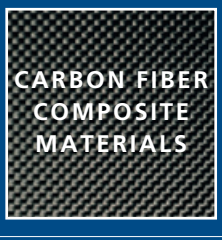
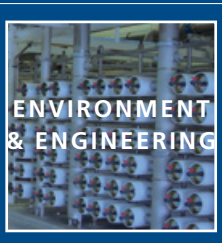
REVIEW OF OPERATIONS

TORAY'S BUSINESS PERFORMANCE FOR THE YEAR

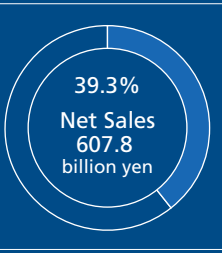
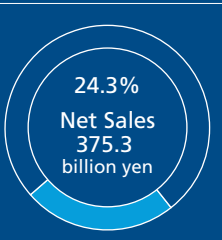
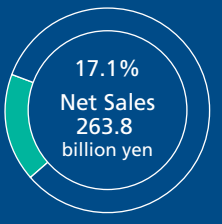
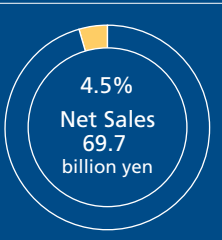
Today, all of Toray Group's business segments are experiencing strong growth, propelled by advanced materials. The Foundation Businesses of Fibers & Textiles and Plastics & Chemicals target stable growth, the Strategically Expanding Businesses of IT-Related Products and Carbon Fiber Composite Materials currently drive the Group's earnings, and we are nurturing the Strategically Developing Businesses of Environment & Engineering and Life Science & Other Businesses as next-generation earnings pillars.

In FY Mar/07, Toray Group achieved record-high figures for net sales (fourth consecutive year), operating income (third consecutive year), and net income (second consecutive year). This section describes in detail these results, forecasts for FY Mar/08 and topics of interest for each the Group's businesses.

TORAY'S BUSINESS AT A GLANCE

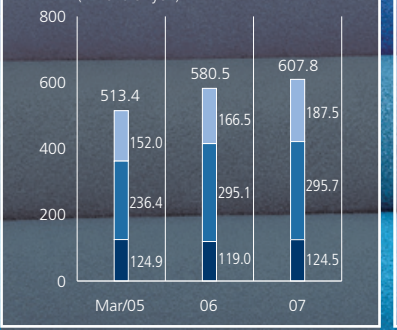
BUSINESS CATEGORIES	BASIC STRATEGIES		BUSINESS SEGMENTS
FOUNDATION BUSINESSES	1. Developing global operations 2. Promoting "New Value Creator*" 3. Developing downstream and processing business	→ Establish stable profit base	
	4. Expanding advanced materials (automobiles, environment and energy, etc.)	→ Promote advancement of foundation businesses	
STRATEGICALLY EXPANDING BUSINESSES	1. Focusing on growing markets (IT, automobiles, aircraft) 2. Prioritizing allocation of managerial resources	→ Positive expansion as profit driving businesses	
			
STRATEGICALLY DEVELOPING BUSINESSES	Nurturing the next profit base beyond 2010 1. Intensive allocation of managerial resources 2. M&A and strategic alliances with external parties	→ Strategically developing and expanding	
			

*New Value Creator: A new business model for creating new value incorporating the vast knowledge and expertise gained in meeting the needs of customers and consumers in new products & services and new production & distribution methods.

SALES RATIO BY BUSINESS SEGMENT IN FY MAR/07	MAIN PRODUCTS	APPLICATION EXAMPLES
	Filament yarns, staple fibers, and woven and knitted fabrics of nylon, polyester, and acrylic fibers, etc.; non-woven fabrics, man-made suede, apparel products	• Women's and men's clothes (coats: man-made suede, dress shirts: polyester-cotton blended fabric, stockings: nylon fiber, apparel products, swimwear) • Automobiles (car seats: polyester fiber, airbags: nylon fiber, seatbelts: polyester fiber) • Sportswear • Furniture & interior (sofas: man-made suede, carpets: BCF nylon, curtains: halogen-free, flame retardant materials) • Disposable diapers: polypropylene filament yarn non-woven fabric • Tents: polyester fiber
	Nylon, ABS, PBT, PPS and other resins and molded products, polyolefin foam; polyester, polypropylene, PPS and other films and processed film products; raw materials for synthetic fibers and other plastics; gypsum; zeolite catalysts; fine chemicals for pharmaceuticals and agrochemicals; veterinary medicine (excludes film and resin covered in IT-related Products segment)	• Automobiles (radiator tanks: nylon resin, intake manifold: nylon resin, connectors: PBT resin, capacitor for hybrid cars: polypropylene film) • Home appliances (housing for washing machines, vacuum cleaners, air conditioners: ABS resin) • Power tools (circular tools housing: nylon resin) • Helmets (nylon resin) • Solar battery panels (PET film) • Sandwich bags (polypropylene film) • Veterinary medicine (for dogs and cats)
	Films and plastic products for information and telecommunications related products; electronic circuits and semiconductor-related materials; color filters for LCDs and related materials and equipment; materials for plasma display panels; magnetic recording materials; graphic materials and related epuipment	• Flat panel display televisions (PET film, PDP rear panel pastes) • PCs (circuit materials, PET film, polyimide coatings) • Cellular phones (color filters, LCP resin, circuit materials, PET film) • Printing (waterless printing plates, relief printing on resins, printing equipment) • Digital video camera recording film (PET film) • In-vehicle multimedia LANs (optical fiber)
	Carbon fibers, carbon fiber composite materials and their molded products	• Aircraft structure (carbon fiber composite materials) • Bridge pier reinforcement (carbon fiber woven fabrics) • PC chassis (carbon fiber molded products) • Wind-power generator blades (carbon fibers) • Marine vessels (carbon fibers)
	Comprehensive engineering; condominiums; industrial equipment and machinery; environment-related equipment; water treatment membranes and related equipments; materials for housing, building and civil engineering applications	• Seawater desalination facilities (water treatment membranes and equipment) • Sewage and waste-water treatment facilities (water treatment membranes and equipment) • Condominiums • Pavements (porous-ceramic paving materials) • Plants and manufacturing facilities (comprehensive engineering services)
	Pharmaceuticals and medical products; analysis, physical evaluation and research services	• Pharmaceuticals (natural interferon-beta drugs, prostacyclin) • Medical treatment devices (hemodialyzers, artificial dialysis equipment) • Analytical services

Toray Japanese Subsidiaries Overseas Subsidiaries

Sales
(Billions of yen)



