

August 6, 2008

**Announcement of Business Results  
For the First Quarter of  
Fiscal Year Ending March 2009**

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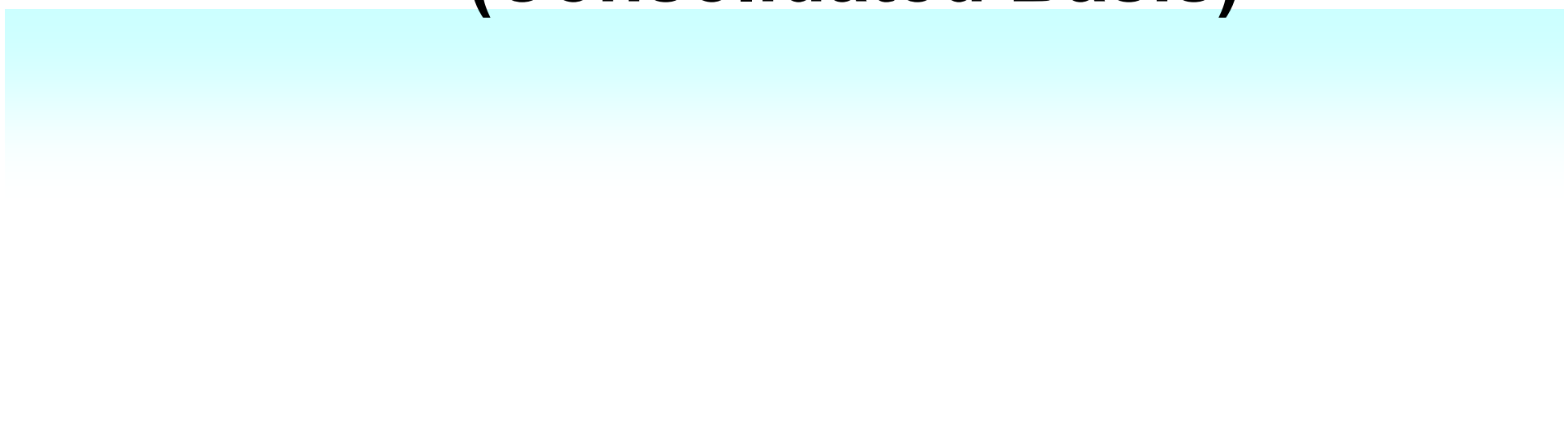
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**I. Business Results for the 1Q  
of Fiscal Year Ending March 2009  
(Consolidated Basis)**



# Summary of Business Results for the 1Q of FY March 2009

Unit : Billion yen

	1Q FY Mar/08	1Q FY Mar/09	Changes
Net Sales	385.8	<b>387.4</b>	+1.6 (+0.4%)
Cost of Sales	308.1	<b>314.9</b>	+6.9 (+2.2%)
Gross Profit	77.7	<b>72.5</b>	- 5.3 (-6.8%)
(Gross Profit to Net Sales)	20.1%	<b>18.7%</b>	- 1.4 points
Operating Income	19.5	<b>13.2</b>	- 6.3 (-32.3%)
(Operating Income to Net Sales)	5.1%	<b>3.4%</b>	- 1.6 points
Non-operating Income and Expenses, net	▲ 0.8	▲ <b>0.8</b>	- 0.0
Ordinary Income	18.8	<b>12.5</b>	- 6.3 (-33.6%)
Special Credits and Charges, net	0.5	▲ <b>3.2</b>	- 3.7
Income before Income Taxes	19.3	<b>9.3</b>	- 10.0 (-51.8%)
Net Income	10.2	<b>4.4</b>	-5.8 (-56.9%)

Unit : Billion yen

	End of Mar/08	End of Jun/08	Changes
Total Assets	1,698.2	<b>1,665.3</b>	-32.9
Total Liabilities	1,056.1	<b>1,051.1</b>	-4.9
Net Assets	642.2	<b>614.2</b>	-27.9
Interest-bearing Debts*	591.2	<b>622.8</b>	+31.7

\* End of Jun/08 figure includes lease obligation

#### Exchange Rate

<Yen/US\$>

(08/3 1Q → 09/3 1Q)

Average: 120.8 → 104.6

End of the term: 123.3 → 106.4

<Yen/Euro>

(08/3 1Q → 09/3 1Q)

Average: 162.7 → 163.4

End of the term: 165.6 → 168.1

#### Oil Price

<US\$/B> (DUBAI FOB)

(08/3 1Q → 09/3 1Q)

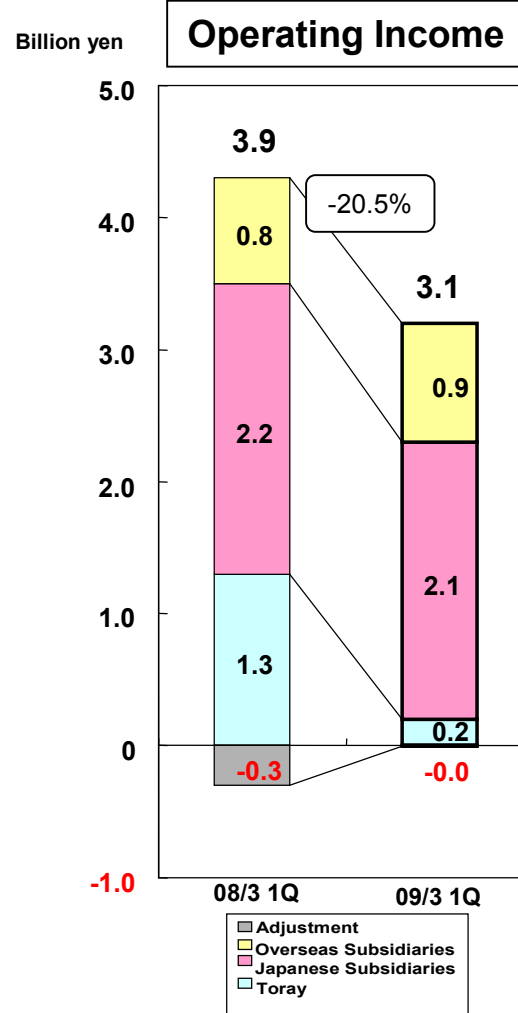
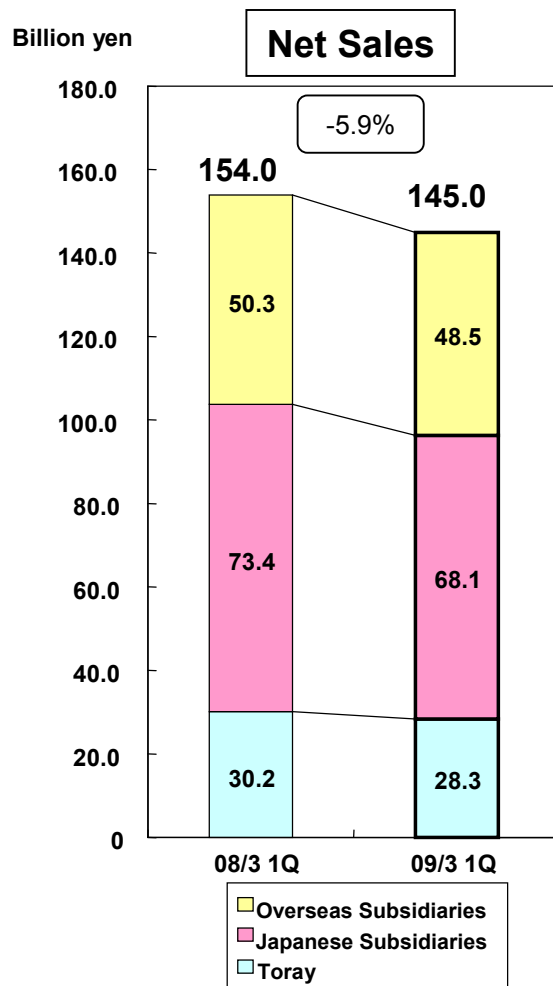
Average: 64.8 → 116.8

\*Consolidated business results are the sums of Apr. – Jun. business results in companies whose FY ends on March 31 and Jan. – Mar. business results in companies whose FY ends on December 31.

