

# **Announcement of Business Results For the 2Q and Six Months Ended September 30, 2019**

**November 7, 2019**

**Toray Industries, Inc.**

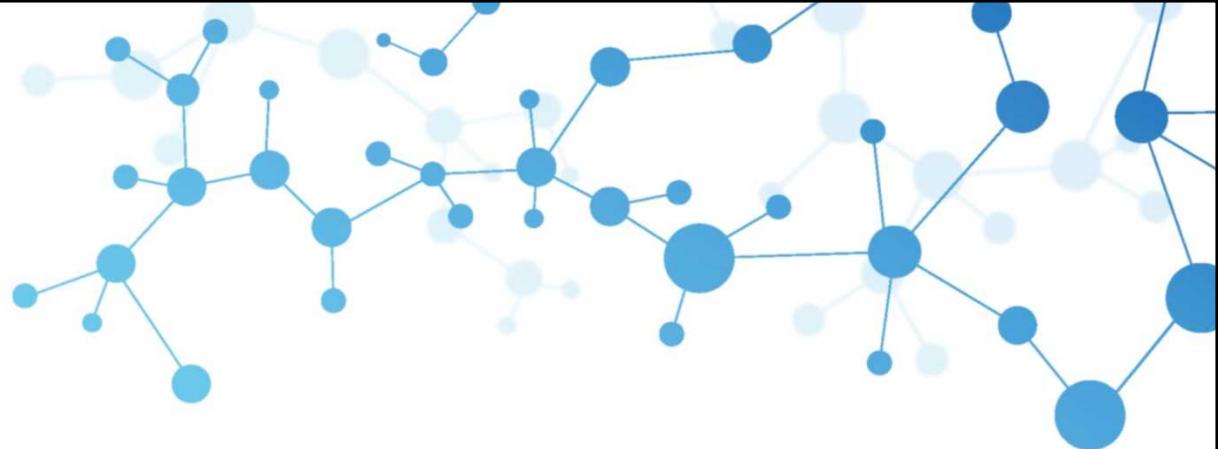
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The TORAY logo is displayed in a bold, blue, sans-serif font. The letters 'T' and 'Y' have a distinctive slanted top edge.

Innovation by Chemistry



# **I. Consolidated Business Results for the 2Q and Six Months Ended September 30, 2019**

# Summary of Consolidated Business Results for the 2Q and Six Months Ended September 30, 2019

Billion yen

	FY Mar/19 2Q (Jul.-Sept.)	FY Mar/20 2Q (Jul.-Sept.)	Changes	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes
Net Sales	640.4	<b>578.2</b>	-62.3 (-9.7%)	1,191.2	<b>1,122.4</b>	-68.9 (-5.8%)
Cost of Sales	518.9	<b>464.9</b>	-54.0 (-10.4%)	957.8	<b>898.2</b>	-59.6 (-6.2%)
Gross Profit	121.5	<b>113.3</b>	-8.2 (-6.8%)	233.4	<b>224.2</b>	-9.2 (-3.9%)
(Gross Profit to Net Sales)	19.0%	<b>19.6%</b>	+0.6 points	19.6%	<b>20.0%</b>	+0.4 points
Operating Income	43.8	<b>37.1</b>	-6.7 (-15.2%)	77.7	<b>71.6</b>	-6.0 (-7.8%)
(Operating Income to Net Sales)	6.8%	<b>6.4%</b>	-0.4 points	6.5%	<b>6.4%</b>	-0.1 points
Non-operating Income and Expenses, net	▲ 1.6	▲ <b>1.7</b>	-0.1	▲ 0.3	▲ <b>2.3</b>	-2.0
Ordinary Income	42.2	<b>35.5</b>	-6.8 (-16.0%)	77.4	<b>69.4</b>	-8.0 (-10.4%)
Special Credits and Charges, net	▲ 2.9	▲ <b>0.7</b>	+2.2	▲ 3.4	▲ <b>1.8</b>	+1.7
Income before Income Taxes	39.3	<b>34.8</b>	-4.5 (-11.5%)	74.0	<b>67.6</b>	-6.4 (-8.6%)
Net Income Attributable to Owners of Parent	25.7	<b>23.0</b>	-2.6 (-10.3%)	48.5	<b>45.7</b>	-2.8 (-5.9%)

## Exchange Rate

	(FY Mar/19 2Q) →	(FY Mar/20 2Q)	(FY Mar/19 Six Months) →	(FY Mar/20 Six Months)
<Yen/US\$>				
Average	: 111.5	→ 107.4	110.3	→ 108.6
End of the Term	: 113.6	→ 107.9		
<Yen/Euro>				
Average	: 129.6	→ 119.3	129.8	→ 121.4
End of the Term	: 132.1	→ 118.0		

# Non-operating Income and Expenses

Billion yen

	FY Mar/19 2Q (Jul.-Sept.)	FY Mar/20 2Q (Jul.-Sept.)	Changes	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes
Non-operating Income	5.3	<b>4.8</b>	-0.5	12.6	<b>11.3</b>	-1.3
Interest and Dividend Income	1.0	<b>1.1</b>	+0.1	3.8	<b>3.9</b>	+0.1
Equity in Earnings of Affiliates	3.6	<b>2.4</b>	-1.2	5.9	<b>4.6</b>	-1.4
Others	0.7	<b>1.4</b>	+0.6	2.9	<b>2.8</b>	-0.1
Non-operating Expenses	<b>▲6.9</b>	<b>▲6.5</b>	+0.4	<b>▲12.9</b>	<b>▲13.6</b>	-0.7
Interest Expenses	<b>▲1.8</b>	<b>▲1.9</b>	-0.1	<b>▲3.2</b>	<b>▲3.8</b>	-0.5
Costs related to Start-up of New Facilities	<b>▲1.1</b>	<b>▲0.9</b>	+0.2	<b>▲3.0</b>	<b>▲2.0</b>	+1.0
Costs related to Idle Facilities	<b>▲2.1</b>	<b>▲2.2</b>	-0.1	<b>▲3.4</b>	<b>▲4.2</b>	-0.9
Others	<b>▲1.8</b>	<b>▲1.4</b>	+0.4	<b>▲3.3</b>	<b>▲3.6</b>	-0.3
Non-operating Income and Expenses, net	<b>▲1.6</b>	<b>▲1.7</b>	-0.1	<b>▲0.3</b>	<b>▲2.3</b>	-2.0
Interest and Dividend Income, Interest Expenses, net	<b>▲0.9</b>	<b>▲0.9</b>	+0.0	0.5	<b>0.1</b>	-0.4