Sales growth

+4.7 %

Operating income to net sales

3.2 %

FIBERS & TEXTILES

Capital expenditures

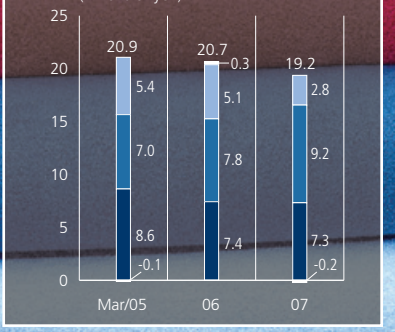
21.6 billion yen

(property, plant and equipment)

ROA

3.9 %

Operating Income
(Billions of yen)



Toray Japanese Subsidiaries Overseas Subsidiaries Adjustment

3

1. *Stylish White*, the first new product co-developed with Japanese retailer UNIQLO Inc. since the start of the alliance with that company. Transparency-prevented women's pants using this material went of sale in April 2007.
2. Highly functional polypropylene spunbond to be produced in China starting in February 2008. Demand for this material is rapidly expanding in Asia, centering on sanitary material applications such as disposable diapers.
3. Toray's *Ecsaine** holds No.1 world market share for man-made suede. It is used in automotive applications under the global brand name *Alcantara**.

SUMMARY OF BUSINESS RESULTS FOR THE FISCAL YEAR ENDED MARCH 2007

In the fiscal year ended March 2007 (FY Mar/07), net sales in this segment rose 4.7%, to ¥607.8 billion, while operating income declined 7.0%, to ¥19.2 billion.

During the year, in response to soaring raw materials and fuel costs, Toray (the parent company) made self-efforts to absorb huge cost increase, increased the selling price to offset raw material cost hike and shifted its emphasis to high-value-added products. These measures contributed to increased sales, although operating income remained about the same level of the last year. We recorded growth in both sales and income in the textiles businesses owing to several factors, including special demand of domestic uniform applications and increased exports of high-value-added products to Europe.

Total sales and operating income of Japanese subsidiaries increased thanks to the efforts to boost sales at trading subsidiaries.

Total sales of our overseas subsidiaries increased, however their operating income was below the level of the last year. This stemmed mainly from the adverse effects of steep rise in raw materials and fuel costs and strong local currencies on our subsidiaries in Southeast Asia, as well as a weak performance by our U.K. subsidiary, although, our subsidiaries in China reported improved their profit level, and our Korean subsidiary expanded spunbond businesses, as well as our subsidiary in Thailand expanded nylon fibers and textiles businesses for airbags.

OUTLOOK

The business environment in the fibers and textiles segment remains challenging, amid continued high raw materials and fuel costs and a continuous oversupply of polyester filament yarn in China. By contrast, we expect sales growth for our products in industrial applications, centering on automotive applications such as nylon fibers and textiles used in airbags, as well as advanced materials, such as PPS fiber used in bag filters.

Under these circumstances, we will continue targeting measures aimed at improving profitability. We will bolster earnings by continuing our self-efforts and increasing selling price to offset raw material cost hikes, and we will improve our product mix by shifting to high-value-added products. In addition, we will work to increase sales of advanced materials, achieve higher earnings for our Chinese subsidiaries, and promote business structure reform of our subsidiaries in Southeast Asia and Europe to improve profitability.

As a result of the above measures, we forecast segment sales of ¥620.0 billion, a 2.0% year-on-year increase in FY Mar/08. However, we predict a 1.2% decline in operating income, to ¥19.0 billion, due to the revision of Japanese taxation system in FY Mar/08, which will reduce operating income by around ¥2.0 billion.

TOPICS

Strategic Partnership with UNIQLO

In June 2006, Toray and UNIQLO Inc., a leading Specialty store retailer of Private label Apparel (SPA), signed a comprehensive, mid- and long-term agreement covering procurement and supply of materials and products.

Toray Group has been already supplying many highly functional materials to UNIQLO. Through the alliance, the two companies have forged a closer strategic partnership, resulting in the creation of a seamless product development system that integrates all stages, from development of materials to final product sales. The Group will share UNIQLO's sales information including customer needs and link it directly to product development so that it would develop innovative materials with speeding up the R&D process and reducing inventory-related risk.

In April 2007, we launched the first new product to emerge from this joint development initiative—a pair of women's pants made of transparent prevention white fabric. For the five-year period from 2006 through 2010, Toray is aiming to supply materials and products to UNIQLO valued at more than ¥200.0 billion.

New Polypropylene Spunbond Company in China

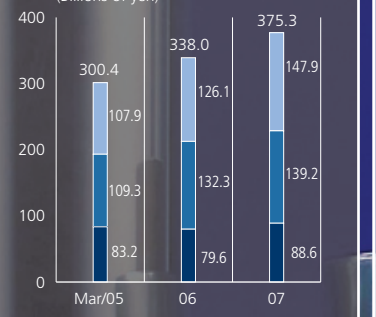
In December 2006, Toray established a new company in China to produce and sell highly functional polypropylene spunbond and its processed goods.

There is rapidly growing demand for polypropylene spunbond for sanitary articles, including disposable diapers, in Asia, particularly in China. At present, Toray's subsidiary in Korea, Toray Saehan Inc., which has an annual production capacity of 49,000 tons, supplies the Asian market. Toray took the decision to establish a new manufacturing base in order to meet the sharp growth in demand forecast for the Chinese market.

Once operations commence in February 2008, the facility will boost the Group's annual production capacity to 67,000 tons, making it one of the top suppliers in Asia. Toray has its sights on further expansion of its production facilities in line with its goal of becoming the No.1 polypropylene spunbond supplier in Asia.

Toray Japanese Subsidiaries Overseas Subsidiaries

Sales
(Billions of yen)



Sales growth

+11.0
%


1

Operating income to net sales

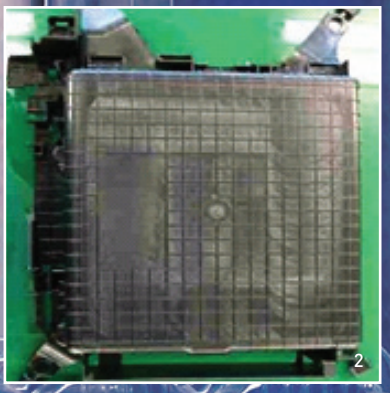
5.1
%

PLASTICS & CHEMICALS

Capital expenditures

25.9
billion yen

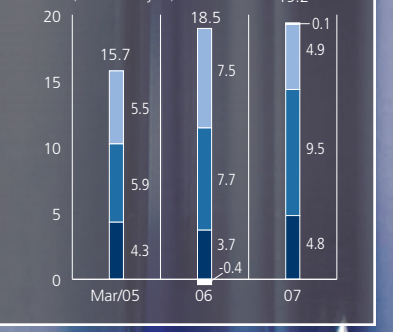
(property, plant and equipment)


2

ROA

4.4
%

Operating Income
(Billions of yen)



Toray Japanese Subsidiaries Overseas Subsidiaries Adjustment

3

1. A product made from the ABS resin *Toyolac**. Toray holds the top world market share for transparent grade ABS resins, and is expanding *Toyolac** production capacity in Malaysia.

