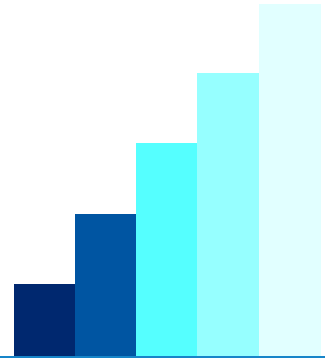


# DATA BOOK



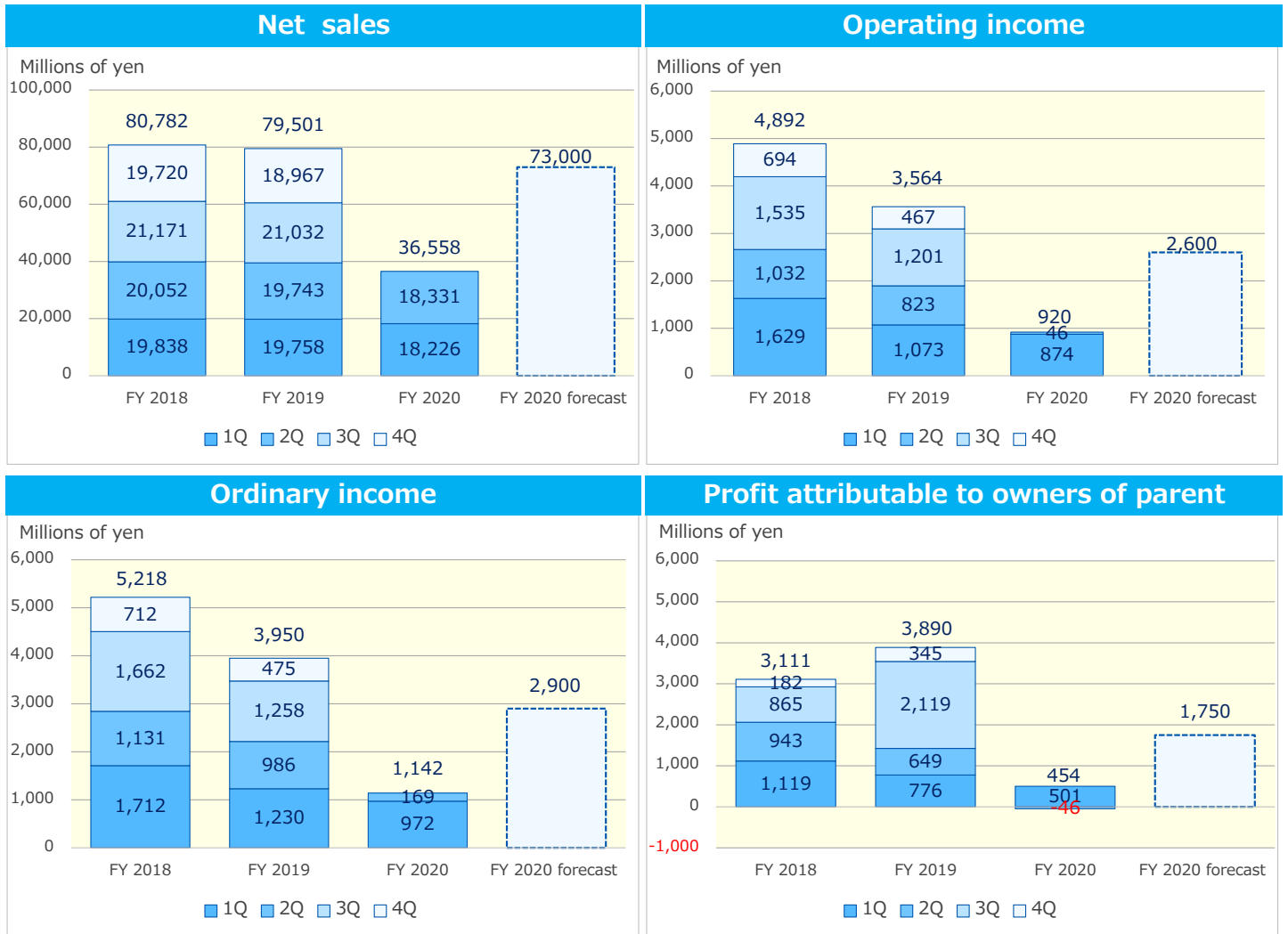
# FY2020

2nd Quarter ended September 30, 2019

November 1st, 2019

ARAKAWA CHEMICAL INDUSTRIES, LTD.

