

## PROGRESSIVE INNOVATION: Expand the Advanced Material Businesses and Transform Toray into a Highly Profitable Business Group

Under its corporate slogan "Innovation by Chemistry" Toray Group has formulated a long-term corporate vision, entitled "AP-Innovation TORAY 21," through which it will aim to be a global top company of advanced materials. Guided by this vision, we are currently implementing "IT-2010," a set of midterm business strategies aimed at promoting "Innovation" not only in technological development but across every aspect of the Group's operations.

IT-2010 consists of two basic strategies. The first is to transform Toray into a highly profitable business group. Specifically, this means achieving sustained business expansion, with annual average growth rate of 5% for net sales and 10% for operating income. To realize such expansion, we will structurally reform our businesses in order to increase the share of net sales and operating income in our overall business for the Strategically Expanding Businesses (IT-related Products and Carbon Fiber Composite Materials), current drivers of earnings,

and Strategically Developing Businesses (Life Science, water treatment, and environmentally friendly products), future drivers of earnings.

The second strategy calls for expansion of our advanced material businesses. By around 2010, we plan to double sales of advanced materials compared with current levels and raise the share of advanced materials in total net sales to 50%, from the present level of 30%.

Under IT-2010, we are targeting "Innovation" across five key areas of our operations: business structure, technologies, competitiveness, business-awareness, and corporate social responsibility (CSR). To promote these innovations, we are initiating eight groupwide projects.

In this special feature, we will focus on strategies for expanding our advanced material businesses and provide details about specific initiatives related to the aforementioned "Five Innovations and Eight Projects."

### BUSINESS CATEGORIES AND BUSINESS SEGMENTS

Business Categories	Divisions*	Business Segments	Basic Materials	Advanced Materials
FOUNDATION BUSINESSES	Fibers & Textiles	Fibers & Textiles	Synthetic fibers Resins Films Chemical materials etc.	High function fibers & textiles
	Resins & Chemicals	Plastics & Chemicals		High function resins Functional particles High function films Display materials Semiconductor packaging materials High density recording materials
	Films			Carbon fibers Advanced composite materials
STRATEGICALLY EXPANDING BUSINESSES	Electronics & Information Related Products	IT-related Products		Pharmaceuticals & Medical devices
	TORAYCA* & Advanced Composites	Carbon Fiber Composite Materials		Environmentally friendly materials High function separation membranes, etc.
STRATEGICALLY DEVELOPING BUSINESSES	Pharmaceuticals & Medical Products	Life Science		
	Water Treatment & Environment	Environment (water treatment)		
		Engineering, others	Engineering, others	

