

# FY2020 Financial Results

KUREHA CORPORATION

May 12, 2021

<b>I. FY2020 Results</b>			
• Overview		3-5	
• Segment results		6-10	
• Financial position		11	
• Cash flow results		12	
• Key indicators		13-14	
<b>II. Consolidated Companies</b>			
• Revenue, total assets		16-17	
<b>III. FY2021 Outlook</b>			
• Overview		19-22	
• Segment forecast		23-27	
• Cash flow forecast		28	
<b>IV. Review of ‘Kureha’s Challenge 2020’</b>			
• KC2020 review			30-34
<b>V. ‘Kureha’s Challenge 2022’ FY2021-2022 Mid-term Management Plan</b>			
• What we do in FY2021-22			36
• Management/Quantitative goals			37
• PGA & PVDF businesses			38-39
• Capital management/ Our basic policy on shareholders’ return			40
<b>VI. ESG Management</b>			
• Advancing ESG initiatives			42-44

# I. **FY2020 Results**

(Period April 1, 2020 – March 31, 2021)

# FY2020 Financial Summary

KUREHA CORPORATION

(in billions of yen except as otherwise indicated)

	FY2019	FY2020	Change YOY
Revenue	142.4	<b>144.6</b>	2.2 (+1.5%)
Core operating profit	16.0	<b>18.9</b>	2.8 (+17.8%)
Adjustments	0.0	<b>0.1</b>	0.0
Other income	13.4	<b>0.9</b>	-12.6
Other expenses	11.4	<b>2.5</b>	-8.9
Operating profit	18.0	<b>17.3</b>	-0.8 (-4.3%)
Financial income	0.5	<b>0.7</b>	0.2
Financial expenses	0.6	<b>0.2</b>	-0.4
Profit before taxes	17.9	<b>17.7</b>	-0.2 (-1.1%)
Profit for the period attributable to owners of the Company	13.7	<b>13.5</b>	-0.2 (-1.6%)
Profit per share (¥)	¥692.61	<b>¥691.33</b>	
Crude oil prices (/bbl)	US\$60	US\$44	
Currency exchange rates: US\$1=	¥108.7	¥106.1	
€1=	¥120.8	¥123.8	
CHN¥=	¥15.6	¥15.7	

## Vs. FY2019

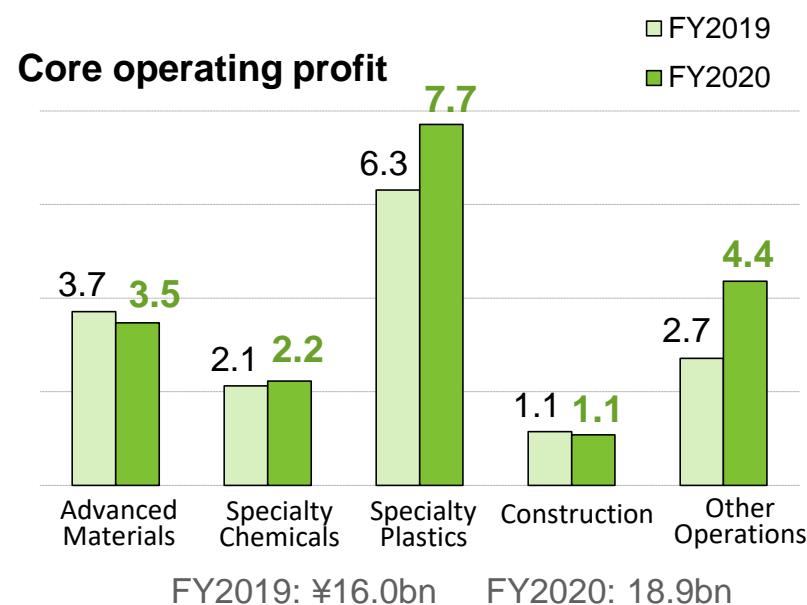
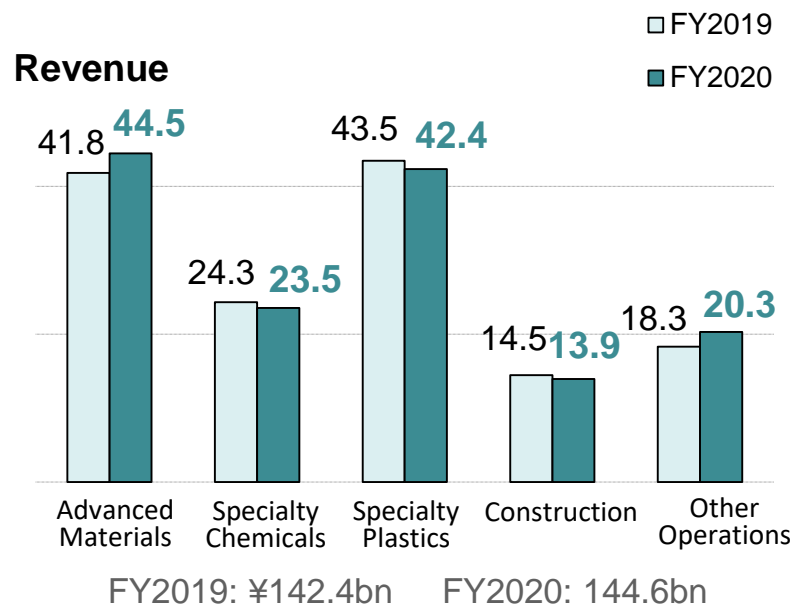
- Revenue growth driven by higher sales volumes in PVDF (LiB cathodes binder), agrochemicals, home products, fishing lines and environment businesses, partially offset by slower PPS (automobile components), PGA (shale oil and gas drilling tools), packaging materials, and industrial chemicals sales
- Core operating profit improved on higher revenue, coupled with lower fuel and raw materials cost and fewer SG&A expenses
- Operating profit declined primarily due to an impairment loss of ¥1.6bn related to the PGA business
- Profit before taxes decreased as a result of lower operating profit
- Profit attributable to the Company decreased as a result of lower profit before taxes

# FY2020 Financial Summary

KUREHA CORPORATION

## Performance by segment

(in billions of yen)



## Factors attributing to core operating profit (vs. FY2019)

AM: PGA-related operating loss (¥3bn) more than offsetting PVDF volume growth in the automobile LiB market

SC: Higher agrochemicals volumes driven by improved demand and additional large-account sales offsetting declines in pharmaceuticals and industrial chemicals

SP: Robust volume growth in home products and fishing lines partially offset by lower packaging materials volumes

CO: Delays and cancellations of private construction projects offsetting steady public construction volumes

OO: Increased low-PCB waste treatment volumes and temporary volume growth related to post-typhoon wastes in the environment engineering business

# FY2020 Financial Summary

KUREHA CORPORATION

(in billions of yen)

<b>FY2019</b>	<b>AM</b>	<b>SC</b>	<b>SP</b>	<b>CO</b>	<b>OO</b>	<b>Total</b>
Revenue	41.8	24.3	43.5	14.5	18.3	142.4
Segment operating profit	3.7	2.1	6.3	1.1	2.7	16.0
Intersegment adjustment						0.0
Other income						13.4
Other expenses						11.4
Operating profit						18.0
Finance income						0.5
Finance costs						0.6
Profit before income tax						17.9
Profit for the period						13.7

Notes:

(FY2019)

- Other income includes a gain from non-current asset sales (¥10.2bn)
- Other expenses include business restructuring cost (¥10.6bn)

<b>FY2020</b>	<b>AM</b>	<b>SC</b>	<b>SP</b>	<b>CO</b>	<b>OO</b>	<b>Total</b>
Revenue	44.5	23.5	42.4	13.9	20.3	144.6
Segment operating profit	3.5	2.2	7.7	1.1	4.4	18.9
Intersegment adjustment						0.1
Other income						0.9
Other expenses						2.5
Operating profit						17.3
Finance income						0.7
Finance costs						0.2
Profit before income tax						17.7
Profit for the period						13.5

(FY2020)

- Other expenses include an impairment loss of non-current assets related to the PGA business (¥1.6bn) and a loss on sale of non-current assets (¥0.4bn)

# Segment Results: Advanced Materials

KUREHA CORPORATION

(billions of yen)

	FY2019	FY2020	Change %
<b>Advanced Materials</b>			
Advanced plastics	27.4	<b>28.8</b>	+5%
Carbon products	5.6	<b>5.3</b>	-5%
Other	8.9	<b>10.3</b>	+17%
<b>Segment revenue</b>	41.8	<b>44.5</b>	+6%
<b>Segment operating profit</b>	3.7	<b>3.5</b>	-6%

[FY2020 market conditions]

Automotive materials	Demand recovered in 3Q following the end of customer-side inventory adjustments
Automotive lithium-ion batteries	Demand recovered and continued to grow after summer, driven by the environment and economic policies in China and Europe; Maritime logistics disruptions prompted some advanced purchase orders
Shale oil and gas	Frac plug demand declined nearly 50% (about 300,000 plugs) from pre-COVID levels
Semiconductor wafers	Semiconductor shortage continued after 3Q; Wafer makers are hesitant and cautious to increase production capacity

Vs. FY2019

## Revenue Up, Operating Profit Down

### Advanced plastics

Revenue increased on higher PVDF (automotive LiB binder) sales volumes, partially offset by slower PGA and PPS sales, while operating profit declined due to PGA-related operating loss and a decrease in equity affiliate earnings related to PPS