## Achievement Transition (Consolidated)



consolidated	FY 2018 (2Q)		FY 2019 (2Q)		FY 2020 (2Q)		FY 2018		FY 2019		FY 2020 forecast	
	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change
<b>Net sales</b>	39,890	5.1	39,501	△ 1.0	<b>36,558</b>	△ 7.5	80,782	4.4	79,501	△ 1.6	73,000	△ 8.2
<b>Operating income</b>	2,662	4.3	1,896	△ 28.8	<b>920</b>	△ 51.4	4,892	△ 4.0	3,564	△ 27.1	2,600	△ 27.1
<b>Ordinary income</b>	2,843	14.8	2,216	△ 22.0	<b>1,142</b>	△ 48.5	5,218	△ 1.8	3,950	△ 24.3	2,900	△ 26.6
<b>Profit attributable to owners of parent</b>	2,063	20.8	1,425	△ 30.9	<b>454</b>	△ 68.1	3,111	△ 8.9	3,890	25.0	1,750	△ 55.0

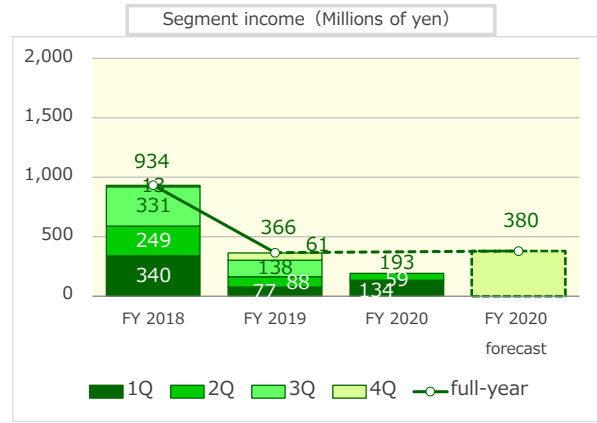
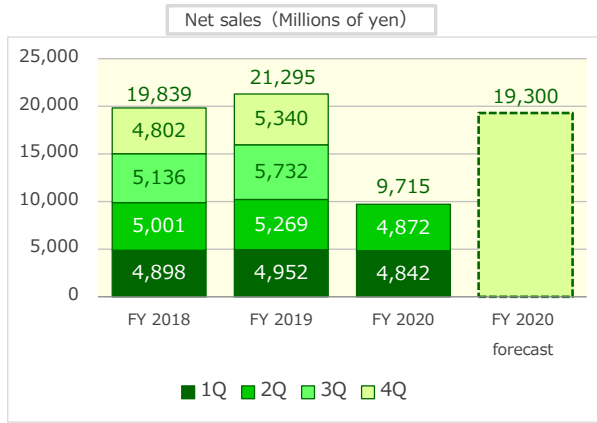
## Management index transition

consolidated	FY 2018 (2Q)		FY 2019 (2Q)		FY 2020 (2Q)		FY 2018		FY 2019		FY 2020 forecast	
	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease
<b>Capital investment</b>	812	△ 333	1,038	226	<b>1,418</b>	<b>380</b>	1,937	△ 170	2,977	1,040	4,300	1,322
<b>Depreciation and amortization</b>	1,254	△ 34	1,319	64	<b>1,323</b>	<b>4</b>	2,613	△ 48	2,870	257	2,940	69
<b>R&amp;D expenses</b>	1,591	70	1,506	△ 84	<b>1,519</b>	<b>13</b>	3,220	41	3,051	△ 169	3,100	48
<b>Interest-bearing debt</b>	11,553	△ 2,652	10,873	△ 679	<b>15,767</b>	<b>4,893</b>	11,269	△ 2,031	14,349	3,080	19,200	4,850
<b>EBITDA</b>	3,916	74	3,215	△ 701	<b>2,244</b>	△ 971	7,506	△ 251	6,435	△ 1,070	5,540	△ 895

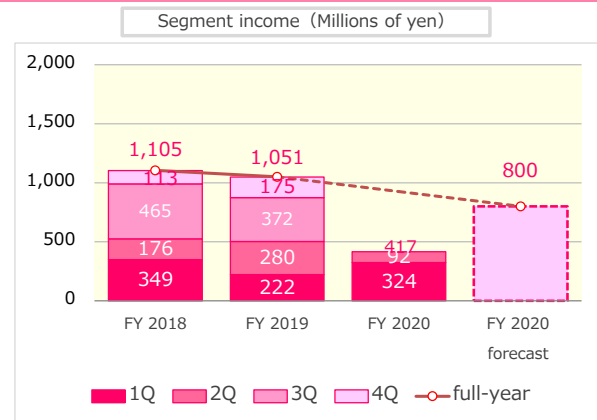
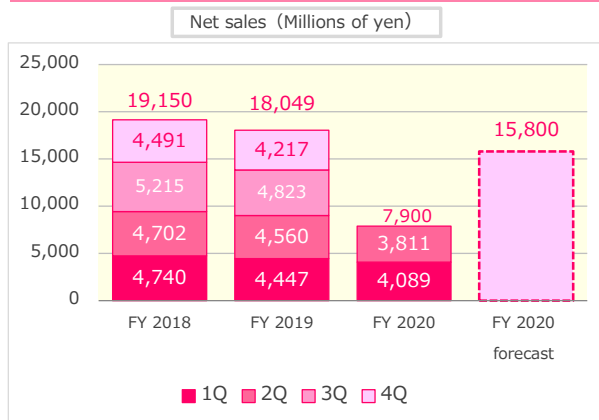
[ EBITDA ] Earnings Before Interest , Taxes , Depreciation , and Amortization