\*As of June 27th 2007

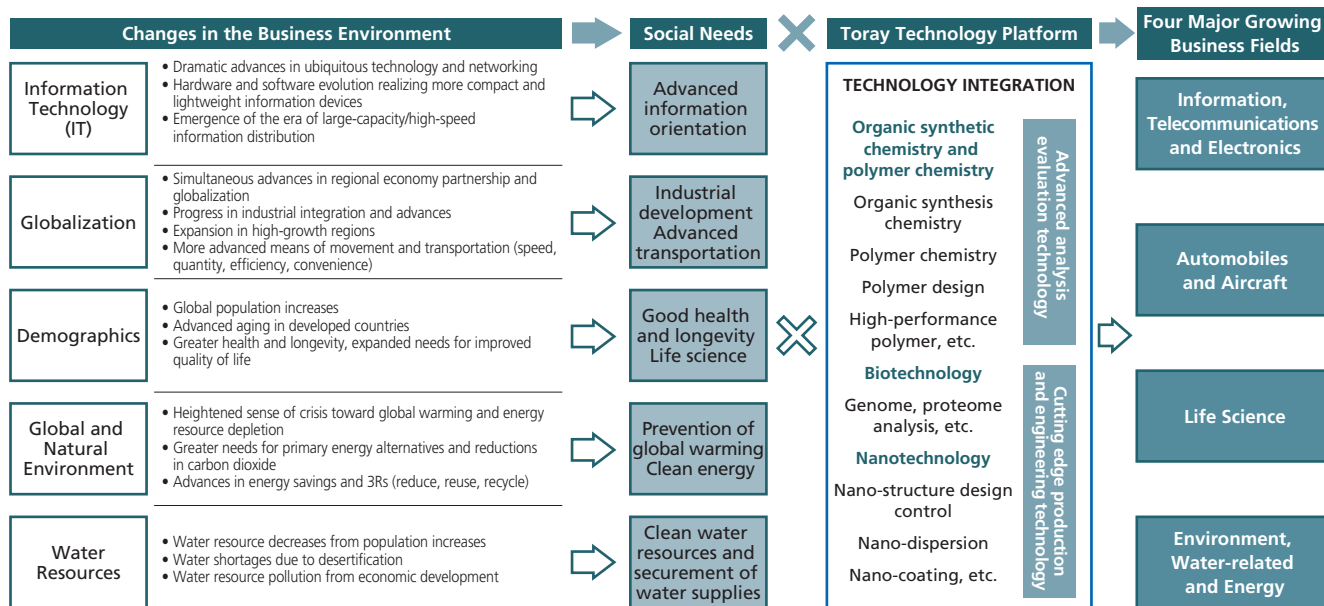
## EXPAND ADVANCED MATERIAL BUSINESSES IN FOUR MAJOR GROWING BUSINESS FIELDS

In considering its business environment over the next decade, Toray Group envisages that the needs of society will be shaped by several major trends: advances in information technologies, the realization of sophisticated transportation systems stemming from industrial advances, people living longer and healthier lives, advances in life sciences, and global environmental issues, including declining water resources. In response, Toray has identified four major growing business fields: (1) Information, Telecommunications, and Electronics, (2) Automobiles and

Aircraft, (3) Life Science, and (4) Environment, Water-related and Energy.

In these four business fields, Toray Group will pursue technological innovation by deploying its core technologies — organic synthetic chemistry, polymer chemistry, biotechnology, and nanotechnology — as well as integration of those technologies, to develop advanced materials and continue delivering optimal solutions to customers. In these ways, we will strive to become the global top company of advanced materials.

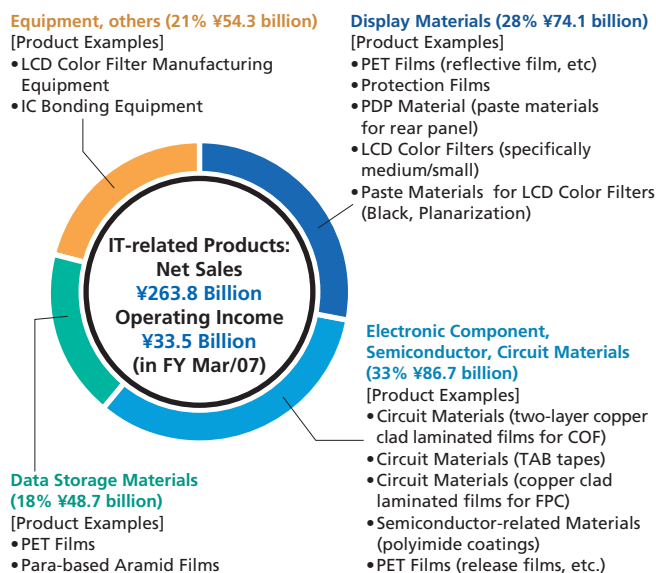
### Four growing business fields targeted by Toray Group



## 1 Information, Telecommunications and Electronics

In the information, telecommunications, and electronics field, Toray is working to address the needs of the sharply growing digital network-related products market, driven by flat-panel displays, PCs and other devices. We are broadening our activities in advanced materials, maintaining a good balance across multiple domains, including display materials\*; electronic component, semiconductor and circuit materials; data storage materials; and equipment and others. Through this we are targeting steady growth in the rapidly changing IT business field. In addition, we have vertically integrated alliances with major customers such as Matsushita Electric Industrial Co., Ltd. and Samsung Electronics Co., Ltd., through which we are also developing and expanding sales of innovative products.

\*For recent progress in display materials, see the "Topics" section on page 27.

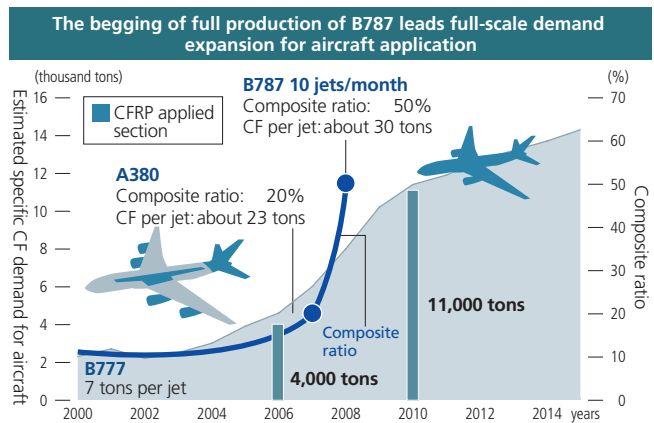
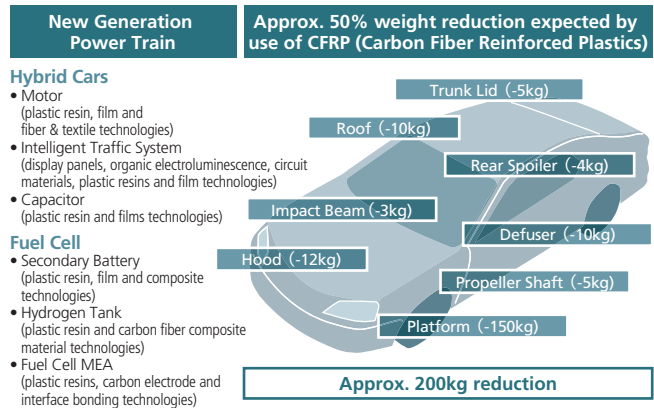