# Results by Business Segment

	Net Sales			Operating Income		
	1Q FY Mar/08	1Q FY Mar/09	Changes	1Q FY Mar/08	1Q FY Mar/09	Changes
Fibers & Textiles	154.0	<b>145.0</b>	-9.0 (-5.9%)	3.9	<b>3.1</b>	-0.8 (-20.5%)
Plastics & Chemicals	98.1	<b>106.8</b>	+8.7 (+8.9%)	4.2	<b>3.5</b>	-0.6 (-15.0%)
IT-related Products	66.4	<b>62.3</b>	-4.1 (-6.1%)	6.1	<b>3.6</b>	-2.6 (-41.9%)
Carbon Fiber Composite Materials	19.3	<b>19.7</b>	+0.4 (+2.0%)	3.8	<b>3.3</b>	-0.4 (-11.8%)
Environment & Engineering	32.9	<b>38.6</b>	+5.7 (+17.5%)	1.1	<b>▲ 0.7</b>	-1.8 (-)
Life Science & Other Businesses	15.2	<b>15.0</b>	-0.2 (-1.2%)	0.9	<b>0.1</b>	-0.7 (-85.5%)
(Pharmaceuticals and Medical Products)	10.3	<b>10.4</b>	+0.2 (+1.7%)	0.1	<b>▲ 0.6</b>	-0.8 (-)
Total	385.8	<b>387.4</b>	+1.6 (+0.4%)	20.0	<b>13.0</b>	-7.0 (-35.1%)
Elimination & Corporate				<b>▲ 0.4</b>	<b>0.3</b>	+0.7
Consolidated	385.8	<b>387.4</b>	+1.6 (+0.4%)	19.5	<b>13.2</b>	-6.3 (-32.3%)

# Results by Business Segment (Fibers & Textiles)



**<Major Subsidiaries >**

Japan : Toray International Inc., Ichimura Sangyo, Co., Ltd., Chori Co., Ltd., etc.  
 Asia : PENFABRIC (Malaysia), LUCKYTEX (Thailand), ITS (Indonesia), TFNL (China), etc.  
 Europe & US : ALCANTARA (Italy), etc.

**Comments**

**Toray**

Price increase and shift to high value-added products did not fully cover the cost increase related to rapid and steep rise in raw materials and fuel prices. Also, adjustment of production was proceeded to promote price increase. In total, sales and income decreased.

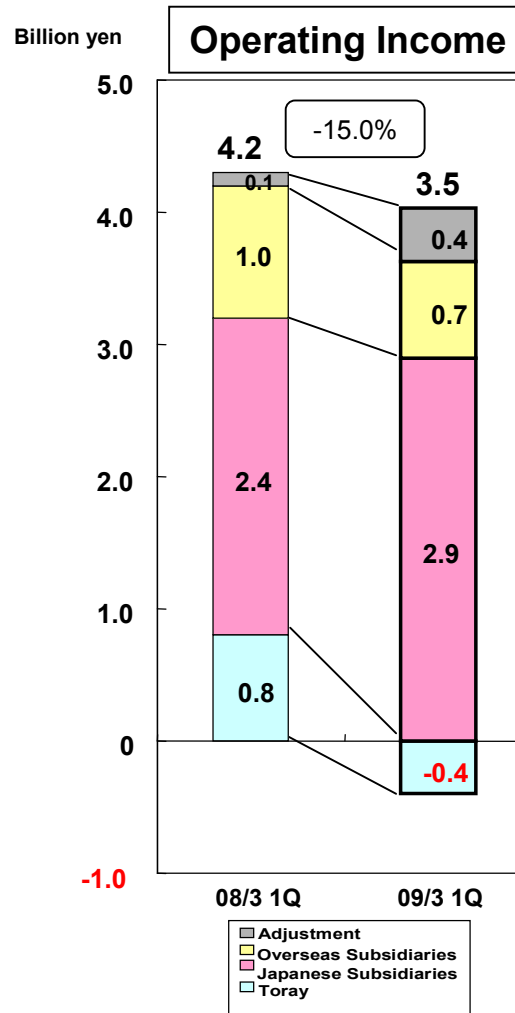
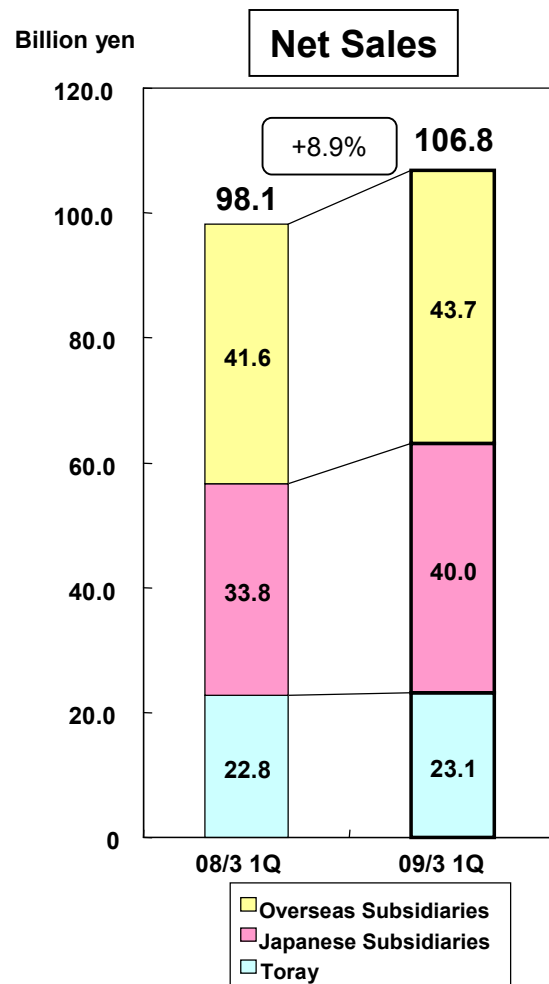
**Japanese Subsidiaries**

Despite steady apparel business for a major SPA at trading subsidiaries, total sales and income decreased due to reforms of unprofitable businesses and profit deterioration of exports stemming from strong yen, etc.

**Overseas Subsidiaries**

Sales decreased because sales of polyester/cotton blended textiles in Malaysia and Thailand, and filament textiles in UK declined. Though cost increased due to steep rise in raw materials and fuel prices, man-made suede business in Europe and fibers & fabrics for airbags in Thailand performed strongly and income increased slightly.

# Results by Business Segment (Plastics & Chemicals)



**<Major Subsidiaries>**

Japan : Toray Advanced Film Co., Ltd., Toray Fine Chemicals Co., Ltd.,  
Soda Aromatic Co., Ltd., Chori Co., Ltd., etc.

Overseas : TPA (US), TPM (Malaysia), TPEu (France), TSI (Korea), etc.

## Comments

### Toray

Sales increased through steady automobile applications in plastic resins business and sales expansion for solar cells and hybrid car capacitors in films business. While income decreased due to the steep rise in raw materials and fuel prices and increased costs derived from periodic maintenance of facilities for ABS resin production, etc.

