Medium-term Management Program “Project AP-G 2016”

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President
Toray Industries, Inc.
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Results of
Medium-term Management Program
“Project AP-G 2013”
(FY 2011 – FY 2013)
Key Principles and Basic Strategies

Key Principles

- Expand businesses in growth business fields and regions
- Establish a robust business footing by cost reductions

Basic Strategies

1. Business expansion in growth business fields
2. Business expansion in growth countries and regions
3. Capital investment strategies
4. M&A and business alliance strategies
5. R&D investment strategies
6. Developing and securing human resources
7. Bolstering competitiveness
8. Ongoing promotion of business structure reform

Group-wide Projects

- Green Innovation Business Expansion (GR) Project
- Asia and Emerging Country Business Expansion (AE) Project
- Total Cost Reduction (TC-II) Project
Green Innovation Business Expansion (GR) Project

Toray Group will use its strengths in chemistry to develop Green Innovation Businesses on a global scale.

<Topics>

<Carbon Fiber Composite Materials>
• Established or invested in automobile parts manufacturing companies in Japan, Asia, US and Europe. (Europe: Mar. 2011, Japan, Asia: Apr. 2013, US: July 2013)
• Agreed to purchase stakes in the US Zoltek Company, a large tow carbon fiber manufacturer. (Sept. 2013)

<Battery Materials>
• Made Toray Tonen Specialty Separator Godo Kaisha a wholly owned subsidiary and established Toray Battery Separator Film Godo Kaisha (currently a company limited.) (Jan. 2012)

<Water Treatment Membranes>
• Received orders to supply reverse osmosis membrane elements to large seawater desalination plants in Asia and the Middle Eastern nations.

<Printing Plate Materials>
• Newly constructed a waterless printing plate manufacturing plant in the Czech Republic and started operation. (Nov. 2013)

<Biomass Materials>
• Succeeded in producing laboratory-scale samples of the world’s first fully renewable biobased polyester fiber. (Nov. 2011)
Asia and Emerging Country Business Expansion (AE) Project

Toray Group will seek to aggressively develop and expand businesses in Asia and emerging countries in other regions that are expected to realize major economic growth.

<Topics>

<China>
- Established a new company for the manufacture and sales of dialysis machines and artificial kidneys. (June 2011)
- Operation started at a new plant to manufacture dialysis machines. (Apr. 2012)
- Established a new plastic resin compound manufacturing company in Chengdu, China and started operation. (Aug. 2013)

<ASEAN>
- Increased the production capacity of Nylon 66 fiber used for automobile airbags in Thailand and started operation. (Aug. 2012)
- Decided to establish a new vapor deposition equipment for packaging films in Malaysia. (Apr. 2013)
- Started high-performance polypropylene filament spunbond business for diapers in Indonesia. (June 2013)
- Established a new plastic resin compound manufacturing base in Indonesia and started operation. (Nov. 2013)

<Republic of Korea>
- Agreed to purchase stakes in Woongjin Chemicals Co., Ltd., a manufacturer of fibers and textiles and water treatment filters, etc. (Nov. 2013)

<Emerging Countries>
- Enhanced the operational and information-gathering base in India, Brazil and the Republic of Turkey.
Total Cost Reduction (TC-II) Project

To reinforce the robust business footing, Toray Group will implement the group-wide project outlined below:

Variable Cost Reduction

- Promote cost reduction in line with business strategies
- Further strengthen collaboration within the Group
- Strengthen global procurement system

Implement “VCi-10 (Variable Cost innovation 10%)” Project

- Reduce variable costs by over 3% each year and over 10% (over 70 billion yen) over three years

Forecast

Reduction estimated by 11.3% or 76.2 billion yen over 3 years

Forecasts

<table>
<thead>
<tr>
<th>Target</th>
<th>FY2011</th>
<th>FY2012</th>
<th>FY2013 (Forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.1 Billion yen</td>
<td>24.6 Billion yen</td>
<td>27.5 Billion yen</td>
<td></td>
</tr>
</tbody>
</table>

Fixed Cost Reduction

- Appropriately managed fixed costs at the business expansionary phase
- Introduced P-ratio* accounting method to secure profit appropriate to incremental fixed costs
- Continued to improve operational effectiveness to keep fixed costs at proper levels in line with profit growth

Forecast

Reduction estimated at 48.9 billion yen of budget

\[ P\text{-ratio} = 0.99 \]