2. A capacitor for a hybrid car made with the polypropylene film *Torayfan**. The growing popularity of hybrid cars is boosting demand for *Torayfan**.

3. *Ecodear** is a plant-based polylactic acid film. *Ecodear** has the same level of heat and impact resistance as petrochemical-based plastic films and also boasts flexibility and high transparency.

SUMMARY OF BUSINESS RESULTS FOR THE FISCAL YEAR ENDED MARCH 2007

In the fiscal year ended March 2007 (FY Mar/07), net sales in this segment grew 11.0% year-on-year, to ¥375.3 billion. Operating income rose 4.0%, to ¥19.2 billion.

In the plastic resins business, Toray boosted sales of its offerings, centering on applications for the automobile, home appliances, and game machines. In the films business, we achieved higher sales of products used in hybrid car capacitors. In chemicals business, meanwhile, we posted increased sales of fine chemicals. As a result, both sales and income increased in this segment.

Total sales and operating income of Japanese subsidiaries healthily increased through steady businesses at plastic resins, films, chemicals, and trading subsidiaries.

Regarding overseas subsidiaries, we recorded increased sales by our plastic resins subsidiaries in Asia and our films subsidiary in the United States. However, total operating income decreased due to several factors. These included the strategic shift of our Korean films subsidiary's business to the IT-related products segment, and challenging conditions faced by our European films subsidiary due to the influx of low-cost products from Asia.

OUTLOOK

We anticipate an increase in demand for plastic resins and films for automotive applications, and continuation of firm demand for films used in solar cells. On the negative side, however, we expect raw materials and fuel costs to remain high, while competition will further intensify in the commodity-type of polyester film market.

In light of these circumstances, we plan to increase sales of high-value-added products such as the films for the fast growing solar cell and hybrid vehicle applications. At the same time, we will expand sales of automotive plastic resins by establishing a global supply bases for the plastic resins business. We will also work to improve profitability of our overseas subsidiaries that are not performing so well.

As a result of the above measures, we forecast a 6.6% increase in segment sales, to ¥400 billion in FY Mar/08, as well as a 1.4% increase in operating income, to ¥19.5 billion. This is despite a ¥1.5 billion decrease in operating income due to the revision of Japanese taxation system in FY Mar/08.

TOPICS

Toray Group aims to secure the top market share in the fast-growing engineering plastic resins market in Asia. Here, we introduce two initiatives by the plastic resins business to expand our production facilities, as we endeavor to establish a global supply bases.

Increasing Production Capacity of ABS Resin, *Toyolac** in Malaysia

Toray has invested around ¥10.0 billion to expand production facilities for its ABS resin *Toyolac** at the plant of Toray Plastics (Malaysia) Sdn. Berhad (TPM), a Malaysian subsidiary. That subsidiary will also commence production of transparent grade ABS resins. The upgraded facility is scheduled to commence operations in March 2008. When it comes on stream, Toray Group's total production capacity for *Toyolac** will increase from 292,000 tons to 402,000 tons per year.

Worldwide demand for ABS resins is forecast to increase at an annual rate of at least 5%, with Southeast Asia and China accounting for around 60% of global demand. Those regions are experiencing rapid growth in demand due to increasing local production by the automobile and other industries. Demand for high-performance products with transparent and heat-resistant properties also continues to grow in line with the increasing sophistication of end products.

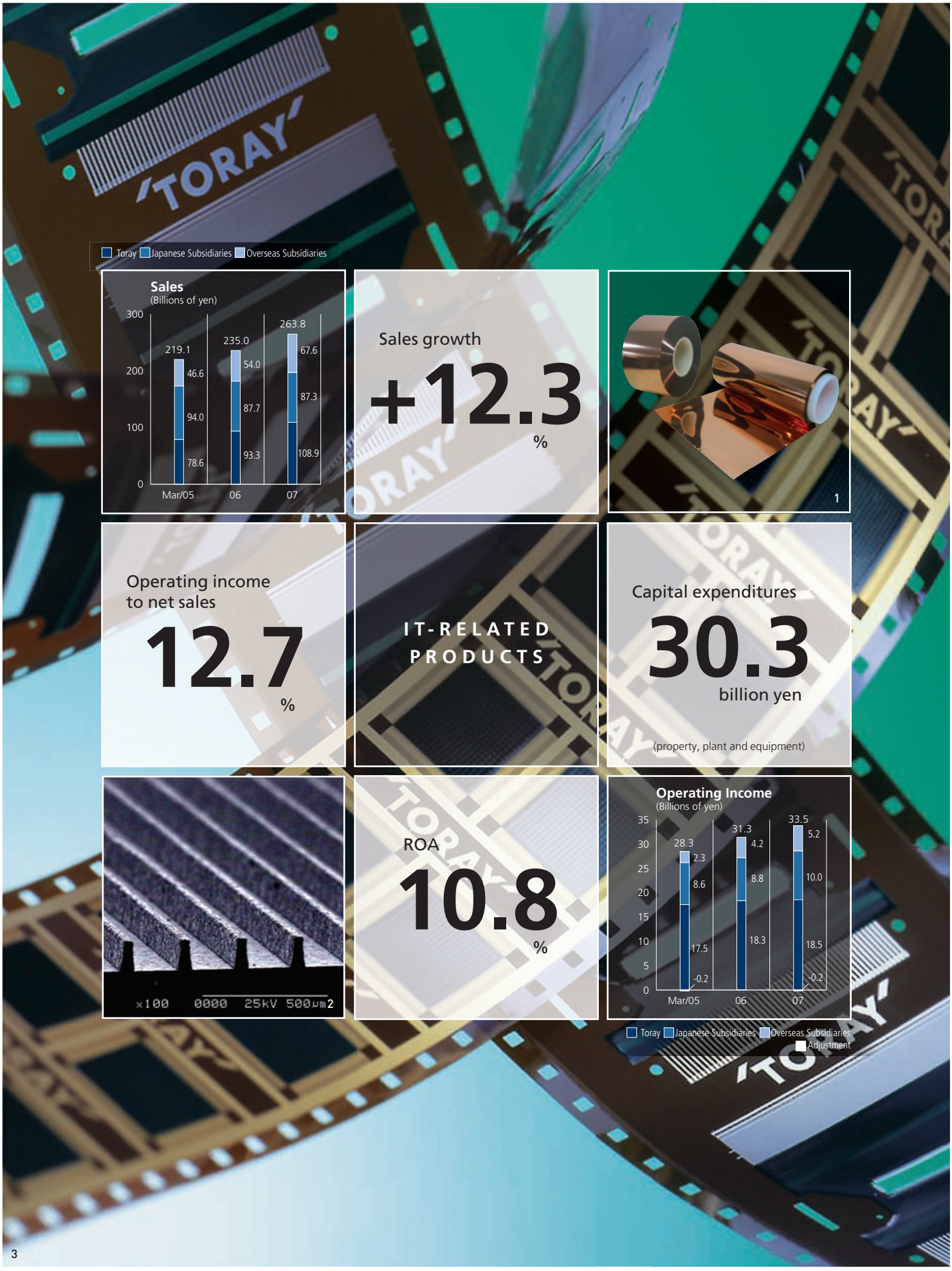
The aforementioned initiative will reinforce the Group's *Toyolac** business by making TPM as a Southeast Asian production base for high-performance, high-quality products with transparent, heat resistant, and flame retardant properties. Moreover, it will enable TPM to supply products of the same high quality as those made in Japan to all parts of the world.

