

### Kureha Corporation Reports Interim Results April – September 2016

This report has been prepared in accordance with the International Financial Reporting Standards (IFRS), which Kureha adopted in FY2016.

**Tokyo, Japan, December 2016** – Kureha Corporation ("Kureha"), a leading global supplier of specialty chemicals and plastics, has reported earnings for the first half of the year ending March 2017 (FY2016). On a consolidated basis, sales decreased 10.1% to 60.2 billion yen year-on-year while operating income fell 9.9% to 4.5 billion yen. Income before income tax decreased by 25.8% to 3.6 billion yen. This resulted in an 11.6% decrease in net income attributable to the owners of Kureha to 3.1 billion yen.

Earnings were affected by a challenging operating environment. In the global economy, uncertainties persisted about the downside risks of the Chinese economy as well as instability in the EU, which was magnified by the Brexit decision. In Japan, personal consumption and capital investment continued to be lackluster, while the appreciating yen impacted negatively on the sales of companies operating overseas.

The situation was compounded by a bottoming-out of the crude oil price early in the year, which affected the hydraulic fracking industry in North America and, in turn, demand for Kureha's polyglycolic acid (PGA). This was a key reason behind the declines in sales and operating income seen in the first half.

However, the Advanced Materials segment also saw positive developments, including effective operational streamlining and continued strong demand for polyvinylidene fluoride (PVDF), a key binder material for lithium-ion batteries. Kureha, already leading the global PVDF market with a share of 50%, is now looking to expand capacity. In addition, the Specialty Plastics segment continued to see strong growth for Kureha's popular home-use wrap film, *New Krewrap*.

Yutaka Kobayashi, President and Chief Executive Officer, said, "Operating conditions in the first half were very challenging, particularly in the core Advanced Materials segment. It is vital that we now assess each of our business areas to maximize performance. However, it is important to note that, in the PGA business, the long downward trend in the number of drilling units reversed in June, and that PGA demand can be expected to grow going forward. To benefit from this trend, Kureha has taken steps to gain direct access to customers in the North America market as a developer and supplier of leading-edge frac plug solutions. In addition, PVDF demand is so strong that we are looking to expand capacity at our lwaki Plant in Japan."

Mr. Kobayashi added, "Our group-wide efforts to reduce costs and enhance efficiency continue to bear fruit. In several segments that saw lower sales in the first half, we also saw rises in operating income, notably in the Specialty Plastics business. We will continue to innovate and add value to our product offering at every level of our operations, while continuing our successful drive to reduce costs across the group."

### **Consolidated interim results**

(Billions of yen, except where stated)

	Sept. 2016	Sept. 2015	Change (%)
Sales	60.2	67.0	-10.1
Operating income	4.5	5.0	-9.9
Income before income tax	3.6	4.8	-25.8
Net income attributable	3.1	3.5	-11.6
to owners of Kureha			
Dividend per share (yen)	5.5.	5.5	-



### Consolidated interim results by segment

(Billions of yen)

Segment		Sept. 2016	Sept. 2015	Change (%)
Advanced materials	Sales	14.7	17.8	-17.5
	Operating income	0.6	0.6	3.8
Specialty chemicals	Sales	11.2	14.8	-24.2
	Operating income	0.8	2.4	-67.8
Specialty plastics	Sales	21.0	20.7	1.6
	Operating income	2.3	1.4	64
Construction related	Sales	5.9	6.3	-6.9
	Operating income	0.4	0.3	13.9
Other operations	Sales	7.5	7.5	0.2
·	Operating income	0.4	0.3	36.5
Adjustments	-	2	1	
Total	Sales	60.2	67.0	-10.1
	Operating income	4.5	5.0	-9.9

### **Performance by Segment**

### **Advanced Materials**

Major product areas: advanced plastics (PPS, PVDF, PGA), carbon materials

In the first-half period, sales in the Advanced Materials segment decreased by 17.5% to 14.7 billion yen from 17.8 billion yen. Operating income continued on a slight positive trajectory, rising by 3.8% to 0.6 billion yen. These results were primarily driven by lower demand for PGA in the advanced plastics business.

#### Advanced plastics: Slowing PGA demand but continued PVDF growth

Sales of advanced plastics fell 22% to 9.0 billion yen. A key contributing factor was the fall in demand for PGA in the shale oil and gas industry, which was affected by low crude oil prices.

PVDF for use in binders for lithium-ion batteries (LiBs) continued to see firm sales, primarily for automotive LiBs loaded in electric and plug-in hybrid electric vehicles, although this growth could not offset the slower performance in the PGA business.