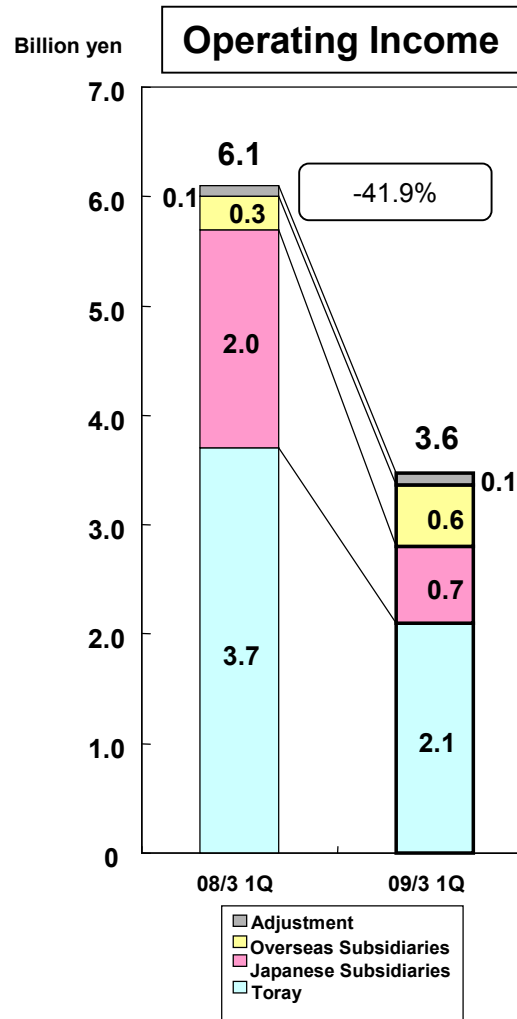
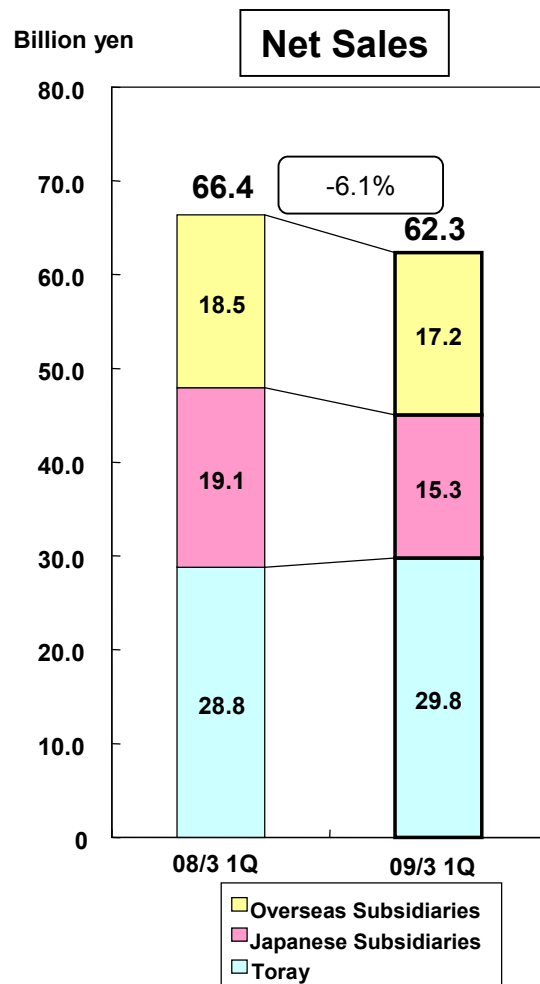
### Japanese Subsidiaries

Sales and income increased through sales expansion at trading subsidiaries and steady business at a fine chemicals-related subsidiary.

### Overseas Subsidiaries

Sales increased through start-up of operation of new production facilities for ABS resin at resins subsidiary in Malaysia and sales expansion at films subsidiary in Korea. However, income decreased due to the effect of steep rise in raw materials and fuel prices at subsidiaries in Europe, US, and Asia.

# Results by Business Segment (IT-related Products)



## Comments

### Toray

Sales increased through sales growth in PET films for flat panel displays and LCD color filters, etc. However, income decreased due to sluggish circuit materials business and graphic materials business as well as the step rise in raw materials and fuel prices and increased costs derived from periodic maintenance of some facilities for films production.

### Japanese Subsidiaries

Sales and income decreased mainly due to decrease of sales of LCD manufacturing equipment at an IT-related machinery subsidiary.

### Overseas Subsidiaries

Sales decreased due to decrease of sales of magnetic materials at a Korean films subsidiary. While income increased mainly through sales growth at Korean circuit-materials subsidiary.

### <Major Subsidiaries>

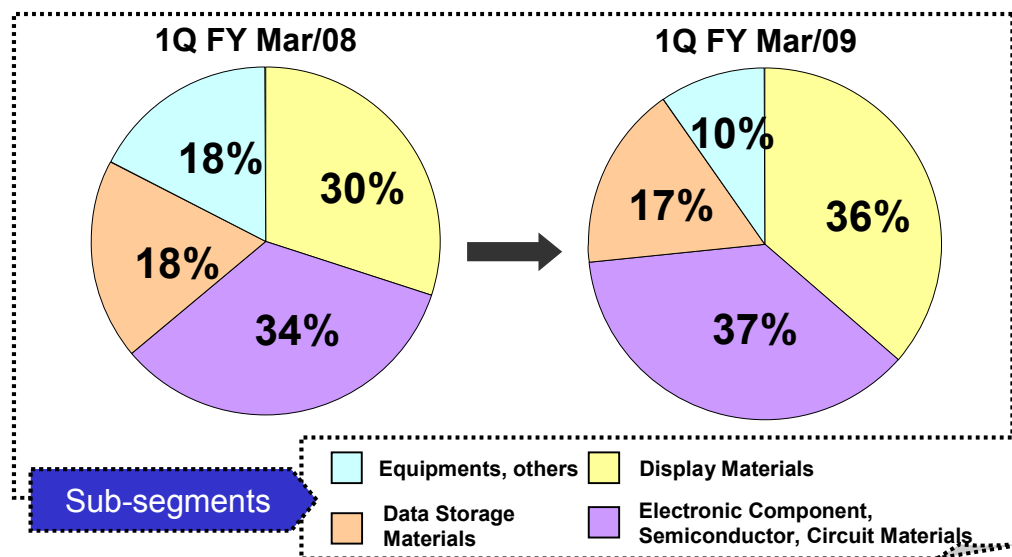
Japan : Toray Engineering Co., Ltd., Toray Advanced Film Co., Ltd., etc.

Overseas : TPA (US), TPEu (France), TSI (Korea), STEMCO (Korea), etc.



# Details of the Sales of IT-related Products Segment

## 【Sales ratio by sub-segment】



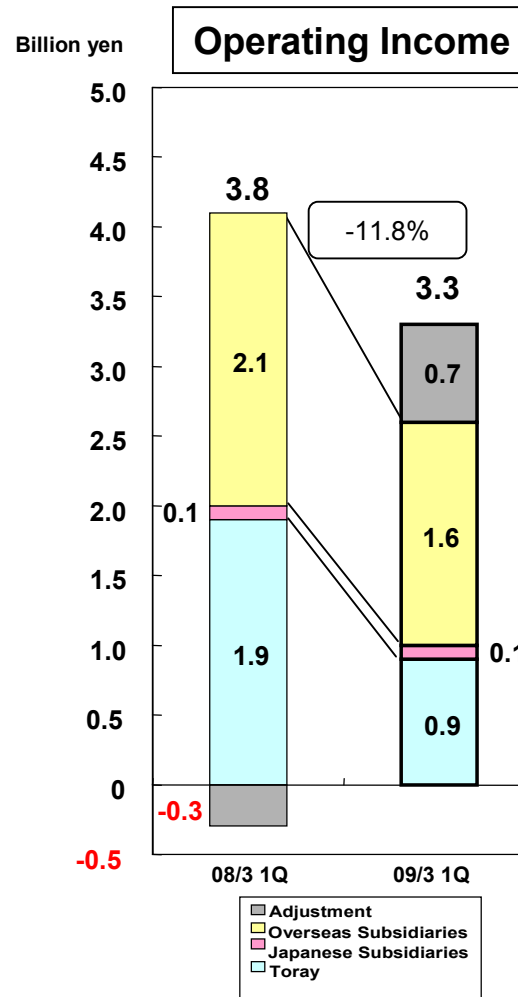
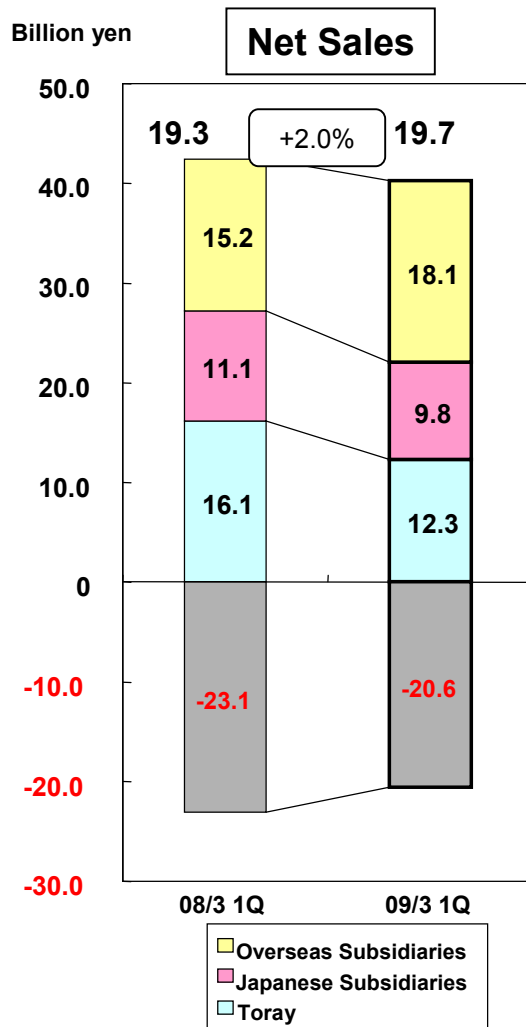
## 【Sales trends by sub-segment】