### Carbon products

Declines in revenue and profit led by lower carbon fiber sales volumes related to automotive (sliding material) and furnace insulation applications

### Other

Revenue and profit grew on strong adhesives sales

# Segment Results: Specialty Chemicals

KUREHA CORPORATION

(billions of yen)

	FY2019	FY2020	Change %
<b>Specialty Chemicals</b>			
Agrochemicals	5.8	<b>7.1</b>	+23%
Pharmaceuticals	4.9	<b>4.0</b>	-18%
Industrial chemicals	6.9	<b>6.1</b>	-12%
Other	6.7	<b>6.3</b>	-6%
<b>Segment revenue</b>	24.3	<b>23.5</b>	-3%
<b>Segment operating profit</b>	2.1	<b>2.2</b>	+5%

Vs. FY2019

## Revenue Down, Operating Profit Up

### Agrochemicals

Growth in revenue and profit supported by higher fungicide sales volume

### Pharmaceuticals

Profit improved on fewer expenses, despite a decline in revenue

### Industrial chemicals

Revenue and profit reduced by lower sales volumes for both organic and inorganic chemicals

[FY2020 market conditions]

Agrochemicals	Demand improved with favorable weather conditions in Europe and the US
Pharmaceuticals (for kidney failures)	Drug prices decreased 4% due to impact of the 2020 NHI drug price revisions; Weak demand continued due to fewer outpatient visits amid the pandemic; Kremezin fast-dissolving tablets approved for use in South Korea and Taiwan
Industrial chemicals	Demand declined for caustic soda in paper manufacturing and for chlorobenzene in PPS resin production; Caustic soda surplus resulted from a demand surge for PVC resins in 3-4Q



# Segment Results: Specialty Plastics

KUREHA CORPORATION

(billions of yen)

	FY2019	FY2020	Change %
<b>Specialty Plastics</b>			
Home products	21.3	<b>21.8</b>	+3%
Fishing lines	3.0	<b>4.0</b>	+32%
Packaging materials	14.1	<b>11.9</b>	-16%
Other	5.1	<b>4.7</b>	-8%
<b>Segment revenue</b>	43.5	<b>42.4</b>	-3%
<b>Segment operating profit</b>	6.3	<b>7.7</b>	+22%

Vs. FY2019

## Revenue Down, Operating Profit Up

### Home products / Fishing lines

Revenue and profit grew, driven by sales volume growth of 'NEW Krewrap' (home-use wrap film) and 'Seaguar' fishing lines

### Packaging materials

Declines in revenue and profit resulting from lower heat-shrink multilayer film volumes and impact associated with the divestment of the blow-bottle business

[FY2020 market conditions]

Home-use wrap film	Domestic market volumes remained at prior year's levels, despite slower demand after a hike for 'stay-home consumption' in Feb-Mar 2020; NEW Krewrap increased its market share slightly with the launch of an 60 <sup>th</sup> anniversary product
Leisure fishing lines	Recreational fishing increased amid the pandemic; A share of fluoropolymer fishing lines expanded in the US market
Packaging materials	Demand for multilayer shrink film declined due to outdoor dining restrictions in Europe amid the pandemic

# Segment Results: Construction

KUREHA CORPORATION

(billions of yen)

	FY2019	FY2020	Change %
<b>Construction</b>			
Construction	22.4	<b>21.1</b>	-6%
Elimination (Intercompany sale)	-7.9	<b>-7.2</b>	--
<b>Segment revenue</b>	14.5	<b>13.9</b>	-4%
<b>Segment operating profit</b>	1.1	<b>1.1</b>	-6%

Vs. FY2019

## Revenue Down, Operating Profit Down

### Construction

Revenue and profit declined as a result of cancellations and delays for private construction projects, while construction volumes in the public sector remained at prior year's levels

# Segment Results: Other Operations

KUREHA CORPORATION

(billions of yen)

	FY2019	FY2020	Change %
<b>Other Operations</b>			
Environmental engineering	12.8	<b>14.9</b>	+17%
Logistics	8.2	<b>7.8</b>	-5%
Hospital operations	4.0	<b>4.0</b>	-1%
Others	2.2	<b>2.4</b>	+11%
Elimination (Intercompany sale)	-8.9	<b>-8.9</b>	--
<b>Segment revenue</b>	18.3	<b>20.3</b>	+11%
<b>Segment operating profit</b>	2.7	<b>4.4</b>	+61%

Vs. FY2019

## Revenue Up, Operating Profit Up

### Environmental engineering

Revenue and profit increased on volumes growth related to low-level PCB wastes and post-typhoon wastes in Fukushima

### Logistics

Revenue and profit on par with prior year

### Hospital operations

Declines in revenue and profit

[FY2020 market conditions]

Low-level PCB wastes	Private contracts expanded in the market as three private companies were newly certified to treat and dispose wastes containing PCB greater than 5000mg/kg in April 2020 <a href="http://www.env.go.jp/recycle/poly/facilities.html">http://www.env.go.jp/recycle/poly/facilities.html</a>
Post-disaster wastes	Demand temporarily increased for disposal and management of post-disaster wastes related to the October 2019 typhoon (temporary growth factor)

# Financial Position

KUREHA CORPORATION

## Assets

	Mar. 31 2020	Mar. 31 2021	Change
Cash and cash equivalents	7.3	<b>17.8</b>	10.6
Trade and other receivables	28.3	<b>28.2</b>	-0.1
Inventories	38.2	<b>36.5</b>	-1.8
Other current assets	5.2	<b>3.7</b>	-1.4
<b>Total current assets</b>	79.0	<b>86.2</b>	7.2
Property, plant and equipment	119.8	<b>120.2</b>	0.4
Intangible assets	0.8	<b>2.2</b>	1.4
Investments and other assets	47.3	<b>48.3</b>	1.1
<b>Total non-current assets</b>	167.9	<b>170.7</b>	2.8
<b>Total assets</b>	246.9	<b>256.9</b>	10.0

## Liabilities and Equity

(billions of yen)

	Mar. 31 2020	Mar. 31 2021	Change
Trade and other payables	19.4	<b>19.2</b>	-0.2
Interest-bearing debt	37.3	<b>29.5</b>	-7.8
Provisions	7.8	<b>7.8</b>	-0.0
Other liabilities	15.7	<b>14.9</b>	-0.8
<b>Total liabilities</b>	<b>80.3</b>	<b>71.4</b>	<b>-8.9</b>
Shareholders' equity	18.2	<b>18.2</b>	-
Capital surplus	15.0	<b>14.9</b>	-0.1
Less: Treasury stock	-8.7	<b>-8.7</b>	-0.0
Retained earnings	135.9	<b>154.2</b>	18.2
Other components of equity	4.6	<b>5.3</b>	0.7
Non-controlling interests	1.6	<b>1.7</b>	0.1
<b>Total equity</b>	<b>166.6</b>	<b>185.5</b>	<b>18.9</b>
<b>Total liabilities and equity</b>	246.9	<b>256.9</b>	10.0

# Cash Flow

KUREHA CORPORATION

(billions of yen)

	FY2019	FY2020	Change
Profit before income tax	17.9	<b>17.7</b>	-0.2
Depreciation	12.1	<b>11.7</b>	-0.4
Other	-14.9	<b>-2.7</b>	12.2
<b>Cash flow from operating activities</b>	<b>15.2</b>	<b>26.7</b>	<b>11.6</b>
<b>Cash flow from investing activities</b>	<b>5.5*</b>	<b>-3.9</b>	<b>-9.4</b>
<b>Free cash flow</b>	<b>20.6</b>	<b>22.8*</b>	<b>2.2</b>
<b>Cash flow from financing activities</b>	<b>-19.4</b>	<b>-12.5</b>	<b>6.8</b>
Effect of exchange rate changes on cash and cash equivalents	-0.0	<b>0.3</b>	0.3
Increase/decrease in cash and cash equivalents	1.3	<b>10.6</b>	9.3
Cash and cash equivalents at beginning of period	6.0	<b>7.3</b>	1.3
Cash and cash equivalents at end of period	7.3	<b>17.8</b>	10.6

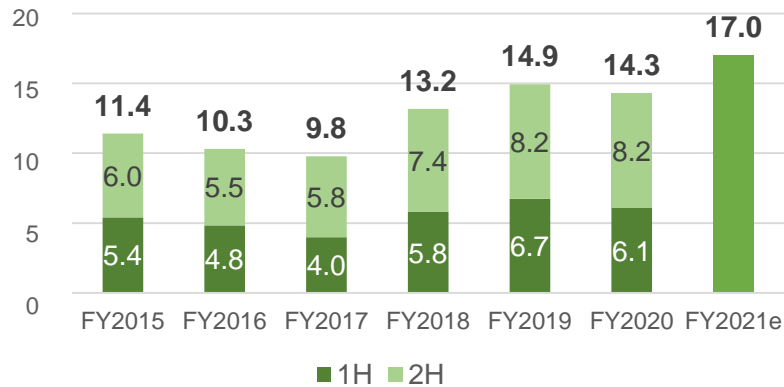
\*Notes -FY2019 Cash flow from investing activities includes a gain on the sale of noncurrent assets (¥10.8bn)  
 -FY2020 Free cash flow reflects an increase in core operating profit and a decrease in inventory