## Segment Information (Consolidated)

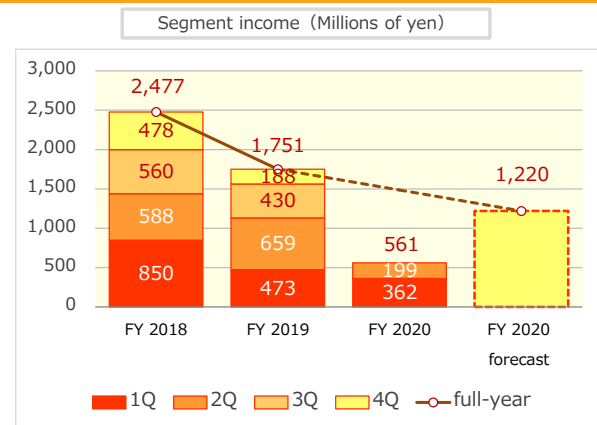
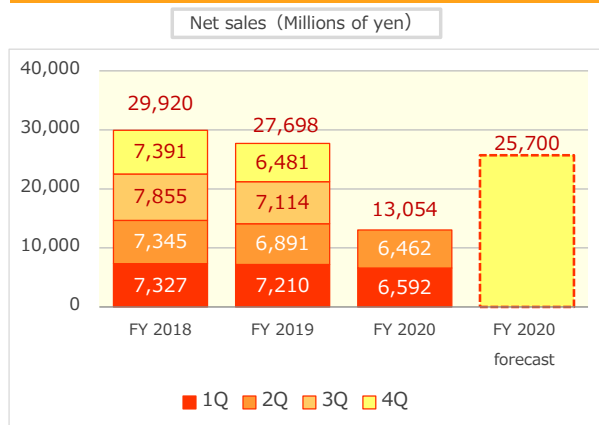
### Paper chemicals



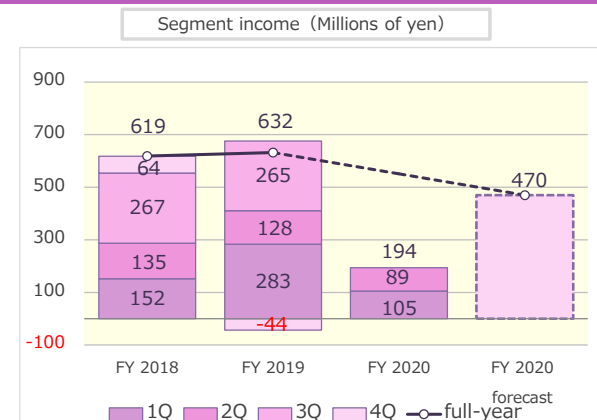
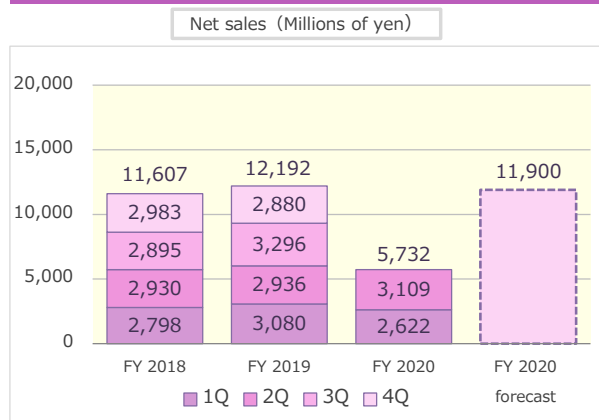
### Coating chemicals



