REPORT 2018

THIS IS OUR PORTRAIT

Possibilities, turning seawater into drinking water, reinforcing genetic analysis for medical breakthroughs, furthering the evolution of eco-cars, producing plant-based functional clothing, extending the shelf life of food for reduced waste, and creating a world where everyone can achieve their personal best. Materials have the power to do all of this and more, because materials make our modern world.

The world is full of possibilities and our materials can change the world, which we will never stop believing.

ANNUAL REPORT 2018 April 1, 2017–March 31, 2018

Corporate Philosophy

Contributing to society through the creation of new value with innovative ideas, technologies, and products

Corporate Missions

For our customers	To provide new value to our customers through high-quality products and superior services
For our employees	To provide our employees with opportunities for self development in a challenging environment
For our stockholders	To provide our stockholders with dependable and trustworthy management
For society	To establish ties and develop mutual trust as a responsible corporate citizen

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VALUE GREATION

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Cautionary statement with respect to forward-looking statements

Descriptions of predicted business results, projections and business plans contained in this annual report are based on forecasts and assumptions regarding the future business environment made at the present time. This annual report is not a guarantee of the Company's future business performance.

Toray's Story of Creating Value

INNOVATION BY CHEMISTRY

Materials can Change Our Lives

Toray Group firmly believes that "materials, as the foundation of all products, have the power to bring about fundamental transformations in society." Based on this belief, our goal is to become a global top company in advanced materials as an integrated chemical industry group. Since our establishment, we have positioned "contributing to communities" as the focus of our existence. Carrying this focus into our corporate philosophy of "contributing to society through the creation of new value with innovative ideas, technologies, and products," we are ramping up efforts to solve a host of issues worldwide together with global partners by providing innovative technologies and advanced materials. With this in mind, we are working to become a corporate group that provides high value to all stakeholders.

The World as Envisioned by Toray Group in 2050



Accelerating measures to counter climate change

of resources and production

Providing clean water and air

and hygiene for people worldwide



Using the Power of Chemistry to Address a Host of Issues Worldwide



Materials are the foundation of all products. And we at Toray believe that the evolution of materials is what will help change the future in a bigger and better way. Much like the butterfly effect^{*}.

Looking at such issues as climate change, water scarcity, and the depletion of resources, the world in which we live is growing increasingly severe with each passing day. Exacerbating many of these problems, the world's population is projected to reach around 10 billion in 2050. Against this backdrop of population growth and the continuous aging of society, the need to maintain and improve people's health is becoming an increasingly important issue. Looking ahead, Toray Group recognizes the need to overcome a host of challenges for people all over the world to enjoy prolonged healthy lifestyles while benefiting from the abundant gifts of nature.

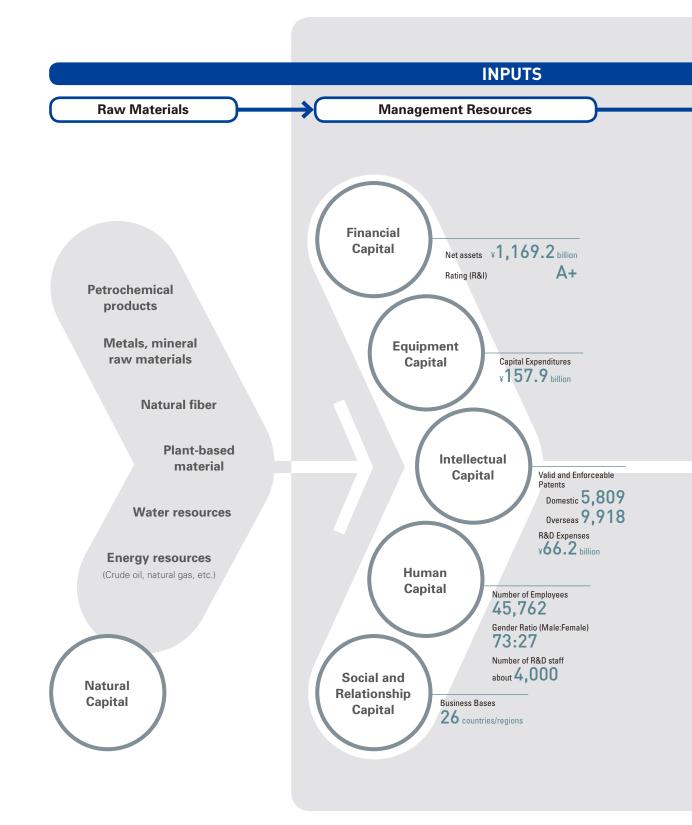
At the same time, we remain fully confident that material innovation is vital to the manufacture of attractive end products that can in turn provide the fundamental solutions necessary to address many of these global problems. It is in fact this confidence that drives our mission to develop and commercialize innovative technologies and advanced materials from a long-term perspective, and to contribute to society as a part of efforts to realize the world to which we aspire.

^{*} The Butterfly Effect is one of the ideas in chaos theory that suggests that a flap of a butterfly's wings in one part of the world can set off a tornado in another. This idea proposes that one small change can instigate various phenomena that ultimately results in a larger transformation in the future.

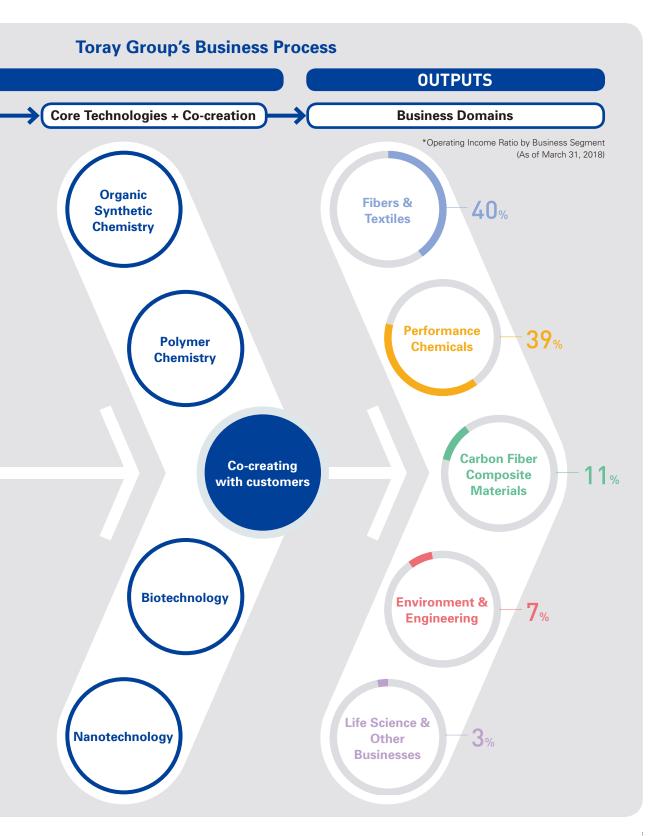


Advanced Materials Give Shape to Advanced Industries

—Toray Group's Business Process



Drawing on organic synthetic chemistry, polymer chemistry, bio- and nanotechnology as its core technologies, Toray Group provides innovative technologies and advanced materials in each of the fibers and textiles, performance chemicals, carbon fiber composite materials, environment and engineering, and life science business domains. Through a process of co-creation with customers, we are generating new value.



Employees Shape the Destiny of a Company

-Toray Group's Basic Strategy for Sustainable Growth

People-centric Management

Based on the concept that "the success or failure of a company is decided by its people, and that employees shape its destiny," Toray has continued to nurture its employees as a long-term management resource since its establishment. Management's efforts therefore reflect the importance placed on continuously motivating employees as the key to improving the Company's performance.

The Direction of Toray's Human Resources Development

Development of fair-minded individuals who act with high ethical standards and a sense of responsibility

Training of professionals with advanced expertise, technical skills, and originality in problem solving

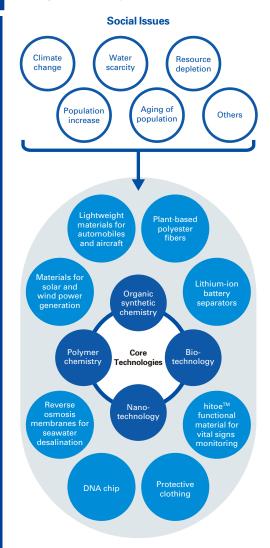
Development of leaders who act with foresight and a sense of balance

Development of individuals, professionals, and leaders who can play an active role in global business

Toray executes diverse training programs to enhance management, sales and marketing, and production technology capabilities, and specialized skills, and to better equip employees to address globalization. These programs cover all levels of employees and fields, aiming to develop future management candidates while expanding and educating the base of core staff ready to employ their strong work place capabilities to lead on the front lines.

Toray's Basic Strategies (Toward Sustainable Growth)

Developing Innovative Technologies and Advanced Materials from a Long-term Perspective

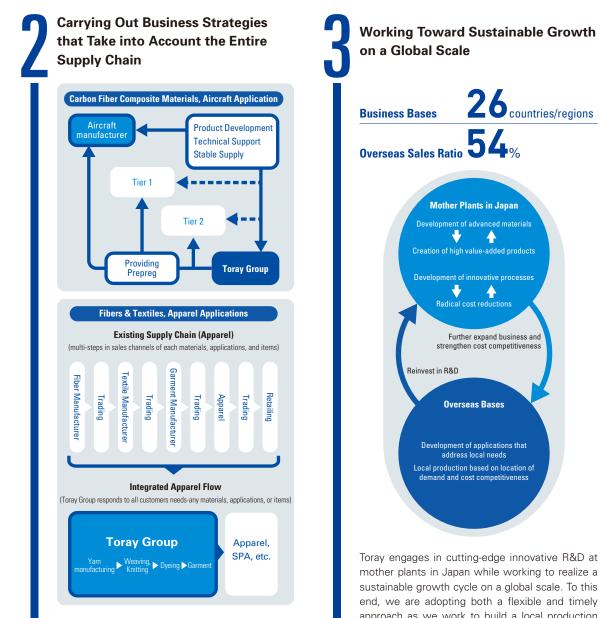


Adopting a long-term perspective, Toray sees the potential value that materials can provide in addressing social issues and market needs through innovative and effective solutions. As a result, the Company engages tenaciously in the development of advanced materials drawing on its core technologies.