\* Positive numbers : Income, Negative numbers (▲) : Expenses

# Special Credits and Charges

Billion yen

	FY Mar/19 2Q (Jul.-Sept.)	FY Mar/20 2Q (Jul.-Sept.)	Changes	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes
Special Credits	0.3	<b>1.8</b>	+1.4	0.7	<b>1.8</b>	+1.1
Gain on Sales of Property, Plant and Equipment	0.1	<b>0.1</b>	-0.0	0.1	<b>0.1</b>	+0.0
Gain on Sales of Investment Securities	0.2	<b>1.7</b>	+1.4	0.6	<b>1.7</b>	+1.1
Others	-	-	-	-	<b>0.0</b>	+0.0
Special Charges	▲ 3.3	▲ <b>2.5</b>	+0.8	▲ 4.1	▲ <b>3.6</b>	+0.5
Loss on Sales and Disposal of Property, Plant and Equipment	▲ 1.8	▲ <b>1.1</b>	+0.7	▲ 2.5	▲ <b>1.8</b>	+0.7
Loss on Impairment of Fixed Assets	▲ 0.2	▲ <b>1.1</b>	-0.9	▲ 0.3	▲ <b>1.2</b>	-0.9
Settlement Package	▲ 1.0	-	+1.0	▲ 1.0	-	+1.0
Others	▲ 0.3	▲ <b>0.3</b>	+0.0	▲ 0.3	▲ <b>0.6</b>	-0.2
Special Credits and Charges, net	▲ 2.9	▲ <b>0.7</b>	+2.2	▲ 3.4	▲ <b>1.8</b>	+1.7

\* Positive numbers : Income, Negative numbers (▲) : Expenses

# Assets, Liabilities, Net Assets and Free Cash Flows

Billion yen

	End of Mar/19	End of Sept/19	Changes
Total Assets	2,788.4	<b>2,698.3</b>	-90.0
Current Assets	1,191.3	<b>1,133.4</b>	-58.0
Tangible Assets	996.9	<b>993.5</b>	-3.4
Intangible Assets	171.2	<b>155.5</b>	-15.7
Investment and Other Assets	428.9	<b>416.0</b>	-12.9

	End of Mar/19	End of Sept/19	Changes
Total Liabilities	1,574.4	<b>1,498.8</b>	-75.6
Current Liabilities	696.5	<b>615.8</b>	-80.7
Other Liabilities	877.9	<b>883.0</b>	+5.1
Total Net Assets	1,213.9	<b>1,199.5</b>	-14.4

Owner's Equity	1,131.0	<b>1,116.7</b>	-14.3
Equity Ratio	40.6%	<b>41.4%</b>	+0.8 points
Interest-bearing Debts	976.3	<b>945.0</b>	-31.2

D/E Ratio	0.86	<b>0.85</b>	-0.02
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## <Free Cash Flows>

	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes
Cash Flows from Operating Activities	57.1	<b>105.8</b>	+48.7
Cash Flows from Investment Activities	▲185.5	▲ <b>72.7</b>	+112.8
Free Cash Flows	▲128.4	▲ <b>33.1</b>	+161.5

# Capital Expenditures, Depreciation, R&D Expenses

Billion yen

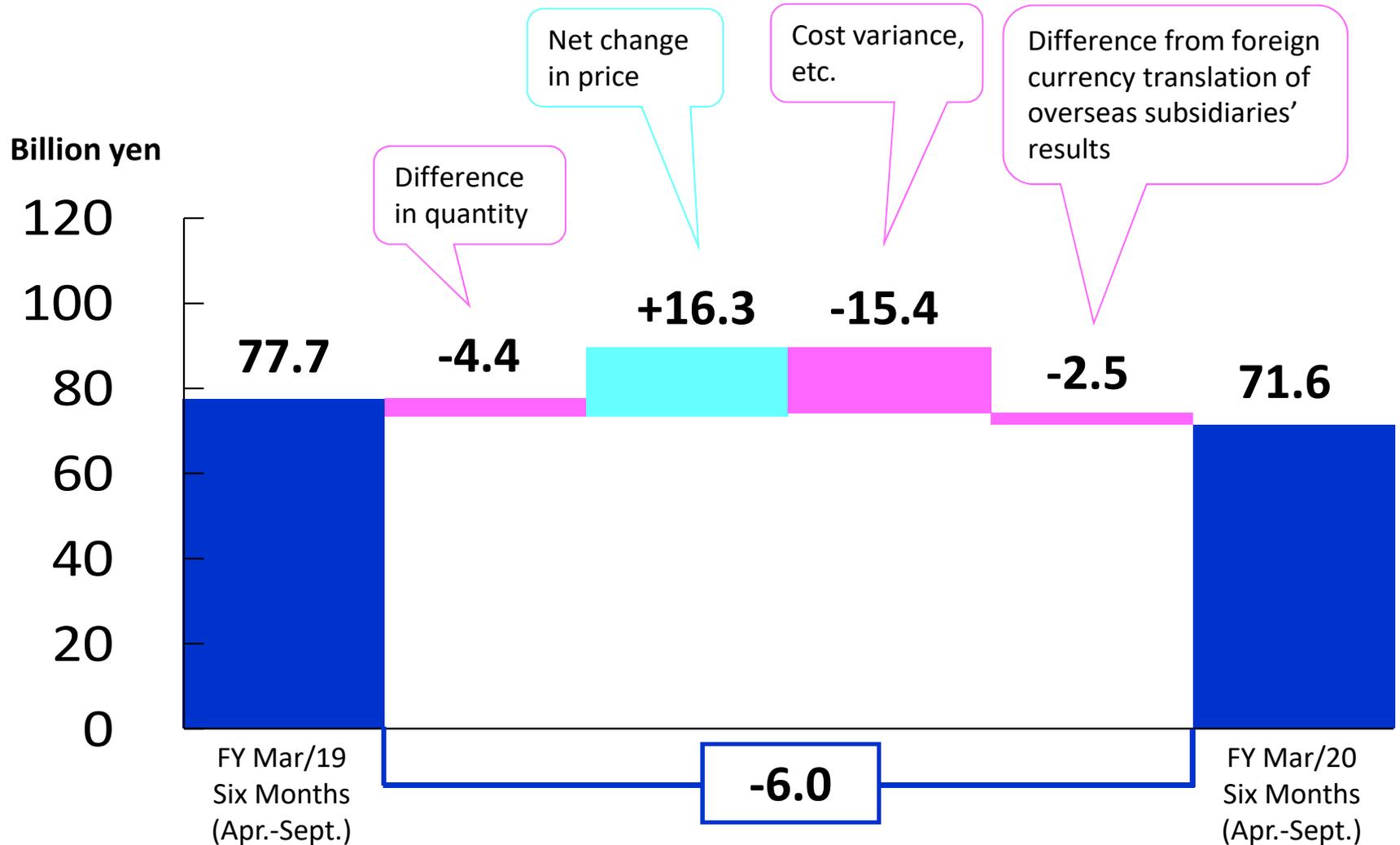
	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes
Capital Expenditures*	66.3	<b>63.1</b>	-3.2
Toray	9.9	<b>13.4</b>	+3.5
Consolidated Subsidiaries	56.3	<b>49.7</b>	-6.7
Depreciation*	50.1	<b>54.5</b>	+4.4
Toray	16.6	<b>16.4</b>	-0.2
Consolidated Subsidiaries	33.5	<b>38.1</b>	+4.6
R&D Expenses	33.2	<b>32.8</b>	-0.4
Toray	24.3	<b>24.0</b>	-0.4
Consolidated Subsidiaries	8.9	<b>8.8</b>	-0.1