#### Carbon products: Effective streamlining improves operating income

In carbon products, sales decreased by 28% to 2.2 billion yen. This was due to factors including falling demand for heat-insulating materials used in the manufacturing of solar power equipment. However, Kureha's ongoing group-wide effort to reduce costs and raise operating efficiency contributed to an improvement in operating income.

**Outlook:** Segment sales for the full fiscal year are projected to be 33.0 billion yen, down 3% from 33.9 billion yen in the previous period. Operating income is expected to fall 20% to 1.1 billion yen. The main factors behind these results will be continued slowing performance in the PGA business throughout the year, as well as intensifying competition in the PPS business.

However, it should be noted that the number of fracking wells is once again on the rise since June, and we foresee PGA demand to grow going forward. Importantly, in April 2016 Kureha renegotiated the sales contract with Magnum Oil Tools International Ltd., which previously had exclusive sales rights for PGA in North America, and revised it to include non-exclusivity terms. This revision gave Kureha direct access to the market and thereby drastically improved our ability to develop and deliver differentiated



solutions to meet customer needs. Going forward, we will be able to directly showcase our technological know-how to customers through a new joint venture between Kureha and JGC Corporation, called Kureha Energy Solutions LLC. Based in Houston, Texas, this new company, which became operational in October 2016, will focus specifically on marketing and selling Kureha's original PGA downhole tools for use in gas and oil fields in the Americas. We are confident this new market position will contribute toward a growth recovery for the PGA business, although the strategic change will have an impact on results initially.

In the PVDF business, the tightening of environmental regulations and positive outlook for electric and plug-in hybrid electric vehicles around the world points toward continued strong demand. We expect LiB binder demand, particularly for use with cathode materials, to become increasingly diversified and expand for both general and specialty grades. Kureha is therefore moving to expand production capacity by 2,000 tons / year at the lwaki Plant in Fukushima, Japan.

For heat-insulating materials used in the manufacturing of solar power equipment, Kureha foresees continued improvement in operating income due to price adjustments and efforts to raise operating efficiency.

### **Specialty Chemicals**

Major product areas – industrial chemicals, agrochemicals, pharmaceuticals

In the first-half period, the Specialty Chemicals segment recorded sales of 11.2 billion yen, a decrease of 24.2%, and operating income of 0.8 billion yen, down 67.8%. This result was primarily driven by slower performance for agrochemicals and pharmaceuticals.

### Agrochemicals: Slow agriculture sector affects demand

The agricultural sector continued to face difficult conditions characterized by oversupply and lower export demand. This negatively affected demand for agricultural chemicals, including the fungicide *Metconazole*.

#### Pharmaceuticals: Negative impact of price revisions and generics

Drug price revisions and government promotion of generic drugs in the Japanese market weighed on this business, and Kureha recorded a decrease in the sales volume of *Kremezin*, a therapeutic agent for chronic kidney disease.

Industrial chemicals: Low raw material prices impact on sales and income In the industrial chemicals business, lower raw material prices resulted in lower market prices, in turn adversely affecting sales and income. Kureha's ongoing cost reduction efforts, however, offset these declines to some extent.

**Outlook:** Segment sales for the full fiscal year are projected to decrease by 18% from 30.4 billion yen to 25.0 billion yen, while operating income will decrease by 47% to 2.5 billion yen, mainly due to the negative effects of drug price revisions and generic drugs on pharmaceuticals, which will affect sales and income for *Kremezin*. The slow sales of agrochemicals in the US will also force Kureha to make inventory adjustments.



### **Specialty Plastics**

Major product areas – food packaging materials, household products

In the first-half period, sales increased 1.6% to 21.0 billion yen from 20.7 billion yen while operating income was up 64% from 1.4 billion yen to 2.3 billion yen. These results were mainly due to firm growth in the consumer goods business and effective cost reductions in the packaging materials business.

#### Consumer goods: Increases in sales and income

In consumer goods, sales of *New Krewrap* household-use wrapping continued on a solid upward trajectory, leading to increases in both sales and operating income.

Packaging materials: Lower sales of heat-shrink film, but improved income In commercial-use food packaging materials, Kureha saw decreased sales of heat-shrink barrier film. However, effective measures to cut costs and improve efficiency reduced the operating loss.

**Outlook:** Sales declines in packaging materials will be more than offset by firm growth in the consumer goods business, particularly in the sales of *New Krewrap*. Segment sales for the full fiscal year are expected to decrease marginally from 42.7 billion yen to 42.0 billion yen, while operating income is projected to rise strongly by 21% to 4.0 billion yen.