03

04

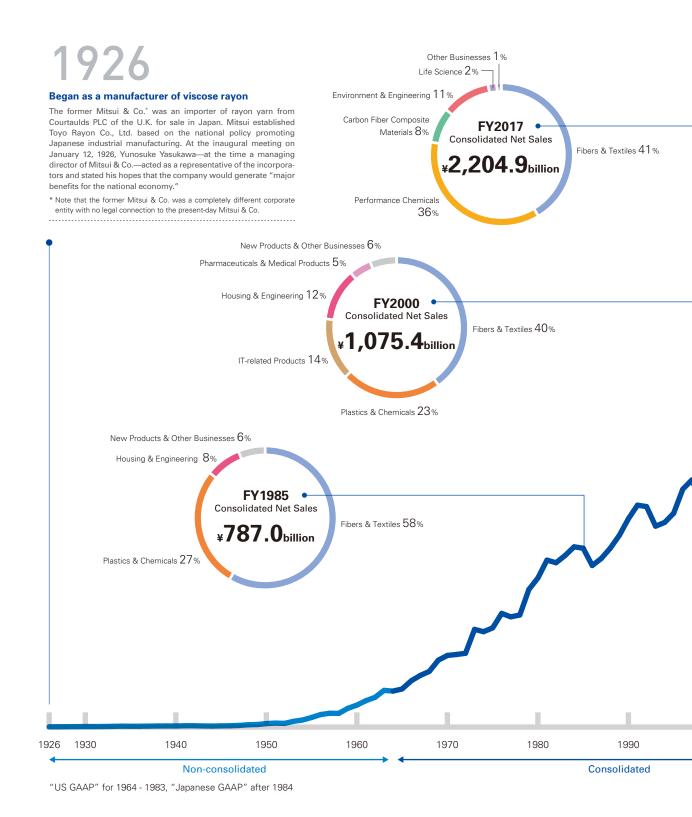
Guided by the understanding that "employees shape the destiny of a company," Toray Group is leveraging the strengths of our human resources together with our research and development capabilities while adopting the basic strategy of building competitive advantage. This enables us to ensure its sustainable growth.



Toray is building close-knit ties with powerful business partners by carrying our business strategies that take into account the entire supply chain. At the same time, the Company is honing the quality and performance of new materials. Through these means, we are establishing a position of competitive advantage. mother plants in Japan while working to realize a sustainable growth cycle on a global scale. To this end, we are adopting both a flexible and timely approach as we work to build a local production structure that takes into consideration the location of demand as well as cost competitive concerns. At the same time, we are undertaking the development of applications that address local needs at each site. By the same token, we are cultivating markets in growth countries and regions while taking steps to capture new profit opportunities.

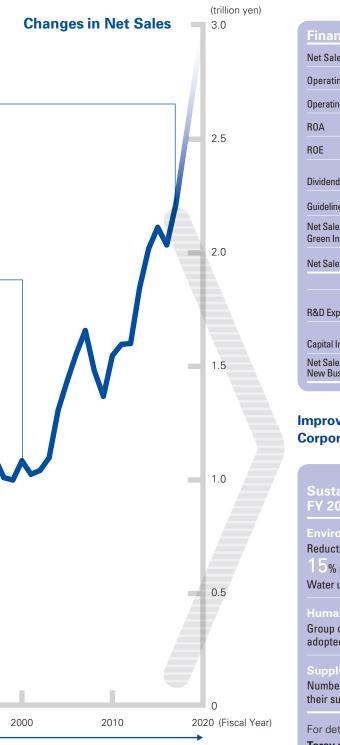
Enhancing Long-term Corporate Value

—A Path of Sustainable Growth since the Company's Foundation and Medium- to Long-term Targets (KPIs)



10 Annual Report 2018

Toray Group began as a manufacturer of viscose rayon in 1926. On top of all three major synthetic fibers, nylon, polyester, and acrylic, the Company has continued to develop innovative technologies while creating a host of advanced materials and high-value-added products in a broad range of films, chemicals, plastic resins, carbon fiber composite materials, pharmaceuticals, and medical products, water treatment, and environmental fields. With an eye toward how society will evolve in 2050 and how innovative technologies and advanced materials may be utilized as a driving force, we will adopt a long-term perspective toward enhancing our corporate value.



Financial KPI	FY2016	FY2019 (Target)
Net Sales	¥2,026.5billion \rightarrow	(2,700.0 billion
Operating Income	¥146.9billion \rightarrow	¥250.0billion
Operating Income to Net Sales Ratio	7.2% →	?%
ROA	6.3% →	approx 🤊 %
ROE	10.1% →	approx12%
Dividend policy	Aim for sustainable linked to business p	
Guideline of D/E ratio	Below 1	
Net Sales of Green Innovation Business	± 628.2 billion \rightarrow	¥900.0 billion
Net Sales of Life Innovation Business	\div ¥195.5billion \rightarrow	¥270.0 billion
R&D Expenses	¥220. Obillion (Total of 3 years from FY ¥500. Obillion	⁷ 2017)
Capital Investment	(Total of 3 years from FY	(2017)
Net Sales of New Business Creation	¥ 1,000.0 billion (2020	s)

Improve Long-term Corporate Value

Sustainable Related KPI (excerpt) FY 2019 Target

Environmental Managemen

Reduction of greenhouse gas emissions per unit of sales:

 $1\,5\,\%$ reduction continued (Compared to FY 1990) Water usage per unit of sales (Compared to FY 2001): $6\,1\,\%$ reduction

Human Resource Management

Group companies that have adopted a mid-term human resource plan: 100%

Supply Chain Management

Number of Group companies that have requested their suppliers to practice CSR procurement: More than 40 companies

For details, we are publishing it as a KPI on promoting CSR: **Toray website > Social Responsibility >CSR Road Map**

An Advanced Materials Manufacturer That Gives Shape to Advanced Industries

—A History of Value Creation

1955

Company principle established

"Toyo Rayon contributes to communities" was identified as the Company's original principle. Shigeki Tashiro, the Company's chairman at that time, states "Just like individual people, companies have a social responsibility to improve the society in which they live."

1941

Succeeded in the synthesis and melt spinning of nylon 6 fiber using proprietary technology

Developed using proprietary technology, "Nylon 6" has created new markets as a new fiber that can be applied in fishing nets as well as apparels such as stockings.



Manufacture of Lumirror™ polyester film began

1959

Toray was the first company in Japan to industrialize polyester film. Positive steps have been taken to address market growth and to adapt to changing conditions and circumstances while gaining a share across a wide range of fields such as video tapes, industrial materials, specialty products, and others.

1971 Manufacture and

Manufacture and marketing of carbon fiber TORAYCA[™] began

High-performance carbon fiber TORAYCA™ features light weight, high tensile strength, and high stiffness. Sales activities commenced under the registered trademark "TORAYCA" from 1971.



1971

Marketing of ESCAINE™, ultramicrofiber non-woven fabric with suede texture, began

ESCAINETM is a non-woven fabric with suede texture using ultrafine microfibers. It was highly acclaimed as a fashion material for its lightweight and excellent chromogenic properties. Currently, it is being used in such areas as automobile interiors and furniture.

1976 Marketing of

TORAYCON™ PBT resin began

Featuring outstanding long-term heat-resistance, chemical-resistance, weather resistance, and electrical characteristics, TORAYCON™ is widely used in various connectors and other electronic and electrical components, and precision parts for office equipment.

1980

Marketing of ROMEMBRA™ reverse-osmosis membrane elements began

Research began in 1968 with ongoing development as a water treatment membrane. ROMEMBRA™ enabled the production of ultra-pure water for the semiconductor industry and the desalination of sea and brine water. Since our establishment, we have positioned "contributing to communities" as the focus of our existence. Carrying this focus into our corporate philosophy of "contributing to society through the creation of new value with innovative ideas, technologies, and products," we have created a succession of materials that bring unprecedented levels of value to the world and forged a globally leading presence as an advanced materials manufacturer that gives shape to advanced industries.

1986

TORAY

The declaration of "A new founding" and a corporate philosophy was established to commemorate 60 years in business

We reviewed the Company principle and established a new corporate philosophy: "Contributing to society through the creation of new value with innovative ideas, technologies, and products." At the same time, we established our new corporate symbol as further commemoration of 60 years in business.

1990

TORAYCA™ carbon-fiber prepreg certified as a primary structural material for U.S. Boeing passenger aircraft

Initially the main applications of carbon fiber were fishing rods, golf shafts, and other sporting goods. Through improved technology and quality, the Company built up trust in this product as a secondary structural material in aircraft applications. In 1990, Toray prepreg was certified for the first time as a primary structural material (for structural parts where damage is directly linked to a crash) for the Boeing 777.

2016

Decided to establish the R&D Innovation Center for the Future as a project to commemorate the Company's 90th anniversary

Toray decided to establish the R&D Innovation Center for the Future at its Shiga Plant where the Company was founded, and will strengthen R&D to make people's lives better with Kotozukuri, value creation, which utilizes the strengths of advanced materials.



Corporate slogan formulated

In April 2006, Toray Group created a new, long-term corporate vision—"AP-Innovation TORAY 21"—and adopted the corporate slogan "Innovation by Chemistry," declaring its aspiration "to become a global top company of advanced materials," while focusing on Chemistry.