Boosting Production of High-Performance Plastic Resins

Toray Group has invested around ¥4.0 billion to expand production facilities for two high-performance plastic resins: *Torelina**, a polyphenylene sulfide (PPS) resin; and *Siveras**, a liquid crystal polymer (LCP). The additional production lines will start operating in December 2007, boosting the Group's annual PPS production capacity to 11,500 tons, and doubling its LCP production capacity to 2,000 tons.

This increase in production capacity is Toray's response to growing demand for high-performance plastic resins for electrical and electronic devices, as well as automotive applications.

Toray Group plans to build additional facilities for the production of PPS resins by 2009. This will further cement its No.1 world ranking as a comprehensive PPS resin manufacturer that also has businesses in films and fibers & textiles. In addition, the Group will develop new applications for LCP resins and expand its business by increasing both its product lineup and its production capacity.


Toray Japanese Subsidiaries Overseas Subsidiaries
Sales
(Billions of yen)
300
200
100
0
219.1
46.6
94.0
78.6
235.0
54.0
87.7
93.3
263.8
67.6
87.3
108.9
Mar/05
06
07
Sales growth
+12.3
%
1
Operating income to net sales
12.7
%
IT-RELATED PRODUCTS
Capital expenditures
30.3
billion yen
(property, plant and equipment)
×100 0000 25kV 500μm2
ROA
10.8
%
Operating Income
(Billions of yen)
35
30
25
20
15
10
5
0
28.3
2.3
8.6
17.5
-0.2
31.3
4.2
8.8
18.3
33.5
5.2
10.0
18.5
-0.2
Mar/05
06
07
Toray Japanese Subsidiaries Overseas Subsidiaries
Adjustment

3

1. *Metaloyal**, two-layer copper clad laminated film to be commercialized in Korea. Demand is increasing for this film for use in COF tapes for LCD driver IC bonding.
2. A pattern processed with a photosensitive paste material used in barrier ribs, which is pasted on the rear panel of a PDP. Toray supplies photosensitive paste materials exclusively to Matsushita PDP Co., Ltd., a joint venture between Toray and Matsushita Electric Industrial Co., Ltd.
3. Electronic circuit materials developed using Toray's advanced film processing technologies and high-performance adhesive technologies. The materials contribute to the technology progress of semiconductor packages and electronic circuits.

SUMMARY OF BUSINESS RESULTS FOR THE FISCAL YEAR ENDED MARCH 2007

In the fiscal year ended March 2007 (FY Mar/07), the IT-related products segment posted a 12.3% increase in net sales, to ¥263.8 billion, and a 7.0% rise in operating income, to ¥33.5 billion.

We reported a significant increase in sales of display materials, thanks to higher sales of films for flat-panel displays (FPDs) and materials for plasma panel displays (PDPs). Growth in sales of electronic component-related films and semiconductor-related materials offset a slump in sales of color filters for liquid crystal displays (LCDs) and circuit materials. As a result, Toray posted an increase in both sales and operating income for this segment.

Japanese subsidiaries remained on a par with the previous year, as higher sales by our film processing subsidiary compensated for a decline in sales by our trading subsidiaries. By contrast, operating income increased thanks to a number of factors, including improved profitability by our IT-related equipment subsidiary.

Overseas subsidiaries recorded higher sales and operating income. This was largely attributable to higher sales of FDP- and electronic component-related films and processed films by our Korean subsidiary.

OUTLOOK

Although the FPD market including LCD and PDP is expanding, production and inventory adjustments are forecasted to restrain growth to moderate levels in first half of the current fiscal year, ending March 2008. However, a return to full-scale market expansion is expected for the second half of the year. Meanwhile, we come under the increasing price pressure to our IT-related products from customers in response to ongoing declines in prices of major electronic devices.

Under these circumstances, Toray Group will endeavor to increase sales of optical films and processed films for FPD applications, as well as IT-related films. In this latter category, we are scheduled to complete expansion of PET film production facilities at our Korean subsidiary in the first half of the current fiscal year. We will also increase sales of new advanced materials, including semiconductor materials.

As a result of the above measures, we project a 13.7% increase in sales of IT-related products, to ¥300.0 billion, and a 1.6% rise in operating income, to ¥34.0 billion in FY Mar/08. A change in accounting treatment for depreciation and amortization will have a ¥1.0 billion negative impact on operating income in this segment.

TOPICS

Start Production of High-density Flexible Printed Circuit Boards in Korea

Toray Group will start production of *Metaloyal**, two-layer copper clad laminated film using the electroplating method for high-density electronic circuit boards at its Korean subsidiary, Toray Saehan. A total of around ¥3.0 billion will be invested in the project, and the new production line is scheduled to commence operation in October 2007.

*Metaloyal** is used in circuit boards mounted with driver ICs for liquid crystal panels in laptop computers, LCD televisions, and mobile phones. The recent shift to large-size LCD and the miniaturization of drive IC has seen a move away from the tape automated bonding (TAB) to chip-on-film (COF) for which *Metaloyal** is applicable, at a surprisingly fast rate.

By increasing production capacity at both Toray Advanced Film Co., Ltd. and Toray Saehan Inc., the Group plans to treble the size of its *Metaloyal** business, to ¥18.0 million, by 2011 to meet huge worldwide demand.