\* Total of tangible assets and intangible assets (excluding goodwill)

## Major Capital Expenditure Projects :

Alcantara S.p.A.	: Alcantara® production facilities
Zoltek Zrt.	: Carbon fiber production facilities
Toray Industries Hungary Kft.	: Battery separator film SETELA® production facilities
Toray Industries, Inc.	: Fuel cell electrode substrate production facilities

# Income Variance Factor Analysis



# Net Sales and Operating Income by Segment

Billion yen

	Net Sales			Operating Income		
	FY Mar/19 2Q (Jul.-Sept.)	FY Mar/20 2Q (Jul.-Sept.)	Changes	FY Mar/19 2Q (Jul.-Sept.)	FY Mar/20 2Q (Jul.-Sept.)	Changes
Fibers & Textiles	282.1	<b>242.4</b>	-39.7 (-14.1%)	23.3	<b>17.3</b>	-6.0 (-25.9%)
Performance Chemicals	222.5	<b>197.7</b>	-24.9 (-11.2%)	18.6	<b>16.7</b>	-1.9 (-10.2%)
Carbon Fiber Composite Materials	50.7	<b>59.0</b>	+8.3 (+16.3%)	2.9	<b>4.8</b>	+2.0 (+68.5%)
Environment & Engineering	66.5	<b>60.1</b>	-6.5 (-9.7%)	3.9	<b>2.5</b>	-1.4 (-35.7%)
Life Science	13.6	<b>14.2</b>	+0.5 (+3.8%)	0.5	<b>0.7</b>	+0.2 (+38.2%)
Others	4.9	<b>4.9</b>	-0.0 (-0.5%)	0.6	<b>0.9</b>	+0.3 (+45.9%)
Total	640.4	<b>578.2</b>	-62.3 (-9.7%)	49.8	<b>42.9</b>	-6.9 (-13.8%)
Adjustments				▲ 6.0	▲ 5.8	+0.2
Consolidated	640.4	<b>578.2</b>	-62.3 (-9.7%)	43.8	<b>37.1</b>	-6.7 (-15.2%)

	Net Sales			Operating Income		
	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes
Fibers & Textiles	503.1	<b>451.2</b>	-51.8 (-10.3%)	41.8	<b>32.1</b>	-9.7 (-23.3%)
Performance Chemicals	435.0	<b>397.7</b>	-37.3 (-8.6%)	35.8	<b>33.7</b>	-2.1 (-6.0%)
Carbon Fiber Composite Materials	96.5	<b>120.5</b>	+24.0 (+24.9%)	6.0	<b>10.7</b>	+4.8 (+79.9%)
Environment & Engineering	121.4	<b>117.4</b>	-4.0 (-3.3%)	5.7	<b>3.9</b>	-1.8 (-32.1%)
Life Science	26.3	<b>26.6</b>	+0.3 (+1.1%)	0.7	<b>1.3</b>	+0.6 (+93.6%)
Others	9.0	<b>9.0</b>	-0.0 (-0.1%)	0.8	<b>1.3</b>	+0.5 (+55.5%)
Total	1,191.2	<b>1,122.4</b>	-68.9 (-5.8%)	90.8	<b>82.9</b>	-7.8 (-8.6%)
Adjustments				▲ 13.1	▲ 11.3	+1.8
Consolidated	1,191.2	<b>1,122.4</b>	-68.9 (-5.8%)	77.7	<b>71.6</b>	-6.0 (-7.8%)

# Business Results by Segment (Fibers & Textiles)

## Net Sales / Operating Income

Billion yen

		FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes	
Net Sales	Toray	102.2	94.1	-8.0	(-7.9%)
	Japanese Subsidiaries	253.5	242.9	-10.6	(-4.2%)
	Overseas Subsidiaries	321.3	274.9	-46.5	(-14.5%)
	Adjustments	▲ 173.9	▲ 160.6	+13.3	
	Total	503.1	451.2	-51.8	(-10.3%)
Operating Income	Toray	10.4	6.9	-3.5	(-33.7%)
	Japanese Subsidiaries	7.2	5.9	-1.3	(-18.1%)
	Overseas Subsidiaries	24.4	18.9	-5.4	(-22.2%)
	Adjustments	▲ 0.2	0.3	+0.5	
	Total	41.8	32.1	-9.7	(-23.3%)

## Business Performance

### Japan

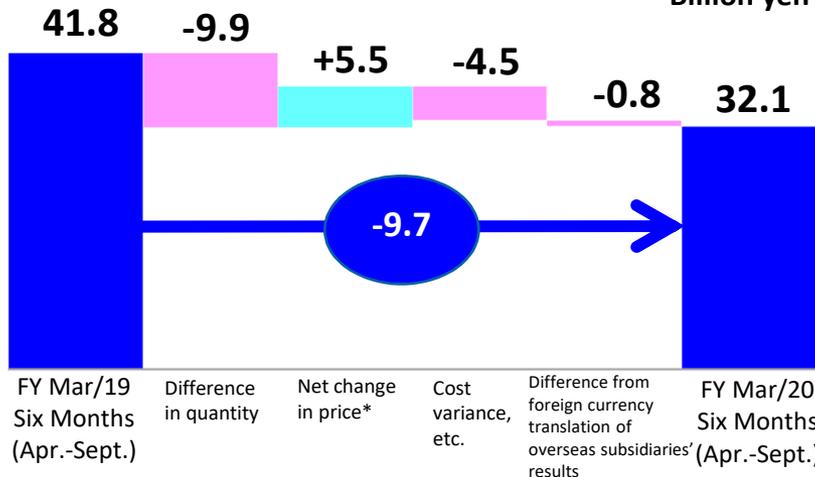
- While shipments of apparel and industrial applications remained weak in general, Toray Group pursued sales expansion of materials for uniform applications in Japan and for sports applications in the U.S. and Europe and also focused on strengthening cost competitiveness.

### Overseas

- Various applications were affected by the weak market conditions reflecting the prolonged trade frictions between the U.S. and China and slowdown in the Chinese economy.
- Demand for apparel applications including garments and textiles as well as automotive applications in Europe and China and hygiene products in China remained sluggish.