* P (Performance)-ratio = fixed cost growth rate/marginal profit growth rate  Divisional management,1.0 or less or contrast with budget
Variance Analysis of FY 2010 Actual and FY 2013 Forecast

Net Sales

- IT-related Products: +17.0
- Environment & Engineering: +11.8
- Fibers & Textiles: +165.9
- Carbon Fiber Composite Materials: +43.0
- Life Science: +9.0

Operating Income

- IT-related Products: +17.2
- Plastics & Chemicals: +9.1
- Others: +3.5

- Fibers & Textiles: +22.6
- Carbon Fiber Composite Materials: +12.7
- Environment & Engineering: +3.7
- Life Science: +0.9
Variance Analysis of "AP-G 2013" Income Target and FY 2013 Forecast

Income Variance Factor Analysis

- Foreign Exchange Gain + 10.0
  ◆ European economic slump triggered by European debt problems
  ◆ Chinese economic slowdown
  ◆ Economic slowdown in emerging countries stemmed from expectations for the downsize of US monetary easing
- Price declined in PET films, etc. due to intensifying competition in Plastics & Chemicals business
- Reduced variable costs, thoroughly managed fixed costs
- Sluggish growth of LCD panels for TVs and lower demand of PDP in IT-related business

"AP-G 2013" Income Target Achievements by Segment

- "AP-G 2013" Income Target
  - FY 2013 Target: 150.0
  - FY 2013 Forecast: 110.0
- "AP-G 2013" Income Target Achievements by Segment
  - Fibers & Textiles + 16.0
  - Carbon Fiber Composite Materials + 1.0
  - Others + 2.0
  - IT-related Products ▲ 38.5
  - Plastics & Chemicals ▲ 13.0
  - Environment & Engineering ▲ 7.0
  - Life Science ▲ 0.5

Income Variance Factor Analysis

- Change in quantity ▲ 30.0
- Variance in selling prices ▲ 40.0
- Variance in Product Mix ▲ 25.0
- TC Activities + 45.0
- Variance in Product Mix ▲ 25.0
- TC Activities + 45.0
- Foreign Exchange Gain + 10.0
- "AP-G 2013" Income Target
  - FY 2013 Target: 150.0
  - FY 2013 Forecast: 110.0
Trends in Operating Income

Billion yen

51.2 18.8 33.0 56.8 81.1 93.0 102.4 103.4 36.0 40.1 100.1 107.7 83.4 110.0

NT-21 NT-II IT-2010 IT-II AP-G 2013

(Forecast)
Medium-term Management Program
“Project AP-G 2016”
(FY 2014 – FY 2016)

Innovation and Proactive Management
- Implementation of Growth Strategy -
Key Principles of “AP-G 2016” (1)

In addition to basic strategies of “AP-G 2013”, devise the new growth strategies to achieve the Long-term Corporate Vision “AP-Growth TORAY 2020.”

Capture Business Opportunities in Growth Business Fields
- Expansion of Green Innovation Businesses

Business Expansion in Growth Countries and Regions
- Expansion of Asia and Emerging Country Businesses

Strengthen Total Cost Reduction
- Reduction of Variable Costs and Fixed Costs

Additional New Perspective
- Expansion of Life Innovation Businesses
- Expansion of Businesses in America
- Innovation of Production Process, Total Operational Cost Reduction in Sales and Marketing

Strive for business growth in areas that can leverage strengths of Toray Group
Devise strategies and action plans to make each businesses the number-one worldwide
Key Principles of “AP-G 2016” (2)

To carry out the growth strategies

- Fully analyze current circumstances, and determine the ideal approach in order to set new action plans
- Design a roadmap and specific action plans for ambitious goals, and ensure the capabilities to carry them out
- Execute innovative initiatives that are different from the past in addition to existing measures
- Pursue group-wide initiatives that give the highest priority to CSR, including Safety, Accident prevention, Environmental preservation and Corporate Ethics and Legal Compliance
Basic Strategies and Group-wide Projects

**Basic Strategies**
1. Business expansion in growth business fields
2. Business expansion in growth countries and regions
3. Bolstering competitiveness
4. Strengthening sales and marketing
5. R&D strategies/Intellectual property strategies
6. Capital investment strategies
7. M&A and business alliance strategies
8. Human resources strategies

**Group-wide Projects**
- Green Innovation Business Expansion (GR) Project
- Life Innovation Business Expansion (LI) Project
- Asia, America and Emerging Country Business Expansion (AE-II) Project
- Total Cost Reduction (TC-III) Project

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Business Expansion in Growth Business Fields

Create new business and respond to expanding demand through the development of advanced materials with Toray Group’s strength in technology and infrastructure.