### Adhesive Materials



### Functional Materials



## Segment Information (Consolidated)

Consolidated		FY 2018 (2Q)		FY 2019 (2Q)		FY 2020 (2Q)		FY 2018		FY 2019		FY 2020 forecast	
		Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change
Paper chemicals	Net sales	9,900	12.2	10,222	3.3	<b>9,715</b>	<b>△ 5.0</b>	19,839	8.7	21,295	7.3	19,300	△ 9.4
	Segment income	590	△ 11.7	166	△ 71.8	<b>193</b>	<b>16.5</b>	934	△ 26.9	366	△ 60.8	380	3.7
	Segment income/sales	6.0%		1.6%		<b>2.0%</b>		4.7%		1.7%		2.0%	
Coating chemicals	Net sales	9,443	1.0	9,008	△ 4.6	<b>7,900</b>	<b>△ 12.3</b>	19,150	△ 1.2	18,049	△ 5.7	15,800	△ 12.5
	Segment income	525	1.0	503	△ 4.3	<b>417</b>	<b>△ 17.1</b>	1,105	△ 1.0	1,051	△ 4.8	800	△ 23.9
	Segment income/sales	5.6%		5.6%		<b>5.3%</b>		5.8%		5.8%		5.1%	
Adhesive Materials	Net sales	14,673	2.9	14,102	△ 3.9	<b>13,054</b>	<b>△ 7.4</b>	29,920	5.8	27,698	△ 7.4	25,700	△ 7.2
	Segment income	1,438	4.6	1,132	△ 21.3	<b>561</b>	<b>△ 50.4</b>	2,477	△ 2.5	1,751	△ 29.3	1,220	△ 30.3
	Segment income/sales	9.8%		8.0%		<b>4.3%</b>		8.3%		6.3%		4.7%	
Functional Materials	Net sales	5,728	7.1	6,016	5.0	<b>5,732</b>	<b>△ 4.7</b>	11,607	3.9	12,192	5.0	11,900	△ 2.4
	Segment income	287	35.9	411	43.1	<b>194</b>	<b>△ 52.8</b>	619	10.5	632	2.1	470	△ 25.7
	Segment income/sales	5.0%		6.8%		<b>3.4%</b>		5.3%		5.2%		3.9%	
Others	Net sales	144	△ 6.1	151	5.0	<b>155</b>	<b>2.5</b>	265	△ 5.8	266	0.3	300	12.7
	Segment income	15	26.5	16	6.3	<b>16</b>	<b>4.4</b>	24	55.3	26	7.2	30	12.5
	Segment income/sales	10.4%		10.5%		<b>10.7%</b>		9.4%		10.0%		10.0%	
Subtotal	Net sales	39,890	5.1	39,501	△ 1.0	<b>36,558</b>	<b>△ 7.5</b>	80,782	4.4	79,501	△ 1.6	73,000	△ 8.2
	Segment income	2,857	2.5	2,229	△ 22.0	<b>1,383</b>	<b>△ 37.9</b>	5,162	△ 6.4	3,828	△ 25.8	2,900	△ 24.3
	Segment income/sales	7.2%		5.6%		<b>3.8%</b>		6.4%		4.8%		4.0%	
Consolidated total	Development Investment	△ 181	—	△ 165	—	<b>△ 147</b>	<b>—</b>	△ 374	—	△ 352	—	△ 300	—
	Segment income	2,675	2.4	2,063	△ 22.8	<b>1,236</b>	<b>△ 40.1</b>	4,787	△ 6.6	3,476	△ 27.4	2,600	△ 25.2
	Segment income/sales	6.7%		5.2%		<b>3.4%</b>		5.9%		4.4%		3.6%	

\*Applied research and development expense that will be the source of growth in the medium to long term.

The sales of business segmentation do not include intersegment sales.

[Paper chemicals] Size agent, Paper strengthening agent, Latex, etc.

[Coating chemicals] Printing ink resin, Paint resin, Polymerization emulsifier, UV/EB curable resin, etc.

[Adhesive Materials] Adhesive resin, Colorless rosin derivatives, etc.

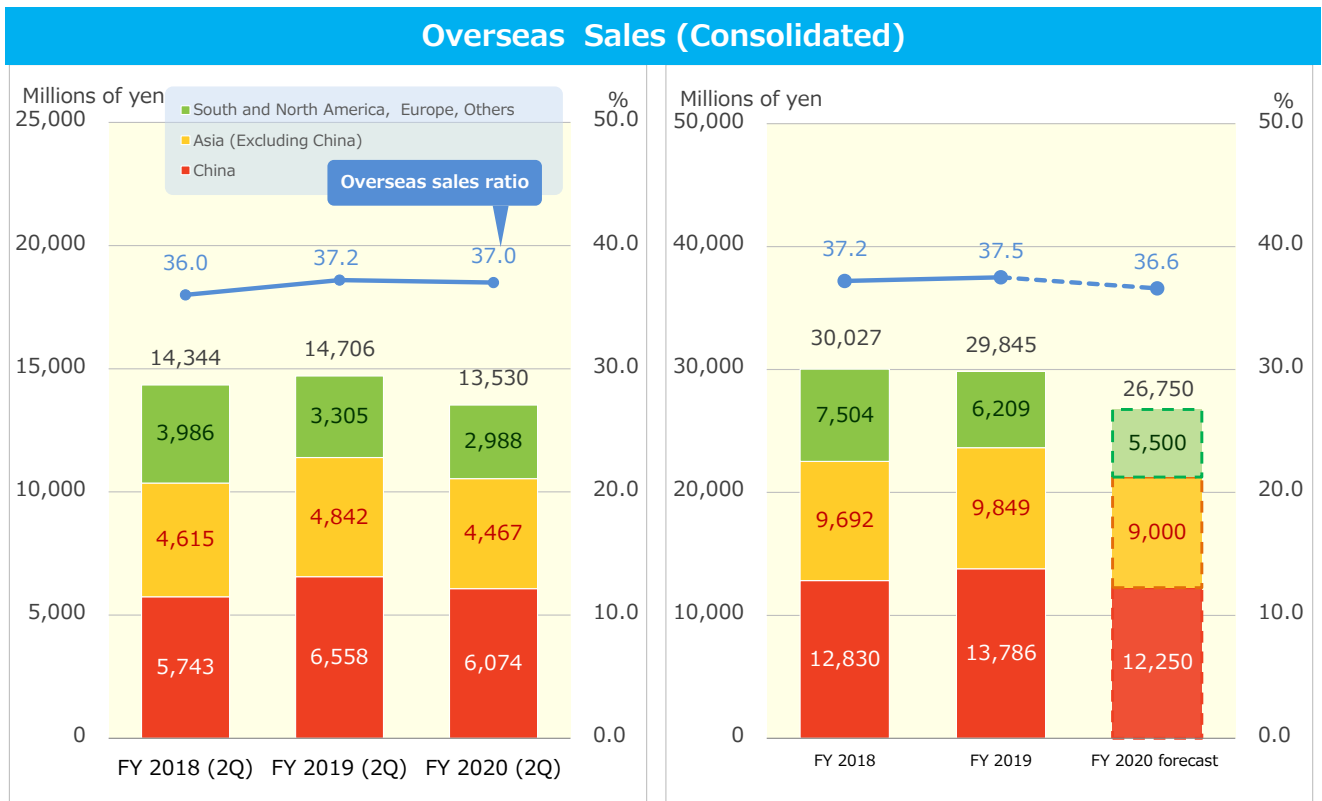
[Functional Materials] Compound materials for electronics, Functional fine chemical materials, Polishing agent for hard disk substrates, Flux cleanig System, etc.