(Unit: Billion yen)

Sub-segment	1Q FY Mar/08	1Q FY Mar/09	Changes
Display Materials	19.9	22.5	+13%
Electronic Component, Semiconductor, Circuit Materials	22.5	23.0	+2%
Data Storage Materials	12.2	10.7	-13%
Equipments, others	11.7	6.2	-47%
<b>Total of IT-related Products Segment</b>	<b>66.4</b>	<b>62.3</b>	<b>-6%</b>

Sub-segments	Products
Display Materials	Optical films, processed optical films, PDP paste materials, color filters, paste materials for color filters, chemicals materials, OLED materials, etc.
Electronic Component, Semiconductor, Circuit Materials	Films for electronic components / circuit materials, FPC copper clad laminated films, adhesive tapes for TAB, adhesive sheets for semiconductors / electronic components, semiconductor coating materials, CMP pads, two-layer copper clad laminated films, TAB tapes, COF tapes, plastics, plastics products, etc.
Data Storage Materials	Magnetic materials, TTR (Thermal Transfer Ribbon), films for graphic art base, graphic materials, etc.
Equipments, others	Slit coaters for LCD, die bonding equipment, inspection equipment, equipment / components for PDP, trading companies, IT support services, services, others

# Results by Business Segment (Carbon Fiber Composite Materials)



## <Major Subsidiaries>

Japan : Toray International, Inc.

Overseas : SOFICAR (France), CFA (US), TCA (US)

As the segment highly conducts global operation with Japanese, Europe, and US facilities, Internal sales figures are shown in adjustment line, to describe the true state of the business.

## Comments

### Toray

Businesses were steady in aircraft applications, bicycle use in sports applications, and export of high-performance carbon fibers to Europe in industrial applications. Meanwhile, sales decreased due to some special factors such as decrease of machinery shipment which existed in the same period of the previous year, decrease of some industrial applications whose shipment concentrated in the same period of the previous year, effects of strong yen, and adjustment in shipment for PC chassis which was affected by the great Sichuan earthquake. With other effects of steep rise in raw materials and fuel prices, increase of depreciation cost accompanying the new production facility of carbon fibers which started operation in January 2008, etc., income decreased.

### Japanese Subsidiaries

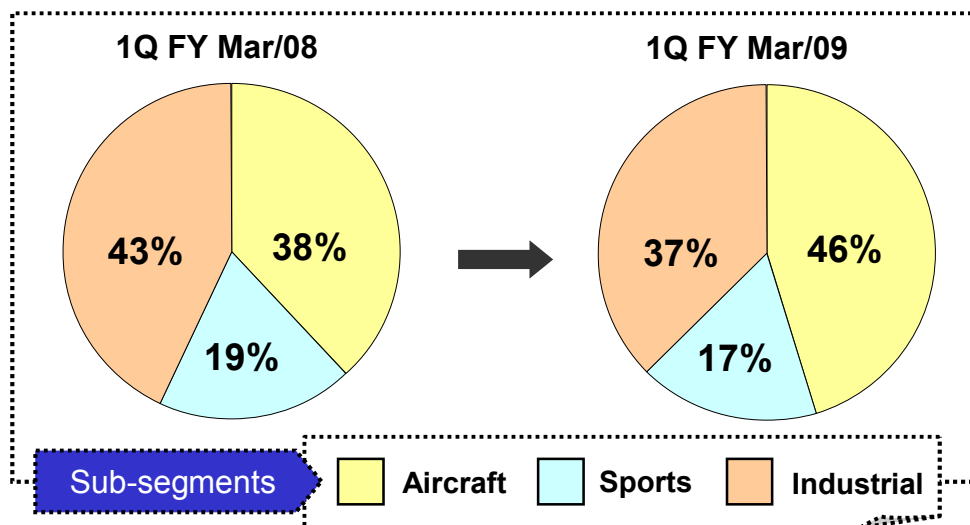
Sales decreased due to the effect of strong yen.

### Overseas Subsidiaries

Sales increased through strong performance in aircraft and industrial applications. However, income decreased due to the effect of the steep rise in raw materials and fuel prices, and increase of depreciation cost accompanying the facility in Europe which started operation in August 2007.

# Details of the Sales of Carbon Fiber Composite Materials Segment

## 【Sales ratio by sub-segment】



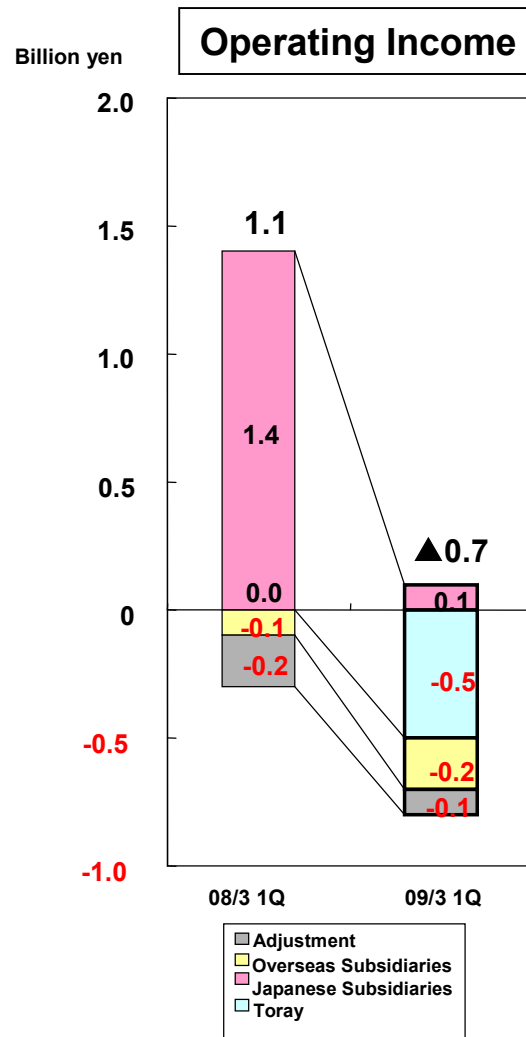
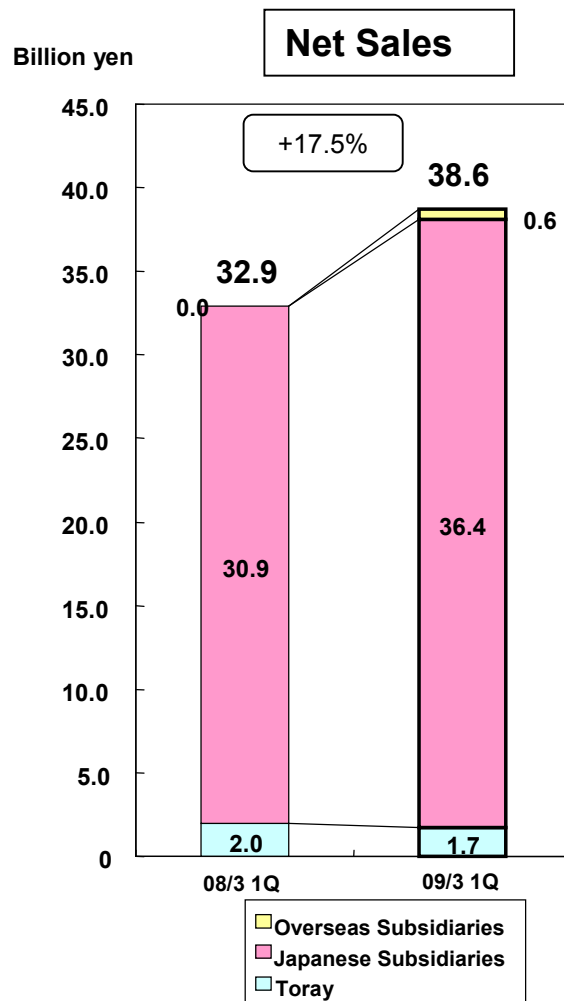
## 【Sales trends by sub-segment】