## Changes in Operating Income

Billion yen



## Topics

- Aug. 2019 : Decided to acquire Alva Sweden AB, a Swedish manufacturer of cushions for automotive airbag systems, and its subsidiary, Alva Confecções S.A. and Alva Tunisia SA.
- Sept. 2019 : Launched “&+”, a new fiber commercial brand to underpin Toray’s commitment to realizing a sustainable society.
- Sept. 2019 : As a new joint initiative with UNIQLO with an aim to contribute to sustainability, started the development of clothing using recycled down and recycled polyester products.

\* Difference in selling price and raw materials’ cost and fuel prices of petrochemical-based products, etc. (net)

# Business Results by Segment (Performance Chemicals)

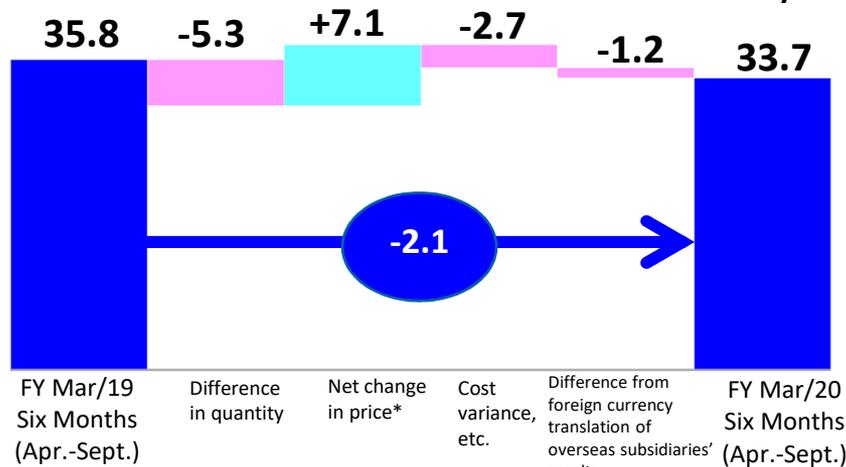
## Net Sales / Operating Income

Billion yen

		FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes	
Net Sales	Toray	131.1	113.3	-17.8	(-13.6%)
	Japanese Subsidiaries	249.3	223.6	-25.8	(-10.3%)
	Overseas Subsidiaries	294.5	255.1	-39.4	(-13.4%)
	Adjustments	▲ 240.0	▲ 194.3	+45.7	
	Total	435.0	397.7	-37.3	(-8.6%)
Operating Income	Toray	10.6	8.1	-2.5	(-23.6%)
	Japanese Subsidiaries	7.7	7.7	+0.0	(+0.1%)
	Overseas Subsidiaries	18.4	19.1	+0.7	(+3.6%)
	Adjustments	▲ 0.9	▲ 1.2	-0.3	
	Total	35.8	33.7	-2.1	(-6.0%)

## Changes in Operating Income

Billion yen



\* Difference in selling price and raw materials' cost and fuel prices of petrochemical-based products, etc. (net)

## Business Performance

### Resins Business

- Sales in Japan were strong in general, while sales of both automotive and home appliance applications were slow overseas primarily due to the impact of the slowdown in the Chinese economy.

### Chemicals Business

- Affected by the decline in the basic chemicals market.

### Films Business

- Shipment of battery separator films for lithium-ion secondary batteries increased reflecting demand growth, while polyester films were affected by the inventory adjustment for optical as well as electronic parts related applications.

### Electronic & Information Materials

- Saw strong performance of OLED related materials and electric circuit materials.

## Topics

- Jul. 2019: Started full-scale production of RAYBRID<sup>®</sup>, a photosensitive material for metal mesh electrodes, which allows the production of larger-sized automotive touch panels without compromising visibility.

# Breakdown of Performance Chemicals Segment

Billion yen

	FY Mar/19 Six Months (Apr. - Sept.)		FY Mar/20 Six Months (Apr. - Sept.)		
	Net Sales	Ratio	Net Sales	Ratio	Changes
Resins, Chemicals	195.2	29%	163.1	28%	-16%
Films	174.5	26%	161.5	27%	-7%
Electronic & Information Materials	32.6	5%	35.6	6%	+9%
Trading	272.7	40%	231.7	39%	-15%
Adjustments	▲ 240.0	-	▲ 194.3	-	-
<b>Total</b>	<b>435.0</b>		<b>397.7</b>		<b>-9%</b>

# Business Results by Segment (Carbon Fiber Composite Materials)

## Net Sales / Operating Income

Billion yen

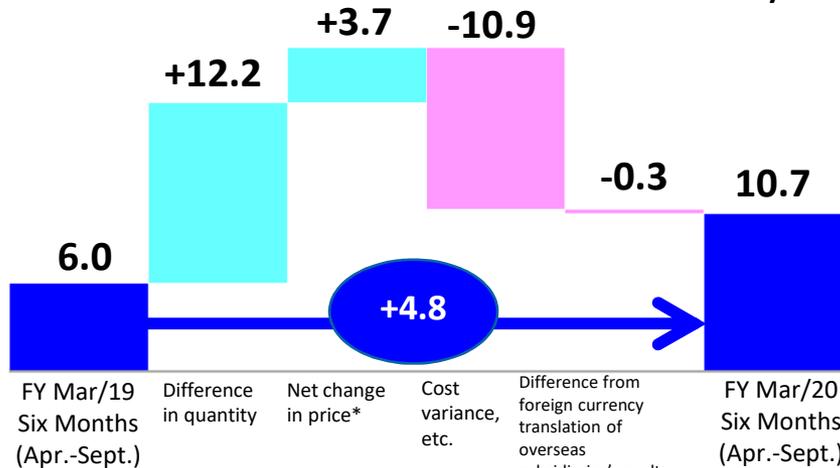
		FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes	
Net Sales	Toray	53.6	58.4	+4.9	(+9.1%)
	Japanese Subsidiaries	38.8	41.5	+2.7	(+7.1%)
	Overseas Subsidiaries	86.3	106.3	+20.0	(+23.1%)
	Adjustments	▲ 82.2	▲ 85.8	-3.6	
	Total	96.5	120.5	+24.0	(+24.9%)
Operating Income	Toray	4.0	6.2	+2.2	(+55.1%)
	Japanese Subsidiaries	0.7	0.8	+0.1	(+15.6%)
	Overseas Subsidiaries	4.5	8.6	+4.1	(+90.7%)
	Adjustments	▲ 3.3	▲ 5.0	-1.7	
	Total	6.0	10.7	+4.8	(+79.9%)

## Business Performance

- Remained strong as a whole. There was an expansion of demand for the aircraft application, strong performance in industrial applications in the environment and energy-related fields such as compressed natural gas tanks and wind turbine blades, and recovery in the demand for sports applications.