In the Environmental Energy Field, in addition to the conventional approach, identify shale gas revolution as a business opportunity.

Expand Green Innovation Business

In the Medical and Health Field, leverage Toray Group’s core technologies, fundamental technologies and business footing.

Expand Life Innovation Business

Toray Group will comprehensively and actively promote business expansion on a group-wide basis.
Expansion of Green Innovation Businesses

Green Innovation Business Expansion (GR) Project

◆ Expand businesses, that contribute to solve problems related to the environment, resources and energy, such as global warming, atmospheric pollution and water shortages

◆ Select and carry out projects by identifying Toray’s competitive technologies
◆ Improve the efficiency of R&D and accelerate commercialization and business expansion by considering the business strategies and collaboration outside Toray Group

◆ Create business opportunities around shale gas related businesses (compressed natural gas tanks, water treatment)

◆ Practice environmental management of Life Cycle Management (LCM), and achieve sustainable growth and lower environmental load
Expansion of Green Innovation Businesses

Contribute to the society by providing solutions to global environmental issues and energy and resources issues, and support sustainable growth of Toray Group.

Toray Group Green Innovation Businesses
Net Sales in FY 2012  450.4 Billion yen

Air Purification
- Dust collecting filter / Air filter

Recycling
- Regeneration-type recycling, circulation-type recycling / Material, chemical recycling

Water Treatment
- RO, MBR, MF/UF membrane
- Torayvino® home water purifier

Low Environmental Load
- Non-halogen flame-retardant material
- Toray Waterless Plate®

Reduction of GHG emissions
- Carbon fiber for aircraft, automobile, pressure vessels, etc.
- Back sheets for solar cells / Lithium-ion battery separator

Basic Strategy 1
- Low Environmental Load
  - Non-halogen flame-retardant material
  - Toray Waterless Plate®
Basic Strategy 1

Expansion Plan for Green Innovation Businesses

<table>
<thead>
<tr>
<th>Net Sales (Billion yen)</th>
<th>FY 2012 Actual</th>
<th>FY 2013 Forecast</th>
<th>FY 2016 Target</th>
<th>FY 2020 Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction of GHG Emissions</td>
<td>450.4 (28%)</td>
<td>approx. 520 (approx. 28%)</td>
<td>approx. 700 (approx. 30%)</td>
<td>( ) net sales ratio</td>
</tr>
<tr>
<td>Low Environmental Load</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Treatment</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Recycling</td>
<td></td>
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<tr>
<td>Air Purification</td>
<td></td>
<td></td>
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<tr>
<td>Others</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Net Sales (Billion yen): FY 2012 Actual = 450.4 (28%)
Forecast = approx. 520 (approx. 28%)
Target = approx. 700 (approx. 30%)
Image = ( ) net sales ratio
**Expansion of Life Innovation Businesses**

*Life Innovation Business Expansion (LI) Project*

To improve quality of healthcare, ease burden on medical institutions, and contribute to health and longevity, Toray Group will expand businesses with its advanced materials, core technologies, fundamental technologies and business platform.

1. **Expanding Pharmaceuticals and Medical Devices businesses**
   - Targeting the areas, expand the existing businesses and create new products
   - Accelerate business development in pre-emptive therapies as a new field

2. **Strengthening the Life Innovation Business of advanced materials**
   - Materials and systems for hospitals
   - Advanced diagnostic equipment and materials

3. **Business expansion, Accelerating development, Explore new businesses**
   - Business expansion through collaboration with strategic partners
   - Capture the needs of medical institutions through engaging to medical clusters (Kobe Biomedical Innovation Cluster, New base established in Minnesota, US)
Expansion of Life Innovation Businesses

Expand life innovation businesses with Toray Group’s management resources.

Toray Group Life Innovation Businesses
Net Sales in FY 2012  109.0 Billion yen

Advanced Materials in LI Business (*)
52.4 Billion yen

Pharmaceuticals and Medical Devices
56.6 Billion yen

PP spunbond for Sanitary materials
Home Water Purifier
Hospital-use Clothing
Air Filter
X-ray CT cradle, Cartridge
DNA chip
Contact Lens
Catheter
Artificial Kidney
Pharmaceuticals
Dialysis Machine
Extracorporeal Circulation Therapeutic Columns

(*) Toray Group estimation (excluding trading businesses)
Expansion Plan for Life Innovation Businesses

Basic Strategy 1

Net Sales (Billion yen)

- Advanced Materials in LI Business (*)
- Pharmaceuticals & Medical Devices

( ) net sales ratio

FY 2012 Actual: approx. 109.0 (7%)
FY 2013 Forecast: approx. 120 (approx. 7%)
FY 2016 Target: approx. 170.0 (approx. 7%)
FY 2020 Image: approx. 120

(*) Toray Group estimation (excluding trading businesses)
Business Expansion in Growth Countries and Regions

Asia, America and Emerging Country Business Expansion (AE-II) Project

Pursue business expansion and develop new markets by strengthening network of Toray Group’s global sites.