[Others] Insurance business, Real estate agent, etc.

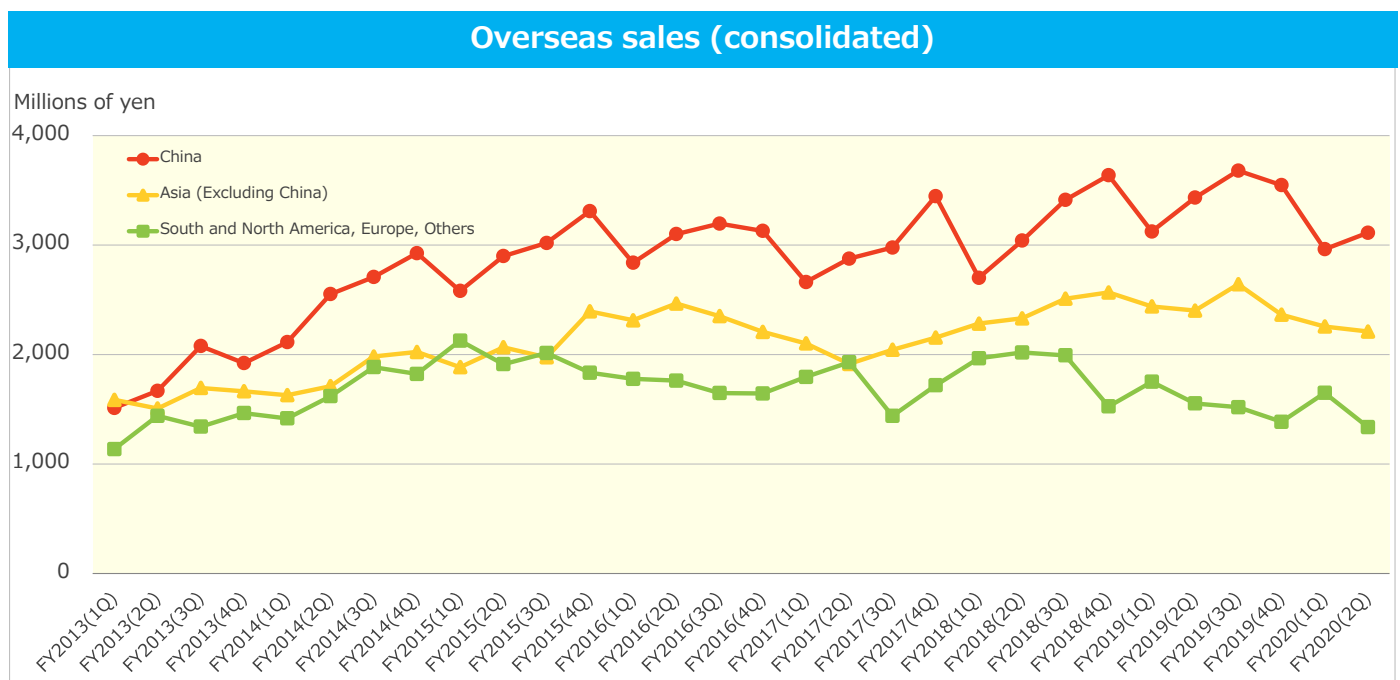
From FY2019, classification of some products has been changed from Functional Materials to Adhesive Materials.

The figures of FY2018 stated above have been modified to reflect the operating results based on the business segment after this change.