(Unit: Billion yen)

Sub-segment	1Q FY Mar/08	1Q FY Mar/09	Changes
Aircraft	7.3	8.9	+22%
Sports	3.7	3.4	-8%
Industrial	8.3	7.4	-11%
<b>Total of Carbon Fiber Composite Materials Segment</b>	<b>19.3</b>	<b>19.7</b>	<b>+2%</b>

Sub-segments	Applications
Aircraft	Commercial Aircraft Satellites, etc.
Sports	Golf Shafts Fishing Rods Bicycles Tennis Rackets, etc.
Industrial	Pressure Vessels / Tanks Automobiles Boats Windmills PC Chassis Civil Engineering / Construction-related applications, etc.

# Results by Business Segment (Environment & Engineering)



## Comments

### Toray

Orders for RO membranes and MBRs increased favorably mainly for Europe, US, and the Mideast, and home water purifiers performed strongly. However, total sales and income decreased due to construction delay of large-scale projects, the effect of strong yen as well as cost increase involved in business expansion, etc.

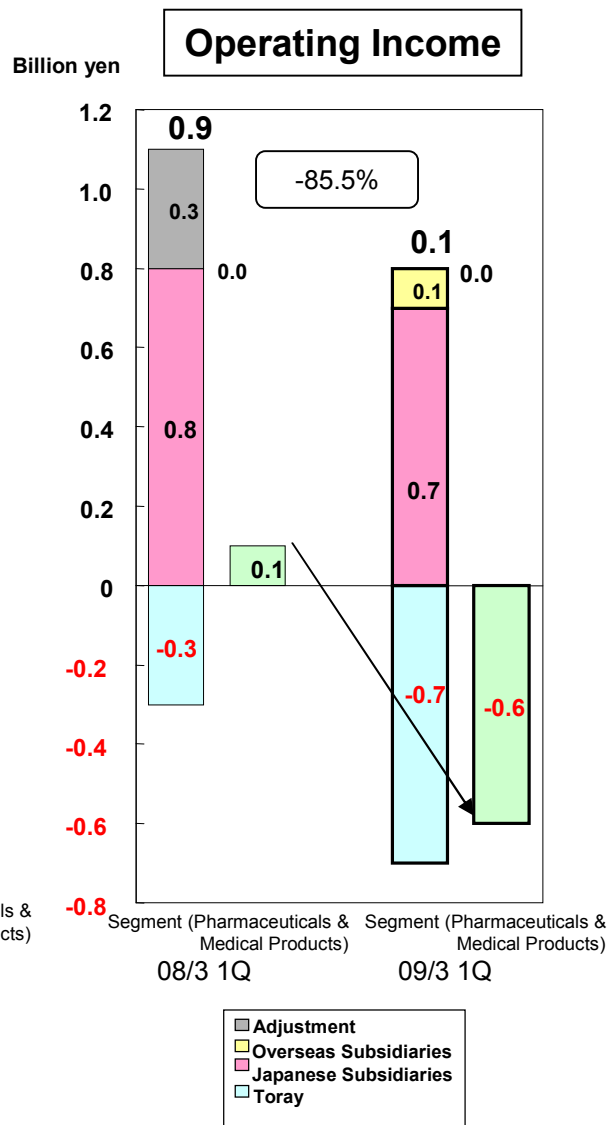
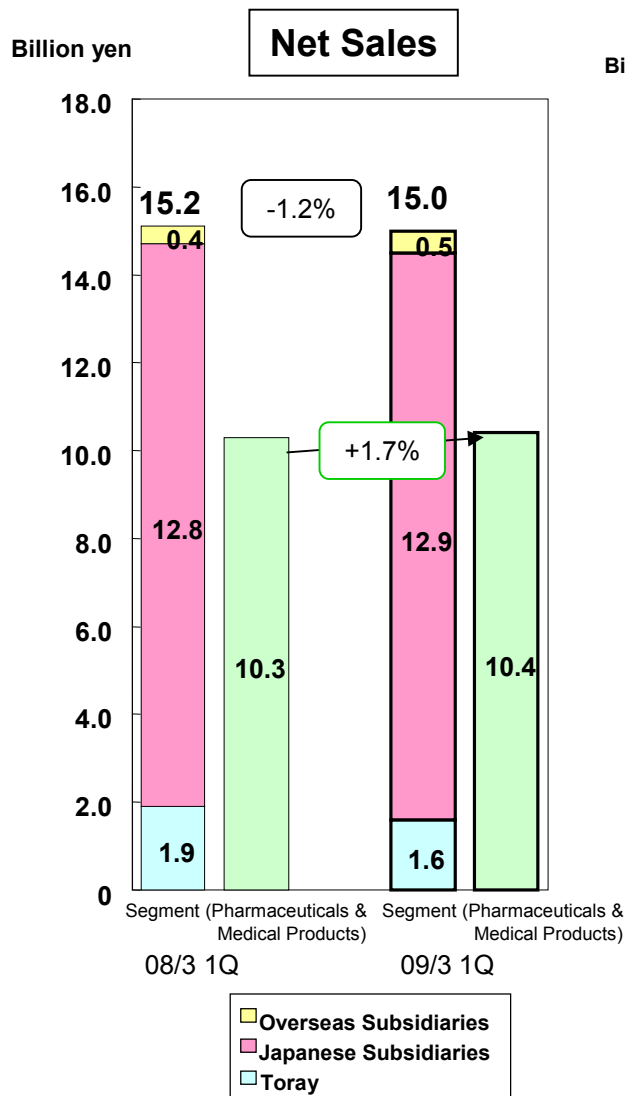
### Japanese Subsidiaries

Businesses were steady at construction subsidiary. As for engineering subsidiary and water-treatment engineering subsidiary, sales and income decreased due to fewer construction works compared to the previous year. While export of machinery increased at a trading subsidiary, and in total, sales increased and income decreased.

### <Major Subsidiaries>

Japan : Toray Construction Co., Ltd., Toray Engineering Co., Ltd.,  
Toray ACE Co., Ltd., Suido Kiko Kaisha, Ltd., etc.

# Results by Business Segment (Life Science & Other Businesses)



**Comments**

**Pharmaceuticals and Medical Products**

Amidst severe market conditions such as decline in sales price caused by NHI drug price revision and reimbursement price reduction, and tough market competition, sales of artificial kidney increased. In total, sales remained largely unchanged. However, income decreased due to the decline in sales prices.