Asia and Emerging countries
Accelerate the business expansion by continuing the “Asia and Emerging Country Business Expansion (AE) Project” under “AP-G 2013.”
Toray Group will aggressively expand businesses with competitive advantages and capitalize on growing demand.

America
Pursue new business expansion of growing opportunities in the US economy, driven by the shale gas revolution, government measures to stimulate manufacturing industries.
Develop and expand business in Central and South America.
Asia, America and Emerging Country Business Expansion (AE-II) Project (1)

【China】
-Accelerate business growth and increase revenue and profit by utilizing Toray’s solid business platform
-Apply high-performance products to capitalize on demand of China’s market to provide solutions to environmental problems

【Indonesia/Thailand/ Malaysia】
-Accelerate the growth of existing and new businesses
-Develop high value-added products in ASEAN countries including Indonesia, Thailand and Malaysia

【India】
-Implement business expansion and establish production bases

【Emerging Countries】
-Business expansion in Central and South America, the Middle East, Republic of Turkey, Russia, Eastern Europe, Africa etc.
Basic Strategy 2

Asia, America and Emerging Country Business Expansion (AE-II) Project (2)

【America】
-Pursue new business expansion with opportunities in the growing US economy, driven by shale gas revolution, government measures to stimulate manufacturing industries

Purchased an approx. 400 acre (about 1.6 million m²) commercial land in South Carolina, US.

◆Carbon Fiber Composites Materials
-Boost production of carbon fiber composite materials to respond to the production increase of Boeing 787
-Respond to the growing demand of high value-added industrial usage such as energy related applications

◆Fibers & Textiles, Plastic Resins, Carbon Fiber Composite Materials
-Consideration of a new production base and business expansion focusing to growing demand of automotive related products

◆Further business expansion by entering to other new businesses, also through M&A alliance
Expansion Plan for Net Sales in Asia, America and Emerging Countries

Basic Strategy 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Net Sales (Billion yen)</th>
<th>Forecast Net Sales (Billion yen)</th>
<th>Target Net Sales (Billion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2012</td>
<td>647.0 (41%)</td>
<td>approx. 780 (approx. 43%)</td>
<td>approx. 1,150 (approx 50%)</td>
</tr>
<tr>
<td>FY 2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2016</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FY 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Develop new markets and expand businesses

(approx) net sales ratio
Bolstering Competitiveness

Continuing the group’s competitiveness to ensure its competitive edge
Targeting for the world’s highest level of cost competitiveness

Total Cost Reduction (TC-III) Project

Continuation of TC-II

◆ Continuing the activities of variable costs reduction (over 3% each year and over 10% over three years)
◆ Controlling fixed costs through P-ratio(*) accounting method (P-ratio = under 0.96 each fiscal year)
◆ Activities involve participation of employees group-wide

Innovation of Production Process

◆ Set up innovative production processes to achieve drastic cost reductions based on new perspectives and approaches
◆ Collaborate across organizations, between research, technical, production and engineering departments

Total Operational Cost Reduction in Sales and Marketing

◆ Establish a highly competitive supply chain, by analyzing and understanding the operational costs and logistics systems

Target to reduce 200 billion yen from 2014 to 2016

*P(Performance)-ratio= fixed cost growth rate/ marginal profit growth rate. Divisional management, 1.0 less or contrast with budget.
Strengthening Sales and Marketing

Establish sales channels that generate earnings and devise business strategies that take into account the entire supply chain.