# Key Indicators

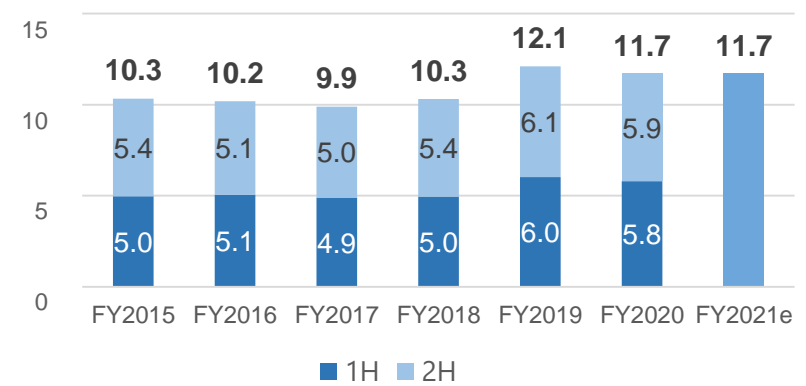
KUREHA CORPORATION

(billions of yen)

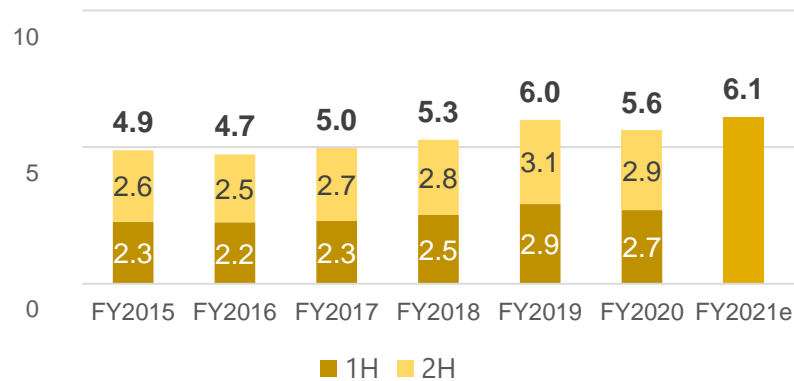
Capital investment



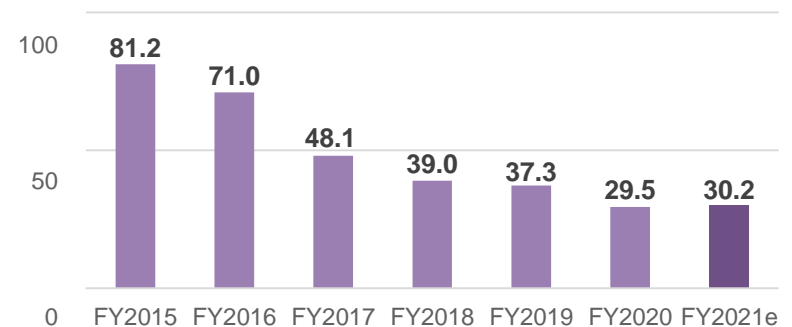
Depreciation expenses



R&amp;D expenditures



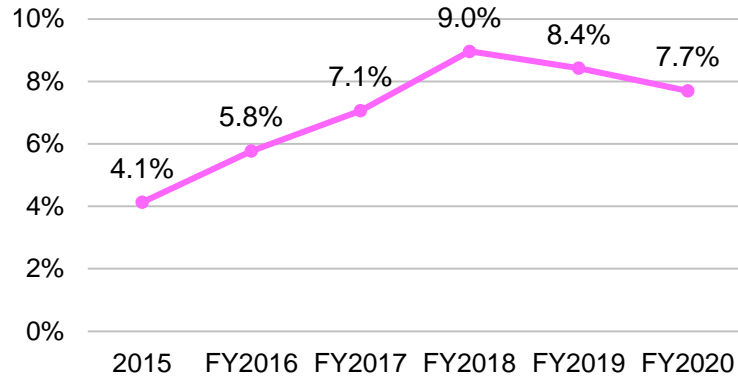
Interest-bearing debt



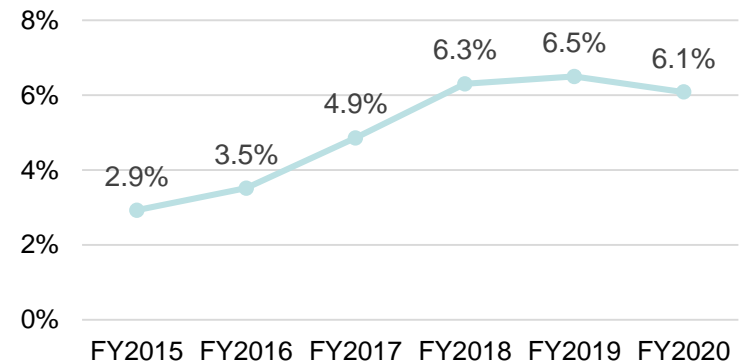
# Key Indicators

KUREHA CORPORATION

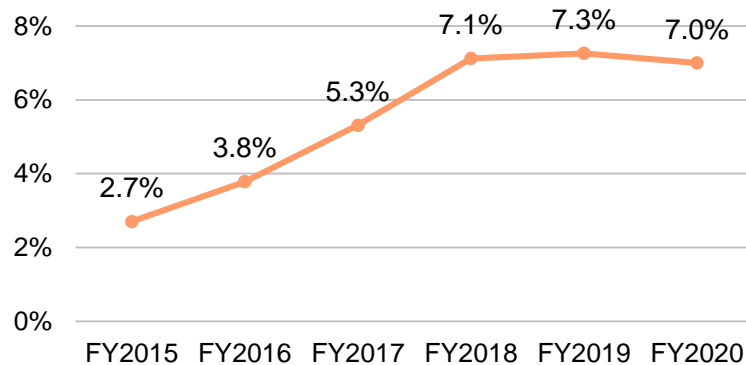
## ROE



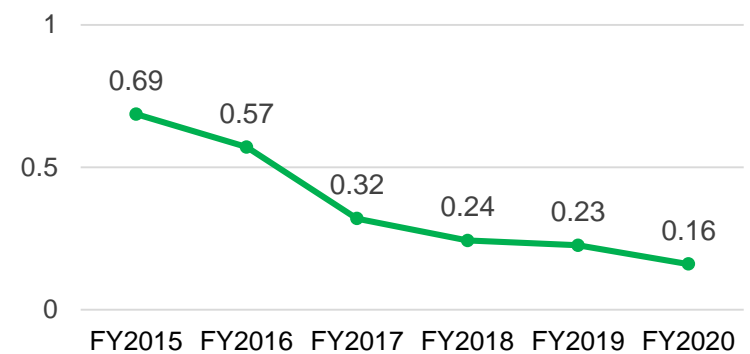
## ROIC



## ROA



## DE ratio



## II. Consolidated Companies



# Consolidated Companies: Revenue, Assets

KUREHA CORPORATION

(billions of yen)

		FY2019		FY2020		Change	
		Revenue	Total assets	Revenue	Total assets	Revenue	Total assets
Kureha Corporation		76.3	192.3	<b>74.2</b>	<b>199.1</b>	-2.1	6.8
Kureha Trading Group		21.6	12.3	<b>23.2</b>	<b>13.3</b>	1.6	1.0
Advanced Materials	Kureha Corporation	30.6	--	<b>29.8</b>	--	-0.9	--
	Kureha Trading Group	9.1	--	<b>11.9</b>	--	2.8	--
	Kureha Extron	3.0	4.6	<b>2.9</b>	<b>4.2</b>	-0.1	-0.4
	Kureha Europe Group	2.0	0.9	<b>1.8</b>	<b>1.1</b>	-0.2	0.1
	Kureha America Group	7.5	26.9	<b>6.7</b>	<b>28.2</b>	-0.8	1.4
	Kureha (Shanghai) Carbon Fiber Materials	1.1	1.2	<b>1.1</b>	<b>1.5</b>	0.0	0.2
	Kureha China Group	5.7	9.2	<b>7.0</b>	<b>10.6</b>	1.3	1.4
	Consolidation adjustments	-17.2	--	<b>-16.7</b>	--	--	--
Total		<b>41.8</b>	--	<b>44.5</b>	--	<b>2.6</b>	--
Specialty Chemicals	Kureha Corporation	19.8	--	<b>19.1</b>	--	-0.7	--
	Kureha Trading	7.4	--	<b>7.0</b>	--	-0.4	--
	Consolidation adjustments	-2.8	--	<b>-2.5</b>	--	--	--
	Total		<b>24.3</b>	--	<b>23.5</b>	--	<b>-0.8</b>
Specialty Plastics	Kureha Corporation	25.9	--	<b>25.4</b>	--	-0.5	--
	Kureha Trading	5.1	--	<b>4.3</b>	--	-0.8	--
	Kureha Gohsen	4.2	5.1	<b>4.7</b>	<b>5.9</b>	0.5	0.9
	Kureha China Group	0.1	--	<b>0.2</b>	--	0.1	--
	Kureha America Group	1.6	1.0	<b>2.1</b>	<b>1.3</b>	0.5	0.4
	Kureha Europe Group	8.5	7.3	<b>7.6</b>	<b>7.1</b>	-0.9	-0.2
	Kureha Vietnam	3.1	3.0	<b>3.1</b>	<b>3.5</b>	0.0	0.5
	Consolidation adjustments	-5.1	--	<b>-5.1</b>	--	--	--
Total		<b>43.5</b>	--	<b>42.4</b>	--	<b>-1.1</b>	--