### **Construction-related / Other Operations**

Major product areas – construction and engineering, environmental engineering, logistics, trading related businesses

Construction-related businesses: Income rises due to cost reductions
In the first-half period, there were fewer public reconstruction projects connected to the
Great East Japan Earthquake of March 2011, offsetting a rise in private construction
projects. However, while these circumstances impacted on sales, effective cost
reductions contributed positively to operating income. As a result, sales in constructionrelated businesses as a whole fell 6.9% to 5.9 billion yen, while operating income rose

### 13.9% to 0.4 billion yen from 0.3 billion yen.

Other operations: Increases in both sales and income

In the environmental business, sales and income remained on par with the previous year due to continued incinerator renewal work. In the transportation business, while sales were slower, operating income rose due to effective cost reductions. As a result, in other operations, sales rose slightly by 0.2% to 7.5 billion yen, while operating income rose 36.5% to 0.4 billion yen from 0.3 billion yen.

**Outlook:** In construction-related businesses, Kureha foresees a continued reduction in post-quake construction projects, as well as rising wage and material costs that will impact on profitability. Sales are projected to decrease 14% to 14.0 billion yen while operating income will fall 54% to 0.7 billion yen.

In other operations, Kureha forecasts growth of the micro-level PCB waste treatment business. However, intensifying competition and increased R&D costs in the environmental engineering business will negatively affect sales and income. Sales are projected to decrease 9% to 16.0 billion yen, while operating income will fall 10% to 1.4 billion yen.



### Capex, Depreciation, R&D and Debt

(Billions of yen)

	Sept. 2016	Sept. 2015	March 2017 (forecasts)
Capital expenditure	4.8	5.3	14.5
Depreciation	5.1	4.8	10.2
R&D	2.2	2.3	5.4
Interest-bearing debt	77.8	87.7	80.8

Capital expenditure during the first-half period decreased from 5.3 billion yen to 4.8 billion yen. For the full fiscal year, Kureha expects to spend 14.5 billion yen, up from 12.1 billion yen in FY2015, primarily to upgrade aging equipment at the Iwaki Factory and to boost production of PPS to meet firm demand.

R&D expenditure remained nearly unchanged at 2.2 billion yen in the first half, but for the full year the allocation is projected to be 5.4 billion yen, up from 4.9 billion yen in the previous year. Kureha will continue to focus its R&D efforts on enhancing existing products and processes as well as developing next-generation products.

Interest-bearing debt decreased from 87.7 billion yen to 77.8 billion yen and is projected to reach 80.8 billion yen for the full fiscal year.

#### **Outlook for the Full Fiscal Year**

(Billions of yen, except where stated)

	March 2017	March 2016	Change (%)
	(Forecasts)		
Sales	130.0	140.8	-8
Operating income	9.0	7.4	22
Income before income tax	8.5	6.6	29
Net income attributable	6.5	4.9	33
to owners of Kureha			
Dividend per share (yen)*	55.0	5.5	

<sup>\*</sup>Post-consolidation common share basis effective October 1, 2016.

(Billions of yen)

Division		March 2017	March 2016	Change
		(Forecasts)		(%)
Advanced materials	Sales	33.0	33.9	-3
	Operating income	1.1	1.4	-20
Specialty chemicals	Sales	25.0	30.4	-18
	Operating income	2.5	4.7	-47
Specialty plastics	Sales	42.0	42.7	-2
	Operating income	4.0	3.3	21
Construction related	Sales	14.0	16.2	-14
	Operating income	0.7	1.5	-54
Other operations	Sales	16.0	17.6	-9
	Operating income	1.4	1.6	-10
Adjustments		-7	-50	
Total	Sales	130. 0	140.8	-8
	Operating income	9.0	7.4	22

Kureha expects the challenging market conditions to continue in the second half of the fiscal year. Sales will be slow in all segments, with foreign exchange fluctuations continuing to affect results negatively.



In the Advanced Materials segment, competition in the PPS resin business will intensify. Also, there will be financial costs from our strategic shift to a direct Kureha market presence in North America in the PGA business as well as our investment into additional PVDF production capacity.

However, the PVDF business will continue to show firm growth. Likewise, in the Specialty Plastics segment, we expect continued solid sales and income performance due to the popularity of our *New Krewrap* household food wrap, which will more than offset declines in Specialty Chemicals and Construction. Kureha will also continue with its program of group-wide cost reductions to further boost operating income.

Overall sales for FY2016 are forecast to fall by 8% to 130.0 billion yen, while operating income is expected to rise 22% to 9.0 billion yen. Income before income tax is expected to rise 29% to 8.5 billion yen. Net income attributable to owners of Kureha is projected to increase 33% to 6.5 billion yen for the full fiscal year.