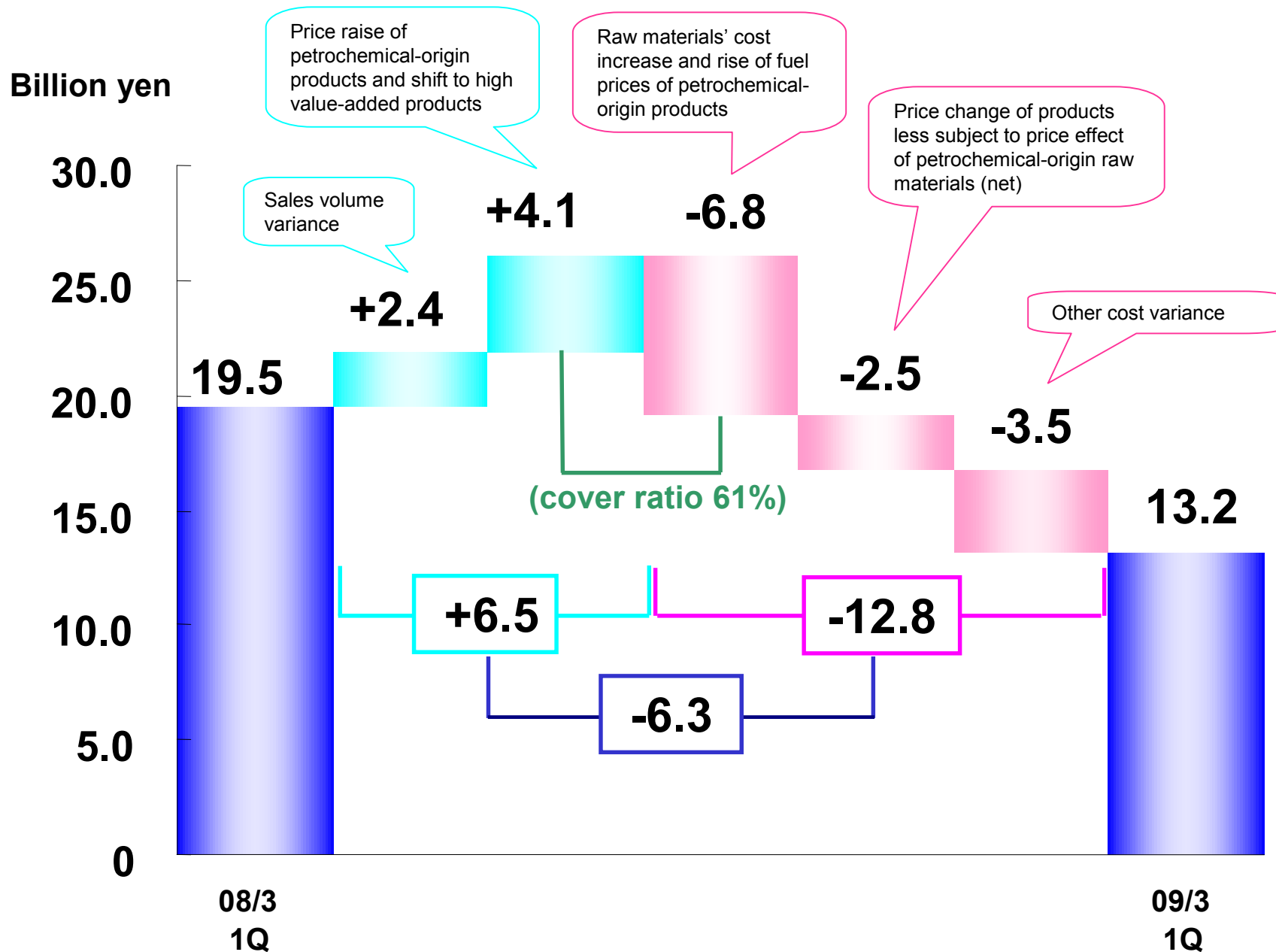
**Others**

As a whole, businesses were steady. Analytical business in the pharmaceuticals area at analytical service subsidiary performed well.

**<Major Subsidiaries>**

Japan : Toray Medical Co., Ltd., Toray Research Center Inc., Toray Enterprise Corp., etc.

# Income Variance Factor Analysis



## **II. Business Forecast for the Fiscal Year Ending March 2009 (Consolidated Basis)**



# Forecast Summary

		FY Mar/08 Actual	FY Mar/09 <Previous Forecast>	FY Mar/09 <Revised Forecast>	Changes	FY Mar/09 <Difference from Previous Forecast>
Net Sales	1st Half	802.3	790.0	790.0	-12.3 (-1.5%)	—
	2nd Half	847.3	910.0	910.0	+62.7 (+7.4%)	—
	<b>Total</b>	<b>1,649.7</b>	<b>1,700.0</b>	<b>1,700.0</b>	<b>+50.3 (+3.1%)</b>	<b>—</b>
Operating Income	1st Half	44.0	31.0	25.0	-19.0 (-43.2%)	-6.0
	2nd Half	59.4	64.0	50.0	-9.4 (-15.8%)	-14.0
	<b>Total</b>	<b>103.4</b>	<b>95.0</b>	<b>75.0</b>	<b>-28.4 (-27.5%)</b>	<b>-20.0</b>
Ordinary Income	1st Half	41.9	26.0	22.0	-19.9 (-47.5%)	-4.0
	2nd Half	49.6	60.0	48.0	-1.6 (-3.2%)	-12.0
	<b>Total</b>	<b>91.5</b>	<b>86.0</b>	<b>70.0</b>	<b>-21.5 (-23.5%)</b>	<b>-16.0</b>
Net Income	1st Half	23.0	12.0	7.0	-16.0 (-69.6%)	-5.0
	2nd Half	25.1	32.0	23.0	-2.1 (-8.3%)	-9.0
	<b>Total</b>	<b>48.1</b>	<b>44.0</b>	<b>30.0</b>	<b>-18.1 (-37.6%)</b>	<b>-14.0</b>






Estimated exchange rate : 105 yen / US\$ (July~)  
Estimated oil price : 125 US\$/ B (DUBAI FOB) (July~)






# Previous Forecast → Revised Forecast

## Factor Analysis of Revision and Countermeasures

Operating Income : 95 Billion yen → 75 Billion yen (- 20 Billion yen) Unit : Billion yen

Factors / Countermeasures	Effects	Comments
Further soaring of feedstock and energy costs accompanied by skyrocketing resource prices including crude oil	 }  }  } -62	Estimated oil price May 9, 2008 : 100US\$/B → July ~ : 125US\$/B
Demand decrease stemming from economic slowdown and volume decrease resulting from price increase		① Slower demand growth due to economic slowdown in the world, etc. ② Effect of adjustment in sales volume resulting from price increase
Specific business issues		① Effect of delay in Boeing 787 on carbon fiber composite materials business ② Sluggish demand growth and tough market competition in pharmaceuticals business ③ Cost increase related to water-treatment business expansion
Price increase and shift to high value-added products	 }  } +42	Full implementation in all businesses
Reduction of expenses and costs, etc.		Reduction of sales expenses, cost reduction through improvement of production efficiency, etc., slowdown of R&D investments, slowdown of capital investments, etc.
<b>Total</b>	<b>-20</b>	

Profit variance :  over 30 billion yen  over 10 billion yen  over 5 billion yen

\* Up-pointing arrows describe favorable variance, down-pointing arrows describe unfavorable variance