◆ Practice solution-oriented sales and enhance relationships with major customers
◆ Set tasks and devising strategies for each business and product to be the number-one in the world
◆ Train core staff to conduct business in every region of the world
◆ Strengthen Toray’s brand in global stage

<Toray Group Midstream and Downstream Strategies>

<Fibers & Textiles, Apparel Applications>

General Supply Chain
(Number of multi-steps in sales channels of each materials, applications and items)

Fibers
Manufacturer
Trading
Textile
Manufacturer
Trading
Garment
Manufacturer
Trading
Apparel
Trader
Retailer

Development of New Supply Chains = One Stop Total Service
(Respond directly to any material, application or item)

Toray Group
Yarn-manufacturing ⇒ Weaving • Knitting ⇒ Dyeing ⇒ Garment

<Carbon Fiber Composite Materials Aircraft Application>

Aircraft
Manufacturer

Tier 1

Tier 2

Toray Group
Material and Processed products manufacturer

Supply Prepreg

- Product development
- Technical support
- Stable supply
R&D Strategies / Intellectual Property Strategies

Work to create innovative new materials and technologies that contribute to continuous growth of Toray Group, and carry out intellectual property strategies that ensure barriers for other companies to enter and maintain advanced technology.

**R&D strategies**

- Prioritize projects which are essential for long-term competitiveness, utilizing group’s core technologies, fundamental technologies, and business platform
- Establish core technologies for the future by strengthening core products and technologies, actively researching new fields and technologies and pursuing production process innovations
- Invest 180 Billion yen of R&D expenses in 3 years from FY 2014

**Intellectual property strategies**

- Enhance quality of patent applications
- Establish globally competitive network of patents
- Maintain superiority of Toray Group’s technologies by strategic patent applications
- Train staff for development of global intellectual property

50% of R&D expenses will be allocated to R&D related to Green Innovation, and 20% to Life Innovation.
400 Billion yen of capital investment planned in 3 years from FY 2014

- 60% of total capital expenditures will be allocated to Growth and Expansion fields.
- 60% of total capital expenditures will be allocated to Asia / Emerging Countries and America.

Steadily carry out investment plans until FY 2016, and strategic investments for long-term growth up to 2020.
M&A / Alliance Strategies

Consider M&A and business alliances as options to pursue growth strategies.

- Search for M&A that suit strategies of each business
- Invest management resources in M&A to expand businesses toward number-one in the world
- Consider strategic direction to realize medium- to long-term plans
- Train personnel to plan and conduct M&A and business alliances and realize synergies
- M&A funds will be held separate from capital expenditure and be invested based on strategic decisions

【Recent case】
- Agreed to purchase the entire stake in the US Zoltek Company (Sept., 2013)
  Toray Group will enter into large tow carbon fiber business aiming for a shift to a new growth track.
- Agreed to purchase 56.2% stakes in Woongjin Chemicals Co., Ltd. (Nov., 2013)
  Toray Group aims at maximizing synergies by expanding product line-up in fibers and textiles and water treatment businesses.
Human Resources Strategies

Realize the strong potential, secure and develop outstanding human resources to expand business on a global scale, and optimally assign them to targeting areas.

Human resources strategy based on business strategies
◆ Rotate human resources among Toray Group, secure and develop key personnel, and pursue most suitable allocation of human resources
◆ Secure and develop key personnel to take charge of local business operations in overseas

Strengthen operational competency at worksites
◆ Secure and develop outstanding human resources that can demonstrate leadership at key worksites and propose key strategies for expanding new businesses and promoting business structure reforms
◆ Raise the level of each group employee’s expertise through on-the-job training
◆ Continuous efforts will be made to develop and hire diverse human resources regardless of gender, nationality or other personal characteristics
Generate free cash flow, invest in growth investment and generate returns for shareholders.
# Financial Targets

<table>
<thead>
<tr>
<th></th>
<th>FY 2013 (Forecast)</th>
<th>FY 2016 (Target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Sales</td>
<td>1,830</td>
<td>2,300</td>
</tr>
<tr>
<td>Operation Income</td>
<td>110</td>
<td>180</td>
</tr>
<tr>
<td>Operating Income to Net Sales Ratio</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>ROA</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>ROE</td>
<td>8%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Remarks: Estimated exchange rate 100 yen/ US$  
Estimated oil price 110 US$/B (DUBAI FOB)

Basic policy of Dividends: Aim for sustainable increase of dividends linked to the business performance