# Consolidated Companies

KUREHA CORPORATION

(billions of yen)

		FY2019		FY2020		Change	
		Revenue	Total assets	Revenue	Total assets	Revenue	Total assets
Construction	Kureha Nishiki Group	19.9	11.6	<b>17.4</b>	<b>11.9</b>	-2.5	0.3
	Kureha Engineering	2.5	1.9	<b>3.7</b>	<b>2.0</b>	1.2	0.1
	Consolidation adjustments	-7.9	--	<b>-7.2</b>	--	--	--
	<b>Total</b>	<b>14.5</b>	<b>--</b>	<b>13.9</b>	<b>--</b>	<b>-0.5</b>	<b>--</b>
Other Operations	Kureha Ecology Mgt Group	11.5	25.9	<b>13.7</b>	<b>29.4</b>	2.2	3.5
	Kureha Unyu Group	8.2	5.7	<b>7.8</b>	<b>5.8</b>	-0.4	0.0
	Kureha Trading	0.1	--	<b>0.0</b>	--	-0.0	--
	Kureha Service Group	3.4	3.1	<b>3.6</b>	<b>3.7</b>	0.2	0.6
	Kureha-Kai Medical Corp.	4.0	3.5	<b>4.0</b>	<b>3.6</b>	0.0	0.1
	Consolidation adjustments	-8.9	--	<b>-8.9</b>	--	--	--
<b>Total</b>	<b>18.3</b>	<b>--</b>	<b>20.3</b>	<b>--</b>	<b>2.0</b>	<b>--</b>	
<b>Kureha Group Total</b>		142.4	246.9	<b>144.6</b>	<b>256.9</b>	2.2	10.0
<i>Number of consolidated subsidiaries</i>		28		<b>28</b>			
<i>Number of equity-method affiliates</i>		2		<b>2</b>			

## **Ⅲ. FY2021 Outlook**

(Period April 1, 2021 – March 31, 2022)

# FY2021 Forecast

KUREHA CORPORATION

(in billions of yen except as otherwise indicated)

	FY2020	FY2021e			Change YoY
		1H	2H	Full-year	
Revenue	144.6	74.5	75.5	<b>150.0</b>	5.4 (+3.8%)
Core operating profit	18.9	7.5	8.5	<b>16.0</b>	-2.9 (-15.1%)
Adjustments	0.1				-0.1
Other income	0.9	0.1	0.2	<b>0.3</b>	-0.5
Other expenses	2.5	0.1	1.2	<b>1.3</b>	-1.2
Operating profit	17.3	7.5	7.5	<b>15.0</b>	-2.3 (-13.1%)
Financial income	0.7	0.1	0.2	<b>0.3</b>	-0.4
Financial expenses	0.2	0.1	0.2	<b>0.3</b>	0.1
Profit before taxes	17.7	7.5	7.5	<b>15.0</b>	-2.7 (-15.5%)
Profit attributable to owners of the Company	13.5	5.7	5.0	<b>10.7</b>	-2.8 (-20.7%)
Profit per share (¥)	¥691.33			<b>¥548.22</b>	
Crude oil prices (US\$/bbl)	\$44	\$60	\$55		
Currency exchange rates: US\$1=	¥106.1			¥107	
€1=	¥123.8			¥128	
CHN¥=	¥15.7			¥16.5	

## Vs. FY2020

- Revenue expected to grow on sales volume growth in the Advanced Materials segment, partially offset by slower construction business and the absence of post-typhoon waste treatment in the environment engineering business
- Operating profit will decrease primarily due to unfavorable product mix, a rise in raw materials and fuel prices, and higher SG&A expenses
- Profit before income tax to decrease as a result of lower operating profit
- Profit attributable to the Company decreased as a result of lower profit before tax

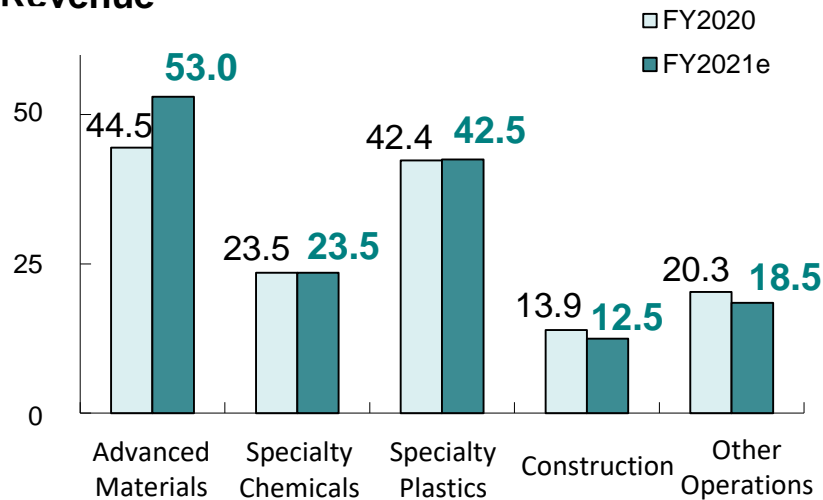
# FY2021 Forecast

KUREHA CORPORATION

## Segment performance forecast (Vs. FY2020)

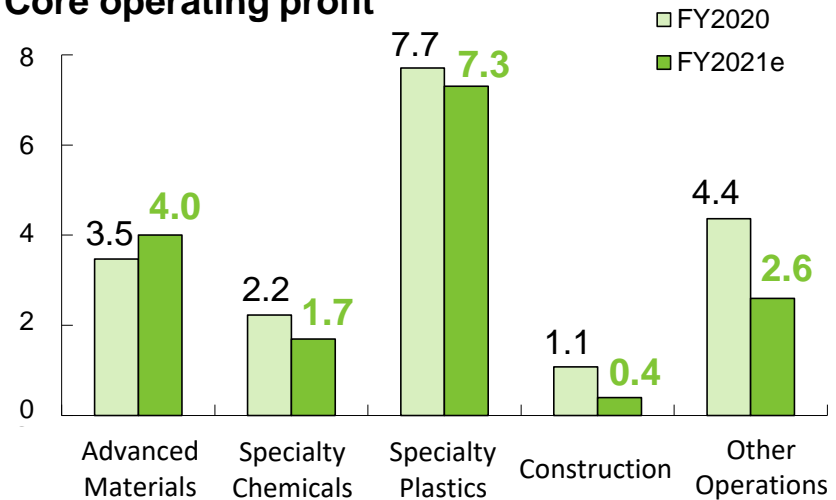
(in billions of yen)

### Revenue



FY2020: ¥144.6bn FY2021e: 150.0bn

### Core operating profit



FY2020: ¥18.9bn FY2021e: 16.0bn

### Factors attributing to core operating profit (vs. FY2020)

- AM: Narrowed PGA-related operating loss, improved profit in PPS domestic business operations
- SC: Lower agrochemicals volumes, impact of the mandatory drug price revisions
- SP: Lower sales volumes and higher expenses in home products
- CO: Fewer construction projects in the private sector
- OO: Lower post-typhoon waste treatment volumes

# FY2021 Forecast

KUREHA CORPORATION

(in billions of yen)

<b>FY2020</b>	<b>AM</b>	<b>SC</b>	<b>SP</b>	<b>CO</b>	<b>OO</b>	<b>Total</b>
Revenue	44.5	23.5	42.4	13.9	20.3	144.6
Segment operating profit	3.5	2.2	7.7	1.1	4.4	18.9
Intersegment adjustment						0.1
Other income						0.9
Other expenses						2.5
Operating profit						17.3
Finance income						0.7
Finance costs						0.2
Profit before income tax						17.7
Profit for the period						13.5

(Notes)

(FY2020)

- Other expenses include an impairment loss of ¥1.6bn on non-current assets and a loss of ¥0.4bn on sales of non-current assets

<b>FY2021e</b>	<b>AM</b>	<b>SC</b>	<b>SP</b>	<b>CO</b>	<b>OO</b>	<b>Total</b>
Revenue	53.0	23.5	42.5	12.5	18.5	150.0
Segment operating profit	4.0	1.7	7.3	0.4	2.6	16.0
Intersegment adjustment						
Other income						0.3
Other expenses						1.3
Operating profit						15.0
Finance income						0.3
Finance costs						0.3
Profit before income tax						15.0
Profit for the period						10.7