Expanded Production Capacity for Plasma Display Panels and Materials

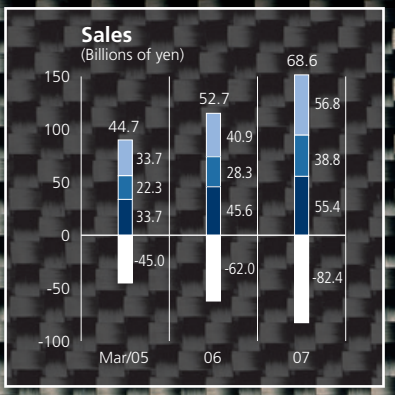
Positioning PDP business as one of our core operations, Toray has been expanding PDP production capacity through Matsushita PDP Company Ltd. (MPDP), a joint venture company with Matsushita Electric Industrial Co., Ltd. On the top of that, Toray is also expanding its PDP paste business in accordance with the expanding capacity of PDP production capacity at MPDP.

In 2006, Toray began expanding production facilities for PDP photosensitive paste materials, to meet anticipated demand from MPDP's fourth plant, which is currently under construction. The first phase of operations began in July 2007. Once full-scale production of paste materials commences in February 2008, total production capacity will increase from 2,700 tons to 5,160 tons per year.

In addition, MPDP is planning to construct a fifth plant, with the first phase of production scheduled to commence in May 2009. Featuring sophisticated facilities, it will be able to make ten 42-inch panels from a single sheet of glass, the highest number in the world. In another first, the new plant will also achieve an annual production capacity equivalent to 12 million 42-inch panels.

Toray Japanese Subsidiaries Overseas Subsidiaries Adjustment*

* 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.



Sales growth

+30.1

%

1

Operating income to net sales

26.4

%

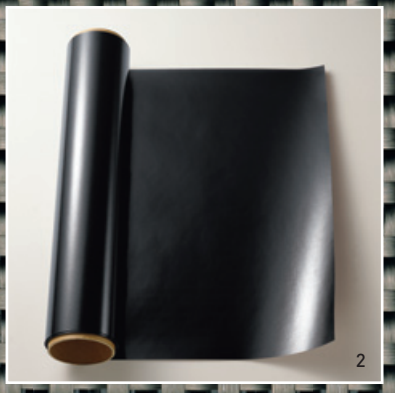
CARBON FIBER COMPOSITE MATERIALS

Capital expenditures

35.3

billion yen

(property, plant and equipment)

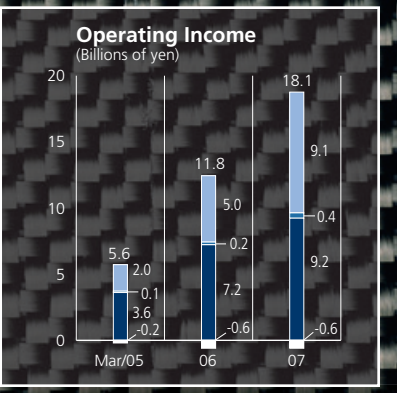


2

ROA

12.7

%



Toray Japanese Subsidiaries Overseas Subsidiaries Adjustment

3

1. Demand is increasing in all applications for *Torayca**, Toray's carbon fiber used in aircraft, sports, and industrial applications.

2. *Torayca** prepreg is a sheet-form carbon fiber impregnated with resin. It is used as a primary structural material in the new Boeing 787 medium-sized aircraft.

3. *Torayca** carbon fiber woven fabric. Applications are increasing for the sheet form of *Torayca** due to its characteristics such as its high workability and easy impregnability for resin.

SUMMARY OF BUSINESS RESULTS FOR THE FISCAL YEAR ENDED MARCH 2007

In the fiscal year ended March 2007 (FY Mar/07), Toray Group enjoyed huge increases in both sales and income in the carbon fiber composite materials segment. Net sales climbed 30.1%, to ¥68.6 billion, and operating income jumped 53.0%, to ¥18.1 billion.

Sales of carbon fibers *Torayca**, intermediate materials such as prepreg*, woven materials and carbon fiber composites products all increased, buoyed by continued strong demand for aircraft, sports and industrial applications. Additional facilities at the Ehime Plant, which came on stream in January 2007, boosted both production and sales, contributing to overall increases in sales and operating income in Toray.

Steady growth in sales by our trading company resulted in increased total sales and operating income of Japanese subsidiaries.

Regarding overseas subsidiaries, we expanded sales on the back of extremely strong demand from aircraft and industrial applications. We reported an increase in overseas subsidiaries' sales and operating income, thanks largely to expanded production and sales by Toray Carbon Fibers America, Inc. (CFA), which began operating new production lines in January 2006.

OUTLOOK

We forecast continued growth in demand for carbon fibers for aircraft, sports, and all industrial applications, and an even higher level of growth for commercial aircraft applications. Do to this, we expect the already tight supply and demand situation to continue, despite plans by various carbon fiber manufacturers to expand production facilities.

In response, Toray Group commenced additional production of carbon fiber at its Ehime Plant in January 2007, with an annual capacity of 2,200 tons. In addition, Société des Fibres de Carbone S.A. (SOFICAR), the Group's carbon fiber production and sales subsidiary in France, is adding a new production line, which is scheduled to come on stream in August 2008 with an annual capacity of 800 tons. In addition, in January 2008 we will start making high modulus carbon fiber at the Ehime Plant at a rate of 400 tons per year.

As a result of the above measures, we forecast a 31.2% increase in segment sales, to ¥90.0 billion, and a 13.4% rise in operating income, to ¥20.5 billion in FY Mar/08. The revision of Japanese taxation system in FY Mar/08, will have a ¥500 million negative impact on segment operating income.

TOPICS

Boost in Production of Carbon Fiber Composite Materials in Three Countries and Five Manufacturing Bases

Toray Group is investing a total of ¥55.0 billion to expand the production capacity of carbon fiber composite materials at five manufacturing bases in Japan, the United States, and France in response to a sharp rise in demand for PAN-based carbon fiber for applications including aircraft.

In 2006, worldwide demand for PAN-based carbon fiber was around 28,000 tons. Global demand is expected to continue growing at around 15% annually, reaching 48,000 tons by 2010. This huge increase will be driven in part by demand for aircraft applications, primarily related to Boeing's next-generation passenger aircraft, Boeing 787 Dreamliner, scheduled to enter service in 2008. We expect further demand to be created by alternative energy-related applications, including CNG tanks, as well as the widespread adoption of carbon fiber in future automobile applications.