2006

Strategic partnership started with UNIQLO Co., Ltd.

As a company that provides innovative technologies and materials that have the power to fundamentally change society, Toray Group entered into a partnership agreement with UNIQLO, a company that enriches people's lives through clothes. Under this partnership both companies provide products that deliver new value and unprecedented levels of performance and comfort to people all over the world. The two companies are now on the third stage of the strategic partnership agreement.

Providing Solutions to Social Issues through Innovation —Toray Group's Providing Value

Carbon Fiber Composite Materials Reducing CO₂ Emissions and Realizing a New Energy Society through Lightweight Materials

Carbon fiber is one quarter the weight while providing 10 times the tensile strength of steel, plus it does not rust. Toray has tenaciously honed its stable production technology for high-quality carbon fiber for over 50 years. Toray's carbon fiber composite materials are currently used in the manufacture of aircraft wings, fuselage and other parts helping to reduce fuel consumption and CO_2 emissions thanks to their lightweight properties. They are also used in the hydrogen tanks for wind turbine blades and fuel cell vehicles that support a new energy society.



Aircraft with 50% CFRP used in their body structure weight compared with conventional aircraft approx



Lifecycle CO2 emissions exhibit a 27,000 t-CO2 reduction per aircraft over 10 years

Fibers & Textiles, Performance Chemicals Toward a Sustainable Society through the Use of Biomass Resources

With the increase in the world's population as well as energy consumption, the global scale depletion of petroleum/fossil fuels and increased atmospheric CO₂ concentration (the main cause of global warming) are becoming issues. Toray believes in realizing a sustainable society that takes into consideration the needs of both the Earth and its inhabitants by changing the raw materials of petroleum-derived products. Materials and products made using Toray's biomass-based polymers make this a reality.

Toray Group's Vision for the World and Contributions

-T

A net zero emissions world, where greenhouse gas emissions are completely offset by absorption

Accelerating measures to counter climate change A world where resources are sustainably managed

Realizing sustainable, recycling-based use of resources and production

Fibers & Textiles, Performance Chemicals, and Carbon Fiber Composite Materials

Supporting the Automobile Industry, Where Technology Innovation Continues to Progress, through Advanced Materials

The automobile industry is experiencing a period of technology innovation from a wide range of energy, IT, environmental and other related perspectives. As the manner in which cars are manufactured continues to adapt to changing trends including the focus on a sustainable, low-carbon society, self-driving automobiles and the way in which people view vehicles, Toray Group is placing the utmost emphasis on four core concepts—lightweight, electrification, safety, and <u>comfort—in its development of new materials</u>.



Toray Group is providing innovative technologies and advanced materials that greatly contribute to the fundamental solutions of global problems.

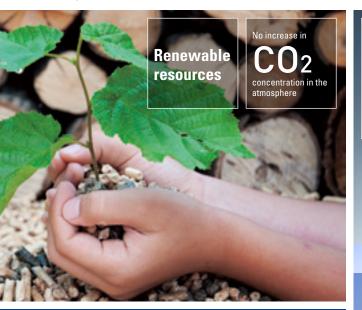
We help accelerate the pace of transition to a sustainable society to cope with increasing environmental problems including climate change and water shortages due to population growth and secure the health and longevity that people desire by stimulating improvements in medical technologies, developments in preventative health care, and reduction of burdens on medical professionals.

Continuous measurement

of biological information by simply wearing

Maintaining

sound health



A world with a restored natural environment, with clean water and air for everyone

Providing clean water

and air

enjoys good health and hygiene Contributing to

better medical care and hygiene for people worldwide

A world where everyone

Fibers & Textiles Functional Materials That Biosense Body Signals

Toray took on a new challenge and collaborated cross-industrially with Nippon Telegraph and Telephone Corporation (NTT) to develop and commercialize hitoeTM, a functional material capable of gathering biological information. Nanofibers measuring just 1/100th the diameter of a human hair are coated with special highly conductive resins and are used for biosensing clothing with the ability to sense a heart rate, cardiographic waveforms, and other body signals with high sensitivity. Since this material is highly durable, formfitting, and breathable, expectations are that it will be used across a wide range of sporting, work safety management as well as nursing, monitoring and health care fields.

Water Treatment

Resolving Global Scale Water Shortage Issues with Water Treatment Technologies

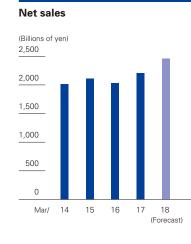
Toray has developed reverse osmosis (RO) membranes that facilitate the extraction of drinking water from the Earth's abundant supply of seawater. The Company's water treatment technologies are today being used at water treatment plants worldwide. In addition to seawater desalination, Toray's RO membrane elements are helping in the fight against global water shortages and improvement of the world's water environments by reusing sewage water. Toray's RO membrane elements account for a cumulative water equivalent of 59.9 million m3 per day. This in turn is equivalent to the daily life water of 420 million people. Cumulative water equivalent of RO membrane elements used at water treatment plants

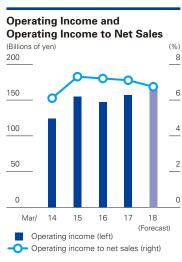
59.9 million m³ per day Equivalent to the daily life

water of 420 million people

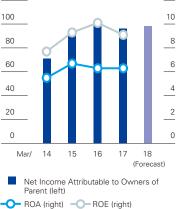
Financial & Non-financial Highlights

Financial Highlights





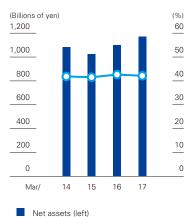








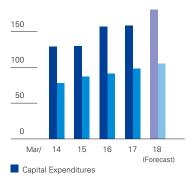
Net Assets and Equity Ratio





Capital Expenditures and Depreciation

(Billions of yen) 200

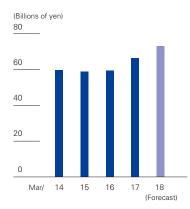


0



Cash flows from operating activities (left) Cash flows used in investing activities (left) 0 Free cash flows (right)

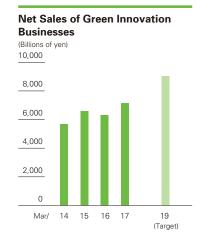
R&D Expenses

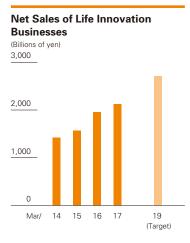


Depreciation

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

Non-financial Highlights

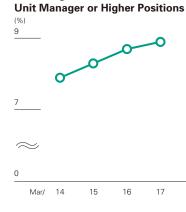




Number of Employees by Gender

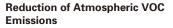


Percentage of Woman in



Reduction of Greenhouse Gas Emissions (Toray)







Comparative Water Usage per Unit of Sales (FY2001, set to an index value of 100)



Waste Recycling Rate



Akihiro Mikkaku

Akihiro Nikkaku President

To Our Stockholders and Investors

Toray Group provides innovative technologies and advanced materials. The Group is committed to further increasing revenues and profits by contributing to society through the creation of new value with innovative ideas, technologies, and products that are in high market demand.

Toray Group's Unwavering Management

Materials offer infinite possibilities. We at Toray Group maintain the unwavering belief that materials, which form the foundation of all products, have the power to intrinsically change society. Guided by this belief, we are working diligently to develop and commercialize innovative technologies and advanced materials ahead of the global competition in an effort to contribute to society at large. Persistent research as well as technologies and know-how accumulated over a long period are essential to unearthing first-in-class materials. The manufacturing process is also grounded in efforts to hone a competitive spirit throughout the workplace as a wellspring for innovation. Our role therefore is to tackle the world's long-term challenges head-on and to focus closely on our operational competency at work place while considering how to utilize the potential of new materials from a longterm perspective. Based on a firm grasp of existing conditions, we are drawing a clear image of the very best that we can be, setting and addressing those issues that need to be overcome, and adopting an unwavering management style that is unaffected by popular trends.

"Having the Integrity to Do the Right Thing in the Right Way"

With respect to safety, accident prevention and environmental preservation, corporate ethics and legal compliance and other essentials of Corporate Social Responsibility (CSR), Toray Group is strengthening its CSR initiatives as issues that take the highest managerial priority. We have drawn up the "Sixth CSR Roadmap," which covers the three-year period to fiscal 2019, and systematically continue to promote CSR in every aspect of business. Working to ensure balance between the need for Toray Group's sustainable growth and fulfilling our CSR, we are working to align CSR initiatives with the Group's management strategies.

Under these circumstances, it was discovered that Toray Hybrid Cord, Inc., a subsidiary of the Company, had inappropriately overwritten data in product inspection reports. It has been confirmed in this case that there were no legal violations and no problems relating to the safety of customers' products. An evaluation submitted by an expert committee entrusted by Toray Group to investigate the matter stated that while the Group's response was essentially appropriate, it recommended that steps be taken to strengthen compliance measures. In addition, this incident provided us with the opportunity to investigate quality data of the entire Group at the same time. We have subsequently confirmed that there are no legal violations or problems which will affect the safety of customers' products.