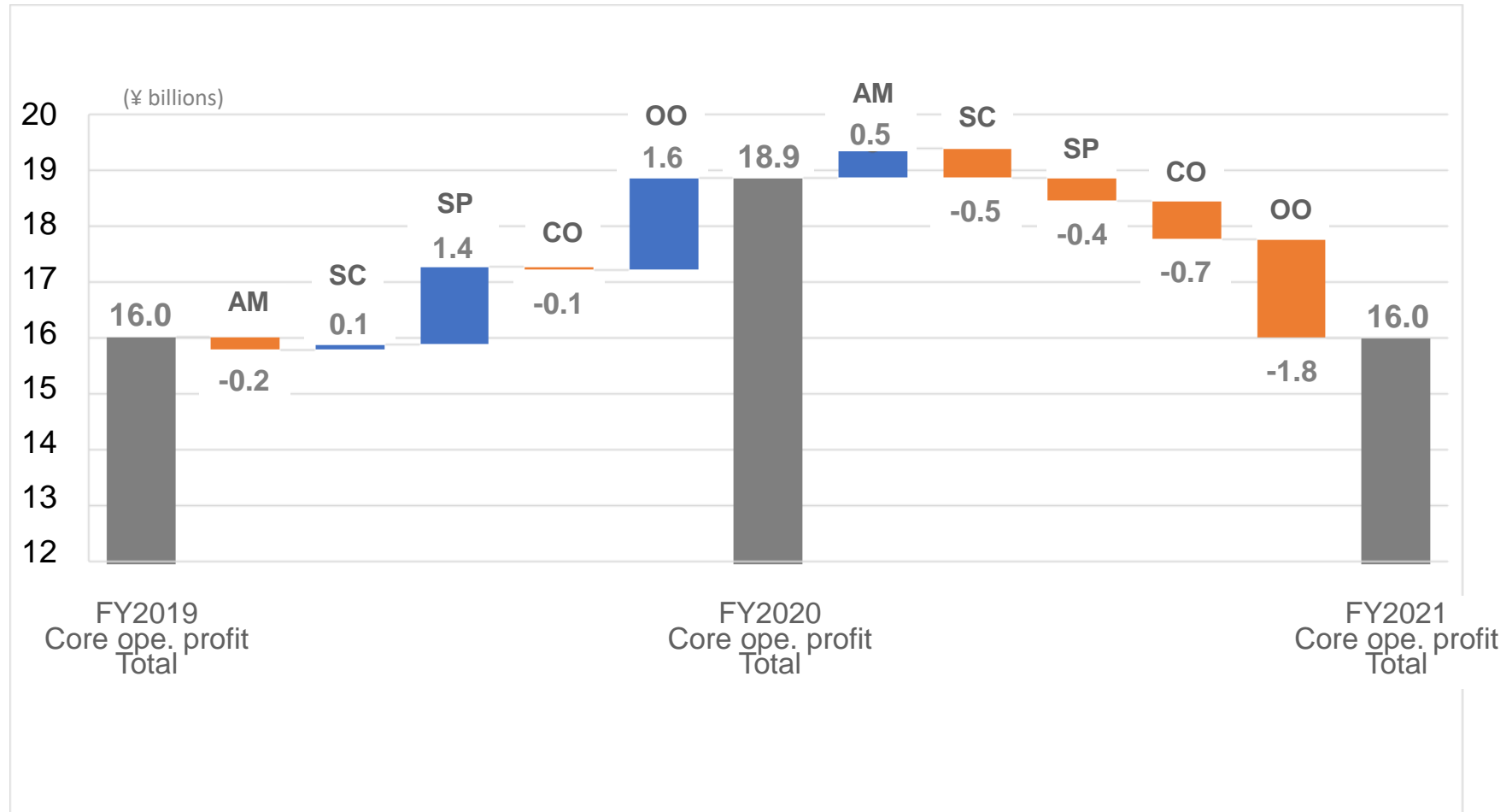
(FY2021)

- Other expenses include an one-time increase of ¥0.55bn in retirement benefit obligations associated with the extension of retirement age

# FY2021 Forecast

KUREHA CORPORATION

## FY2020-2021e Core operating profit analysis



# FY2021 Forecast: Advanced Materials

KUREHA CORPORATION

(billions of yen)

	FY2020	FY2021e	Change %
<b>Advanced Materials</b>			
Advanced plastics	28.8	<b>36.8</b>	+28%
Carbon products	5.3	<b>4.8</b>	-9%
Other	10.3	<b>11.4</b>	+11%
<b>Segment revenue</b>	44.5	<b>53.0</b>	+19%
(1 <sup>st</sup> half year)	(18.6)	(27.0)	(+45%)
<b>Segment operating profit</b>	3.5	<b>4.0</b>	+15%
(1 <sup>st</sup> half year)	(-0.8)	(1.6)	

Vs. FY2020

## Revenue Up, Operating Profit Up

### Advanced plastics

Revenue and profit expected to improve on higher PGA and PPS sales volumes:

- PGA frac plug sales expanding in mid-/high-temperature shale fields as oil production rebounds
- PPS volume growth bolstered by capacity enhancements in Jan. 2021
- PVDF likely to maintain prior year's profit levels, despite slower volume growth due to limited production capacity and higher raw materials and fuel cost

### Carbon products

Operating profit to decrease on flat revenue due to unfavorable product mix and higher cost

### Other

Revenue will improve on higher adhesive volumes, while profit remains on par with prior year due to unfavorable product mix



# FY2021 Forecast: Specialty Chemicals

KUREHA CORPORATION

(billions of yen)

	FY2020	FY2021e	Change %
<b>Specialty Chemicals</b>			
Agrochemicals	7.1	<b>6.7</b>	-6%
Pharmaceuticals	4.0	<b>4.2</b>	+4%
Industrial chemicals	6.1	<b>6.5</b>	+7%
Other	6.3	<b>6.1</b>	-4%
<b>Segment revenue</b> (1 <sup>st</sup> half year)	23.5 (11.1)	<b>23.5</b> <b>(11.8)</b>	-0% (+7%)
<b>Segment operating profit</b> (1 <sup>st</sup> half year)	2.2 (0.9)	<b>1.7</b> <b>(0.9)</b>	-24% (+2%)

Vs. FY2020

## Revenue Levelling Out, Operating Profit Up

### Agrochemicals

Revenue likely to decrease in competitive market conditions, while operating profit will decline due to higher R&D cost

### Pharmaceuticals

Revenue expected to grow with the launch of Kremezin fast-dissolving tablets in overseas markets and their sales expansion in Japan, while profit will decrease primarily due to impact of the mandatory drug price revisions

### Industrial chemicals

Increases in revenue and profit driven by improved demand for organic and inorganic chemicals

# FY2021 Forecast: Specialty Plastics

KUREHA CORPORATION

(billions of yen)

	FY2020	FY2021e	Change %
<b>Specialty Plastics</b>			
Home products	21.8	<b>21.5</b>	-1%
Fiber products	4.0	<b>4.0</b>	+1%
Packaging materials	11.9	<b>11.7</b>	-1%
Other	4.7	<b>5.3</b>	+13%
<hr/>			
<b>Segment revenue</b> (1 <sup>st</sup> half year)	42.4 (21.1)	<b>42.5</b> <b>(21.0)</b>	0% (-0%)
<b>Segment operating profit</b> (1 <sup>st</sup> half year)	7.7 (3.7)	<b>7.3</b> <b>(3.7)</b>	-5% (-1%)

Vs. FY2020

## Revenue Up, Operating Profit Up

### Home products / Fiber products

- A slight decrease in revenue from home products and flat revenue growth for fishing lines
- Operating profit to decrease primarily due to higher raw materials and fuel cost and increased expenses

### Packaging materials

Revenue to decline slightly and profit to level out as higher multilayer shrink film volumes offset lower PVDC film volumes in East Asia markets

# FY2021 Forecast: Construction

KUREHA CORPORATION

(billions of yen)

	FY2020	FY2021e	Change %
<b>Construction</b>			
Construction	21.1	<b>20.0</b>	-5%
Elimination (Inter-company sale)	-7.2	<b>-7.5</b>	--
<b>Segment revenue</b> (1 <sup>st</sup> half year)	13.9 (5.8)	<b>12.5</b> <b>(5.7)</b>	-10% (-2%)
<b>Segment operating profit</b> (1 <sup>st</sup> half year)	1.1 (0.5)	<b>0.4</b> <b>(0.1)</b>	-63% (-78%)

Vs. FY2020

## Revenue Down, Operating Profit Down

### Construction

Revenue and operating profit to decrease due to lower construction volumes in the private sector, intensified competition and higher construction cost

# FY2021 Forecast: Other Operations

KUREHA CORPORATION

(billions of yen)

	FY2020	FY2021e	Change %
<b>Other Operations</b>			
Environmental engineering	14.9	<b>13.0</b>	-13%
Logistics	7.8	<b>7.9</b>	+1%
Hospital operations	4.0	<b>4.1</b>	+3%
Others	2.4	<b>2.3</b>	-5%
Elimination (Inter-company sale)	-8.9	<b>-8.8</b>	--
<b>Segment revenue</b> (1 <sup>st</sup> half year)	20.3 (9.5)	<b>18.5</b> <b>(9.0)</b>	-9% (-5%)
<b>Segment operating profit</b> (1 <sup>st</sup> half year)	4.4 (2.0)	<b>2.6</b> <b>(1.2)</b>	-40% (-40%)

Vs. FY2020

## Revenue Down, Operating Profit Down

### Environmental engineering

Revenue and profit expected to decrease due to a lack of post-typhoon waste treatment projects seen in the previous year

### Logistics, Hospital operations

Revenue will increase slightly while operating profit will remain on par with prior year in logistics and hospital operation businesses

# Cash Flow Forecast

KUREHA CORPORATION

(billions of yen)