To meet increased demand, we will build a new high-performance carbon fiber production line at the Ehime Plant, with an annual capacity of 400 tons. We will also boost production at CFA and SOFICAR by 1,800 tons each. In addition, we will build a precursor production line at CFA to address these increases in carbon fiber production capacity. We will also expand production of prepeg by 5.8 million square meters at Toray Composites (America), Inc. (TCA), a subsidiary in the state of Washington. In Japan, we will build a second prepeg production base at our Ishikawa Plant. Through these five manufacturing bases in three countries, we will establish a structure to ensure stable supply and optimize Toray's operations on a global scale.

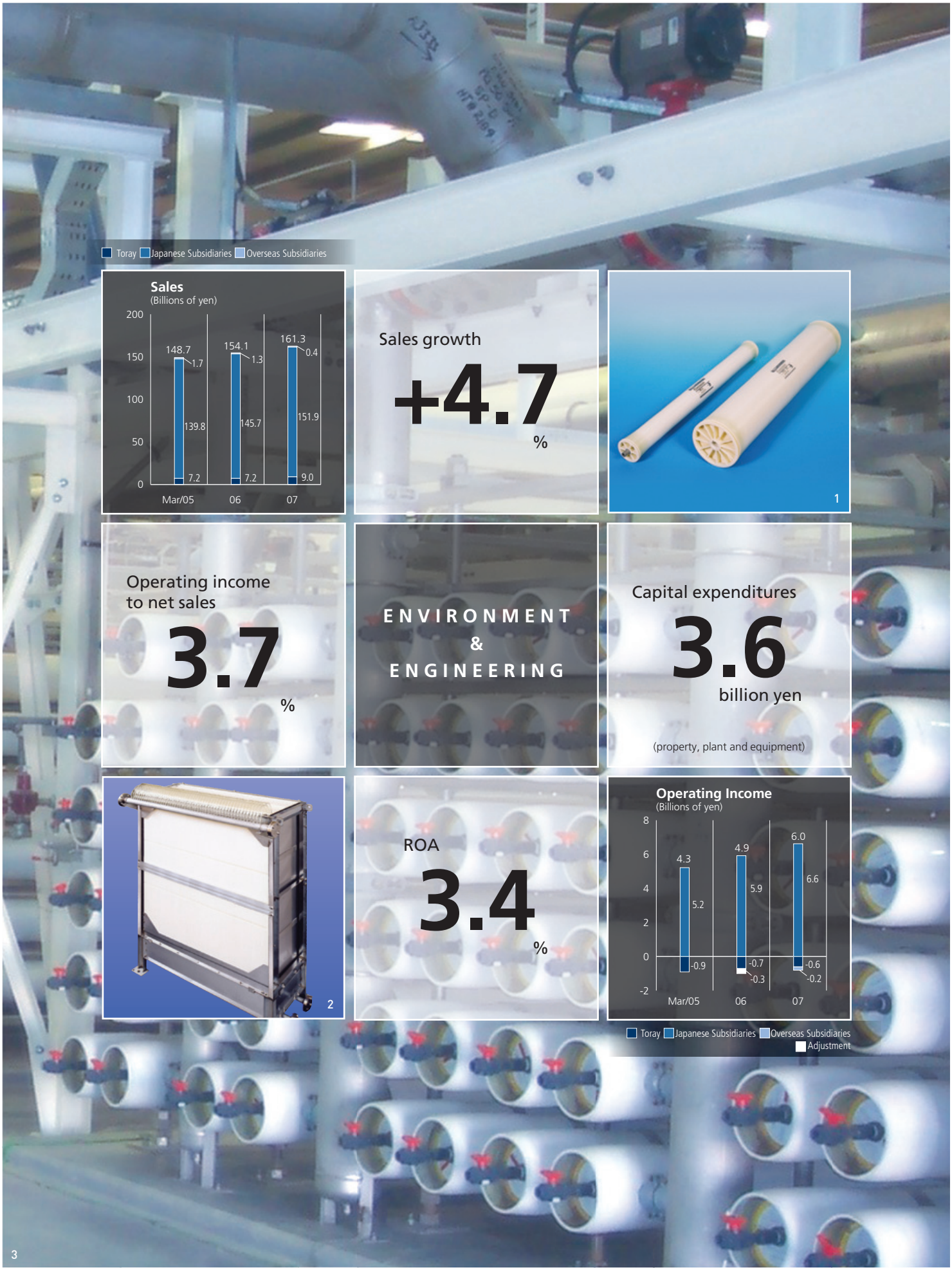
*Prepreg: sheet-form carbon fiber impregnated with resin

Carbon fiber production capacity (tons/year)

	Jan. 2007	Aug. 2007	Jan. 2008	Dec. 2008	Increase
Ehime Plant	6,900	6,900	7,300	7,300	+400
CFA (U.S.)	3,600	3,600	3,600	5,400	+1,800
SOFICAR (FRANCE)	2,600	3,400	3,400	5,200	+1,800
Group total	13,100	13,900	14,300	17,900	+4,000

Prepreg production capacity (10,000m²/year)

	Jan. 2007	Jul. 2008	Jan. 2009	Increase
Ehime Plant	1,080	1,080	1,080	—
TCA (U.S.)	1,140	1,720	1,720	+580
Ishikawa Plant	—	—	580	+580
Group total	2,220	2,800	3,380	+1,160


Toray Japanese Subsidiaries Overseas Subsidiaries
Sales
(Billions of yen)
200
150
100
50
0
148.7
1.7
139.8
7.2
154.1
1.3
145.7
7.2
161.3
0.4
151.9
9.0
Mar/05
06
07
Sales growth
+4.7
%
1
Operating income to net sales
3.7
%
ENVIRONMENT & ENGINEERING
Capital expenditures
3.6
billion yen
(property, plant and equipment)
2
ROA
3.4
%
Operating Income
(Billions of yen)
8
6
4
2
0
-2
4.3
5.2
-0.9
4.9
5.9
-0.7
-0.3
6.0
6.6
-0.6
-0.2
Mar/05
06
07
Toray Japanese Subsidiaries Overseas Subsidiaries
Adjustment
3

1. Demand is increasing for Toray's reverse osmosis membrane *Romembra**, elements used in seawater desalination, amid a worsening water shortage worldwide.
2. Demand is expanding for immersed membrane modules for Membrane Bioreactor (MBR) to treat and reuse wastewater.
3. A plant in Sulaibiya, Kuwait is the largest wastewater reuse plant in the world. The plant uses Toray's stay-clean (low fouling) reverse osmosis (RO) membrane technology and has a production capacity of 320,000m³ of water a day.

SUMMARY OF BUSINESS RESULTS FOR THE FISCAL YEAR ENDED MARCH 2007

In the fiscal year ended March 2007 (FY Mar/07), the environment & engineering segment recorded a 4.7% increase in net sales, to ¥161.3 billion. Operating income rose 21.0% year-on-year, to ¥6.0 billion.

