China Shanghai lockdowns
- EV sales are increasing faster than a year ago but will likely decelerate briefly due to rising inflation and economic slowdowns in China and Europe
- Lithium Iron Phosphate (LFP) batteries are increasingly used for Chinese EVs, whereas Nickel Manganese Cobalt (NMC) batteries, which allow better power storage and longer range, are the mainstream in the US and Europe
- Major South Korean LiB makers are building more LiB plants in the US through JVs and collaboration with auto makers

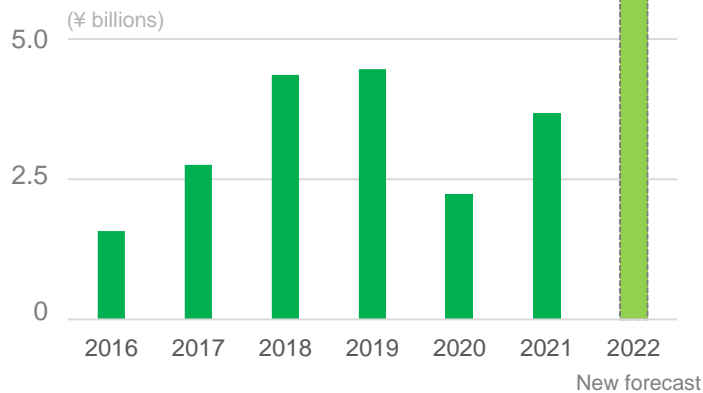
## Kureha PVDF capacity enhancement

- Completed capacity increase for specialty polymers at the Iwaki Factory as scheduled, started commercial production in 4Q FY21
- Delayed construction for the 2<sup>nd</sup> PVDF plant in China due to the pandemic and changes in local guidelines
- Aims to provide stable supply of specialty polymers for key customers by further increasing capacity at the Iwaki Factory through debottlenecking, productivity improvement and optimized allocation

# Polyglycolic Acid (PGA) Business

KUREHA CORPORATION

## PGA Business Revenue



### 1Q-2Q FY22 Results

- Achieved substantial revenue growth with sales expansion of PGA frac plugs for mid-/high-temperature shale drilling operations (increased per-well plug use)
- Losses related to the US resin manufacturing facility widened due to weaker yen

### 3Q-4Q FY22 Forecast

- Revenue likely to exceed our previous forecast due to expanded PGA plug sales for mid- and high-temperature shale applications
- Will suspend PGA resin production to optimize inventory

### Business conditions

- US shale drilling activities are recovering slowly, now at almost 90% of the pre-pandemic level
- The market share of Kureha PGA frac plugs reaches nearly 20% for mid- and high-temperature shale well development

### Strategies to generate profit

- Kureha will strategize to turn steady profit by solely focusing on the mid-/high-temp shale development, for which PGA plugs are increasingly used
- Will continue to optimize inventory, reduce production cost and rationalize R&D activities related to shale development

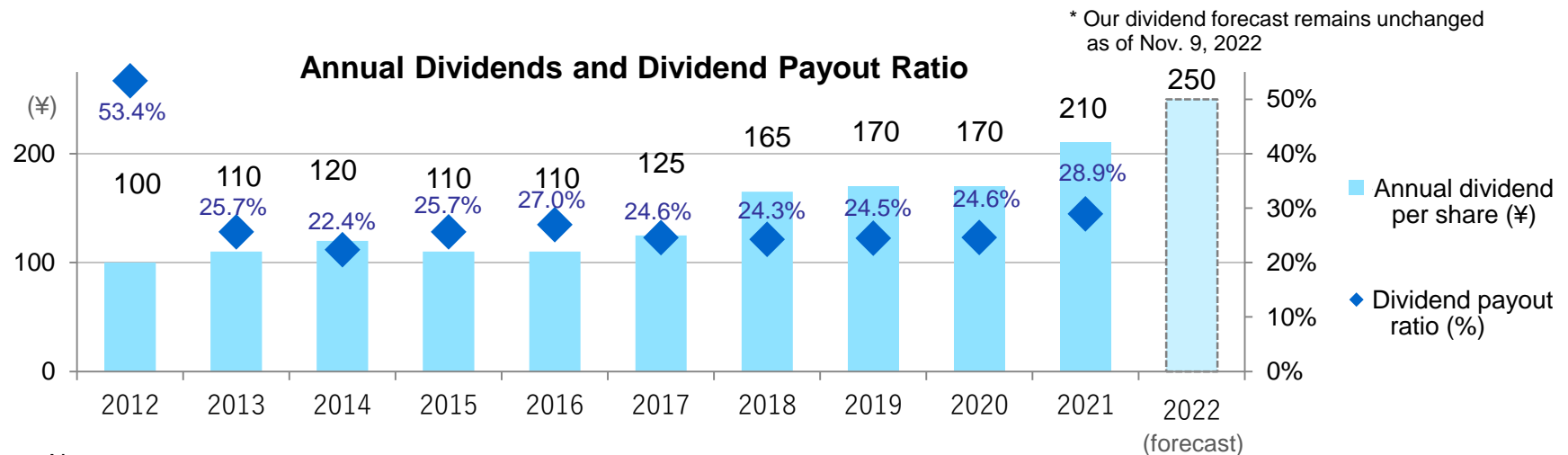
### Product improvements

- Prioritizes the development of a shorter PGA plug for mid-/high-temp application
- Prepares to conduct field trials for the above plugs and improved PGA plugs for low-/ultra-low temp application during 3Q-4Q FY22

# Returning to Shareholders

KUREHA CORPORATION

- Kureha's basic policy on the distribution of earnings is to strengthen the company overall to achieve longer-term growth, provide for future business expansion, enhance retained earnings, and pay a stable and continued dividend.
- We also consider the acquisition of our own shares to flexibly adjust to varying financial conditions.
- An actual year-end dividend for FY2022 is to be determined based on FY2022 full-year results.