	FY2020	FY2021e	Change
Profit before income tax	17.7	15.0	-2.7
Depreciation	11.7	11.7	0.0
Other	-2.7	-8.0	-5.3
<b>Cash flow from operating activities</b>	<b>26.7</b>	<b>18.7</b>	<b>-8.0</b>
<b>Cash flow from investing activities</b>	<b>-3.9</b>	<b>-17.3</b>	<b>-13.4</b>
<b>Free cash flow</b>	<b>22.8</b>	<b>1.4</b>	<b>-21.4</b>
<b>Cash flow from financing activities</b>	<b>-12.5</b>	<b>-3.1</b>	<b>9.4</b>
Effect of exchange rate changes on cash and cash equivalents	0.3	--	-0.3
Increase/decrease in cash and cash equivalents	10.6	-1.7	-12.3
Cash and cash equivalents at beginning of period	7.3	17.8	10.6
Cash and cash equivalents at end of period	17.8	16.1	-1.7

\*Notes: FY2021 estimated cash flow from investing activities includes proceeds from the sale of investment securities (¥9.6bn)

# **IV. Review of ‘Kureha’s Challenge 2020’**

(FY2019-2020 Mid-term Management Plan)

## 'Kureha's Challenge 2020'

- *Product Differentiation and New Business Creation* -

### Management Goals

- Expand the PGA business and generate profit
- Strengthen the PVDF business for further expansion
- Optimize business models for existing businesses
- Globally explore and develop new businesses
- Strengthen management foundations

FY2018-2020 is a period to solidify the foundation for Kureha's future expansion

### Strategic direction

As a company driven by innovation, Kureha will develop differentiated products in the field of specialty chemicals and become a high value-added enterprise that continually contributes to the global society

(billions of yen)

	KC2020 targets	FY2020 results	Change YOY
Revenue	157.0	<b>144.6</b>	-8%
Core operating profit	18.0	<b>18.9</b>	+5%
Operating profit	18.0	<b>17.3</b>	-4%
Operating profit margin	11.5%	<b>11.9%</b>	
Profit for the period attributable to owners of the Company	14.0	<b>13.5</b>	-4%
ROA	Approx. 7.1%	<b>7.0%</b>	
ROE	8.0%	<b>7.7%</b>	

## Revenue and operating profit fell below KC2020 targets:

### Advanced Materials

- Achieved operating profit target for PVDF, despite a shortfall of volumes in the automobile LiB market due to China's revised NEV subsidy policies
- Delays in the development of PGA frac plugs used in ultra-low-temperature shale fields
- PGA sales volume target not achieved due to slower oil production in the pandemic
- Recorded an impairment loss of ¥1.6bn related to PGA due to changes in the business circumstance

### Specialty Chemicals

- A slower-than-expected decline in agrochemical demand

### Specialty Plastics

- Achieved profit targets for home products and fishing lines
- Not achieved sales and profit targets for packaging materials

### Other

- Earnings grew in the environment engineering business due to increased volumes of low-PCB wastes and temporary post-disaster wastes

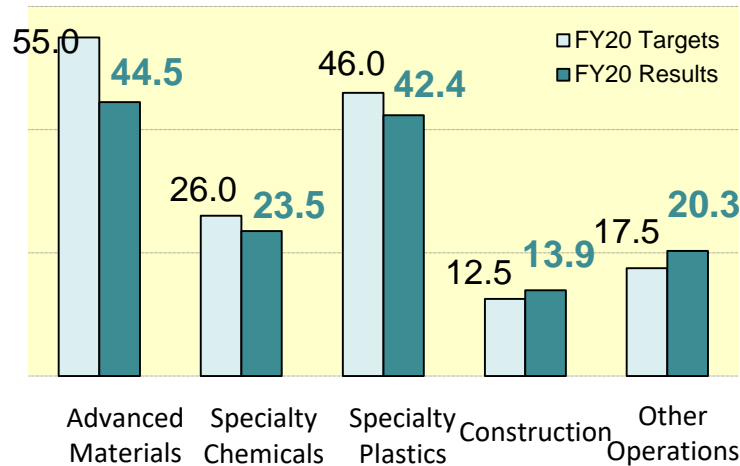
- Advanced Materials businesses, which key markets include automotive and shale oil and gas, were severely impacted by the economic slowdown during the pandemic and failed to meet targets at all profit levels
- Overall core operating profit reached its target due to an increase in value-added product volumes, cost reduction efforts, and increased earnings in the environmental engineering business
- Operating profit fell short of target primarily due to an impairment loss related to the PGA business



## Segment performance (FY2020 results vs. targets)

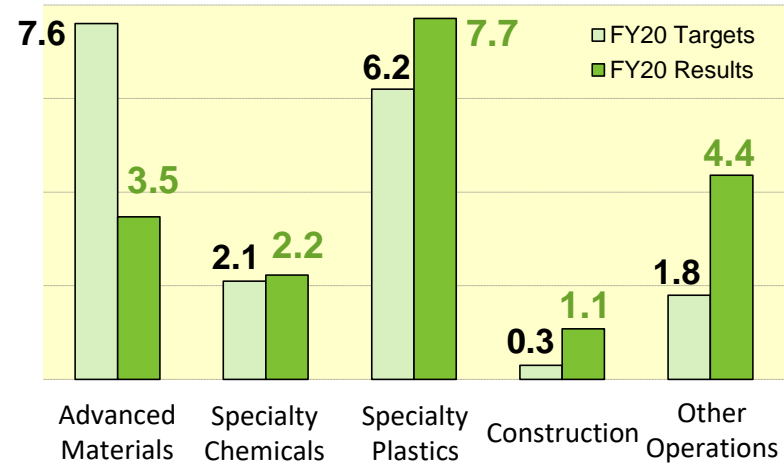
(billions of yen)

## Revenue



FY2020 Targets: ¥157.0bn Results: ¥144.6bn

## Core operating profit



FY2020 Targets: ¥18.0bn Results: ¥18.9bn

Factors attributing to core operating profit (vs. FY2020 targets)

- AM: PGA and PPS fell far short of profit targets more than offsetting profit achieved for PVDF
- SC: Improved margin in pharmaceuticals and steady volume growth in agrochemicals partially offset by a shortfall in industrial chemicals
- SP: Home products and fishing lines exceeding sales and profit targets partially offset by a shortfall in packaging materials
- CO: Higher construction volumes in the public sector and fewer expenses
- OO: Increased low-PCB waste treatment and temporary volume growth related post-typhoon waste treatment

## Priority Measures

### 1. PGA: Business expansion and profit generation

- Generate earnings
- Launch ultra low-temp PGA frac plugs to accelerate sales expansion in the US
- Launch market development in China

## Progress and Challenges

- Delays in the development of PGA frac plugs for ultra low-temperature application
- Market development in China lagged behind schedule
- Adopted flexible pricing strategies and expanded use of PGA frac plugs for full-bore application in high-/mid-temp shale fields
- Secured market access by launching intermediate non-PGA plugs in ultra-low temp shale fields

### 2. PVDF: Strengthening for further business expansion

2000tpa capacity Increase at Iwaki Factory  
(→ Commercial production started in Jan. 2019)

- Debottlenecking at the Iwaki Factory facility to be completed in FY2021
- Construction plan for an additional production facility to be finalized and construction scheduled to start in FY2021

### 3. Optimization of existing business models

PPS: Start up an additional production facility in Feb. 2021

Home products: Maintain steady profit and develop new markets in East Asia

Packaging materials: Reconstruct its business strategy

- Completed the construction of an additional PPS facility in Jan. 2021 and will start commercial production shortly
- Needs to further collaborate with business partners to address changes in the PPS market

• Achieved profit growth for NEW Krewrap

- Completed the transfer of the blow bottle business
- Needs to respond to changes in the packaging materials market

## Priority Measures

### 4. Exploration and development of new businesses

Explore new business themes in Japan and overseas

Invest resources to promote downstream business development and accelerate technology innovation

Speed up the launch of new businesses by leveraging external resources

### 5. Strengthening of management foundations

Improve management efficiency and strengthen the Group-wide management system

Enhance efficiency and productivity via the Reform Project; FY2019-2020 cost reduction target: ¥1.5bn

Improve operational efficiency with digital technologies; promote smart operation models in manufacturing and R&D divisions

Develop products to address social/environment issues, with a view to fulfilling the SDGs

Develop human resources for business globalization and new business creation

## Progress and Challenges

- Collaborative projects continuing with multiple start-up companies
- Invested additional resources in the development of new agrochemicals and PVDF products
- Needs to review some new business themes due to changing market conditions (emerging competitors, earnings prospects, etc.)