In the water treatment business, Toray posted large sales and improved profits through exports of reverse osmosis (RO) membranes.

In Japan, we recorded higher total sales and operating income of Japanese subsidiaries, owing to steady sales by our construction and engineering subsidiaries.

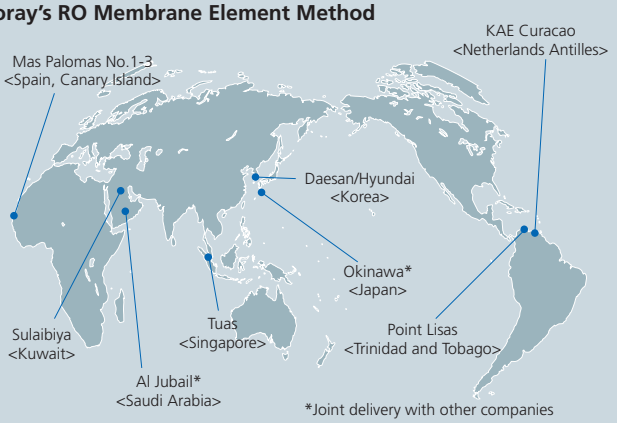
OUTLOOK

We expect active capital expenditures by corporations to continue. In the water treatment business, we foresee ongoing difficulties in the water treatment engineering business stemming from cutbacks to public-works in Japan. However, demand is expanding for seawater desalination and the reuse of wastewater, globally.

Under these circumstances, we will endeavor to increase sales of plant engineering and engineering equipment by our engineering subsidiaries. We will also reinforce our global marketing and sales network to expand our water treatment membrane business. In addition, we will restructure the business of our water treatment engineering subsidiary in an effort to increase earnings.

As a result of the above measures, we forecast a 11.6% increase in segment sales, to ¥180.0 billion, and a 51.2% jump in operating income, to ¥9.0 billion in FY Mar/08.

Water Treatment Plants Adopting Toray's RO Membrane Element Method



Cumulative installation : about 6,400,000 m³/day
(as of seawater desalination over 1,000,000 m³/day)

TOPICS

Development of High Boron Rejection RO Membrane Element for Seawater Desalination

Toray was the first in the world to demonstrate a correlation between the boron rejection rate and pore diameter distribution in reverse osmosis (RO) membranes used for seawater desalination. We achieved this breakthrough by quantifying pore diameter distribution on a sub-nanometer level*. We then used this information together with our proprietary molecular design technology to develop a "high boron rejection RO membrane" that controls pore diameter with sub-nanometer accuracy.

The rejection of boron molecules, which are very small, has long been a problem when desalinating water using RO membranes. Although Toray has previously developed RO membranes with a high rate of boron rejection, this time we combined our research findings and expertise in nanotechnology to design polymer molecules with an ideal pore diameter.

* Sub-nanometer equals one-tenth of one-billionth of a meter

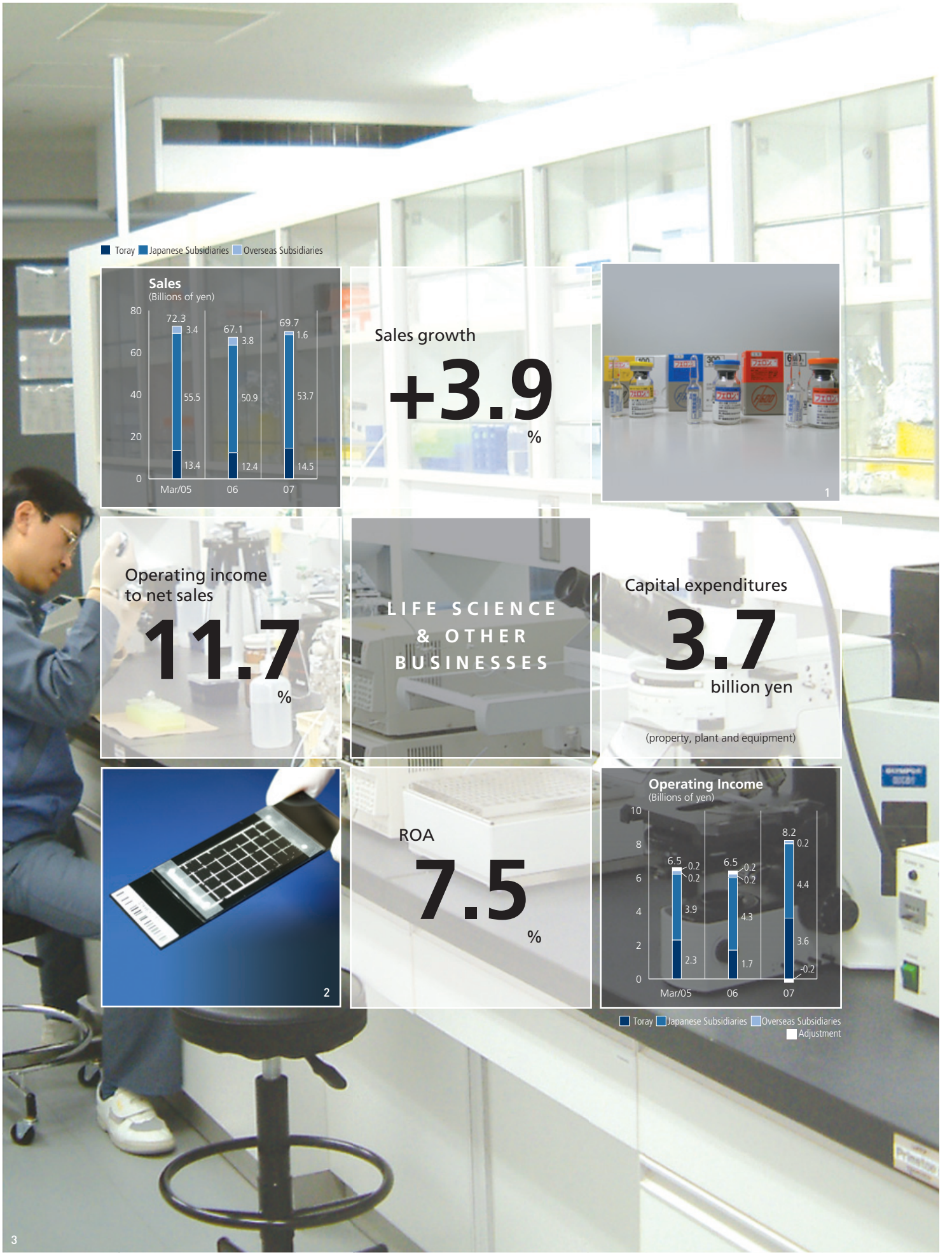
Succession of Orders for RO Membranes for Mediterranean Desalination Plants

Toray has received a succession of orders for RO membranes for use in seawater desalination plants in the Mediterranean Sea. The plants are the Hamma desalination plant in Algeria, which will produce 200,000 cubic meters of water per day, a plant in Palmachim, Israel (93,000 cubic meters per day), and three desalination plants in Malta (54,000 cubic meters per day). All of the plants are scheduled to commence operation in 2007.