#### Notes

- Kureha conducted a ten-to-one share consolidation on October 1, 2016. All figures in this chart are presented on a post share consolidation basis for comparison purposes
- Accounting standards: Japanese GAAP (before and in FY2015); IFRS (in and after FY2016)
- Commemorative dividends of ¥10 are included in the annual dividends of FY2014 and FY2018
- Share repurchases completed: ¥3bn in FY2018, ¥5bn in FY2019

# Consolidated Companies

KUREHA CORPORATION

(billions of yen)

		1Q-2Q FY21		1Q-2Q FY22		Change	
		Revenue	Total assets	Revenue	Total assets	Revenue	Total assets
Kureha Corp.		34.6	201.4	<b>45.5</b>	<b>215.0</b>	10.9	13.6
Kureha Trading Group		10.2	14.0	<b>12.3</b>	<b>15.3</b>	2.1	1.4
Advanced Materials	Kureha Corp.	17.6	--	<b>29.6</b>	--	12.1	--
	Kureha Trading Group	7.2	--	<b>8.7</b>	--	1.5	--
	Kureha Extron	1.7	4.2	<b>2.2</b>	<b>4.3</b>	0.4	0.2
	Kureha Europe Group	1.2	0.9	<b>1.9</b>	<b>1.4</b>	0.7	0.5
	Kureha America Group	2.3	28.6	<b>4.0</b>	<b>38.6</b>	1.7	10.0
	Kureha (Shanghai) Carbon Fiber Materials	0.9	1.4	<b>0.9</b>	<b>2.0</b>	0.0	0.6
	Kureha China Group	6.9	13.7	<b>15.3</b>	<b>33.3</b>	8.4	19.6
	Consolidation adjustments	-9.0	--	<b>-15.2</b>	--	-6.2	--
Total		<b>28.8</b>	<b>--</b>	<b>47.3</b>	<b>--</b>	<b>18.5</b>	<b>--</b>
Specialty Chemicals	Kureha Corp.	10.3	--	<b>14.7</b>	--	4.4	--
	Kureha Trading Group	4.0	--	<b>4.9</b>	--	0.8	--
	Consolidation adjustments	-1.5	--	<b>-2.1</b>	--	-0.6	--
	Total		<b>12.8</b>	<b>--</b>	<b>17.5</b>	<b>--</b>	<b>4.7</b>
Specialty Plastics	Kureha Corp.	14.0	--	<b>13.6</b>	--	-0.4	--
	Kureha Trading	1.7	--	<b>1.7</b>	--	0.0	--
	Kureha Gohsen	2.9	6.0	<b>3.3</b>	<b>6.9</b>	0.4	0.9
	Kureha China Group	0.2	--	<b>0.4</b>	--	0.1	--
	Kureha America Group	1.1	1.3	<b>1.2</b>	<b>2.4</b>	0.1	1.1
	Kureha Europe Group	4.1	6.9	<b>4.6</b>	<b>7.4</b>	0.5	0.5
	Kureha Vietnam	2.1	3.9	<b>2.4</b>	<b>5.1</b>	0.3	1.2
	Consolidation adjustments	-3.1	--	<b>-3.4</b>	--	-0.3	--
Total		<b>22.9</b>	<b>--</b>	<b>23.8</b>	<b>--</b>	<b>0.8</b>	<b>--</b>

# Consolidated Companies (cont'd)

KUREHA CORPORATION

(billions of yen)

		1Q-2Q FY21		1Q-2Q FY22		Change	
		Revenue	Total assets	Revenue	Total assets	Revenue	Total assets
Construction	Kurehanishiki Construction Group	7.2	10.9	<b>6.5</b>	<b>11.0</b>	-0.7	0.1
	Kureha Service Group	1.8	2.4	<b>2.2</b>	<b>1.8</b>	0.4	-0.5
	Consolidation adjustments	-3.5	--	<b>-4.4</b>	--	-0.9	--
	<b>Total</b>	<b>5.5</b>	<b>--</b>	<b>4.2</b>	<b>--</b>	<b>-1.3</b>	<b>--</b>
Other Operations	Kureha Ecology Management Group	6.0	27.8	<b>5.6</b>	<b>28.6</b>	-0.3	0.8
	Kureha Special Laboratory Co.	0.6	0.9	<b>0.6</b>	<b>0.9</b>	0.0	0.1
	Kureha Unyu Group	4.1	5.5	<b>4.1</b>	<b>5.2</b>	-0.0	-0.3
	Kureha Trading	0.0	--	<b>0.0</b>	--	0.0	--
	Kureha Service Group	0.4	1.9	<b>0.4</b>	<b>1.6</b>	-0.0	-0.3
	Kureha Staff Service Co.	0.8	0.7	<b>0.8</b>	<b>0.7</b>	0.0	0.0
	Kureha-Kai Medical Corp.	2.0	3.7	<b>2.1</b>	<b>3.9</b>	0.1	0.2
	Consolidation adjustments	-4.9	--	<b>-4.7</b>	--	0.2	--
<b>Total</b>	<b>9.0</b>	<b>--</b>	<b>8.9</b>	<b>--</b>	<b>-0.1</b>	<b>--</b>	
Kureha Group Total		79.1		<b>101.8</b>		22.7	
(Number of consolidated subsidiaries and affiliates accounted for by equity method)		(30)		(29)*			

\*Kureha sold all its shares held in NANTONG SKT NEW MATERIAL Co., Ltd., an affiliate accounted for by equity method, in July 2022.



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