- Expanded the environment business
- Completed the restructuring of several consolidated companies in Japan

- Achieved cost reduction twice more than originally planned through the Reform Project

- Still in process of transferring more personnel into strategic divisions

- Needs to further improve individual IT skills to promote digital transformation

- Needs to address global environment challenges including carbon neutrality

- Completed labor management consultations regarding a new personnel system

## **V. ‘Kureha’s Challenge 2022’**

**FY2021-2022 Mid-term Management Plan**

**(A Final stage of Kureha’s Challenge extension plan)**

# Kureha's Challenge 2022

KUREHA CORPORATION

## FY2021-2022: What We Do..

- A 'follow-through, uncompromising' stance (Kureha's culture)→ will complete the measures remaining from the previous mid-term management plan
- Will embody and clarify a future vision of Kureha Group and formulate an action plan to fulfill this vision from a medium-/long-term perspective
- Will strenuously carry out priority measures set out in 'Kureha's Challenge 2022'

### Environment & Social Trends Around Us..

- Accelerating climate change • Transition to zero waste society • Carbon neutrality • Marine plastic pollution • Global population growth & aging society • Food shortages and polluted water resources • Improved living standards and advanced medical care
- Changing individual life styles • Globalization and diversity • Digitalization and social network • Increasing geopolitical conflicts (trade wars)

**Strategic direction:**  
**Kureha wants to be..**  
**'A high-value added enterprise that develops differentiated products in the field of specialty chemicals and continually contribute to society'**

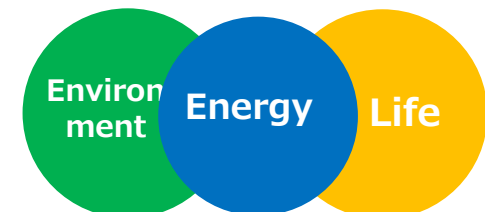
### Areas we can offer solutions to:

- Mobility market: lightweight, high performance and low carbon solutions
- Materials to reduce environmental load
- Carbon neutrality and zero emission
- Sustainable food production and food loss reduction
- Chemical recycling

**Action plan to fulfill our future vision**

### 'Kureha's Challenge 2022'

- Commit to achieve four management goals
- Achieve quantitative goals set on a year-by-year basis reflecting impact of the pandemic



# Kureha's Challenge 2022

KUREHA CORPORATION

## Management Goals and Priority Measures

### Expansion of Advanced Materials Businesses

- Solidify the foundation for the PGA business
- Expand the PVDF business
- Improve profitability in the PPS business
- Establish new business models for Advanced Materials businesses

### Optimization of Existing Businesses

- Review business strategies and growth measures in response to changes in the business environment (carbon products, pharmaceuticals, agrochemicals)
- Increase earnings in the home products business
- Revise business strategies for packaging materials
- Develop new applications for existing products

### Identification and Development of New Businesses

- Develop and commercialize environmental load reduction technologies to contribute to society
- Accelerate pipeline projects to develop new products
- Create new businesses with integrated in-house and external technologies

### Strengthening Management Foundations

- Implement a new personnel system (further emphasizes role-/performance-based compensations and gradually extend retirement age to 65)
- Further strengthen production technology and cost competitiveness
- Strengthen IT-related human resources and promote digitalization
- Strengthen ESG management with a view to fulfilling the SDGs and achieving carbon neutrality

## Quantitative Goals

*\*Quantitative goals are set on a year-by-year basis due to uncertainties related to the economic impact of the pandemic*

**FY2021**
**Revenue**  
¥150bn

**Operating profit**  
¥15bn

**Net profit**  
¥10.7bn

**Capital investment**  
¥17bn

**Depreciation**  
¥11.7bn

**R&D expenditures**  
¥6.1bn

# PGA Business

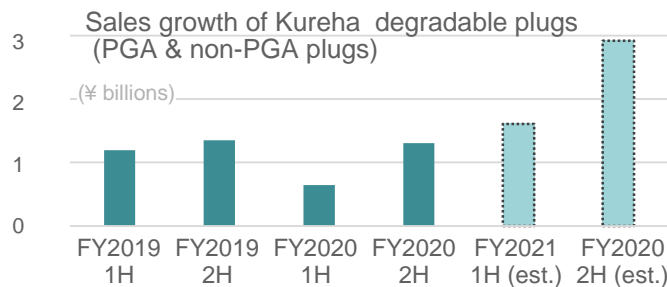
KUREHA CORPORATION

## FY2020: ¥3.0bn in operating loss, ¥1.6bn impairment loss on manufacturing facilities

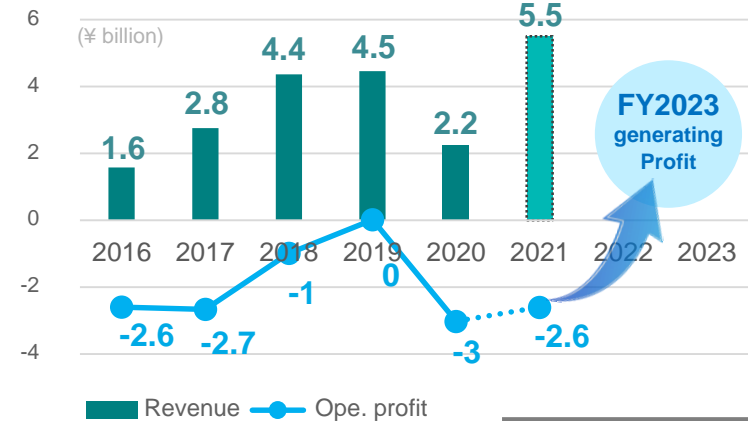
- Frac plug market volumes decreased by half from pre-pandemic levels due to plunging oil prices and a sharp drop in shale oil production
- Sales of Kureha original PGA frac plug grew after 3Q, driven by flexible pricing and increased full-bore applications (use for an entire wellbore) by major accounts, while stock shapes sales were slow due to customer-side inventory adjustments
- Recorded a ¥0.33bn loss on retirement of inventories (included in the above operating loss) and an impairment loss of ¥1.6bn (as 'other expenses') after re-valuing PGA-related non-current assets in the light of changing business conditions and ongoing product development

## FY2021: Reducing operating loss to 2.6bn

- Will continue to execute measures to expand volume growth but expect to reduce operating loss marginally by ¥4bn due to lower prices and higher cost related to inventory withdrawals
- Aim to generate profit in and after FY2023



## Revenue & Operating profit



Action 1

Action 2

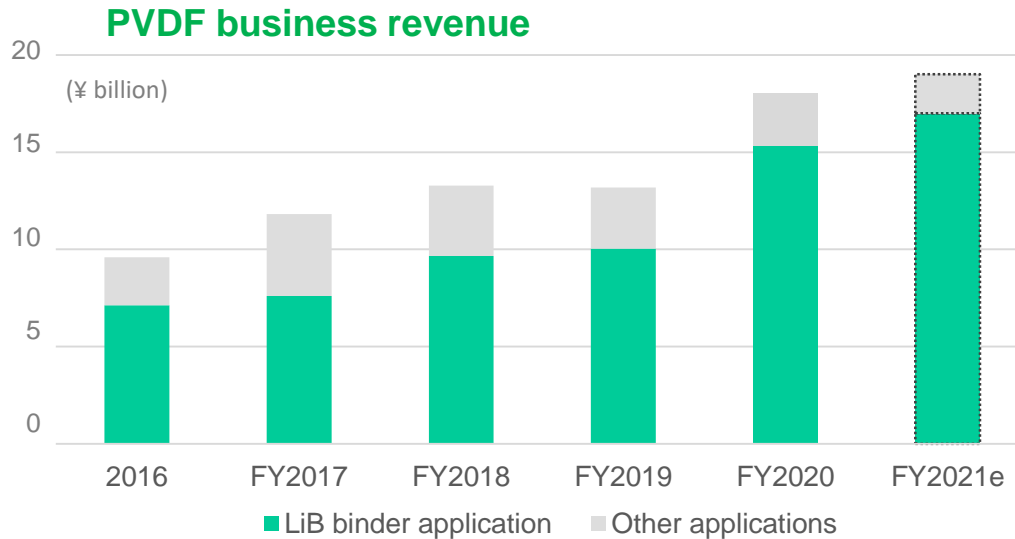
Action 3

## Action plans to achieve profitability

- 1- Expand full-bore applications for PGA frac plugs and increase a share in high-/mid-temperature shale markets with a new pricing strategy and by improving plug designs
- 2- Launch a non-PGA degradable frac plug in FY2021
- 3- Launch an improved PGA frac plug targeted for ultra-low temp application in FY2022 and increase its market share

# PVDF Business

KUREHA CORPORATION



- Kureha maintains a roughly 40% share in the automotive LiB cathode binder market, serving major South Korean and Chinese lithium-ion battery (LiB) makers
- Demand recovered and growing rapidly after a temporary halt of LiB production in early 2020 amid the pandemic, driven by global environmental and economic initiatives
- Kureha China Changshu facility manufactures and supplies PVDF specialty binder grades (May 2020-)
- Ongoing studies for an additional PVDF facility (delayed due to the pandemic)
  - Location: China (tentative)
  - Other details to be released in FY2021 1H
  - Start of commercial production: FY2024 (tentative)