Guide line of D/E ratio: Below 1

ROA=Operating Income/ Total Assets  
ROE=Net Income/ Shareholders’ Equity
## Strategies by Segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Major Issues in “AP-G 2016”</th>
<th>Growth Products and Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibers &amp; Textiles</td>
<td>- Advancement of global supply chain</td>
<td>- Functional material for apparel and garment</td>
</tr>
<tr>
<td></td>
<td>- Expand businesses in growth field and growth area while maintaining the operating margin</td>
<td>- Fiber &amp; textile for airbag</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- PP Spunbond for sanitary materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fiber GR products (bio-based polymers, etc.)</td>
</tr>
<tr>
<td>Plastics &amp; Chemicals</td>
<td>- Expand high value-added products in automotive application and environmental and energy application</td>
<td>- Resin compound for automotive use</td>
</tr>
<tr>
<td></td>
<td>- Strengthen business structure in Asian and North American market</td>
<td>- PPS resin, Transparent ABS resin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- High Functional Packaging and industrial film</td>
</tr>
<tr>
<td>IT-related Products</td>
<td>- Growth in high value-added IT-related materials by capturing changes in market structure</td>
<td>- Film for flat panel displays</td>
</tr>
<tr>
<td></td>
<td>- Strengthen global operation of high functional film</td>
<td>- Battery separator film</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Touch panel related materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- OLED related materials</td>
</tr>
</tbody>
</table>
## Segmental Strategies

<table>
<thead>
<tr>
<th>Segment</th>
<th>Business Strategies in “AP-G 2016”</th>
<th>Growth Products and Applications</th>
</tr>
</thead>
</table>
| Carbon Fiber Composite Materials | - Aggressively invest management resources to aerospace application  
- Expand industrial application such as energy related application  
- Strengthen supply chain of automotive application | - High functional/ High quality carbon fiber, TORAYCA®  
- Materials for IT-related and automotive application  
- Large tow (Zoltek in USA) |
| Environment & Engineering     | - Bolster and expand the water treatment businesses  
- Strengthen ties of Toray’s advanced materials and equipment businesses | - RO membrane for desalination of sea water  
- Plant systems for environment and new energy |
| Life Science                  | - Promote growth in pharmaceutical business outside Japan and expand adaptation  
- Establish global production base of medical devices to respond to the demand of each country | - REMITCH®(*)  
- TORAYMYXIN®  
- Artificial kidney, Dialysis equipment |}

(*)REMITCH is a registered trademark of TORII PHARMACEUTICAL CO>LTD.
Trends in Operating Income

Billion yen


51.2 18.8 33.0 56.8 81.1 93.0 1,024 1,034 36.0 40.1 100.1 107.7 83.4 110.0

"Project NT21" Breakaway from Crisis
"Project NT-II" Establish Foundation for Further Growth
"Project IT-2010" Challenge for Further Growth
"Project IT-II" Reforms with no Exception
"Project AP-G 2013" Reform and Proactive Management
"Project AP-G 2016" Innovation and Proactive Management

AP-Growth TORAY 2020
Reference

Medium-term Business Strategies by Segment
## Business Categories and Segments

<table>
<thead>
<tr>
<th>Business Categories</th>
<th>Toray Divisions</th>
<th>Segments</th>
<th>Basic Materials and Technique</th>
<th>Advanced Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Growth Driving Businesses</td>
<td>Fibers &amp; Textiles</td>
<td>Fibers &amp; Textiles</td>
<td>Synthetic Fibers, Resins, Films, Chemical Materials, etc.</td>
<td>High Function Fibers &amp; Textiles</td>
</tr>
<tr>
<td>Strategically Expanding Businesses</td>
<td>Films</td>
<td>IT-related Products</td>
<td></td>
<td>Carbon Fiber Composite Materials</td>
</tr>
<tr>
<td></td>
<td>Electronics &amp; Information Related Products</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Composite Materials</td>
<td>Carbon Fiber Composite Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensively Developing and Expanding Businesses</td>
<td>Pharmaceuticals and Medical Products</td>
<td>Life Science</td>
<td></td>
<td>Pharmaceuticals and Medical Devices, etc.</td>
</tr>
<tr>
<td></td>
<td>Water Treatment and Environment</td>
<td>Environment and Engineering</td>
<td>Engineering, others</td>
<td>Environmental-conscious materials, High Function Separation Membranes</td>
</tr>
</tbody>
</table>
Basic Policy

Carry out the role expected of a Core Growth Driving Business, following the basic policy of improving its ability to generate revenue and profit, and expanding business globally in growth business fields and regions.

Basic Strategies

1. In Japan, maintain and reinforce the business structure by strengthening its domestic business footing and the processing platform (Toray Synthetic Textile Cluster) in production areas, and by growing its strategic businesses such as Green Innovation, Life Innovation, and Automotive related.

2. Outside Japan, promote business growth actively by strengthening business footing at its existing locations, and undertaking priority investment in growth regions and growth fields as a means to speed up the expansion of worksites and operations.