# Forecast by Business Segment

Unit : Billion yen

		Net Sales				Operating Income				Difference from FY Mar/09 Previous Forecast	
		FY Mar/08	FY Mar/09	Changes	(%)	FY Mar/08	FY Mar/09	Changes	(%)	Net Sales	Operating Income
Fibers & Textiles	1st Half	320.9	295.0	-25.9	(-8.1%)	10.0	5.0	-5.0	(-50.0%)	-10.0	-2.0
	2nd Half	316.4	325.0	+8.6	(+2.7%)	11.4	7.0	-4.4	(-38.4%)	-	-5.0
	Total	637.3	620.0	-17.3	(-2.7%)	21.4	12.0	-9.4	(-43.8%)	-10.0	-7.0
Plastics & Chemicals	1st Half	199.4	220.0	+20.6	(+10.3%)	9.0	6.5	-2.5	(-27.4%)	+20.0	-0.5
	2nd Half	204.6	230.0	+25.4	(+12.4%)	11.8	10.5	-1.3	(-10.7%)	+15.0	-1.5
	Total	404.0	450.0	+46.0	(+11.4%)	20.7	17.0	-3.7	(-17.9%)	+35.0	-2.0
IT-related Products	1st Half	138.7	125.0	-13.7	(-9.9%)	12.8	8.0	-4.8	(-37.4%)	-10.0	-1.5
	2nd Half	145.0	155.0	+10.0	(+6.9%)	17.0	15.0	-2.0	(-11.6%)	-10.0	-3.0
	Total	283.7	280.0	-3.7	(-1.3%)	29.8	23.0	-6.8	(-22.7%)	-20.0	-4.5
Carbon Fiber Composite Materials	1st Half	39.9	40.0	+0.1	(+0.3%)	8.2	5.0	-3.2	(-38.8%)	-	-2.0
	2nd Half	43.7	50.0	+6.3	(+14.4%)	9.9	9.0	-0.9	(-9.4%)	-5.0	-2.0
	Total	83.6	90.0	+6.4	(+7.7%)	18.1	14.0	-4.1	(-22.6%)	-5.0	-4.0
Environment & Engineering	1st Half	71.1	80.0	+8.9	(+12.5%)	2.5	0.0	-2.5	(-100.0%)	+5.0	-
	2nd Half	102.1	115.0	+12.9	(+12.6%)	7.3	7.0	-0.3	(-4.1%)	+5.0	-0.5
	Total	173.2	195.0	+21.8	(+12.6%)	9.8	7.0	-2.8	(-28.2%)	+10.0	-0.5
Life Science & Other Businesses	1st Half	32.3	30.0	-2.3	(-7.0%)	2.4	1.0	-1.4	(-59.1%)	-5.0	-1.0
	2nd Half	35.5	35.0	-0.5	(-1.5%)	3.9	3.0	-0.9	(-22.2%)	-5.0	-2.0
	Total	67.8	65.0	-2.8	(-4.1%)	6.3	4.0	-2.3	(-36.5%)	-10.0	-3.0
(Pharmaceuticals & Medical Products Included)	1st Half	22.4	22.0	-0.4	(-1.6%)	0.8	0.0	-0.8	(-100.0%)	-3.0	-0.5
	2nd Half	26.0	26.0	+0.0	(+0.0%)	1.9	2.0	+0.1	(+2.9%)	-4.0	-1.0
	Total	48.4	48.0	-0.4	(-0.7%)	2.8	2.0	-0.8	(-28.1%)	-7.0	-1.5
Elimination & Corporate	1st Half					▲ 0.8	▲ 0.5	+0.3			+1.0
	2nd Half					▲ 1.8	▲ 1.5	+0.3			-
	Total					▲ 2.5	▲ 2.0	+0.5			+1.0
Consolidated	1st Half	802.3	790.0	-12.3	(-1.5%)	44.0	25.0	-19.0	(-43.2%)	-	-6.0
	2nd Half	847.3	910.0	+62.7	(+7.4%)	59.4	50.0	-9.4	(-15.8%)	-	-14.0
	Total	1,649.7	1,700.0	+50.3	(+3.1%)	103.4	75.0	-28.4	(-27.5%)	-	-20.0

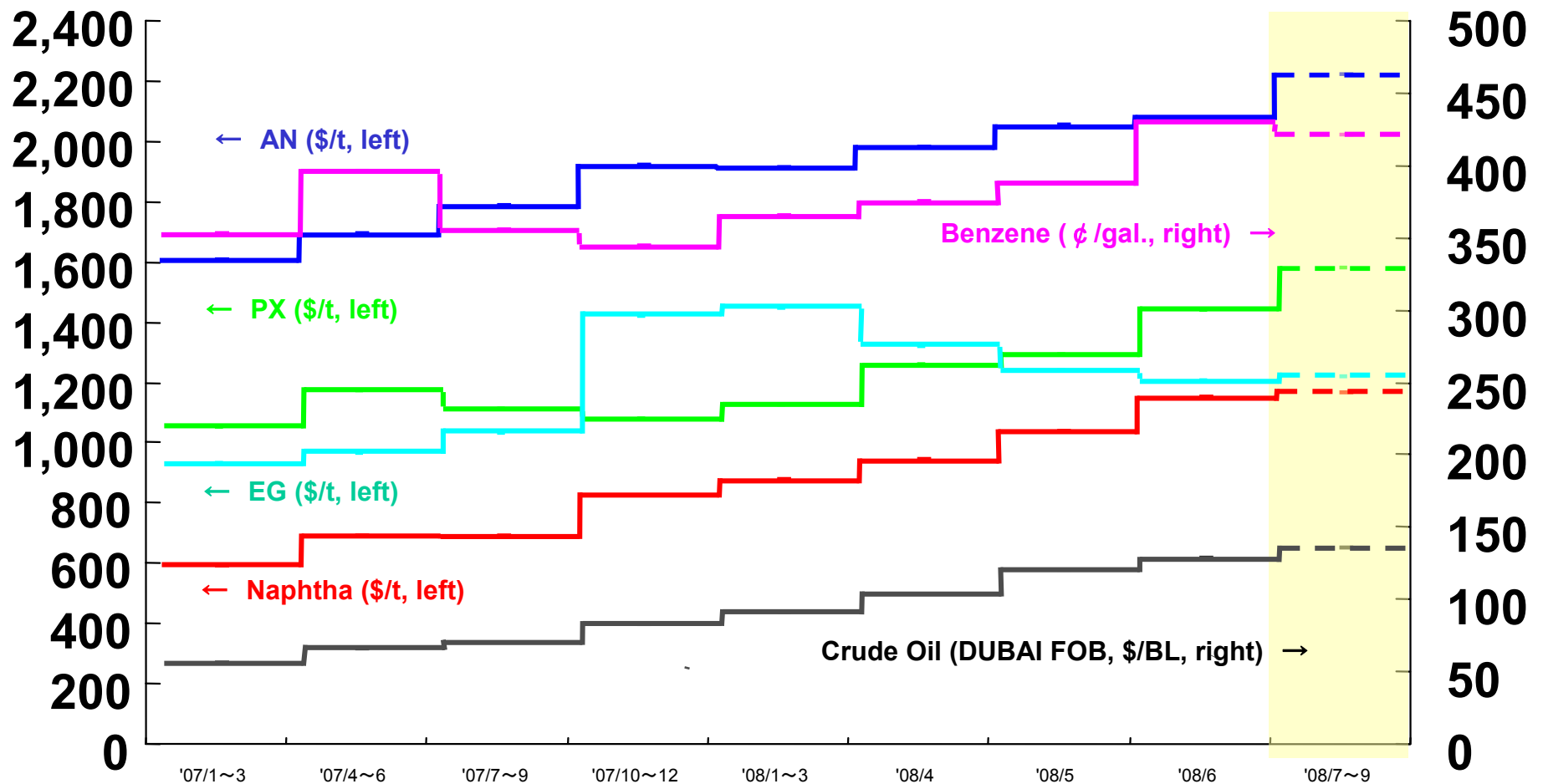
# Operating Income Comparison with Previous Forecast by Business Segment