## Changes in Operating Income

Billion yen



\* Difference in selling price and raw materials' cost and fuel prices of petrochemical-based products, etc. (net)

## Topics

- Aug. 2019 : Took part in the "China Composites Expo 2019," the Largest composite materials exhibition in Asia. Highlighted the contributions made by Toray's carbon fiber composite materials in the areas of "mobility," "energy," and "quality of life."
- Sept. 2019 : Participated in the exhibition "Composites Europe 2019" in Germany with five subsidiaries located in Europe including Zoltek. Introduced a diverse product lineup leveraging the Group's comprehensive materials and process technology capabilities.

# Breakdown of Carbon Fiber Composite Materials Segment

Billion yen

	FY Mar/19 Six Months (Apr.-Sept.)		FY Mar/20 Six Months (Apr.-Sept.)		
	Net Sales	Ratio	Net Sales	Ratio	Changes
<b>Aerospace</b>	<b>41.8</b>	<b>43%</b>	<b>55.9</b>	<b>46%</b>	<b>+34%</b>
<b>Sports</b>	<b>8.1</b>	<b>8%</b>	<b>9.1</b>	<b>8%</b>	<b>+13%</b>
<b>Industrial</b>	<b>46.6</b>	<b>48%</b>	<b>55.5</b>	<b>46%</b>	<b>+19%</b>
<b>Total</b>	<b>96.5</b>		<b>120.5</b>		<b>+25%</b>

# Business Results by Segment (Environment & Engineering)

## Net Sales / Operating Income

Billion yen

		FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes	
Net Sales	Toray	11.2	12.6	+1.4	(+12.5%)
	Japanese Subsidiaries	140.9	128.0	-12.8	(-9.1%)
	Overseas Subsidiaries	15.7	17.8	+2.0	(+13.0%)
	Adjustments	▲ 46.4	▲ 40.9	+5.4	
	<b>Total</b>	<b>121.4</b>	<b>117.4</b>	<b>-4.0</b>	<b>(-3.3%)</b>
Operating Income	Toray	▲ 0.0	▲ 0.4	-0.4	(-)
	Japanese Subsidiaries	3.8	1.7	-2.2	(-56.5%)
	Overseas Subsidiaries	2.0	2.8	+0.8	(+38.1%)
	Adjustments	▲ 0.2	▲ 0.1	+0.0	
	<b>Total</b>	<b>5.7</b>	<b>3.9</b>	<b>-1.8</b>	<b>(-32.1%)</b>

## Business Performance

### Water Treatment Business

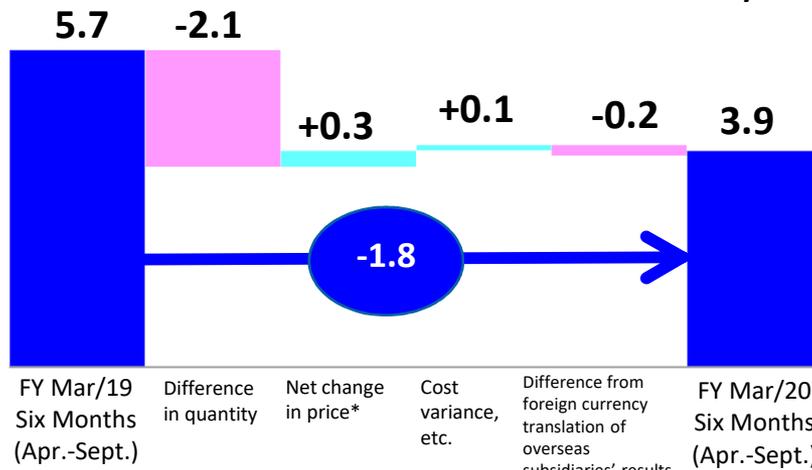
- Demand for reverse osmosis (RO) membranes and other products grew strongly on the whole in Japan and overseas.

### Japanese Subsidiaries

- A construction subsidiary was negatively affected by the decline of high profit project orders.
- An engineering subsidiary experienced decreases in the shipment of some electronics related equipments.

## Changes in Operating Income

Billion yen



## Topics

- Jul. 2019 : Created the world's highest-level nanofiltration (NF) membrane with the aim for commercialization within the next three years.

\* Difference in selling price and price change of products less subject to price effect of petrochemical-based raw materials (net)

# Business Results by Segment (Life Science)

## Net Sales / Operating Income

Billion yen

		FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes	
Net Sales	Toray	12.2	12.7	+0.5	(+3.8%)
	Japanese Subsidiaries	20.7	20.4	-0.3	(-1.3%)
	Overseas Subsidiaries	6.3	6.6	+0.4	(+6.1%)
	Adjustments	▲ 12.9	▲ 13.2	-0.3	
	Total	26.3	26.6	+0.3	(+1.1%)
Operating Income	Toray	▲ 0.5	0.2	+0.7	(-)
	Japanese Subsidiaries	0.6	0.6	-0.0	(-0.3%)
	Overseas Subsidiaries	0.1	0.3	+0.2	(+231.6%)
	Adjustments	0.5	0.2	-0.3	
	Total	0.7	1.3	+0.6	(+93.6%)

## Business Performance

### Pharmaceutical Business

- Sales of orally active prostacyclin derivative DORNER<sup>®</sup> were affected by the introduction of its generic versions.
- While sales of pruritus treatment REMITCH<sup>®</sup>\* were also influenced by the introduction of its generic versions, its shipment was strong partly due to the growth in the entire market.

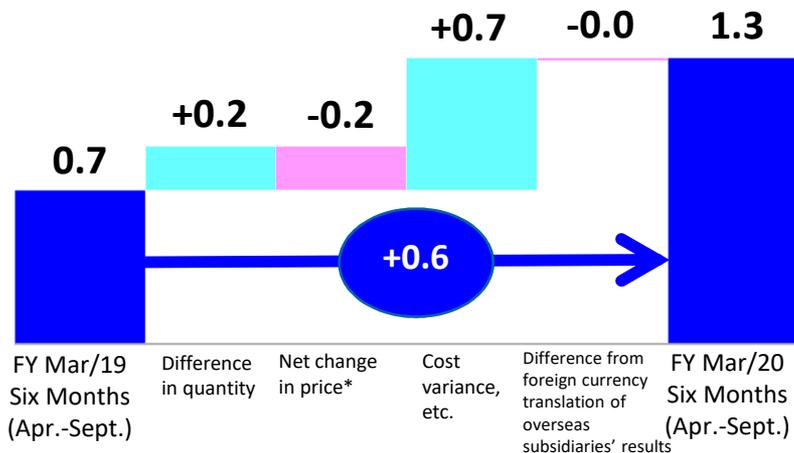
### Medical Devices Business

- Shipment of dialyzers grew strongly in Japan and overseas.