Toray Group has initiated measures to secure the effectiveness of quality assurance activities across the entire Group and will redouble efforts relating to compliance adherence, including quality assurance. In order to ensure quality assurance and address problems in a rapid and appropriate manner if they occur, Toray Group will strengthen communication with customers. The Board of Directors and Corporate Auditors receive regular reports about the status of progress of these measures to fulfill the Group's governance functions. The Group will hence-forth engage in its corporate activities with the concerted commitment of all of executives and employees "to have the integrity to do the right thing in the right way." Overview of Toray Group's Performance in Fiscal 2017 (The Fiscal Year Ended March 31, 2018)

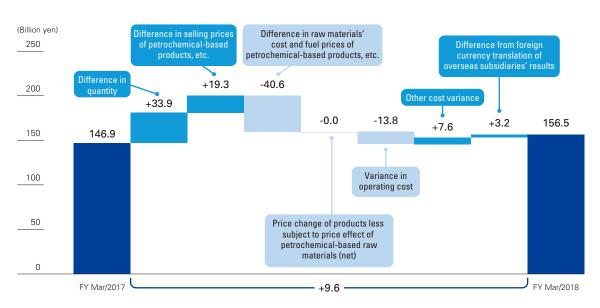
Record High Sales and Operating Income

From here, we will report our performance in fiscal 2017. In addition to signs of the economy picking up in emerging countries, the global economy in general, including the U.S. and Europe, continued along a recovery path in fiscal 2017. On the domestic front, the Japanese economy also maintained its gradual recovery on the back of improving employment and income conditions. Meanwhile, the rise in raw material and fuel prices had a negative impact on Toray Group's profits.

Under these business circumstances, Toray Group embarked on the new medium-term management program, "Project AP-G 2019," which spans the three-year period from April 2017 to the end of March 2020. Under this program, we are implementing growth strategies that are designed to secure business expansion in growth business fields as well as growth countries and regions, while strengthening our competitiveness.

As a result, consolidated net sales for fiscal 2017 increased 8.8% compared with the previous fiscal year, to ¥2,204.9 billion. From a profit perspective on a year-onyear basis, operating income improved 6.5%, to ¥156.5 billion. Net income attributable to owners of parent, on the other hand, fell 3.5%, to ¥95.9 billion. Taking the aforementioned into consideration, Toray Group achieved record high net sales and operating income in the fiscal year under review.

As far as the return of profits to shareholders is concerned, we have set the annual cash dividend at ¥15 per share, a year-on-year increase of ¥1 per share. This takes into account our performance in fiscal 2017.



Income Variance Factor Analysis

"Petrochemical-based products, etc." are the total of Fibers & Textiles, Performance Chemicals, and Carbon Fiber Composite Materials segments.

To Our Stockholders and Investors

The Medium-term Management Program "Project AP-G 2019"

Toray Group's Approach to Management Based on a Long-term Perspective

Toray Group maintains a long-term perspective in the conduct of its business. Within the framework of its Longterm Corporate Vision, which looks 10 years into the future, the Company identifies key medium-term issues that need to be addressed over a span of three years as a part of efforts to achieve its vision. At the same time, we work diligently to address short-term issues based on annual budgets. In this sense, we do not focus on medium-term "plans," but more on medium-term "programs" to address key "issues." Rather than put in place a plan that is grounded in a set of numerical targets, our focus is on medium-term issues. In this regard, the achievement of numerical targets is simply a by-product of efforts designed to implement programs aimed at addressing specific issues.

Based on this understanding, Toray Group put in place the Long-term Corporate Vision "AP-Growth TORAY

2020" (Vision 2020) in 2011 in a bid to become a corporate group that continually increases revenues and profits and provides high value for all stakeholders. Under Vision 2020, we have set our sights on sustainably increasing revenues and profits. In specific terms, we are targeting consolidated net sales of ¥3 trillion, operating income of ¥300 billion, and an ROE of 13% around 2020.

The current medium-term management program, "Project AP-G 2019" is the third stage of Vision 2020. Under "Project AP-G 2019," we are carrying out the three conventional basic strategies of business expansion in growth business fields, expansion and advancement of global business, and growth by strengthening our competitiveness. At the same time, we are focusing on creating new businesses that will help drive Toray Group through a period of renewed growth during the 2020s. As far as our performance targets are concerned, we will look to achieve consolidated net sales of ¥2,700 billion and consolidated operating income of ¥250 billion in fiscal 2019, the last fiscal year of "Project AP-G 2019."

Basic Issues of "Project AP-G 2019"

1	Proactively expand business in growth fields, countries, and regions
2	Improve profitability by continuously creating and expanding differentiated products
3	Steadily realize profit improvements through radical reforms both in business and organizational structures
4	Continue "strengthening of cost competitiveness" to reinforce and strengthen earning structure
5	Continue "pursuit of the ultimate limits" for the creation of new and innovative materials and create large-scale new businesses
6	Thoroughly implement "safety, accident prevention, and environmental preservation" and "business ethics and legal compliance" globally
7	Secure and develop human resources that can contribute to "strong workplace capability"

THREE BASIC 01 Business Expansion in Growth Business Fields

Toray Group is working diligently to put forward the two Group-wide Green Innovation Business Expansion (GR) and Life Innovation Business Expansion (LI) projects.

The Green Innovation Business Expansion Project

In addition to preserving the global environment, Toray Group provides solutions that help address energy and resource issues while targeting business expansion. As a result, the Company takes every opportunity to reduce greenhouse gas (GHG) emissions, lower its environmental footprint, and to support the treatment of water, recycling, and air purification. In fiscal 2017, net sales from GR Project businesses were ¥712.3 billion, up 13.4% compared with the previous fiscal year.

Upgrading and Expanding the Carbon Fiber Reinforced Plastics (CFRP) Business Foundation That Contributes to the Reduction of GHG Emissions

Toray Group and France-based Safran concluded an implementation agreement for the supply of higher performance carbon fiber composite materials for use in next-generation aircraft engines in March 2018. By deepening its direct contact and discussions with aircraft engine manufacturers and continuing its development of innovative composite materials, the Company is taking steps to further expand its business by promoting aviation and aircraft engine applications, which are projected to increase in the future, while working to enhance performance, conserve energy, and lower costs.

Moreover, Toray Group reached an agreement to acquire all of the shares of TenCate Advanced Composites Holding B.V. (TCAC) based in the Netherlands in March 2018. With its main manufacturing bases in Europe and the U.S., TCAC is especially strong in carbon fiber composite materials using thermoplastic resins that improve the efficiency of molding parts. By introducing Toray Group's carbon fiber and polymer technologies and combining the two companies' supply chains, this acquisition is expected to generate significant synergies going forward. We will respond swiftly to demand expansion of the market for small-sized aircraft and expand the business further for industrial applications including automobiles in the medium to long term.

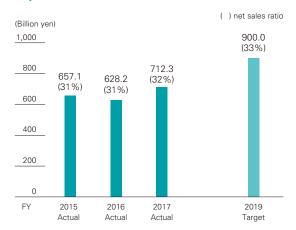
Boosting Battery Separator Film (BSF) Production Capacity for Electric Vehicles and Other Uses

Toray Group decided to increase its BSF production capacity in the Republic of Korea by roughly 50% in October 2017. At the same time, steps are being taken to substantially increase coating capacity. Battery separator films that offer a high level of performance and reliability are widely used as separators in the lithium-ion secondary batteries (LIBs) that commonly go into manufacturing mobile electronic devices, electric vehicles and other products. We have focused on capturing a definitive share of the rapidly expanding demand in recent years and are endeavoring to secure a leading position in the global market for BSF.

Received an Order to Supply the Ultrafiltration (UF) Membrane, TORAYFIL[™], for the Largescale Wastewater Treatment Facility for Production of Drinking Water in the U.S.

Toray Group received an order to supply hollow fiber UF membrane modules TORAYFIL[™] for the largest wastewater treatment facility for production of drinking water in the U.S. in March 2018. Acclaimed for its high running performance and durability, plans are in place to commence shipments of TORAYFIL[™] from around 2019 and for the facility to start production in 2021. Currently, the U.S. is plagued with an acute shortage of water. This is especially the case along the west coast where the demand for wastewater reuse is projected to expand. Looking ahead, Toray Group will focus on securing project orders that help address these water issues as a global player that handles a comprehensive range of UF, reverse osmosis (RO) and microfiltration (MF) membranes as well as membrane bioreactor (MBR) systems.

Expansion of Green Innovation Businesses



The Life Innovation Business Expansion (LI) Project

Making the most of its management resources, Toray Group is working to expand its business by enhancing the quality of medical care, alleviating the burden of medical professionals, and contributing to the maintenance of health and longevity. In fiscal 2017, net sales from LI Project businesses were ¥211.9 billion, up 8.4% compared with the previous fiscal year.

Expanding Polypropylene (PP) Spunbond Production Bases to Address the Demand for Disposable Diapers in China

China has forged a position as the largest consumer of disposable diapers. In addition to its existing local base in East China, Toray Group acquired land for commercial use in South China for the purpose of expanding its high-performance PP spunbond production capacity in November 2017. Plans are in place for a new production facility to commence operations in fiscal 2019. Demand for disposable diapers continues to expand in China as lifestyles improve on the back of rising incomes and the number of newborns increases following discontinuation of the nation's one-child policy. As a result, major sanitary product manufacturers are actively establishing or expanding production facilities for disposable diapers in China. In addition to capturing a definitive share of this demand, Toray Group is accelerating the pace of global PP spunbond business expansion where it boasts considerable strengths from each of the production network and quality perspectives.

Advancing Clinical Trials while Working to Secure Early Regulatory Approval of TRK-950 as an Epoch-making Cancer Treatment

Toray Group is advancing phase I clinical trials in the U.S. and France on TRK-950, a proprietary therapeutic agent for the treatment for solid cancer. TRK-950 is a monoclonal antibody preparation that combines with and attacks cancer cells. Developed by the Group's New Frontiers Research Laboratories, which was established in 2003, TRK-950 is the culmination of efforts aimed at deepening and integrating Toray Group's core technologies and a key tool in cultivating opportunities in the medical business domain. Advancing global clinical development in Europe and the U.S., the Group is working to secure the early regulatory approval of TRK-950 as a first-in-class cancer treatment drug.