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### **Condensed interim balance sheets**

As of 30 September 2016 and 2015 (Millions of yen)

	Sept. 2016	Sept. 2015
Assets		
Current assets	67,699	70,812
Cash and cash equivalents	6,118	5,657
Noncurrent assets	162,832	179,431
Property, plant and equipment	121,364	130,848
Intangible assets	1,526	1,810
Investments and other assets	39,942	46,773
Total assets	230,531	250,244
Liabilities and net assets		
Current liabilities	66,939	65,862
Short-term borrowings	35,578	31,039
Fixed liabilities	45,472	63,030
Corporate bonds	26,862	32,000
Long-term borrowings	14,550	14,323
Total liabilities	112,411	128,892
Net assets		
Shareholders' equity	116,851	104,422
Minority interest	1,268	855
Total net assets	118,120	121,351
Total liabilities and net assets	230,531	250,244

### <u>Condensed interim income statement</u> As of 30 September 2016 and 2015

(Millions of yen)

	Sept. 2016	Sept. 2015
Sales	60,228	66,987
Cost of goods sold	43,472	49,229
Selling, general and administrative expenses	13,163	13,867
Operating income	4,512	5,008
Income before income taxes	3,564	4,807
Taxes and minority interest adjustments	469	1,418
Net income attributable to Kureha	3,052	3,453

# Fiscal 2016 Interim Results

(Period April 1 – September 30,2016)

### **KUREHA CORPORATION**

November 14, 2016



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### Notice

Kureha has adopted the International Financial Reporting Standards (IFRS) from the fiscal year ending March 31, 2017 (FY2016). In this report, data of the previous year (FY2015) are also provided in accordance with IFRS for comparison purposes.



# 1. FY2016 Half-Year Results (April 1 – September 30, 2016)



# FY2016 1H Highlights

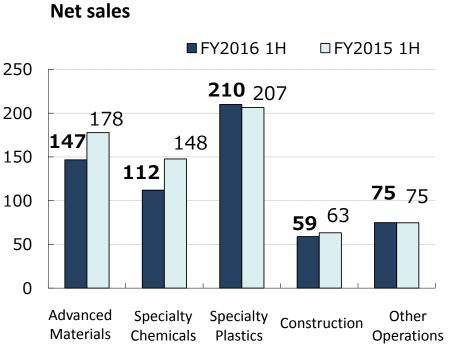
(in 100 million yen except where stated)

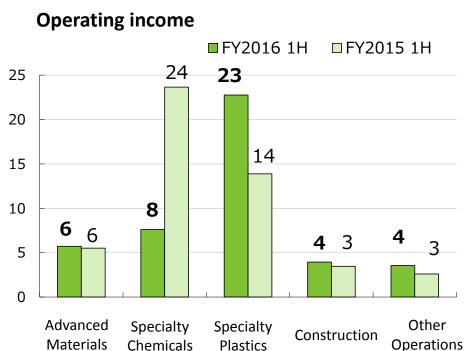
	FY2016 1H	FY2015 1H	%Change	
Net sales	602	670	-10.1%	<ul> <li>Net sales down due to weak volumes in Advanced Materials</li> </ul>
Operating income	45	50	-9.9%	and Specialty Chemicals
Income before income tax	36	48	-25.8%	- Lower operating income driven
Net income attributable to owners of Kureha	31	35	-11.6%	primarily by declined Specialty Chemicals
EPS*	¥177.61	¥200.99		- Increased financial expenses
Equity attributable to owners of Kureha per share*	¥6,799	¥7,011		- Lower tax expenses
Ratio of equity attributable to owners of Kureha to total assets	50.7%	49.3%		
Dividend per share	¥5.5	¥5.5	conso	nare values are provided on a post- lidation common share basis, in which ten pre-consolidation common shares
	Sept 30 2016	Mar 31 2016	were (	consolidated to one post-consolidation
Total assets	2,305	2,398	comm	on share, effective October 1, 2016.
Total equity attributable to owners of Kureha	1,169	1,182		KUREHA

# FY2016 1H Highlights

FY2016 1H	Advanced Materials	Specialty Chemicals	Specialty Plastics	Const- ruction	Other Operations	Segment Total	Adjustment	Total	
Net sales	147	112	210	59	<b>75</b>	602		602	
Elimination							0		
Other income							2		
Other expenses							1		
Operating income	6	8	23	4	4	44	2	45	
Financial income							3		
Financial expenses							12		
Income before income tax								36	
Net income attributable to Kureha								31	
FY2015 1H	Advanced Materials	Specialty Chemicals	Specialty Plastics	Const- ruction	Other Operations	Segment Total	Adjustment	Total	
Net sales	178	148	207	63	75	670		670	
Elimination							1		
Other income							4		
Other expenses							4		
Operating income	6	24	14	3	3	49	1	50	
Financial income							4		
Financial expenses							6		
Income before income tax								48	
Net income attributable to Kureha								35	

# FY2016 1H Highlights





### Factors affecting segment operating income

[Advanced Materials] Improved PVDF and carbon products offsetting a decline in PGA