## Overseas Sales (Consolidated)



Consolidated	FY 2018 (2Q)		FY 2019 (2Q)		FY 2020 (2Q)		FY 2018		FY 2019		FY 2020 forecast	
	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change
<b>Overseas sales</b>	14,344	8.0	14,706	2.5	<b>13,530</b>	△ 8.0	30,027	10.9	29,845	△ 0.6	26,750	△ 10.4
Overseas sales in Asia	10,358	8.4	11,400	10.1	<b>10,542</b>	△ 7.5	22,522	11.6	23,635	4.9	21,250	△ 10.1
Overseas sales in China	5,743	3.7	6,558	14.2	<b>6,074</b>	△ 7.4	12,830	7.2	13,786	7.5	12,250	△ 11.1
<b>Overseas sales ratio</b>	36.0%		37.2%		<b>37.0%</b>		37.2%		37.5%		36.6%	



## Balance Sheets (Consolidated)

(Unit : Millions of yen)

Item	FY2019 (2Q)		FY2020 (2Q)		FY2019		Increase /Decrease (A) - (B)
	(As of September 30, 2018)		(As of September 30, 2019)		(As of March 31, 2019)		
	Amount	Com- position ratio	Amount (A)	Com- position ratio	Amount (B)	Com- position ratio	
(Assets)		%		%		%	
<b>I Current assets</b>							
1. Cash and deposits	7,853		7,091		9,061		△ 1,970
2. Notes and accounts receivable - trade	26,894		21,742		27,069		△ 5,326
3. Electronically recorded monetary claims - operating	2,018		1,665		1,969		△ 303
4. Merchandise and finished goods	8,101		8,185		9,508		△ 1,322
5. Work in process	1,026		826		1,006		△ 180
6. Raw materials and supplies	6,939		6,745		7,311		△ 566
7. Other	1,358		2,501		1,143		1,358
Allowance for doubtful accounts	△ 123		△ 103		△ 114		10
<b>Total Current assets</b>	<b>54,069</b>	<b>61.7</b>	<b>48,655</b>	<b>55.1</b>	<b>56,956</b>	<b>61.8</b>	<b>△ 8,300</b>
<b>II Noncurrent assets</b>							
1. Property, plant and equipment							
(1) Buildings and structures	7,547		7,800		7,684		115
(2) Machinery, equipment and vehicles	5,786		5,818		5,956		△ 138
(3) Land	5,140		5,142		5,140		2
(4) Construction in progress	2,594		10,668		5,937		4,731
(5) Other	491		568		549		18
<b>Total property, plant and equipment</b>	<b>21,560</b>	<b>24.6</b>	<b>29,998</b>	<b>33.9</b>	<b>25,268</b>	<b>27.4</b>	<b>4,729</b>
2. Intangible assets							
(1) Goodwill	684		402		543		△ 140
(2) Other	416		437		398		39
<b>Total intangible assets</b>	<b>1,175</b>	<b>1.2</b>	<b>840</b>	<b>1.0</b>	<b>941</b>	<b>1.0</b>	<b>△ 101</b>
3. Investments and other assets							
(1) Investment securities	8,665		6,968		7,261		△ 293
(2) Retirement benefit asset	1,736		1,160		1,105		55
(3) Deferred tax assets	275		300		305		△ 5
(4) Other	343		355		386		△ 30
Allowance for doubtful accounts	△ 68		△ 64		△ 66		2
<b>Total investments and other assets</b>	<b>10,952</b>	<b>12.5</b>	<b>8,720</b>	<b>9.9</b>	<b>8,991</b>	<b>9.8</b>	<b>△ 271</b>
<b>Total noncurrent assets</b>	<b>33,613</b>	<b>38.3</b>	<b>39,558</b>	<b>44.8</b>	<b>35,201</b>	<b>38.2</b>	<b>4,357</b>
<b>III Deferred Assets</b>							
1. Business commencement expenses	-		99		17		82
<b>Total deferred assets</b>	<b>-</b>	<b>-</b>	<b>99</b>	<b>0.1</b>	<b>17</b>	<b>0.0</b>	<b>82</b>
<b>Total assets</b>	<b>87,683</b>	<b>100.0</b>	<b>88,313</b>	<b>100.0</b>	<b>92,174</b>	<b>100.0</b>	<b>△ 3,861</b>

(Unit : Millions of yen)