\*REMITCH<sup>®</sup> is a registered trademark of Torii Pharmaceutical Co., Ltd.

## Changes in Operating Income

Billion yen



## Topics

- Jul. 2019 : Started full-scale production of "HEMOFEEL<sup>®</sup> SNV," a new continual and gentle blood filtration device.

\* Difference in selling price and price change of products less subject to price effect of petrochemical-based raw materials (net)

# Results of Major Subsidiaries and Regions

Billion yen

	Net Sales			Operating Income		
	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes	FY Mar/19 Six Months (Apr.-Sept.)	FY Mar/20 Six Months (Apr.-Sept.)	Changes
Toray International, Inc.	334.7	<b>306.0</b>	-28.7	6.9	<b>6.2</b>	-0.7
Toray Engineering Co., Ltd.	54.6	<b>50.1</b>	-4.5	2.2	<b>1.0</b>	-1.2
Toray Construction Co., Ltd.	22.3	<b>18.3</b>	-4.0	1.1	<b>0.1</b>	-1.0
Toray Advanced Film Co., Ltd.	20.2	<b>19.3</b>	-0.9	1.7	<b>1.5</b>	-0.2

Subsidiaries in Southeast Asia	Fibers & Textiles	78.1	<b>70.2</b>	-7.9	4.1	<b>3.3</b>	-0.9
	Performance Chemicals	60.0	<b>44.7</b>	-15.3	5.4	<b>3.1</b>	-2.3
	Others	0.1	<b>0.1</b>	-0.0	0.0	<b>0.0</b>	+0.0
	Total	138.1	<b>115.0</b>	-23.2	9.6	<b>6.4</b>	-3.2

Subsidiaries in China	Fibers & Textiles	157.9	<b>132.8</b>	-25.2	14.8	<b>11.5</b>	-3.3
	Performance Chemicals	54.5	<b>42.6</b>	-11.8	1.8	<b>1.4</b>	-0.4
	Others	16.4	<b>18.3</b>	+1.9	0.8	<b>1.4</b>	+0.6
	Total	228.8	<b>193.7</b>	-35.2	17.4	<b>14.3</b>	-3.0

Subsidiaries in Korea	Fibers & Textiles	53.4	<b>41.4</b>	-12.0	1.6	<b>1.6</b>	+0.1
	Performance Chemicals	76.7	<b>83.2</b>	+6.4	8.4	<b>13.3</b>	+4.9
	Others	12.4	<b>14.7</b>	+2.3	1.1	<b>2.3</b>	+1.2
	Total	142.5	<b>139.3</b>	-3.2	11.1	<b>17.3</b>	+6.2

# Comparison of Operating Income (1Q vs. 2Q) by Segment

Segment	Operating Income (Bil. yen) 1Q Actual → 2Q Actual ( ) difference	Variance Factors
Fibers & Textiles	14.8 → 17.3 (+2.5)	<ul style="list-style-type: none"> <li>In the garment business, shipment of autumn/winter products increased.</li> </ul>
Performance Chemical	17.0 → 16.7 (-0.3)	<ul style="list-style-type: none"> <li>In the resins business, sales volume of ABS resins decreased due to the impact of the slowdown in the Chinese economy.</li> <li>Chemicals business was affected by the price decline in the basic chemicals market.</li> <li>In the electronics and information materials business, shipment of OLED related materials and electric circuit materials expanded.</li> </ul>
Carbon Fiber Composite Materials	5.9 → 4.8 (-1.1)	<ul style="list-style-type: none"> <li>In the aerospace applications, sales volume declined in the 2Q, since there was a frontloaded shipment reflecting a customer's production plan in the 1Q.</li> </ul>
Environment & Engineering	1.4 → 2.5 (+1.1)	<ul style="list-style-type: none"> <li>In the water treatment business, sales of RO membranes remained strong, and shipment of home water purifiers was favorable.</li> <li>Construction projects proceeded steadily at a water treatment engineering subsidiary.</li> </ul>
Life Science	0.6 → 0.7 (+0.1)	<ul style="list-style-type: none"> <li>In the medical devices business, sales of dialyzers and dialysis machines expanded.</li> </ul>
Others	0.4 → 0.9 (+0.5)	
Adjustments	▲5.5 → ▲5.8 (-0.2)	
<b>Total</b>	<b>34.5 → 37.1</b> <b>(+2.6)</b>	



## **II. Business Forecast for the Fiscal Year Ending March 2020 (Consolidated Basis)**

# Forecast Summary for the Fiscal Year Ending March 2020

Billion yen

		FY Mar/19 Actual	FY Mar/20 Forecast	Changes		Initial Forecast	Difference from Initial Forecast*
Net Sales	1st Half	1,191.2	1,122.4	-68.9	(-5.8%)	1,210.0	-87.6
	2nd Half	1,197.6	1,207.6	+10.0	(+0.8%)	1,320.0	-112.4
	<b>Total</b>	<b>2,388.8</b>	<b>2,330.0</b>	<b>-58.8</b>	<b>(-2.5%)</b>	<b>2,530.0</b>	<b>-200.0</b>
Operating Income	1st Half	77.7	71.6	-6.0	(-7.8%)	70.0	+1.6
	2nd Half	63.8	73.4	+9.6	(+15.0%)	90.0	-16.6
	<b>Total</b>	<b>141.5</b>	<b>145.0</b>	<b>+3.5</b>	<b>(+2.5%)</b>	<b>160.0</b>	<b>-15.0</b>
Ordinary Income	1st Half	77.4	69.4	-8.0	(-10.4%)	67.0	+2.4
	2nd Half	57.1	68.6	+11.5	(+20.2%)	88.0	-19.4
	<b>Total</b>	<b>134.5</b>	<b>138.0</b>	<b>+3.5</b>	<b>(+2.6%)</b>	<b>155.0</b>	<b>-17.0</b>
Net Income Attributable to Owners of Parent	1st Half	48.5	45.7	-2.8	(-5.9%)	39.0	+6.7
	2nd Half	30.9	37.3	+6.5	(+21.0%)	54.0	-16.7
	<b>Total</b>	<b>79.4</b>	<b>83.0</b>	<b>+3.6</b>	<b>(+4.6%)</b>	<b>93.0</b>	<b>-10.0</b>

Net Income per Share	1st Half	30.32 yen	28.54 yen
	2nd Half	19.29 yen	23.34 yen
	<b>Total</b>	<b>49.61 yen</b>	<b>51.88 yen</b>
Dividend per Share	1st Half	8 yen	8 yen
	2nd Half	8 yen	8 yen
	<b>Total</b>	<b>16 yen</b>	<b>16 yen</b>

Assumed exchange rate : 105 yen / US\$ (from October)

\*Difference from Initial Forecast : the difference from the forecast announced on May 14, 2019.