[Specialty Chemicals] Lower volumes in pharmaceuticals and agrochemicals, negative effect of drug price revision

[Specialty Plastics] Steady growth of home products

[Construction] Cost reduction

[Other Operations] Cost reduction



# Segment Performance

### **Advanced Materials**

(in 100 million yen)	FY2016 1H	FY2015 1H	%Change
Sales			
Advanced plastics	90	115	-22%
Carbon products	22	30	-28%
Other	1	1	-18%
Non-consolidated sales total	112	146	-23%
Subsidiaries sales total	122	152	-20%
Adjustment	-88	-120	
Kureha Group sales	147	178	-17%
Kureha Group operating income	6	6	4%

### Advanced plastics

Declined on lower PGA volumes (extruded products used for oil and gas exploration) more than offsetting the growth of PVDF for lithium-ion battery applications

### Carbon products

Improved operating loss by streamlining domestic and global operations despite lower volume sales



### **Specialty Chemicals**

(in 100 million yen)	FY2016 1H	FY2015 1H	%Change
Sales			
Agrochemicals	19	36	-48%
Pharmaceuticals	32	42	-24%
Industrial chemicals	42	48	-13%
Non-consolidated sales total	93	127	-27%
Subsidiaries sales total	32	38	-14%
Adjustment	-13	-17	
Kureha Group sales	112	148	-24%
Kureha Group operating income	8	24	-68%

### **Agrochemicals**

Weak demand for fungicides

### Pharmaceuticals

Lower volume and lower price of Kremezin (therapeutic medicine for chronic kidney failure) affected by the impact of the national drug price revision

### Industrial chemicals

Lower volumes in both organic and inorganic chemicals



# Segment Performance

### **Specialty Plastics**

(in 100 million yen)	FY2016 1H	FY2015 1H	%Change
Sales			
Home products	101	89	14%
Packaging materials	36	39	-9%
Non-consolidated sales total	137	128	7%
Packaging materials overseas	53	63	-16%
Fiber products	18	19	-3%
Other	34	35	-3%
Subsidiaries sales total	104	116	-10%
Adjustment	-31	-37	
Kureha Group sales	210	207	2%
Kureha Group operating income	23	14	64%

### **Home products**

Continued strong growth of homeuse wrap film 'NEW Krewrap'

### Packaging materials

Decreased sales on lower heatshrink film volumes but narrowed operating loss on improved efficiency



# Segment Performance

(in 100 million yen)	FY2016 1H	FY2015 1H	%Change	
Construction				
Sales		1		
Construction	96	98	-2%	Construction
Adjustment	-37	-35		Sales slightly down due to weal
Kureha Group sales	59	63	-7%	demand for post-quake public reconstruction, but operating
Kureha Group operating income	4	3	14%	income upped on lower costs
Other Operations Sales				
Environmental engineering	43	43	0%	Other operations
Logistics	42	45	-6%	- Environmental engineering
<b>Hospital operations</b>	18	18	3%	leveled off
Other	9	9	1%	- Logistics operating profit
Subsidiaries sales total	113	115	-2%	improved through cost reduction
Adjustment	-38	-40		- Hospital operations turned
Kureha Group sales	75	75	0%	profitable on improved sales
<b>Kureha Group operating income</b>	4	3	37%	

# **Balance Sheet**

(in 100 million yen)

Assets						
Assets	Sept. 30 2016	Mar. 30 2016	%Change			
Cash and cash equivalents	61	67	-6			
Accounts and notes receivable-trade	259	309	-51			
Inventories	327	331	-4			
Other current assets	30	22	8			
Current assets total	677	729	-52			
Property, plant and equipment	1,214	1,250	-36			
Intangible assets	15	17	-1			
Investments and other assets	399	403	-3			
Noncurrent assets total	1,628	1,669	-41			
Assets total	2,305	2,398	-93			

Liabilities and
Net Assets

Net Assets	Sept. 30 2016	Mar. 30 2016	%Change
Accounts and notes payable-trade	188	198	-10
Interest-bearing debt	778	812	-34
Reserves	55	58	-4
Other liabilities	104	135	-32
Liabilities total	1,124	1,204	-80
Capital stock	125	125	0
Capital surplus	94	94	0
Treasury stock	-45	-45	0
Retained earnings	977	957	20
Other equities	17	50	-33
Minority interests	13	13	0
Net assets total	1,181	1,194	-13
Liabilities and Net assets total	2,305	2,398	-93



# Cash Flow

(in 100 million yen)