General Sales of High-performance Limited-use (Disposable) Protective Clothing

Building on its track record of developing products for a wide range of applications including decontamination work on an individual basis, Toray Group commenced general sales of LIVMOA[®], a line of highly breathable limited-use (disposable) protective clothing in May 2017. Recognized as highly breathable, LIVMOA[®] helps to enhance comfort by reducing the sticky sensation caused by humid conditions and is distinguished by its particle absorption and dust-proofing properties.

Expansion of Life Innovation Businesses



Pharmaceuticals & Medical Devices

*Toray Group estimation

THREE BASIC STRATEGIES 02 Expansion and Advancement of Global Business

Looking at conditions in which Toray Group operates, the need for advanced technologies in such wide-ranging fields as automobiles and energy is increasing in the U.S. and Europe. At the same time, standards of living are improving and environmental regulations becoming more stringent in China and emerging countries. Against this backdrop, Toray Group is working to expand its global business by capturing profit opportunities. In fiscal 2017, overseas sales were ¥1,150.8 billion, up 10.4% compared with the previous fiscal year.

Acquired an Equity Interest in a Major Knitted Fabrics Company Based in Hong Kong; Company Included in the Scope of Consolidation as an Equity-method Affiliate

Toray Group acquired a 28% stake in Pacific Textiles Holdings Ltd. (Pacific Textiles), a Hong Kong-based company that engages in the manufacture and sale of knitted, dyed and printed fabrics, for an acquisition cost of approximately ¥59 billion in July 2017. The company has been included in Toray Group's scope of consolidation as an equity-method affiliate. With a production scale that is matched by only a handful of companies throughout the world, Pacific Textiles is a highly profitable business entity thanks to its considerable cost and guality competitive advantage that is making significant inroads targeting major apparel companies in Europe and the U.S. as well as specialty store retailers of private label apparel (SPA). By acquiring an equity interest, Toray Group will further strengthen its relationship with Pacific Textiles, expand its knitted fabrics business, and work vigorously to increase the sophistication of its operations as a global integrated business.

Newly Established a Polyphenylene Sulfide (PPS) Resin Compound Base in Hungary

Operations commenced at a new PPS resin compound production facility at the Hungarian plant of Toray Group's U.S. subsidiary Zoltek Companies, Inc., the world's largest supplier of large tow carbon fibers in March 2018. This represents Toray Group's first resin compound production facility in Europe. Working with its sales company Toray Resins Europe GmbH, a company that was established in Germany to engage in marketing and technical service functions in 2015, Toray Group will position this new production facility at the heart of efforts to expand the resin business in Europe and to further cement the Group's status as the world's leading manufacturer of PPS resins.

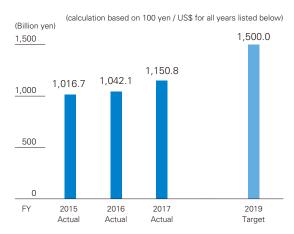
Planning to Open the Automotive Center Europe in Germany

Toray Group has announced that it will open the Automotive Center Europe (AMCEU) in August 2018 in Germany, as a part of efforts to strengthen its R&D function in Europe, which stands at the forefront of environmental restrictions in the world. Building on the experience of the Automotive Center (AMC), which is located within Toray Group's Nagoya Plant, and in order to further drive expansion of Toray Group's automotive-related business, AMCEU will play the major role of a core technology development base in Europe that is capable of handling new applications through R&D and offering one-stop service to customers in Europe.

Initiating Steps to Fully Expand Business in India

In February 2018, Toray Group acquired land in Sri City in the State of Andhra Pradesh, India as a base to be used primarily for new business by its Indian subsidiary Toray Industries (India) Private Limited (TID). Accordingly, Toray Group will actively direct management resources toward developing this land as an important base for its advanced materials business. In business fields where demand is expected to expand, Toray Group will work from this newly developed site to address domestic demand in India and to grow its global operations focusing mainly on South Asia. As an initial step, a new base for the PP spunbond for hygiene products business targeting disposable diapers will be established (operations scheduled to commence in 2020). Thereafter, a new production facility for nylon and PBT resin compounds will be constructed to meet the demand for high-performance resins in line with automobile market expansion (operations scheduled to commence in September 2019).

Overseas Net Sales (Total of Overseas Consolidated Subsidiaries)



THREE BASIC **03** Strengthening Competitiveness STRATEGIES

In addition to the growth strategies of "business expansion in growth business fields" and "expansion and advancement of global business," Toray Group is promoting efforts to strengthen its competitiveness from three specific perspectives: (1) total cost reduction, (2) strengthening its corporate structure, and (3) strengthening sales and marketing.

Total Cost Reduction	 Promote Total Cost Reduction (TC) Project on a Group-wide basis Activities of variable cost reduction (annual target at over 3.6%) Control fixed costs using the P-ratio* accounting method (P-ratio=under 0.96 each fiscal year) For innovation of the production process, identify themes by category in terms of "innovative cost reduction," "large-scale total cost reduction" and "capacity increase of existing facilities" to achieve reduction effects by more than ¥50 billion in three years
Strengthening Corporate Structure	 Clarify issues of companies and businesses with profitability problems, and gather Toray Group's collective efforts to improve revenue and profit options include reducing or withdrawing from businesses with limited growth potential or excessive competition Manage the Group's assets effectively and expand revenue and profit
Strengthening Sales and Marketing	 Sales and marketing leads to build a "profit-making system" in cooperation with production, technology, R&D departments and external partners Maximize the revenue and profit of existing businesses through improvements in price policies, distribution systems and brand initiatives

Strengthen the Corporate Structure as well as Sales and Marketing while Promoting **Cost Reduction**

As a part of efforts to secure total cost reduction, Toray Group is implementing the Group-wide Total Cost Reduction (TC) Project. In carrying out this project, the Company is looking to reduce costs by a total of ¥220 billion over a three-year period from fiscal 2017 through a process of variable cost, fixed cost, and production process innovation.

In order to strengthen its corporate structure, Toray Group is conducting a share and management transfer of a Chinese subsidiary which manufactures textiles. In addition to modifying an existing facility in its film business, the decision has also been made to start production of multilayered ceramic capacitor (MLCC) release films, a growth field.

As far as efforts to strengthen sales and marketing are concerned, Toray Group entered into a technical cooperation agreement relating to OLED materials with Idemitsu Kosan Co., Ltd. Moreover, the Company is proactively collaborating with leading outside partners. This included participation in a joint exhibition with UNIQLO for the first time in New York.

Total Cost	Total Cost Reduction Results of FY2017					
Variable C	osts	Reduced: 28.0 billion yen (Reduction ratio 3.2%)				
Fixed Cos	ts	Reduced: 25.0 billion yen (P-ratio*=0.99)	Total Reduced: 69.3 billion yen			
Innovation	of Production Processes	Reduced: 16.3 billion yen				

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*P (Performance)-ratio=fixed cost growth rate/marginal profit growth rate. Target: less than 1.0 or monitored by division under budget.

Performance Forecasts for Fiscal 2018

Working Toward Further Increasing Revenues and Profits

In fiscal 2018, the global economy as a whole is expected to continue its gradual expansion, as the economies of the U.S., Europe, and other developed countries maintain their expansion and emerging economies in general perform strongly except for a slight slowdown in China. However, attention should be paid to risk factors such as the protectionism trade policies of developed countries, expansion of trade friction, and financial market turmoil caused by moves toward monetary policy normalization in the U.S. and Europe. The Japanese economy is also expected to continue on a gradual recovery track on the back of improving employment and income conditions, though there are concerns that the economy may be affected by uncertainties in overseas economies and fluctuations in crude oil prices and in financial markets. Under these conditions, consolidated net sales for fiscal 2018 are projected to reach ¥2,450 billion. From a profit perspective, operating income is forecast to come in at ¥165 billion and net income attributable to owners of parent at ¥98 billion. With the Corporate Mission of continuously increasing cash dividends in line with the Company's performance, Toray Group plans to pay an annual dividend of ¥16 per share for fiscal 2018.

Proactively Undertaking Investments Designed to Secure Sustainable Growth on an Ongoing Basis

In fiscal 2018, Toray Group will work diligently to realize the effects of the global increase in production and sales of such products as battery separator films for lithium-ion secondary batteries (LIBs), PP spunbond for hygiene products and carbon fiber composite materials. At the same time, the

Billion yen

Billion yen

Consolidated Business Forecast for Fiscal 2018

	FY2018 (Forecast)	Changes
Net Sales	2,450.0	+245.1
Operating Income	165.0	+8.5
Net Income Attributable to Owners of Parent	98.0	+2.1

Assumed exchange rate : 110 yen / US\$ (Released August 6, 2018)

Forecast by Segment for Fiscal 2018

	Net Sales (Changes)		Operating Income (Chang	
Fibers & Textiles	1,000.0	(+86.4)	81.0	(+8.6)
Performance Chemicals	895.0	(+91.7)	79.0	(+7.6)
Carbon Fiber Composite Materials	215.0	(+37.1)	15.0	(-5.8)
Environment & Engineering	260.0	(+21.7)	16.0	(+2.7)
Life Science	60.0	(+6.2)	1.0	(-0.9)
Others	20.0	(+2.1)	4.0	(+1.1)
Adjustment		—	-31.0	(-4.8)
Consolidated	2,450.0	(+245.1)	165.0	(+8.5)

(Released August 6, 2018)



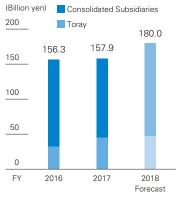
Company will shift to high value-added products and cultivate new applications and customers across each of its businesses. If synergies appear to be achievable through the use of the Group's strengths, Toray Group will extend and supplement the growth of its existing businesses by flexibly pursuing M&A and alliance opportunities. Furthermore, every effort will be made to secure a business structure that is insulated as much as possible from the effects of such factors as changes in foreign currency exchange rates as well as raw material and fuel prices by making use of the Group's global business foundations. Toray Group will aim to sustain its growth through capital expenditure, research and development, and human resources development from a medium- to long-term perspective.