## 2 Automobiles and Aircraft

Toray is actively developing products for the next-generation automobile market, taking advantage of expanded functionality of carbon fiber composite materials and engineering plastics. Due to environmental considerations, automobiles will need to become lighter in order to enhance fuel efficiency and cut greenhouse gas emissions. Applications for engineering plastics will increase as a result, and we also anticipate more widespread adoption of carbon fiber composite materials. In addition, we will develop new products in response to the growing hybrid cars and car electronics sectors.

The market for our products in aircraft applications continues to grow, characterized by steady orders for the new "Boeing 787" (scheduled to begin commercial flight in 2008), an all-composite airplane in which the structural materials consist mostly of carbon fiber composite materials. To reliably meet demand in this area, we will steadily expand our carbon fiber and prepreg production capacity.

\* For details of production capacity increase of our carbon fiber production facilities, see the "Topics" section on page 29.

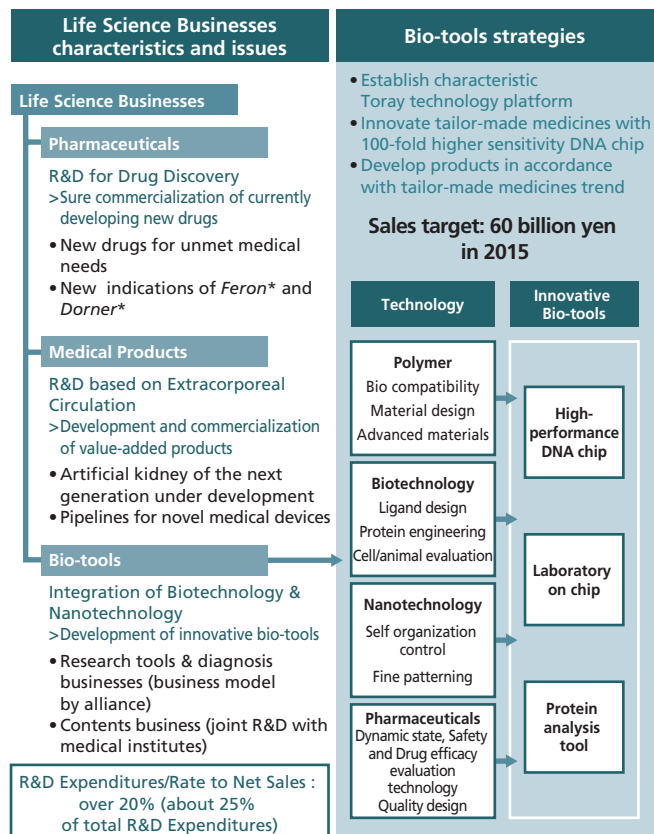


## 3 Life Science

In the life science field, we will target advances in the pharmaceuticals and medical products businesses. With respect to pharmaceuticals, progressing our business model of new drug research and development, we will steadily gain approval for and commercialize new drugs currently under development and broaden our new drug pipeline. In medical products, we will focus on developing, gaining approval for and commercializing high-value-added products, centering on extracorporeal circulation devices.

Through the integration of biotechnologies and nanotechnologies, we will also create and launch innovative bio-tools. We have already released a high-performance DNA chip featuring a 100-fold sensitivity compared with existing chips. Using a protein separation device that we developed as a protein analysis tool, we have also built a solid track record in detection of marker proteins\*, thus attracting widespread attention in the field of protein analysis.

\* For more information about detection of marker proteins, see the "Topics" section on page 33.



## 4 Environment, Water-related, and Energy

In the environmental and recycling fields, we are working to develop and increase sales of environmentally friendly products (*Ecodream\** products\*). We are developing applications for fibers & textiles, plastic resins, and films made from non-petrochemical materials, proactively tackling the recycling of fibers & textiles and plastic resins, and developing next-generation energy materials.