# Forecast by Segment

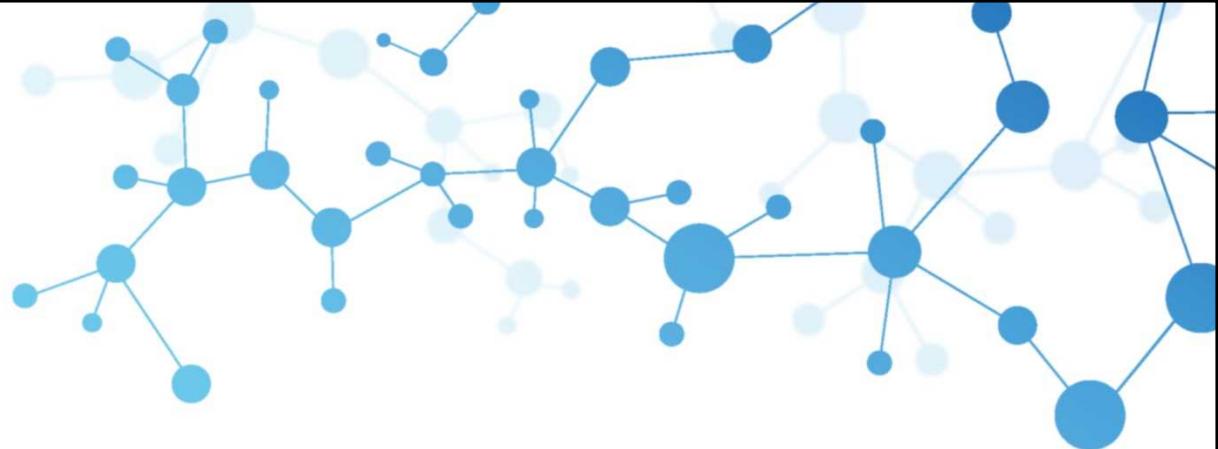
Billion yen

		FY Mar/19 Actual			FY Mar/20 Forecast			Changes			Difference from Initial Forecast*		
		1st Half	2nd Half	Total	1st Half	2nd Half	Total	1st Half	2nd Half	Total	1st Half	2nd Half	Total
Net Sales	Fibers & Textiles	503.1	471.2	974.3	451.2	463.8	915.0	-51.8	-7.4	-59.3	-28.8	-56.2	-85.0
	Performance Chemicals	435.0	433.9	868.8	397.7	427.3	825.0	-37.3	-6.5	-43.8	-52.3	-57.7	-110.0
	Carbon Fiber Composite Materials	96.5	119.5	215.9	120.5	129.5	250.0	+24.0	+10.1	+34.1	0.5	-0.5	—
	Environment & Engineering	121.4	136.3	257.7	117.4	147.6	265.0	-4.0	+11.3	+7.3	-7.6	+2.6	-5.0
	Life Science	26.3	27.4	53.7	26.6	28.4	55.0	+0.3	+1.1	+1.3	-0.4	+0.4	—
	Others	9.0	9.5	18.5	9.0	11.0	20.0	-0.0	+1.5	+1.5	1.0	-1.0	—
	Consolidated	1,191.2	1,197.6	2,388.8	1,122.4	1,207.6	2,330.0	-68.9	+10.0	-58.8	-87.6	-112.4	-200.0
Operating Income	Fibers & Textiles	41.8	31.1	72.9	32.1	33.9	66.0	-9.7	+2.8	-6.9	+0.1	-4.1	-4.0
	Performance Chemicals	35.8	31.9	67.7	33.7	35.3	69.0	-2.1	+3.4	+1.3	-4.3	-7.7	-12.0
	Carbon Fiber Composite Materials	6.0	5.6	11.5	10.7	11.3	22.0	+4.8	+5.7	+10.5	+2.7	-2.7	—
	Environment & Engineering	5.7	6.5	12.2	3.9	8.1	12.0	-1.8	+1.6	-0.2	-0.1	-1.9	-2.0
	Life Science	0.7	0.6	1.3	1.3	▲ 0.3	1.0	+0.6	-0.9	-0.3	+1.3	-0.3	+1.0
	Others	0.8	2.3	3.1	1.3	1.7	3.0	+0.5	-0.5	-0.1	+0.3	-0.3	—
	Adjustments	▲ 13.1	▲ 14.2	▲ 27.3	▲ 11.3	▲ 16.7	▲ 28.0	+1.8	-2.5	-0.7	+1.7	+0.3	+2.0
Consolidated	77.7	63.8	141.5	71.6	73.4	145.0	-6.0	+9.6	+3.5	+1.6	-16.6	-15.0	

\*Difference from Initial Forecast : the difference from the forecast announced on May 14, 2019.

# Comparison of Operating Income (Initial vs. New) Forecast by Segment

Segment	Full-year Operating Income (Bil. yen) Initial Forecast → New Forecast ( ) difference	Variance Factors
Fibers & Textiles	70.0 → 66.0 (-4.0)	<ul style="list-style-type: none"> <li>Expect sales of both apparel and industrial applications to decrease due to the prolonged trade frictions between the U.S. and China.</li> </ul>
Performance Chemical	81.0 → 69.0 (-12.0)	<ul style="list-style-type: none"> <li>In the resins business, expect sales of ABS resins and other products to remain weak in the Chinese market due to the prolonged trade frictions between the U.S. and China.</li> <li>In the chemicals business, expect basic chemicals to be affected by the deteriorating market conditions.</li> <li>In the films business, expect sales volume to decrease on the whole, and demand for battery separator films for automotive applications to be lower than the forecast.</li> </ul>
Carbon Fiber Composite Materials	22.0 → 22.0 (±0.0)	<ul style="list-style-type: none"> <li>Expect to be in line with the initial forecast.</li> </ul>
Environment & Engineering	14.0 → 12.0 (-2.0)	<ul style="list-style-type: none"> <li>In the water treatment business, expect RO membranes to be strong, while hollow-fiber membranes and MBR related projects are likely to be delayed, and expect to be affected by the strong yen.</li> <li>An engineering subsidiary expects some impact from cancellation and delay of projects.</li> </ul>
Life Science	0.0 → 1.0 (+1.0)	<ul style="list-style-type: none"> <li>Expect positive effects from cost reduction including sales expenses, and strong shipment of pruritus treatment, REMITCH®*.</li> </ul>
Others	3.0 → 3.0 (±0.0)	<ul style="list-style-type: none"> <li>Expect to be in line with the initial forecast.</li> </ul>
Adjustments	▲30.0 → ▲28.0 (+2.0)	*REMITCH® is a registered trademark of Torii Pharmaceutical Co., Ltd.
Total	160.0 → 145.0 (-15.0)	