As far as its capital expenditure is concerned, Toray Group is looking at engaging in investments totaling ¥500 billion over a three-year period from fiscal 2017. At the same time, in line with plans to undertake R&D expenses of around ¥220 billion mainly in Green Innovation Business Expansion and Life Innovation Business Expansion projects, Toray Group plans to undertake capital expenditures (depreciation and amortization of ¥105 billion) of ¥180 billion and R&D expenses of ¥73 billion in fiscal 2018.

Adopting a Policy of Public Interest Capitalism

Toray Group recognizes that corporations are public institutions. Based on this understanding, the Company is aiming to contribute to the growth and development of society at large including all stakeholders such as shareholders, customers, employees, and the local community. Guided by the concept of public interest capitalism, Toray Group is committed to securing the sustainable growth in concert with society. In other words, the Company will work diligently to develop and commercialize innovative technologies and advanced materials that are capable of changing people's lives. Every effort will be made to contribute to society by creating new value that addresses market needs, which will in turn lead to further expansion of revenues and profits.

We ask all shareholders and investors for the longterm support and understanding of our management style and endeavors.



Capital Expenditures*

Depreciation



R&D Expenses



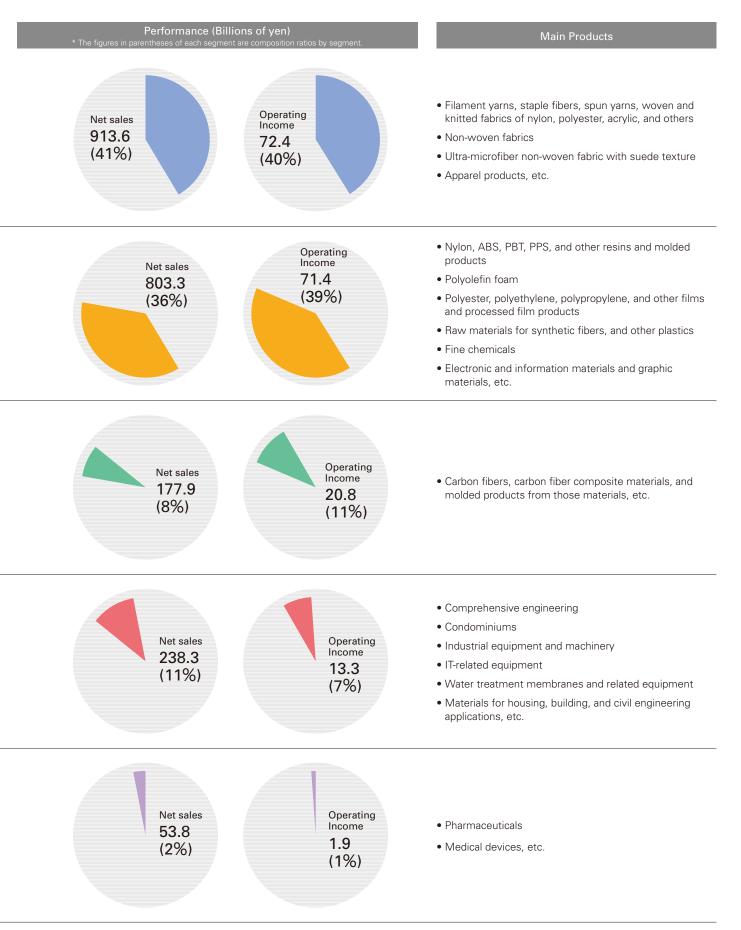
* Total of tangible assets and intangible assets (excluding goodwill)

Major Capital Expenditure Projects

	Toray Advanced Materials Korea Inc.	High-functional polypropylene spunbond production facilities
2018	Zoltek Companies, Inc.	Large tow carbon fiber ZOLTEK [™] production facilities
	Toray Battery Separator Film Korea Limited	Battery separator film SETELA TM production facilities
	Toray Composite Materials America, Inc.	Carbon fiber TORAYCA [™] prepreg integrated production facilities
	Toray Battery Separator Film Korea Limited	Battery separator film SETELA [™] production facilities
2019	Alcantara S.p.A.	Alcantara [™] production facilities
	Zoltek Companies, Inc.	Large tow carbon fiber ZOLTEK [™] production facilities
	Toray Polytech (Foshan) Co., Ltd.	High-functional polypropylene spunbond production facilities

Results by Segment for Fiscal 2017

	Busines	ss Categories and Segments	Summary of Financial Results
Core Growth Driving Business		Fibers & Textiles	In Japan, demand for some industrial applications such as automobiles was strong and apparel applications saw gradual improvement in store sales of final products. Against this background, Toray Group not only strived to expand sales in both apparel and industrial applications but also worked to expand the business format that integrates fibers to textiles to final products while focusing on strengthening cost competitiveness. Overseas, business performance of some subsidiaries in Southeast Asia and the Republic of Korea remained slow. On the other hand, materials for automotive applications and hygiene products remained strong in general and the Group expanded the integrated business for apparel applications.
usiness	Strategica	Performance Chemicals	In the resin business, shipment for automotive applications was strong in general, mainly in Japan. Besides automotive applications, Toray Group also promoted sales expansion of ABS and PPS resins. In the film business, shipment of battery separator films for lithium-ion secondary batteries increased reflecting demand growth, while films for electronic parts which are used for applications such as smartphones continued to be favorable. In the electronic & information materi- als business, demand for OLED panels increased and shipment of related mate- rials expanded.
	Strategically Expanding Businesses	Carbon Fiber Composite Materials	With the final demand for the aircraft remaining strong in the aerospace applica- tions, shipments showed signs of recovery as the inventory adjustment in the supply chain was completed. In the industrial applications, demand showed a recovery trend primarily in the environment and energy-related field led by com- pressed natural gas tank applications and wind turbine blade applications. The segment was affected by increases in raw material prices as well as intensify- ing competition.
Intensively Developing a		Environment & Engineering	In the water treatment business, demand for reverse osmosis membranes and other products in general grew strongly in Japan and abroad. In terms of domestic subsidiaries in the segment, industrial machinery and electronics-related equipment performed strongly at an engineering subsidiary.
Intensively Developing and Expanding Businesses		Life Science	In the pharmaceutical business, shipment of pruritus treatment REMITCH®* expanded due to the impact of the introduction of a new dosage form and approval of new indications. On the other hand, shipment of natural-type interferon beta preparation FERON® and orally active prostacyclin derivative DORNER® remained sluggish due to the impact of alternative medicines and generic drugs, and royalty income on some products decreased. In the medical devices business, shipment of dialyzers grew strongly. * REMITCH® is a registered trademark of Torii Pharmaceutical Co., Ltd.



Excludes other businesses, equivalent to ¥17.9 billion (1%) in net sales and ¥2.9 billion (2%) in operating income, and adjustment of operating income of -¥26.2 billion. The composition ratio by segment of operating income is calculated excluding the adjustment amount.

Core Growth Driving Business Fibers & Textiles

				(Billions of yen)
Years ended March 31		2017		2018 Forecast
Net sales	856.1	913.6	+6.7%	1,000.0
Operating income	66.8	72.4	+8.5%	81.0
Operating income to net sales	7.8%	7.9%		8.1%

2018 forecasts announced on August 6, 2018.

Basic Policy

- Strengthen its earnings structure as a core growth driving business of Toray, and expand business in growth business fields and regions
- Aim for significant growth in the segment through the further enhancement of global operations

Earnings Opportunities and Risks

- Growing need for advanced materials contributing to the resolution for global environmental and energy/resource issues, and health and longevity
- Changes in the global economy and personal spending trends
- Improving standards of living and tighter regulations in China and emerging economies as income levels in those areas rise
- Raw materials and fuel prices trends

Basic Strategies for Achieving the Medium-term Management Program "AP-G 2019" Targets

- Maintain and reinforce domestic business foundation and processing platform in production areas, and further strengthen business competitiveness
- Reinforce business foundation of existing operations at overseas locations, and expand business in growth business fields and regions
- Strengthen Toray Group's global operations and create new business areas by developing and expanding business on multiple levels combining its strength of diverse product lines, supply chain, and global sales
- > Aim to achieve significant growth by the global fibers/textiles/final products integrated business format and SCM, reinforce value chain of strategic products, and expand new business areas

Fiscal 2018 Outlook

In apparel applications, we are focused on enhancing our business model, including expansion of our business format that integrates fibers to textiles to final products. In industrial applications we will expand sales in growth regions on the back of enhanced capacity in growth fields such as hygiene materials and automotive applications.

In addition to continuing to pass on rise in raw material prices to selling prices, we aim to bolster our business structure through cost reductions and other measures, enhance the global business, and expand earnings as expected as a core growth driving business.



Net Sales (Billions of yen) 913.6

Operating Income

72.4

Operating income to net sales

7.9%

ROA (Operating income/Assets)

Core Growth Driving Businesses/Strategically Expanding Businesses Performance Chemicals

				(Billions of yen)
Years ended March 31		2017		2018 Forecast
Net sales	724.6	803.3	+10.9%	895.0
Operating income	61.8	71.4	+15.5%	79.0
Operating income to net sales	8.5%	8.9%		8.8%

2018 forecasts announced on August 6, 2018.