Billion yen

Business Segment	Full-year Operating Income Previous Forecast → Revised Forecast ( ) difference [Billion yen]	Reasons for revision
Fibers & Textiles	19.0 → 12.0 (-7.0)	<ul style="list-style-type: none"> <li>Although we continue price increase and shift to high value-added products to cope with rapid and unexpected steep rise in raw materials and fuel prices, we forecast that it will be difficult to fully cover cost increase during the current fiscal year</li> </ul>
Plastics & Chemicals	19.0 → 17.0 (-2.0)	
IT-related Products	27.5 → 23.0 (-4.5)	<ul style="list-style-type: none"> <li>Demand for flat panel displays and electronic components is estimated to become lower than our initial forecast</li> <li>The cost is estimated to become higher than our initial forecast due to the steep rise in raw materials and fuel prices</li> </ul>
Carbon Fiber Composite Materials	18.0 → 14.0 (-4.0)	<ul style="list-style-type: none"> <li>The cost is estimated to become higher than our initial forecast due to the steep rise in raw materials and fuel prices</li> <li>Demand growth in part of sports applications is estimated to be slower due to economic slowdown</li> <li>We take into consideration further influence of delay in Boeing 787</li> </ul>
Environment & Engineering	7.5 → 7.0 (-0.5)	<ul style="list-style-type: none"> <li>We expect cost increase accompanying rapid business expansion of RO membranes and MBRs</li> </ul>
Life Science & Other Businesses	7.0 → 4.0 (-3.0)	<ul style="list-style-type: none"> <li>Sales volume of pharmaceuticals is estimated to be smaller than our initial forecast due to severe market competition</li> <li>Royalty revenues are estimated to be less than expected in the initial forecast</li> </ul>
Elimination & Corporate	▲3.0 → ▲2.0 (+1.0)	
Consolidated	95.0 → 75.0 (-20.0)	

# Trends in Raw Materials Prices

Almost all the raw materials prices and fuel prices are soaring due to skyrocketing prices of crude oil and naphtha, and the tight supply-demand balance.



# <Reference> Recent Topics



# Developed Highly Sensitive Protein Analysis Chip

Developed protein analysis chip for testing/diagnosis which makes possible highly-sensitive and easy detection of disease marker proteins with a drop of blood or urine, etc. The new chip enables the reduction of protein analysis time from the conventional few hours to less than 15 minutes. We will further develop practical applications aiming for application of approval during fiscal year 2009.

## Conventional disease marker protein test



The test is possible only at major hospitals and inspection centers with expensive and large-scale inspection systems



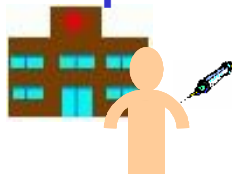
- The analysis requires long time (few hours).
- Small and medium-sized hospitals cannot conduct the test.
- Responses to emergency medical services are impossible

Comprehensively utilized technology integration of nano and bio, and bio-tool development know-how

Developed plastic chip of half the size of a name card on which all the necessary processes (pre-treatment, separation, detection of the samples, etc.) for disease marker proteins analysis can be operated



## Enables simple and quick bedside tests of disease marker proteins



Collect samples



Drop on plastic chip



Place in compact system



Complete the test within 15 minutes

To nurture the newly developed highly sensitive protein analysis chip to a new pillar of bio-tools business following the ultra high-sensitive DNA chip commercialized in 2006, Toray will boost development of the product with the possibility of external collaboration.

# Toray to Supply Reverse Osmosis Membrane for the Largest Wastewater Recycling Plant in Singapore

Won an order to supply “low fouling reverse osmosis membrane elements” for a large-scale wastewater recycling plant in the Changi region of Singapore. The construction of the plant is part of Singapore government’s NEWater project and is the last and the biggest plant under the project. The plant will have the capacity to produce 228,000 cubic meters of water per day which is the second largest in the world and Toray is scheduled to supply the membranes in two batches in 2008 and 2009.

## NEWater Project of Singapore

Despite the heavy rainfall in the tropical rainforest climate, water sources of Singapore (rivers, lakes and reservoir dams) are limited. Therefore Singapore relies on import from neighboring Malaysia for most of its water requirements and the country has been placing emphasis on securing water as a national policy.

Since 2002, PUB (Singapore’s Public Utilities Board) has been employing recycling technologies for reusing wastewater as industrial water and building recycling facilities for supplying the water to reservoirs.

Toray’s reverse osmosis membrane was adopted in the last and the biggest plant under the NEWater project.



With the new order, Toray will have a 60% share of the RO membrane elements used in Singapore.

## Main wastewater recycling plants with Toray RO

No.	Country	Location	Capacity (m3/d)	Operation Year (*)
1	Kuwait	Sulaibiya	320,000	2005
2	Singapore	Changi	228,000	(2009)
3	Australia	Luggage Point	66,000	(2008)
4	China	Tianjin	30,000	2006
5	Singapore	Seleter	24,000	2004

Toray’s “low fouling reverse osmosis membrane element” has also been adopted in the world’s largest membrane-based urban sewage reuse plant in Sulaibiya, Kuwait **which means that Toray’s membrane is being used in the two biggest wastewater recycling plants in the world.**

(\*) the year the plant began operation ( ) denotes that the plant is currently being constructed

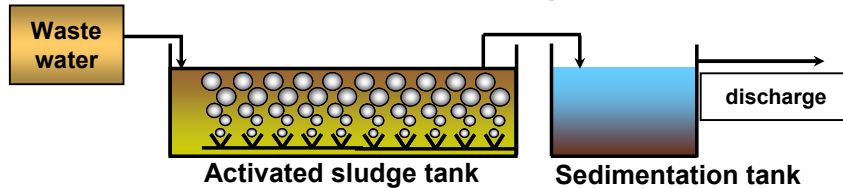


# Toray Supplies PVDF Submerged Membrane Module for MBRs to UAE Sewage Recycling Plant

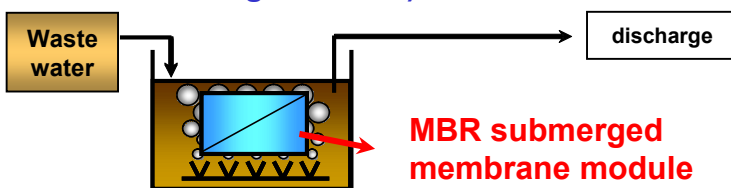
Toray supplies polyvinylidene fluoride submerged membrane module used in membrane bioreactors, or MBRs, to a sewage recycling plant in the United Arab Emirates (UAE). The plant, located in Al Ain in the eastern part of the emirate of Abu Dhabi, is designed to purify sewage using MBR and supply the processed water to the surrounding region for irrigation use. The plant will have the capacity to treat 15,000 m<sup>3</sup>/day (three units of 5,000 m<sup>3</sup>/day) and is expected to start operations later this year. In addition to this project, Toray has won orders to supply submerged membrane module for MBRs to be used in two other sewage plants in UAE with processing capacities of 38,000 m<sup>3</sup>/day and 45,000 m<sup>3</sup>/day. Toray will supply membranes within this fiscal year.

## MBR

### Conventional activated sludge method



### MBR (Membrane Bioreactor, membrane separation activated sludge method)



- small footprint - good water quality
- eliminates the excess sludge thus reduces environmental impact

MBR submerged membrane plants occupy less space and are relatively less expensive and therefore the MBR submerged membrane market is estimated to be growing rapidly at a 20% annual rate.

## Toray's MBR submerged membrane



1. High water permeation rate per unit area of membrane in sewage treatment
2. Resistant to stain
3. High chemical resistance
4. Consumes less energy



**Middle Eastern market:** Toray has won orders for MBR submerged membranes treating a total of about 200,000 m<sup>3</sup>/day for the current fiscal year including the delivery announced this time.

**Chinese market:** Toray's MBR submerged membrane are being used in the recycling plants in the Beijing Olympic venue and Toray is actively pursuing sales expansion of these membranes with focus on industrial wastewater treatment.

Tight supply-demand situation in the wastewater treatment market

Toray plans to greatly expand its production capacity for MBR submerged membranes during 2009.



Descriptions of predicted business results, projections, and business plans for the Fiscal Year ending March 2009 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.