3. With Toray Group as a whole, enhance initiatives with major customers around the world, facilitate collaboration between production and sales operations in and outside Japan, and make its global supply chain management (SCM) more advanced by reorganizing operations and secure and develop human resources.

Establish the world’s only business model that creates value added from a value chain of strategic materials and global SCM that integrates fibers, textiles and other products.
**Plastics & Chemicals**

**Basic Policy**

*Expand business, revenue and profit by developing high value-added products in expanding applications and growth regions.*

**Basic Strategies**

**Resins & Chemicals Business**

1. Make the polyphenylene sulfide (PPS) business number-one in the world.
2. Develop and commercialize high value-added products.
3. Develop next generation Green Innovation and Life Innovation applications.
4. Pursue high value-added products by developing integrated manufacturing processes spanning resin production to molding.

**Films Business**

1. Expand revenue and profit growth by developing and commercializing new high value-added products for the environment and energy-related applications.
2. Firmly capture growing demand for value-added products in growth fields and applications.
3. Establish optimal supply system and maximize profits through reinforcing global operations worldwide.
IT-related Products

Basic Policy

Expand business mainly in the display industry and semiconductor industry by developing and commercializing high value-added products.

Basic Strategies

■ Films Business
1. Expand revenue and profit by developing and commercializing high value-added products for display materials applications.
2. Firmly capture growing demand for value-added products where growth fields and applications are concentrated.
3. Maximize profits by reinforcing global operations worldwide to establish an optimal supply system.

■ Electronics & Information Materials Business
1. Expand business in the display industry and semiconductor industry.
2. Proactively develop new integrated business model by combining materials, equipment and process technologies.
3. Pursue commercialization of products in the Life Innovation category.
Basic Strategies

TORAYCA® Business
1. Reinforce dominant position in the market.
2. Aircraft and aerospace applications will be given the highest priority with management resources allocated accordingly.
3. In industrial applications, focus on energy-related applications.
4. In sports applications, enhance profitability and make a shift to high value-added products.

Advanced Composites Business
1. Expand value-added composites business.
2. Expand automotive components business.
4. Promote development themes for medium- and the long-term including aircraft materials.

Large-tow Business
1. Accelerate business expansion through Zoltek Company.

Further expand the business as the world’s number-one manufacturer of carbon fiber
Environment & Engineering

Basic Policy

Expand business in the environment and energy field with focus on water treatment membranes and facility design capabilities.

Basic Strategies

Water Treatment Business
1. Expand business, boost its competitiveness and improve its revenue and profit.
2. Expand reverse osmosis membrane base business.
3. Expand UF membranes and MBR business.
4. Strengthen business footing in the water treatment system and plant business.

Engineering Business
1. Expand plant business including the environment and new energy fields and the life science field.
2. Proceed in the solar photovoltaic system.

FY2012 Actual
FY2013 Forecast
FY2016 Target

(Billion yen)

Net Sales (left axis) Operating Income (right axis)
Life Science

Basic Policy

Strengthen global development and focus on the global contribution to the development of medical care.

Basic Strategies

■ Pharmaceuticals Business
1. Broaden the indications of existing products to create new markets and demand.
2. Launch products and expand sales for pruritus associated with liver disease, start sales of existing pharmaceuticals in China and Southeast Asia.

■ Medical Devices Business
1. Accelerate development of emergency and intensive care products outside Japan and improve development system in equipment business.
2. Commercialization of products will be accelerated by speeding up technical and clinical development, establishing a manufacturing system built on global development.
3. Expand dialyzer business outside Japan to realize the next phase of production expansion.
4. Enhance and expand bio-tools.

FY2012
Actual 56.6
Forecast 60.0
Target 7

FY2016
(Billion yen)

Net Sales (left axis)  Operating Income (right axis)
<Reference> Expansion of No.1 Positioned Businesses World Wide

Maintain the strong position as the world leader in advanced materials by strengthening the number-one positioned businesses by implementing the “AP-G 2016”

- PP spunbond for sanitary materials
- Fiber & Textiles
  - Suede-texture Artificial Leather
  - High-functional Garment
  - HEATTECH is the trademark of FAST RETAILING CO., LTD.
- Carbon Fiber Composite Materials
- PET Film (Reflection Film etc.) for Display Application
- IT-related Products
  - PET Film for Electric Component (Release films etc.)
  - ITO Base Film for Touch Panels
- Environment & Engineering
  - Reverse-Osmosis Membrane for Seawater Desalination
- Plastics & Chemicals
  - PET Film for Back Sheet of Solar Cells
  - * PPS Resins
- IT-Related Products
  - LCD Color Filter Production Equipment
  - Photosensitive Functional Materials