Basic Policy

- Expand business by expanding sales of high value-added products in growth business fields and maximum utilization of global bases
- Strengthen earnings base by business structure reform

Earnings Opportunities and Risks

- Growing need for advanced materials contributing to the resolution of global environmental and energy/resource issues
- Changing in the demand trends of end products such as automobiles, including electric vehicles, LCD TVs and smartphones, and changes in technological trends in various components.
- Raw materials price trends

Basic Strategies for Achieving the Medium-term Management Program "AP-G 2019" Targets

Resins, Chemicals Business

- Allocate management resources and promote business expansion in growing businesses including PPS resins, resin compounds overseas, and automotive materials
- Films Business
 - Invest in facilities for lithium-ion battery separator films and promote sales expansion through product development
 - Reorganize manufacturing of PET films, increase value of existing products by utilizing global operations, and enhance sales expansion

Electronic & Information Materials Business

• Expand sales of OLED related materials and accelerate technology development and commercialization of products beyond the LCD display field

Fiscal 2018 Outlook

Amid ongoing stability in global automobile production, we target sales expansion in automotive application in the resins business as demand for plastic resins expands in line with the trend in automobiles toward electrification and reduced weight. We also focus on expanding sales on the back of enhanced capacity at TORAYPEFTM.

In the films business, by utilizing our global operation, we will expand sales of PET films particularly for high value-added products including electronic components. We focus on the sales expansion of battery separator films for lithium-ion secondary batteries to meet growing demand by increasing capacity utilization on the back of sequential capacity expansions enacted in fiscal 2017.

For the electronic & information materials business, we target the sales expansion of OLED related materials in line with growth in the overall market.

In addition to continuing to pass on rise in raw material prices to selling prices, we will strive toward reducing overall costs.



Operating Income (Billions of yen)

71.4

Operating income to net sales

8.9%

ROA (Operating income/Assets) 7_6.

Strategically Expanding Businesses Carbon Fiber Composite Materials

				(Billions of yen)
Years ended March 31	2016	2017	Changes	2018 Forecast
Net sales	161.6	177.9	+10.1%	215.0
Operating income	34.0	20.8	-13.3%	15.0
Operating income to net sales	14.8%	11.7%		7.0%

2018 forecasts announced on August 6, 2018.

Basic Policy

• Further expand the business as the world's number-one manufacturer of carbon fibers

Earnings Opportunities and Risks

- Growing need for advanced materials contributing to the resolution of global environmental and energy/resource issues
- Demand trends in end products, including automobiles, compressed natural gas tanks, wind turbine blades, and aircraft
- Global supply and demand balance for carbon fiber
- Trends in raw materials and fuel prices, foreign currency exchange rates

Basic Strategies for Achieving the Medium-term Management Program "AP-G 2019" Targets

Aerospace Applications

- Further strengthen existing partnerships
- Capture new programs

Industrial Applications

- Reinforce dominant market share by leveraging comprehensive strengths in lineup of regular tow and large tow products
- Reinforce dominant market share in the wind-turbine blade applications by strengthening alliance with major customers, supported by the cost competitiveness in large tow products
- Develop intermediate products/molding technologies and enhance the supply chain to meet the full-scale expansion in automotive application demand

Fiscal 2018 Outlook

- For aerospace applications, given the completion of the inventory adjustment in the supply chain in fiscal 2017, we expect an expansion in carbon fiber composite material demand amid steady final demand for aircraft.
- For industrial applications, we are targeting sales expansion amid a recovery in overall demand, particularly for environmental and energy-related products such as wind turbine blades and compressed natural gas tanks. We will expand sales of wind turbine blade applications, where demand is expanding, making good use of the sequential expansions in capacity from the fourth quarter of fiscal 2017 in large tow products.
- In addition to continuing to pass on rise in raw material prices to selling prices, we will to strive toward reducing overall costs.

Net Sales (Billions of yen) 177.9

Operating Income

20.8

Operating income to net sales

11.7%

ROA (Operating income/Assets)

Intensively Developing and Expanding Businesses Environment & Engineering

				(Billions of yen)
Years ended March 31		2017	Changes	2018 Forecast
Net sales	212.5	238.3	+12.1%	260.0
Operating income	11.7	13.3	+13.5%	16.0
Operating income to net sales	5.5%	5.6%		6.2%

2018 forecasts announced on August 6, 2018.

Basic Policy

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

Earnings Opportunities and Risks

- Growing need for advanced materials that can contribute to the resolution of global environmental and energy/resource issues, and related machinery to manufacture them
- Political instability in areas suffering from water shortages
- Crude oil price trends
- Capex trends at mainstay customers

Basic Strategies for Achieving the Medium-term Management Program "AP-G 2019" Targets

Water Treatment Business

- Expand business and strengthen competitiveness in the membrane business
- Enhance development of reverse osmosis membrane products and strengthen cost competitiveness
- Expand sales of UF membranes in China and the U.S.A.
- Strengthen the business foundation in the water treatment system and plant business
- Engineering Business
 - Expand plant business and industrial machinery (in the environment and energy fields and the life science field)
 - Make use of external resources in growth areas
 - Strengthen cost competitiveness
 - Accelerate overseas expansion

Fiscal 2018 Outlook

- In the water treatment business, as to reverse osmosis membranes, we target sales expansion
 of drinking water use by seawater desalination and brine water desalination, and industrial applications including pure water production for industrial use, as well as in the field of wastewater reuse.
 As to UF/MF membranes, we target sales promotion for water purification applications and preprocessing applications in wastewater reuse as well as desalination of sea water. We are focused on
 expanding sales of MBR membranes for wastewater reuse applications in emerging economies
 such as India and the countries of South and Central America.
- For the engineering subsidiary, we focus on an expansion in plant construction in the environmental and energy field as well as in the life science field. In the industrial machinery business, we target sales expansions particularly in the fields of electric vehicles and semiconductors, where demand is expected to rise.

Net Sales (Billions of yen)

238.3

Operating Income

13.3

Operating income to net sales

5.6%

ROA (Operating income/Assets) 5_2%

Intensively Developing and Expanding Businesses Life Science

				(Billions of yen)
Years ended March 31	2016	2017	Changes	2018 Forecast
Net sales	54.2	53.8	-0.6%	60.0
Operating income	2.1	1.9	-9.6%	1.0
Operating income to net sales	4.0%	3.6%		1.7%

2018 forecasts announced on August 6, 2018.

Basic Policy

- Maintain and expand domestic market share, accelerate and strengthen overseas development
- Use selection and concentration to promote more efficient product development

Earnings Opportunities and Risks

- Growing need for advanced materials to improve quality of healthcare, ease burden on medical professionals, and contribute to health and longevity
- Japanese government's promotion of generic products and ongoing revision of National Health Insurance drug price standards as well as reduction of the insurance reimbursement prices
- Laws and regulations trends in each country

Basic Strategies for Achieving the Medium-term Management Program "AP-G 2019" Targets

Pharmaceutical Business

- \bullet Maintain the domestic market share and develop overseas markets of oral antipruritus drug REMITCH $^{\circledast^*}$
- Create next-generation drugs using new processes

Medical Devices Business

- Expand sales of dialyzer products in Japan and overseas
- Expand domestic sales and accelerate overseas development in critical care and cardiovascular products
- Quickly commercialize bio-devices

Fiscal 2018 Outlook

- While the pharmaceutical business appears to be facing headwinds from the emergence of generic products, we expect the oral antipruritus drug REMITCH^{®*} oral disintegrating tablets, which were launched in June 2017, to maintain its domestic market share through appealing its superiority, and we will concurrently target acceleration in overseas development. In regard to drug development moving forward, we focus on a pipeline expansion in priority areas, including neurological diseases as well as kidney diseases, autoimmune disorders and cancer, and research in innovative bio-pharmaceuticals aiming at the creation of next-generation drugs.
- In the medical devices business, we target an expansion in the domestic and overseas dialysis business thanks to the provision of one-stop services combining dialyzers developed based on Toray's hollow fiber technology with dialysis machinery and its management system, which can be used for a variety of dialysis-related medical needs.
- In the medical products business, we focus on expanding sales through improvements in existing products, indication expansion and the acceleration of overseas development, particularly in the priority areas of emergency care, intensive care (acute blood purification), and cardiovascular products. As we look to an expansion in business moving forward, we will advance the development of new medical devices based on the technologies related to advanced materials, in which Toray excels.
 *REMITCH[®] is a registered trademark of Torii Pharmaceutical Co., Ltd

Net Sales (Billions of yen)

53.8

Operating Income



Operating income to net sales

3.6%

ROA (Operating income/Assets)



FOUNDED ON TECHNOLOGY AND KNOWLEDGE

Toray Group's medium-term management program, "Project AP-G 2019," aims for the creation of new technologies and materials, with particular focus on "Green Innovation" and "Life Innovation" businesses, as well as the promotion of measures to manifest the essential value of these technologies and materials. The company also maintains technological competitiveness by constructing a solid market entry barrier with its intellectual property.

10/10/10

R&D Philosophy

Since its very inception, Toray Group has continuously carried out R&D on advanced materials based on the firm conviction that R&D provide the key to building Toray of tomorrow. The company has accordingly continued to focus on R&D of advanced materials based on the needs of the times. However, it inevitably takes a certain amount of time to develop and commercialize materials. Accordingly, we focus on maintaining the ability to recognize the value of materials and the will to follow through in development. Our basic policy is pipeline management, management based on R&D with a long-term focus, emphasizing not only on immediate profit-making themes, but the next one, and the one after that as well. The phrase, "The Deeper, the Newer," has been passed down as a key phrase at Toray, and is part of the DNA of our researchers and engineers. The concept underlying this is that when you dig deep into something, the result will be new discoveries and inventions. With this in mind, we continue to challenge the ultimate based on a grand vision for the times and the needs of society, with the goal of creating innovation that has both economic and social value.