	FY2016	FY2015	
	1H	1H	Change
Pre-depreciation profit	86	98	-12
Increase/decrease n assets and liabilities	46	11	35
Payments of corporation tax	-14	-25	10
Other-net	-38	-28	-9
Cash flow from operating activities total	80	55	25
Cash flow from investing activities total	-56	-58	1
Cash flow from financing activities total	-31	-21	-10
Effect of exchange rate changes on cash and cash equivalents	2	0	1
Increase/decrease in cash and cash equivalents	-6	-23	17
Cash and cash equivalents at beginning of year	67	79	-12
Cash and cash equivalents at end of year	61	57	5



# 2. FY2016 Full-Year Forecasts (April 1, 2016 – March 31, 2017)



### FY2016 Full-Year Outlook

(in 100 million yen)	FY2016e	FY2015	YoY Change	Changes from FY2016 projection as of May 2016
Net sales	1,300	1,408	-108 (-8%)	-120 (-9%)
Operating income	90	74	16 (22%)	-15 (-14%)
Income before income tax	85	66	19 (29%)	-20 (-19%)
Net income attributable to owners of Kureha	65	49	16 (33%)	-15 (-19%)
Dividend per share (yen)				
Interim End-year	¥5.5 ¥55.0*	¥5.5 ¥5.5	_	o a post-consolidation effective October 1, 20

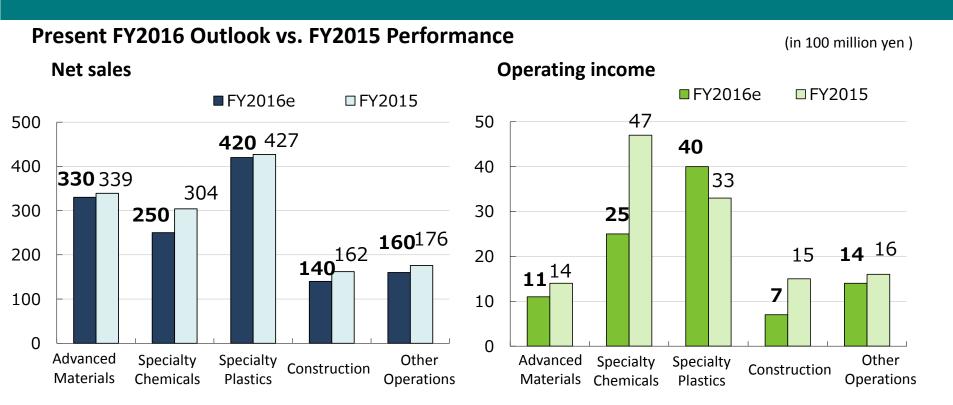
### **YoY changes**

- Sales decline in all segments, with a sharp drop in Specialty Chemicals
- Increased operating income on strong growth of Specialty Plastics and due to lack of last year's reconstruction cost, more than offsetting declines in Specialty Chemicals and Construction

### Factors for changes from May 2016 projection

- Sales down across all segments, primarily in Advanced Materials, partly affected by negative currency
- Increased operating income in Specialty Plastics and Construction, owing partly to reduced cost, more than offset by negative currency effects and decline in Advanced Materials
- Increased financial expenses

FY2016e	(in ¥100M yen)	Advanced Materials	Specialty Chemicals	Specialty Plastics	Const- ruction	Other Operations	Segment Total	Adjustment	Total
Net sales		330	250	420	140	160	1,300		1,300
	Elimination							0	
C	ther income	*Incl. ¥7.8B su	ubsidy income					80	
Oth	ner expenses	*Incl. ¥6.9B lo	ss on reduction	and ¥1.5B los	s on retireme	nt of noncurrer	nt assets	87	
Operating inco	ome	11	25	40	7	14	97	-7	90
Fina	ncial income							6	
Financ	cial expenses							11	
Income before	income tax								85
Net income attributable to	) Kureha								65
<b>FY2015</b> (	in ¥100M yen)	Advanced Materials	Specialty Chemicals	Specialty Plastics	Const- ruction	Other Operations	Segment Total	Adjustment	Total
Net sales		339	304	427	162	176	1,408		1,408
	Elimination							-1	
O	ther income							9	
Oth	ner expenses	*Incl. ¥4.5B re	estructuring cos	t				59	
Operating inco	ome	14	47	33	15	16	124	-50	74
Fina	ncial income							8	
Financ	cial expenses							16	
Income before	income tax								66
Net income attributable to	) Kureha								49



### YoY changes for segment operating income

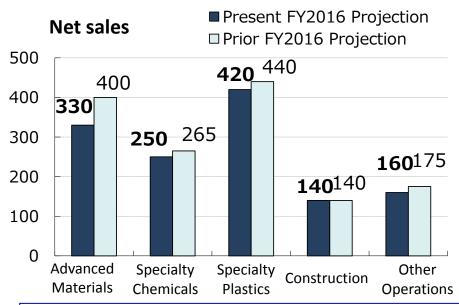
[Advanced Materials] Decline due to delayed PGA business development resulting from strategic changes and intensified competition for PPS, despite improvements in PVDF and Carbon Products