Given predications of serious clean water shortages in the 21st century, we are expanding our water treatment business on a global scale. The market for water-treatment-related busi-

nesses, including that for water supply service, is expected to grow to about ¥100 trillion by 2025, from the current level of around ¥60 trillion. Toray is a comprehensive manufacturer of water treatment membranes. We are one of very few companies with expertise across the entire spectrum of high-performance water treatment membranes, including reverse osmosis (RO) membranes, nanofiltration (NF) membranes, ultrafiltration (UF) membranes, and microfiltration (MF) membranes. Deploying our world-leading core expertise in membrane technologies, we will advance our business to cover the full range of water treatment applications\*\*.

\* For more information on Toray's *Ecodream\** products, see page 42.

\*\*For more information on recent progress in our water treatment business, see page 31.

Size	0.001μm	0.01μm	0.1μm	1μm	10μm
Separation materials	Ion, Low molecule weight organics Trihalomethane, Monovalent ions, Multivalent ions, Agricultural & Organic Material		High molecular weight polymer	Colloid	Clay, Coliform, Cryptosporidium
			Virus	Bacteria	
Types	RO (Reverse Osmosis)		NF (Nanofiltration)		UF (Ultrafiltration)
Toray's membrane products	RO/NF membrane		PAN Hollow Fiber UF membrane PS Hollow Fiber MF membrane		PVDF Hollow Fiber MF membrane Home Water Purifiers Torayvino* Immersed membrane for MBR

### Five Innovations, Eight Project

Under IT-2010, we are pursuing “Five Innovations, Eight Project” in order to transform management and give it a strong innovation-oriented approach. The tasks and strategies of each “Innovation” and “Project” are summarized in the table below.

### Toward an Era of Dynamic New Progress

By pursuing strategies under IT-2010, we will seek to strive for further growth. Our ultimate goal, set for around 2010, is to achieve operating income of ¥150 billion. Meanwhile, we will keep firmly in mind our image of Toray in 2015, shaped by our long-term corporate vision, as we embrace the challenge of achieving sustainable growth.

Five Innovations	Projects	Issues and Responses
Innovation of business structure	Business structure innovation	<ol style="list-style-type: none"> <li>1. Transform the business portfolio; from a medium- and long-term perspective create and expand high-profitability, high-growth potential businesses</li> <li>2. Strategically allocate management resources (human resources and capital investment)</li> <li>3. Promote new, large-scale businesses in the four major growing business fields</li> <li>4. Take actions regarding problem businesses</li> <li>5. Move forward with major M&amp;A</li> </ol>
	Overseas business strengthening	<ol style="list-style-type: none"> <li>1. Reorganize, consolidate, and implement measures to bring unprofitable operations into the black at overseas businesses and subsidiaries</li> <li>2. Move forward with programs to expand businesses in China, Korea, Europe, and the U.S.</li> <li>3. Expand businesses in new markets and new areas</li> </ol>
Innovation of technologies	Advanced material businesses expansion	<ol style="list-style-type: none"> <li>1. Move forward with technology development strategies consistent with the Group's business strategies and clarify success indicators</li> <li>2. Strengthen product commercialization capabilities (business planning, customer information, ability to generate proposals, etc.)</li> <li>3. Strengthen and foster existing peripheral technologies</li> </ol>
	R&D capabilities innovation	<ol style="list-style-type: none"> <li>1. Allocate managerial resources to “APEX 40 (top priority 40 themes)”</li> <li>2. Generate next large-scale R&amp;D themes</li> <li>3. Strengthen research and technological foundation</li> </ol>
	Manufacturing technology innovation	<ol style="list-style-type: none"> <li>1. Realize world-leading quality with world's lowest costs</li> <li>2. Generate operational strength at manufacturing facilities</li> <li>3. Generate technology development strength</li> </ol>
Innovation of competitiveness	Cost innovation	<ol style="list-style-type: none"> <li>1. Reduce costs by reviewing the manufacturing structure in existing businesses</li> <li>2. Reduce variable costs</li> <li>3. Improve efficiency of capital expenditure</li> </ol>
	Marketing and sales innovation	<ol style="list-style-type: none"> <li>1. Thorough implementation of customer-oriented, proposal-based marketing and sales</li> </ol>
Innovation of business-awareness	Corporate brand strengthening	<ol style="list-style-type: none"> <li>1. Heighten the appeal of the Group's corporate brand (CB) and corporate image</li> <li>2. Further enhance employee loyalty</li> </ol>
CSR Innovation	—	<ol style="list-style-type: none"> <li>1. Promoting CSR implementation</li> <li>2. Strengthening security trade administration</li> <li>3. Establishing and using internal controls systems</li> </ol>