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Long-term Corporate Vision
“AP-Growth TORAY 2020”
- Global Growth through Advanced Materials and Green Innovation-
Basic Principles of “AP-Growth TORAY 2020”

**Toray Group**

Corporate group that continually increases revenues and profits

Corporate group that proactively contributes to social development and environmental stewardship

Corporate group that provides high values to all stakeholders

Realization of Toray Group Corporate Philosophy

“Contributing to society through the creation of new value with innovative ideas, technologies and products”
Business Categories and Strategies

Core Growth Driving Businesses
- Expand businesses in growth business fields and regions and steadily increase revenues and profits
- Improve products and business models to expand earnings and allocate management resources to growth business fields

Steadily drive business expansion and profit growth of the Group

Strategically Expanding Businesses
- Focus on growth business fields including information-telecommunication, automobiles and aircraft, and energy saving and new energy
- Allocate management resources with priority
- Implement measures including M&A and business alliance

Drive revenue and profit growth over the medium- and long-term and achieve strategic and aggressive business expansion

Intensively Developing and Expanding Businesses
- Allocate management resources with priority
- Develop and expand businesses by measures including M&A and business alliance

Develop as the next driver for revenue and profit growth to follow IT-related products and carbon fiber composite materials

Global Growth through Advanced Materials and Green Innovation
Prospects of Business Structure Reform

To evolve into a corporation that continually increases revenues and profits, Toray Group will implement business structure reforms based on the strategy described below.

**Expand Business Revenue and Profit**

- Steadily expand revenues and profits through Foundation Businesses
- Bolster the earnings of Strategically Expanding Businesses through focused allocation of management resources

  **Position Foundation Businesses and Strategically Expanding Businesses as the drivers of revenue and profit growth. Nurture Intensively Developing and Expanding Businesses to be the next profit base**

**Expand Global Business**

- Pursue growth in global markets in every segment to expand the net sales ratio of growth countries and regions from 34% to 50%

  **Leverage global business opportunities in growth countries and regions**

**Expand Green Innovation Businesses**

- Promote the development of products and technologies that will provide solutions to global environmental issues and energy and resource issues

  **Expand net sales of Green Innovation Businesses to 1 trillion yen around 2020**
Toray introduced LCM as a rationale to establish business strategies and management strategies based on an analysis of the balance of environmental load and costs from the standpoint of the entire lifecycle of products, technologies and services in all the industrial and business activities.

**LCM Environmental Management**

**Balance**

- Environmental load Reduction
- Sustainable Growth

For the development of a viable engagement
# Image of Financial Indicators

<table>
<thead>
<tr>
<th><strong>Billion yen</strong></th>
<th>Around 2020 (Image)</th>
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</thead>
<tbody>
<tr>
<td><strong>Net Sales</strong></td>
<td>3,000</td>
</tr>
<tr>
<td><strong>Core Growth Driving Businesses</strong></td>
<td>1,500 (50%)</td>
</tr>
<tr>
<td><strong>Strategically Expanding Businesses and Intensively Developing and Expanding Businesses</strong></td>
<td>1,500 (50%)</td>
</tr>
<tr>
<td><strong>Green Innovation Businesses</strong></td>
<td>1,000 (33%)</td>
</tr>
<tr>
<td><strong>Life Innovation Businesses</strong></td>
<td>300 (10%)</td>
</tr>
<tr>
<td><strong>Asia, America, Emerging countries(*)</strong></td>
<td>1,800 (60%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>( ) net sales ratio</strong></th>
<th><strong>Operating Income</strong></th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Income to Net Sales ratio</strong></td>
<td>10%</td>
<td></td>
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<table>
<thead>
<tr>
<th><strong>ROA</strong></th>
<th>10%</th>
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<tbody>
<tr>
<td><strong>ROE</strong></td>
<td>13%</td>
</tr>
</tbody>
</table>

**ROA= Operating Income / Total Assets**  
**ROE= Net Income / Shareholders’ Equity**

(*) Under “Project AP-G 2013”, sales forecast to Asia and Emerging countries was 150 billion yen. Forecast is revised as above in “Project AP-G 2016.”
Descriptions of predicted business results, projections and business plans contained in this material are based on assumptions and forecasts regarding 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.