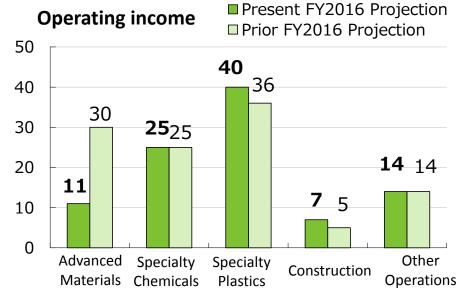
[Specialty Chemicals] Decline due to negative effects of drug price revision and generic drugs on pharmaceuticals and inventory adjustments for agrochemicals

[Specialty Plastics] Improve on steady growth of Home Products more than offsetting a decline in Packaging Materials [Construction] Decline due to low demand for post-quake reconstruction and increased labor/raw materials cost [Other Operations] Decline due to increased competition and R&D cost for Environmental Engineering



(in 100 million yen)





### [FY2016 Operating Income Outlook]

Previous projection: ¥11,000 mil → Present (Revised) projection: ¥9,700 mil

\*Factors include negative currency effect (¥500mil), reduced sales (¥2000mil), increased cost (1200mil)

Factors for changes in segment operating income projection

[Advanced Materials] Delayed PGA business growth due to strategic changes, intensified competition for PPS

[Specialty Chemicals] Benefits of cost reduction offsetting negative currency effect

[Specialty Plastics] Growth in Home Products more than offsetting delayed sales expansion and negative currency effect for Packaging Materials

[Construction] Lower operating income on projected sales

[Other Operations] Benefits of cost reduction offsetting ales decline in Environmental Engineering

# Segment Outlook

### **Advanced Materials**

(in 100 million yen)	FY2016	FY2015	%Change
Sales			
Advanced plastics	211	213	-1%
Carbon products	40	52	-23%
Other	4	4	2%
Non-consolidated sales total	<b>255</b>	270	-5%
Subsidiaries sales total	290	311	-7%
Adjustment	-215	-242	
Kureha Group sales	330	339	-3%
Kureha Group operating income	11	14	-20%

### **Advanced plastics**

PGA and PPS decline to more than offset the growth of PVDF

### **Carbon products**

Operating loss decreases on higher price and restructuring efforts



# Segment Outlook

### **Specialty Chemicals**

(in 100 million yen)	FY2016	FY2015	%Change
Sales			
Agrochemicals	75	95	-21%
Pharmaceuticals	55	74	-26%
Industrial chemicals	85	94	-10%
Non-consolidated sales total	215	263	-18%
Subsidiaries sales total	65	70	-7%
Adjustment	-30	-30	
Kureha Group sales	250	304	-18%
Kureha Group operating income	25	47	-47%

### **Agrochemicals**

Declines on continued slow demand and inventory adjustment

### **Pharmaceuticals**

Declines on lower volumes and lower prices affected by the impact of generic drugs and drug price revision

### Industrial chemicals

Negatively affected by lower market prices reflecting lower raw materials prices



# Segment Outlook

### **Specialty Plastics**

(in 100 million yen)	FY2016	FY2015	%Change
Sales			
Home products	194	186	4%
Packaging materials	71	79	-10%
Non-consolidated sales total	265	265	0%
Packaging materials (overseas)	114	125	-9%
Fiber products	36	36	1%
Other	67	74	-10%
Subsidiaries sales total	217	235	-8%
Adjustment	-62	-73	
Kureha Group sales	420	427	-2%
Kureha Group operating income	40	33	21%

### **Home products**

Continued growth of home-use wrap film 'NEW Krewrap'

### Packaging materials

Flat heat-shrink film sales, decline in operating income due to negative currency effect



# Segment Outlook

(in 100 million yen)	FY2016	FY2015	%Change
Construction			
Sales			
Construction	210	246	-15%
Adjustment	-70	-84	
Kureha Group sales	140	162	-14%
Kureha Group operating income	7	15	-54%
Other Operations			
Sales			
Environmental engineering	102	99	3%
Logistics	84	89	-6%
Hospital operations	37	36	4%
Other	17	17	-1%
Subsidiaries sales total	240	241	0%
Adjustment	-80	-65	
Kureha Group sales	160	176	-9%
Kureha Group operating income	14	16	-10%
Kureha Group operating income	14	16	-10

### **Construction**

Operating income decrease on weak volumes in post-quake reconstruction and with higher labor and raw materials costs

### Other operations

Segment sales and operating income negatively affected intensified competition and technology development costs in the environmental engineering business, despite growth in low-concentration PCB treatment sector