## III. Reference

# Quarterly Net Sales by Segment

Billion yen

	FY Mar/19 Actual					FY Mar/20 Actual	
	1Q	2Q	3Q	4Q	Total	1Q	2Q
Fibers & Textiles	221.0	282.1	258.0	213.2	974.3	208.8	242.4
Performance Chemicals	212.4	222.5	219.9	214.0	868.8	200.0	197.7
Carbon Fiber Composite Materials	45.7	50.7	57.8	61.6	215.9	61.5	59.0
Environment & Engineering	54.9	66.5	63.2	73.1	257.7	57.4	60.1
Life Science	12.6	13.6	13.9	13.4	53.7	12.4	14.2
Others	4.1	4.9	4.2	5.2	18.5	4.2	4.9
Consolidated	550.8	640.4	617.1	580.5	2,388.8	544.2	578.2

# Quarterly Operating Income by Segment

Billion yen

	FY Mar/19 Actual					FY Mar/20 Actual	
	1Q	2Q	3Q	4Q	Total	1Q	2Q
Fibers & Textiles	18.5	23.3	18.5	12.6	72.9	14.8	17.3
Performance Chemicals	17.2	18.6	16.2	15.7	67.7	17.0	16.7
Carbon Fiber Composite Materials	3.1	2.9	2.4	3.2	11.5	5.9	4.8
Environment & Engineering	1.9	3.9	2.2	4.3	12.2	1.4	2.5
Life Science	0.2	0.5	0.6	0.1	1.3	0.6	0.7
Others	0.2	0.6	0.9	1.3	3.1	0.4	0.9
Adjustments	▲ 7.1	▲ 6.0	▲ 6.1	▲ 8.1	▲ 27.3	▲ 5.5	▲ 5.8
Consolidated	33.9	43.8	34.7	29.1	141.5	34.5	37.1

# Quarterly Net Sales of Performance Chemicals by Sub-segments

Billion yen

	FY Mar/19					FY Mar/20	
	1Q	2Q	3Q	4Q	Total	1Q	2Q
Resins, Chemicals	97.9	97.3	96.9	90.4	382.5	83.9	79.2
Films	85.5	88.9	91.3	86.9	352.7	80.7	80.8
Electronic & Information Materials	14.3	18.3	16.5	14.9	64.0	16.3	19.4
Trading	135.5	137.1	135.7	126.9	535.3	122.7	109.0
Adjustments	▲ 120.9	▲ 119.1	▲ 120.5	▲ 105.2	▲ 465.7	▲ 103.6	▲ 90.7
Total	212.4	222.5	219.9	214.0	868.8	200.0	197.7

# Quarterly Net Sales of Carbon Fiber Composite Materials by Sub-segments

Billion yen

	FY Mar/19					FY Mar/20	
	1Q	2Q	3Q	4Q	Total	1Q	2Q
<b>Aerospace</b>	19.3	22.5	26.5	28.7	96.9	29.1	26.7
<b>Sports</b>	4.1	3.9	5.2	4.3	17.5	4.9	4.2
<b>Industrial</b>	22.3	24.3	26.2	28.7	101.4	27.4	28.1
<b>Total</b>	45.7	50.7	57.8	61.6	215.9	61.5	59.0

# Quarterly Net Sales of Major Subsidiaries and Regions

Billion yen

	FY Mar/19					FY Mar/20	
	1Q	2Q	3Q	4Q	Total	1Q	2Q
Toray International, Inc.	146.3	188.5	183.0	145.1	662.9	147.0	159.0
Toray Engineering Co., Ltd.	24.0	30.6	27.9	32.6	115.1	22.8	27.3
Toray Construction Co., Ltd.	10.1	12.2	14.9	19.0	56.1	8.1	10.2
Toray Advanced Film Co., Ltd.	9.7	10.5	10.8	9.5	40.5	9.4	9.9

Subsidiaries in Southeast Asia	Fibers & Textiles	37.9	40.2	39.8	34.9	152.7	34.7	35.6
	Performance Chemicals	29.6	30.4	29.1	26.0	115.1	23.2	21.5
	Others	0.1	0.1	0.1	0.0	0.2	0.0	0.0
	Total	67.6	70.6	68.9	61.0	268.0	57.9	57.1
Subsidiaries in China	Fibers & Textiles	75.5	82.5	77.4	50.8	286.1	61.2	71.6
	Performance Chemicals	27.0	27.5	26.5	23.2	104.2	22.8	19.9
	Others	8.6	7.8	9.7	7.4	33.5	9.4	8.9
	Total	111.1	117.8	113.5	81.4	423.7	93.3	100.4
Subsidiaries in Korea	Fibers & Textiles	25.5	27.9	26.1	24.5	103.9	20.8	20.6
	Performance Chemicals	35.9	40.8	41.4	41.7	159.9	40.5	42.7
	Others	7.0	5.5	6.1	5.7	24.3	7.5	7.2
	Total	68.4	74.1	73.6	71.9	288.1	68.3	70.5

# Quarterly Operating Income of Major Subsidiaries and Regions

Billion yen

	FY Mar/19					FY Mar/20	
	1Q	2Q	3Q	4Q	Total	1Q	2Q
Toray International, Inc.	2.6	4.3	4.4	2.7	14.1	2.7	3.5
Toray Engineering Co., Ltd.	0.5	1.8	0.6	2.5	5.4	0.4	0.6
Toray Construction Co., Ltd.	0.4	0.7	0.9	0.2	2.2	▲ 0.1	0.1
Toray Advanced Film Co., Ltd.	0.7	1.0	0.9	0.8	3.3	0.6	0.8

Subsidiaries in Southeast Asia	Fibers & Textiles	2.2	2.0	2.4	1.1	7.6	1.8	1.5
	Performance Chemicals	3.2	2.3	1.1	1.6	8.2	1.9	1.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	5.3	4.2	3.5	2.7	15.8	3.7	2.7
Subsidiaries in China	Fibers & Textiles	7.5	7.3	6.0	3.7	24.5	5.7	5.8
	Performance Chemicals	0.8	1.0	0.9	0.8	3.4	0.7	0.7
	Others	0.5	0.3	0.5	0.1	1.4	0.7	0.7
	Total	8.8	8.5	7.3	4.7	29.3	7.2	7.2
Subsidiaries in Korea	Fibers & Textiles	1.0	0.5	0.5	▲ 0.1	2.0	0.7	0.9
	Performance Chemicals	3.1	5.3	5.5	5.8	19.7	6.1	7.2
	Others	0.7	0.5	0.8	0.5	2.4	1.2	1.1
	Total	4.8	6.3	6.8	6.2	24.1	8.1	9.2

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**Descriptions of predicted business results, projections, and business plans for the Fiscal Year Ending March 2020 contained in this material are based on predictive forecasts of the future business environment made at the present time.**

**The material in this presentation is not a guarantee of the Company's future business performance.**

**'TORAY'**

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