Countries in the Mediterranean region rank alongside those in the Arabian Gulf with respect to the scarcity of water resources**. Production capacity of desalination plants on the Mediterranean Sea is forecast to increase 179% by 2015, a growth rate that is roughly double that for the Arabian Gulf states. Algeria and Israel, as well as Spain, where Toray has an extensive track record, are all planning to construct huge desalination plants that use the RO membrane element method.

The Hamma desalination plant in Algeria, currently under construction, is the largest plant of its kind in Africa. The plant ordered for Israel is the first such plant that Toray Group has supplied for that country. In Malta, it is the first time that Toray's products have been adopted as replacements for three desalination plants constructed on the island in the 1980s and 1990s.

** Countries deemed to have scarce water resources are those where demand far outstrips supply and have a water shortage rate of at least 40%.
Water shortage rate = (1 – water supply/water required) x 100.


Toray Japanese Subsidiaries Overseas Subsidiaries
Sales
(Billions of yen)
80
60
40
20
0
72.3
3.4
55.5
13.4
67.1
3.8
50.9
12.4
69.7
1.6
53.7
14.5
Mar/05
06
07
Sales growth
+3.9
%
1
Operating income to net sales
11.7
%
LIFE SCIENCE & OTHER BUSINESSES
Capital expenditures
3.7
billion yen
(property, plant and equipment)
2
ROA
7.5
%
Operating Income
(Billions of yen)
10
8
6
4
2
0
6.5
0.2
0.2
3.9
2.3
6.5
0.2
0.2
4.3
1.7
8.2
0.2
4.4
3.6
-0.2
Mar/05
06
07
Toray Japanese Subsidiaries Overseas Subsidiaries
Adjustment
3

1. *Feron**, Japan's first natural Interferon drug, received approval to treat hepatitis C compensated cirrhosis in April 2006.
2. Toray's 9k series of *3D-Gene** ultrahigh sensitivity DNA chip support human gene analysis research in the areas of immunity, metabolic syndrome and cancer.
3. Toray's New Frontiers Research Laboratories, established to foster collaboration with outside research groups, makes its laboratory space available for others to use. Joint research is conducted in a range of fields, including biotechnology and nanotechnology.

SUMMARY OF BUSINESS RESULTS FOR THE FISCAL YEAR ENDED MARCH 2007

In the fiscal year ended March 2007 (FY Mar/07), net sales in the life science & other businesses segment grew 3.9%, to ¥69.7 billion, and operating income rose 26.3%, to ¥8.2 billion.

Sales and operating income of the pharmaceuticals and medical products business increased through sales expansion of artificial kidneys and emergency intensive care devices, as well as increase in licensing revenues. Both sales and operating income of other businesses also increased, thanks to strong performance of Toray Research Center Inc.

OUTLOOK

The pharmaceuticals market in Japan is forecasted to stay largely unchanged, while competition in the market for artificial kidneys will become increasingly intense.

Under these circumstances, we will seek approval for new drugs and new indications, and strive to increase sales of *Feron** aided by the recently approved additional indication for hepatitis C compensated cirrhosis. In the medical products, we will work to increase sales of *Toraylite**, a moist-type artificial kidney.

As a result of the above measures, we forecast a 0.4% increase in segment sales, to ¥70.0 billion, and a 1.9% decline in operating income, to ¥8.0 billion, stemming from lower operating income in FY Mar/08.

TOPICS

New Indication for Natural Interferon Beta Drug *Feron**

In April 2006, Toray received approval for its natural Interferon Beta drug, *Feron**, to be used in Japan to treat viremia* associated with hepatitis C compensated cirrhosis. Consequently, *Feron** is the first antiviral drug in Japan found to be effective in the treatment of hepatitis C compensated cirrhosis.

Hepatitis C compensated cirrhosis is caused by the hepatitis C virus, and can lead to decompensated cirrhosis and hepatocellular carcinoma. Until now, only drugs that stabilized liver function were permitted for the treatment of hepatitis C compensated cirrhosis. Thus, Toray's acquisition of approval for *Feron** for treating the hepatitis C virus, which causes hepatitis C compensated cirrhosis, offers a new method of treatment for patients.

*Except for the treatment of patients with hepatitis C virus serotype 1 and high viral loads.

Development of High-Sensitivity DNA Chips for Analysis of High-Density Human Gene Expression

In November 2006, Toray developed the *3D-Gene** Human Immunity & Metabolic Syndrome 9k chip and the *3D-Gene** Human Digestive Cancer 9k chip. Both chips will be used for the analysis of human gene expression and were made using an ultrahigh sensitivity DNA chip *3D-Gene** substrate.

The first of these two DNA chips has about 9,000 genes related to the human immune mechanism and metabolic syndrome**. It will be used in a wide variety of research fields, ranging from basic research on immunology and endocrine metabolomics to research on allergies, autoimmune diseases, diabetes, metabolic syndrome, and other diseases. The second *3D-Gene** Human Digestive Cancer 9k chip, which also carries about 9,000 genes, will be used in the detection of a broad spectrum of cancer-related genes, mainly associated with digestive cancer.

This new series of *3D-Gene** 9k chips makes a huge contribution to research on immunity, metabolic syndrome, and cancer, fields in which Japan leads the world. They will be used in the analysis of human gene expression, including genes used for diagnostic purposes and for new drug discovery.

Toray's provision of these new products to corporate and academic research institutions will expedite medical research in Japan that includes the identification of new genes used for diagnosis. Moreover, the *3D-Gene** chips are expected to lead to the development of DNA chips for testing and diagnostic applications that will serve as key tools in so-called "tailor-made" medicine.

Part of the research was undertaken with assistance from the Bio-IT Equipment Development Project sponsored by Japan's Ministry of Economy, Trade and Industry and the New Energy and Industrial Development Organization (NEDO).

**According to the April 2005 definition of metabolic syndrome adopted as diagnostic criteria in Japan, a person with metabolic syndrome must have abdominal obesity caused by excessive nutritional intake or lack of exercise, an accumulation of visceral fat, plus two of the following three factors: raised glucose, lipid metabolism abnormality, and raised blood pressure.