# **Key Indicators**

			FY2016 1H	FY2016 2H	FY2016 Full year	FY2015 1H	FY2015 2H	FY2015 Full year	FY15-16 %Change
Capital expenditure			48	97	145	53	68	121	35%
Depreciation			51	51	102	48	51	99	6%
R&D expenses			22	32	54	23	26	49	19%
Interest-bearing debt			778	808	808	877	812	812	-0%
Exchange rates	JP¥/US\$	Average	105.2	105.0	105.1	121.9	118.4	120.1	
		Term end	101.1	105.0	105.0	120.0	112.7	112.7	
	JP¥/EUR€	Average	118.0	115.0	116.5	135.1	130.1	132.6	
		Term end	113.4	115.0	115.0	135.0	127.7	127.7	
	JP¥/CH¥	Average	15.9	15.5	15.7	19.5	18.3	18.9	
		Term end	15.1	15.5	15.5	19.0	17.4	17.4	



# Cash Flow

(in 100 million yen)

	FY2016	FY2015	Change
Pre-depreciation profit	187	169	18
Increase/decrease n assets and liabilities	-47	-22	-25
Payments of corporation tax	-20	-43	23
Other-net	69	41	28
Cash flow from operating activities total	189	146	43
Cash flow from investing activities total	-166	-60	-106
Cash flow from financing activities total	-22	-99	77
Effect of exchange rate changes on cash and cash equivalents	0	2	-2
Increase/decrease in cash and cash equivalents	1	-12	13
Cash and cash equivalents at beginning of year	67	79	-12
Cash and cash equivalents at end of year	68	67	1



# 3. Consolidated Companies



### Subsidiaries Sales and Assets

		FY2016 1H		FY2015 1H		Change	
		Net sales	Total assets	Net sales	Total assets	Net sales	Total assets
Kureha Corporation		286	1,883	310	1,963	-24	-80
Kureha Trading Group (2)		77	122	76	118	1	4
	Kureha Corporation	112	-	146	-	-33	-
	Kureha Trading Group (2)	41	-	35	-	6	-
	Kureha Extron Co.	8	19	12	25	-4	-6
	Kureha Extech Co.	12	17	13	30	-1	-12
	Kureha Battery Materials Japan Co. (2)	-	2	33	38	-33	-36
Advanced	Kureha GmbH	7	10	8	11	0	-1
Materials	Kureha America Group (4)	29	244	17	286	11	-41
	Kureha (Shanghai) Carbon Fiber	7	20	8	37	-2	-17
	Mateials Co.	/	20	0	37	-2	-1/
	Kureha China Group (3)	19	126	25	154	-7	-28
	Consolidation adjustments	-88	-	-120	-	32	-
	Total	147	-	178	-	-31	-
	Kureha Corporation	93	-	127	-	-34	-
Specialty	Kureha Trading Co.	32	-	38	-	-5	-
Chemicals	Consolidation adjustments	-13	-	-17	-	3	-
	Total	112	-	148	-	-36	-
	Kureha Corporation	137	-	128	-	9	-
	Kureha Trading Co.	23	-	21	-	2	-
Specialty Plastics	Kureha Gohsen Co.	18	34	19	36	-1	-1
	Kureha China Group (3)	2	-	3	-	-1	-
	Kureha America Group (4)	9	7	11	10	-2	-2
	Kureha Europe Group (5)	39	56	45	68	-6	-12
	Kureha Vietnam Co.	14	36	18	47	-4	-11
	Consolidated adjustments	-31	-	-37	-	6	-
	Total	210	-	207	-	3	-

### Subsidiaries Sales and Assets

		FY26016 1H		FY2015 1H		Change	
		Net sales	Total assets-38	Net sales	Total assets	Net sales	Total assets
Construc-	Kureha Nishiki Group (4)	78	97	80	95	-3	1
	Kureha Engineering Co.	19	26	18	28	1	-2
tion	Consolidation adjustments	-37	-	-35	-	-2	-
	Total	59	-	63	-	-4	-
	Kureha Ecology Management Co.	38	83	38	74	0	8
	Kureha Special Laboratory Co.	6	5	6	6	-1	-1
	Kureha Unyu Group (7)	42	62	45	61	-3	1
Other	Kureha Trading Co.	0	-	0	-	0	_
	Kureha Service Co.	3	9	3	9	0	1
Operations	Kureha-kai Medical Co.	18	38	18	42	1	-5
	Kureha Staff Service Co.	6	7	6	6	0	0
	Consolidation adjustments	-38	-	-41	-	3	-
	Total	75	-	75	-	0	-
Consolidation Total		602		670		-68	
[Total Number of Consolidated Subsidiaries]		[41]		[40]			



### Disclaimer

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