Item	FY2019 (2Q)		FY2020 (2Q)		FY2019		Increase / Decrease (A) - (B)
	(As of September 30, 2018)		(As of September 30, 2019)		(As of March 31, 2019)		
	Amount	Com- position ratio	Amount (A)	Com- position ratio	Amount (B)	Com- position ratio	
(Liabilities)		%		%		%	
<b>I Current liabilities</b>							
1. Notes and accounts payable - trade	11,599		8,712		12,178		△ 3,466
2. Short-term borrowings	5,648		6,902		5,454		1,448
3. Income taxes payable	378		301		752		△ 451
4. Accrued consumption taxes	127		110		142		△ 31
5. Provision for bonuses	1,163		1,180		1,222		△ 42
6. Provision for bonuses for directors (and other officers)	36		15		60		△ 45
7. Provision for repairs	89		-		105		△ 105
8. Notes payable - facilities	74		168		111		56
9. Other	4,480		4,692		4,825		△ 133
Total current liabilities	23,598	26.9	22,082	25.0	24,853	27.0	△ 2,770
<b>II Noncurrent liabilities</b>							
1. Bonds payable	5,000		5,000		5,000		-
2. Long-term borrowings	225		3,865		3,895		△ 30
3. Deferred tax liabilities	1,815		1,168		1,186		△ 17
4. Provision for repairs	-		15		-		15
5. Retirement benefit liability	324		312		305		7
6. Asset retirement obligations	288		324		330		△ 6
7. Other	290		288		276		11
Total noncurrent liabilities	7,943	9.1	10,974	12.4	10,994	11.9	△ 20
Total liabilities	31,541	36.0	33,057	37.4	35,848	38.9	△ 2,790
(Net assets)							
<b>I Shareholders' equity</b>							
1. Share capital	3,343		3,343		3,343		-
2. Capital surplus	3,564		3,564		3,564		-
3. Retained earnings	42,101		44,138		44,153		△ 15
4. Treasury shares	△ 13		△ 452		△ 13		△ 439
Total shareholders' equity	48,995	55.9	50,593	57.3	51,047	55.4	△ 454
<b>II Accumulated other comprehensive income</b>							
1. Valuation difference on available-for-sale securities	3,739		2,582		2,796		△ 214
2. Foreign currency translation adjustment	930		380		727		△ 346
3. Remeasurements of defined benefit plans	800		157		175		△ 17
Total accumulated other comprehensive income	5,470	6.2	3,120	3.5	3,699	4.0	△ 579
<b>III Minority interests</b>	1,675	1.9	1,542	1.8	1,579	1.7	△ 36
Total net assets	56,141	64.0	55,256	62.6	56,326	61.1	△ 1,070
Total liabilities and net assets	87,683	100.0	88,313	100.0	92,174	100.0	△ 3,861

## Statements of Income (Consolidated)

(Unit : Millions of yen)

Item	FY2019 (20) '18/4-'18/9		FY2020 (20) '19/4-'19/9		Increase/ Decrease		FY2019 '18/4-'19/3	
	Amount	Ratio	Amount	Ratio	Amount	Rate of Change	Amount	Ratio
I Net Sales	39,501	100.0	36,558	100.0	△ 2,943	△ 7.5	79,501	100.0
II Cost of sales	30,737	77.8	28,922	79.1	△ 1,814	△ 5.9	62,123	78.1
Gross profit	8,764	22.2	7,636	20.9	△ 1,128	△ 12.9	17,378	21.9
III Selling, general and administrative expenses	6,867	17.4	6,715	18.4	△ 152	△ 2.2	13,813	17.4
Operating income	1,896	4.8	920	2.5	△ 975	△ 51.4	3,564	4.5
IV Non-operating income								
Interest income	9		15				18	
Dividend income	103		114				197	
Rental income from real estate	56		49				107	
Foreign exchange gains	144		-				146	
Insurance claim income	-		146				-	
Other	116	430	56	382	1.0	△ 47	195	667
V Non-operating expenses								
Interest expenses	80		79				149	
Foreign exchange losses	-		41				-	
Compensation expenses	-		-				68	
Other	29	110	39	161	0.4	50	62	280
Ordinary income		2,216		1,142	3.1	△ 1,074		3,950
VI Extraordinary income								
Gain on sales of non-current assets	5		0				5	
Gain on sales of investment securities	7		21				7	
Insurance claim income	63		-				2,118	
Reversal of provision foreign currency translation adjustment	-	75	7	29	0.1	△ 46	-	2,130
VII Extraordinary loss								
Loss on sales and retirement of non-current assets	34		13				235	
Loss on valuation of non-current assets	-		-				0	
Loss on sales of investment securities	-		-				0	
Loss on valuation of investment securities	-		-				14	
Loss on sales of investments in capital	-		15				-	
Expenses for suspension of operation	-	34	91	119	0.3	85	-	250
Income before income taxes		2,258		1,052	2.9	△ 1,205		5,831
Income taxes-current	473		309				1,385	
Income taxes-deferred	186	659	95	405	1.1	△ 253	211	1,596
Net income		1,599		647	1.8	△ 952		4,235
Income before minority interests		174		192	0.5	18		344
Profit attributable to owners of parent		1,425		454	1.3	△ 970		3,890