## Growing production capacity

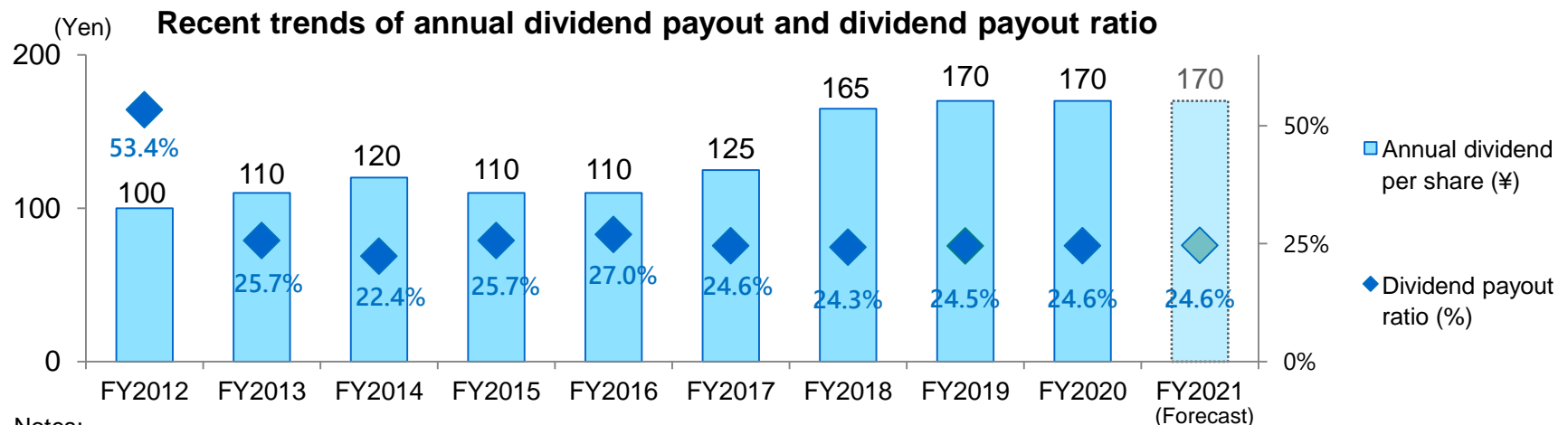
Feb 2019	2000tpa capacity increase at Iwaki Factory (Nameplate capacity: 6000tpa/Japan Iwaki Factory, 5000tpa/China Changshu Factory)
May 2020	Production of specialty grades for LiB binder application at China Changshu Factory (No change in nameplate capacity)
FY2022	Improved productivity for specialty grades at Iwaki Factory (No change in nameplate capacity)
FY2024	Production at a new facility in China (Nameplate capacity: 6000tpa or more)



# Capital Policy and Returning to Shareholders

KUREHA CORPORATION

- Aiming for sustainable growth and enhanced corporate value, Kureha will set the stage for future business development by steadily achieving the management goals and quantitative targets set forth in Kureha's Challenge 2022 mid-term management plan. While maintaining financial stability, we will further strengthen our scrutiny of investments and enhance earnings capacity and capital efficiency.
- Our basic policy for the distribution of earnings is to strengthen the company overall to realize longer-term growth, prepare for future business expansion, enhance retained earnings, and provide a stable and continued dividend. In addition, Kureha will consider options of repurchasing its shares, which is flexible in nature, upon reviewing its financial conditions.



## 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 (-2015); IFRS (FY2016-)
- A commemorative dividend of ¥10 is included in FY2014 and 2018 annual dividends
- Kureha repurchased treasury shares in FY2018 (¥3bn) and in FY2019 (¥5bn)

## VI. ESG Management

# Advancing ESG Initiatives

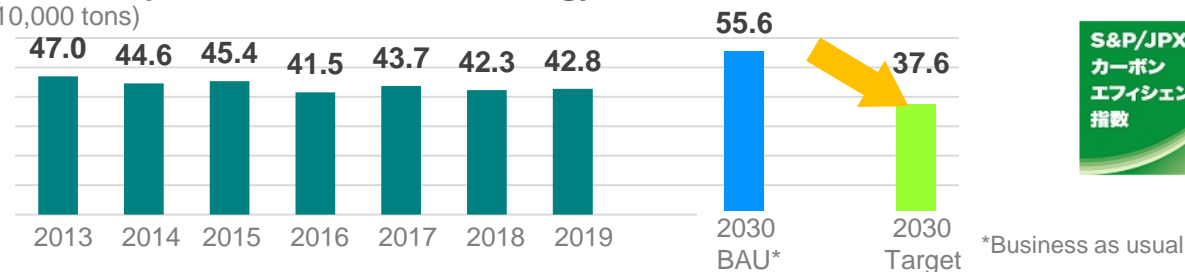
KUREHA CORPORATION

## For Environment

- Set forth a goal to reduce greenhouse gas emissions in Sept. 2020  
FY2030 Goal: Reduce CO<sub>2</sub> emissions from energy use by 20% from FY2013 levels  
 Our step-by-step approach to this goal includes:
  - Reduce in-house power generation and review its long-term operation
  - Expand the use of recycled/regenerated electricity for net-zero CO<sub>2</sub> emission
  - Upgrade equipment and facilities to improve energy efficiency
  - Promote energy-saving initiatives in daily operations
- Set forth a goal to reduce industrial wastes at Kureha Corporation  
FY2025 Goal: Reduce wastes from 18% (FY2019) to 1.5% (FY2025)

### Kureha Group CO<sub>2</sub> emissions from energy use

(10,000 tons)



In April 2021, Kureha established the Carbon Neutral Drive Committee under R&D Division to develop technologies that will enable us to reduce CO<sub>2</sub> emissions from our operations and contribute such technology solutions to global society

## For Society

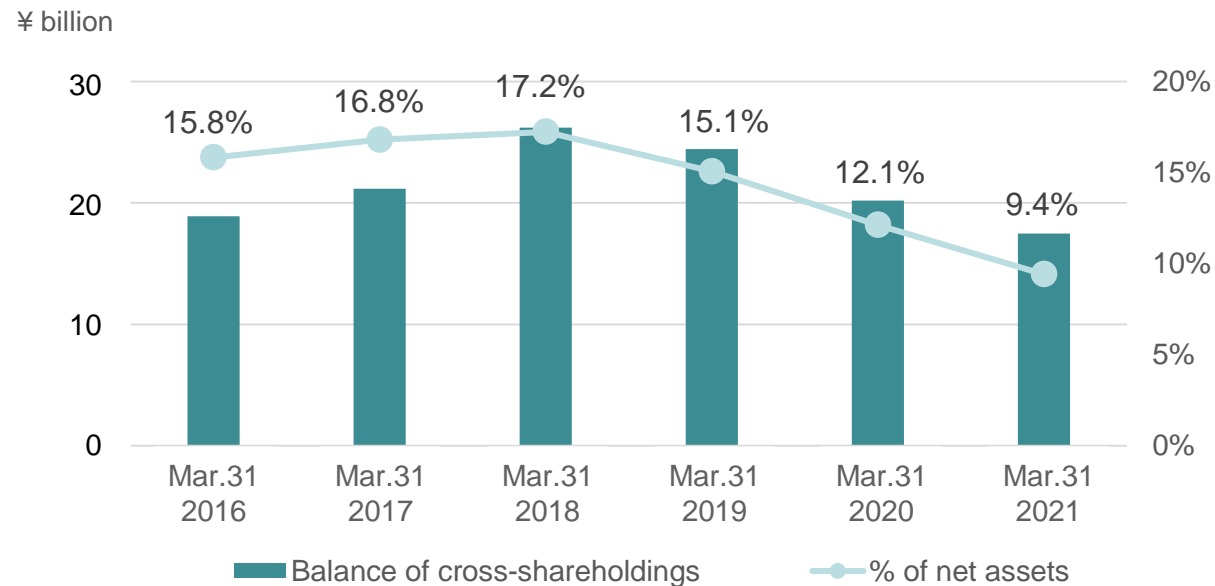
- Revised Kureha Ethical Charter and set forth our policy on human rights in Nov. 2020
  - Aims to join the UN Global Compact  
[https://www.kureha.co.jp/en/newsrelease/docs/20201102\\_Ethical%20Charter\\_en.pdf](https://www.kureha.co.jp/en/newsrelease/docs/20201102_Ethical%20Charter_en.pdf)
- Implements a new human resources system and gradually extend retirement age to 65 (in Kureha Corporation)
  - The new HR system allows more promotions for younger employees and adequate pays and benefits for mid-career recruitment, while it further emphasizes responsibility- and performance-based benefits for all employees
  - Retirement age is gradually extended to 65 as to provide senior employees with more opportunities to work actively
    - October 2021- Introduce a new HR system
    - April 2022- Start extending retirement age by one year for each year
    - April 2026- Completing the increase in retirement age to 65

**Kureha aims to achieve sustainable growth driven by a corporate culture, where each employee works autonomously and plays active roles, while swiftly responding to changes in our business environment**

- Announced FY2021-23 action plans to support women's empowerment and advancement in society
  - Submitted to the Japanese Ministry of Health, Labour and Welfare in April 2021  
[https://positive-ryouritsu.mhlw.go.jp/positivedb/planfile/202104141010495187758\\_1.pdf](https://positive-ryouritsu.mhlw.go.jp/positivedb/planfile/202104141010495187758_1.pdf)

## To Strengthen Governance

- Employed a delegation-type executive system in April 2020
- Continues to reduce cross-shareholdings to improve corporate governance
  - We have sold off cross-shareholdings in companies who are remotely related to our business



- These materials are supplied to provide a deeper understanding of our company, and are not intended to as a solicitation for investment or other actions.
- These materials have been prepared by our company based on the information available at this point in time. However, actual performance may produce results that differ from the plan due to unforeseeable events and factors.
- Please utilize these materials using you own judgment and responsibility.