## &lt;Reference&gt; Statements of Comprehensive Income (Consolidated)

Net income		1,599		647		△ 952	△ 59.5		4,235
Other comprehensive income									
Valuation difference on available-for-sale securities		△ 140		△ 214		△ 73			△ 1,083
Foreign currency translation adjustment		△ 575		△ 409		165			△ 780
Remeasurements of defined benefit plans, net of tax		△ 46		△ 17		28			△ 673
Total other comprehensive income		△ 762		△ 641		120			△ 2,537
Comprehensive income		837		5		△ 831	△ 99.3		1,697



## Statements of Cash Flows (Consolidated)

(Units: Millions of yen)

Item	FY2019 (2Q)	FY2020 (2Q)	Increase / Decrease	FY2019
	'18/4-'18/9	'19/4-'19/9		'18/4-'19/3
	Amount	Amount		Amount
<b>I Cash flows from operating activities</b>				
Income before income taxes	2,258	1,052	△ 1,205	5,831
Depreciation	1,319	1,323	4	2,870
Amortization of goodwill	140	140	-	281
Increase (decrease) in allowance for doubtful accounts	1	△ 9	△ 10	△ 7
Increase (decrease) in provision for bonuses	△ 105	△ 40	65	△ 43
Increase (decrease) in provision for bonuses for directors (and other officers)	△ 44	△ 45	△ 1	△ 20
Increase (decrease) in retirement benefit liability	△ 2	7	9	△ 21
Decrease (increase) in retirement benefit asset	△ 198	△ 55	143	433
Loss (gain) on sales of investment securities	△ 7	△ 21	△ 14	△ 7
Loss on valuation of investment securities	-	-	-	14
Loss (gain) on sales of investments in capital	-	15	15	-
Loss (gain) on sales and retirement of non-current assets	29	13	△ 16	230
Reversal of foreign currency transaction adjustment	-	△ 7	△ 7	-
Expenses for suspension of operation	-	91	91	-
Insurance claim income	△ 63	-	63	△ 2,118
Interest and dividend income	△ 113	△ 129	△ 16	△ 216
Interest expenses	80	79	△ 1	149
Decrease (increase) in trade receivables	923	5,423	4,499	649
Decrease (increase) in inventories	△ 97	1,888	1,985	△ 1,962
Increase (decrease) in trade payables	△ 291	△ 3,382	△ 3,090	339
Increase (decrease) in accrued consumption taxes	32	92	59	45
Other	△ 291	△ 1,058	△ 767	△ 1,163
Subtotal	3,570	5,376	1,805	5,285
Interest and dividends received	119	129	9	215
Interest paid	△ 98	△ 58	40	△ 168
Proceeds from insurance income	132	-	△ 132	2,621
Income taxes (paid) refund	△ 688	△ 928	△ 239	△ 1,225
<b>Cash flows from operating activities</b>	<b>3,035</b>	<b>4,519</b>	<b>1,483</b>	<b>6,728</b>
<b>II Cash flows from investing activities</b>				
Decrease (increase) in time deposits	△ 7	-	7	△ 25
Purchase of property, plant and equipment	△ 2,871	△ 5,852	△ 2,980	△ 7,954
Proceeds from sales of property, plant and equipment	65	10	△ 54	69
Purchase of investment securities	△ 17	△ 23	△ 6	△ 33
Proceeds from sales of investment securities	9	30	20	9
Purchase of intangible assets	△ 25	△ 66	△ 40	△ 41
Payments for deferred assets	-	△ 82	△ 82	△ 16
Decrease (increase) in other investments	2	1	△ 0	3
Other	△ 32	△ 9	23	△ 220
<b>Cash flows from investing activities</b>	<b>△ 2,877</b>	<b>△ 5,992</b>	<b>△ 3,114</b>	<b>△ 8,208</b>
<b>III Cash flows from financing activities</b>				
Net increase (decrease) in short-term borrowings	△ 169	1,523	1,693	△ 122
Proceeds from long-term borrowings	300	-	△ 300	4,000
Repayments of long-term borrowings	△ 358	△ 30	328	△ 567
Purchase of treasury shares	△ 0	△ 439	△ 439	△ 0
Repayments to non-controlling shareholders	-	△ 173	△ 173	-
Dividends paid	△ 392	△ 454	△ 61	△ 804
Dividends paid to non-controlling interests	-	△ 0	△ 0	△ 262
Other	-	△ 804	△ 804	-
<b>Cash flows from financing activities</b>	<b>△ 619</b>	<b>△ 377</b>	<b>241</b>	<b>2,243</b>
<b>IV Effect of exchange rate change on cash and cash equivalents</b>	<b>△ 161</b>	<b>△ 117</b>	<b>43</b>	<b>△ 196</b>
<b>V Net increase (decrease) in cash and cash equivalents</b>	<b>△ 623</b>	<b>△ 1,968</b>	<b>△ 1,345</b>	<b>566</b>
<b>VI Cash and cash equivalents at beginning of period</b>	<b>8,404</b>	<b>8,970</b>	<b>566</b>	<b>8,404</b>
<b>VII Cash and cash equivalents at end of period</b>	<b>7,781</b>	<b>7,002</b>	<b>△ 778</b>	<b>8,970</b>