Characteristic of R&D of Toray

Culture of Commitment to Basic Research

Our culture prioritizes basic research that has to be based on a grand vision of the times, recognizes the value of materials and is unswayed by current trends and so provides a fertile foundation for continuing to create innovative advanced materials like our carbon fibers and reverse osmosis membranes.

2 Long-term and Persistent Efforts to Pursue Advanced Materials and Technology to the Ultimate Limits

Our commitment to unceasing pursuit in R&D—exemplified in our strong preference for advanced materials and belief that delving deeper into a single theme yields new inventions and discoveries—has taken root in the form of persistent efforts over the long term. We believe this "super-continuity" approach spurs innovation.

3 Specialist Teams in Many Fields

Toray's teams of specialists have abundant knowledge and experience in a wide variety of fields including polymer design, high-function technology, and drug discovery, formulation, and pharmacology, which are applications of our core technologies.

4 Undivided R&D Organization

The Technology Center serves as the nexus for all R&D functions enabling advanced materials created in one field to be rapidly applied to other fields.



Integrating Technologies by Industry-government-academia Collaborative Research

Toray actively engages in technology fusion through external collaboration and open innovation activities with industries, governments, and academic institutions in Japan and overseas with the aim of continuing to create innovative advanced materials.

6 Strategic Partnerships with Industry Leaders

Toray produces first-to-market advanced materials in growth markets through collaborations with leading companies and venture companies in Japan and overseas.

Advanced Analytical Capabilities

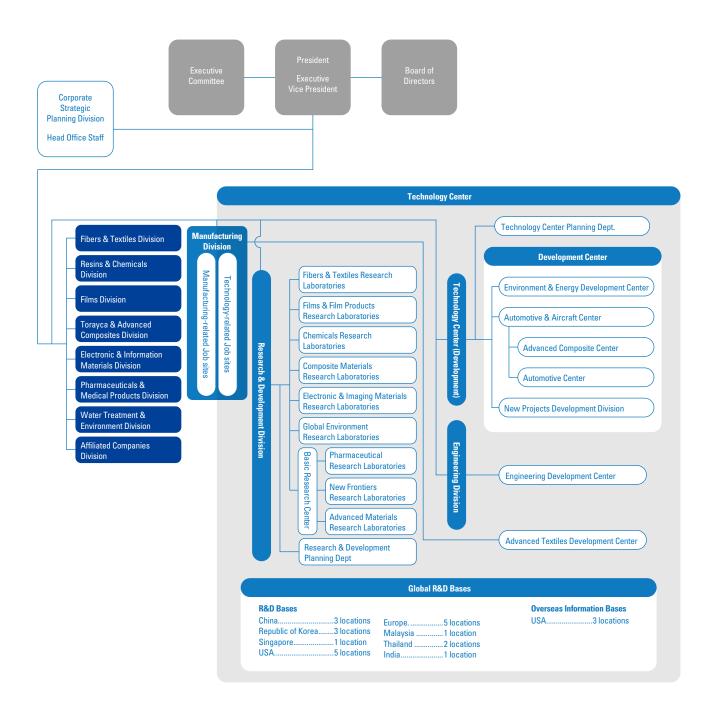
Toray works closely with Toray Research Center Inc., which has extensive achievements in commissioned analysis and research studies, to enhance the Company's analysis capabilities for its R&D and manufacturing technology.

R&D Organization at Toray Group

Toray has centralized all of its R&D functions into a single organization called the Technology Center. Bringing together specialists from many fields in this undivided R&D organization makes it easier to create new innovations by integrating technologies. Moreover, the system enables the company to exhibit combined strength by actively exploiting techniques and knowledge from many fields to solve problems in a single business area. It also enables to be rapidly applied to various advanced materials and technologies to multiple businesses.

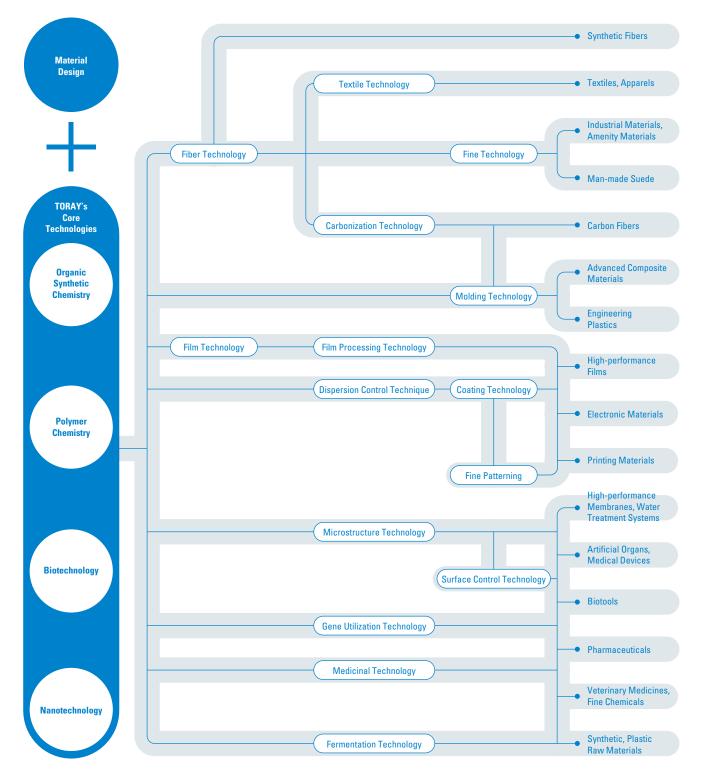
On the other hand, under the direct control of the Technology Center are the Automotive & Aircraft Center, which develops advanced materials for automobiles and aircraft applications, and the Environment & Energy Development Center, which focuses on technology cooperation in the environment and energy fields. Through these organizations, the company is promoting open innovation with its customers, business partners, and external organizations.

In addition, the Life Innovation business is led by the Life Innovation Business Strategic Planning Department, which promotes close cooperation with, in addition to bases in Kobe and Minnesota (US), domestic and overseas medical institutions, diagnostic centers, medical device firms, not to mention the Technology Center.



Toray's Technical Fields — Development of Advanced Materials by Integrating Toray's Core Technologies

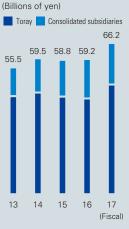
Toray Group's core technologies are "organic synthetic chemistry," "polymer chemistry," "biotechnology" and "nanotechnology." Based on these, we are working toward greater depth and fusion of fundamental technologies such as polymerization, yarn-making, fibers application processing, film processing, and organic synthesis, while expanding our operations from fibers and textiles to films, chemicals, and plastic resins. We are also creating advanced materials and developing businesses in the fields of electronic & information materials, carbon fiber composite materials, pharmaceuticals, medical devices, and water treatment.

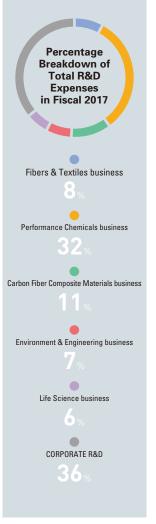


Fiscal 2017 R&D Expenses

¥66 2billion

R&D Expenses





Fiscal 2017 R&D Achievements

Fibers & Textiles

Using our unique oil-resistant processing technology, we have developed the LIVMOATM 3500 series, a limited-use chemical protective clothing, to resist external oil penetration. We have also developed WithReliefTM, a high-functional, skin-friendly insect-resistant textile, which is a quality that previous high-functional insect-resistant materials did not possess. In addition, we have developed a high-permeability type ENTRANTTM, a high-performance textile with water resistance and moisture permeability that is also about 50 times more breathable than previous products.

Performance Chemicals

We have developed a PET film with a smooth and durable surface that is resistant to scratches thanks to a hybrid coating formed through the combination of super hard nanoparticles and a functional polymer dispersing agent. We have also successfully developed a biaxially oriented PET film with the world's highest level of thermal conductivity—about 2.5x the level shown in previous products. In addition, for non-destructive X-ray testing and mammography applications, we have developed an X-ray scintillator panel that produces clear and high-spatial resolution X-ray images.

Carbon Fiber Composite Materials

Toray's newly developed fabrication technology for carbon fiber reinforced plastic enables both improved dimensional accuracy and the saving of energy. The company has also decided to introduce process development equipment to create a high-performance carbon fiber for the next generation. With this equipment, we will develop the world's strongest yarn and innovative technologies to improve productivity, and aim to achieve balance with further high performance and low costs.

Environment & Engineering

In collaboration with RIKEN, the company has developed innovative technologies aimed at analyzing the phenomenon in which contaminants under a variety of conditions will adhere to and clog reverse osmosis membranes. This analysis contributed to our development of new low-fouling membranes. As a method for treating and reusing sewage and industrial wastewater, we have also developed basic technologies for converting aeration energy of the membrane separation activated sludge process to highly efficient cleaning energy. The company was also awarded from the Japan Chemical Industry Association the 49th (fiscal 2017) JCIA Technology Award (Grand Prize) for the development of high performance reverse osmosis membranes.

Life Science

The company has developed orally disintegrating decay (OD) tablets that can be taken with or without water for anti-itching medication TRK-280. The company also obtained approval for the domestic manufacture and sale of REMITCH^{®*} OD Tablets 2.5µg and started selling them. Moreover, phase I clinical testing of the company's TRK-950, an antibody drug for cancers, was carried out in the US and France. Toray also developed Prelina II RichTM, a bifocal contact lens that improves focus correction.

*REMITCH® is a registered trademark of Torii Pharmaceutical Co., Ltd.

Fiscal 2017 Topics

Developing CFRP Fabrication Technologies to Achieve Improved Dimensional Accuracy and the Saving of Energy

Toray has developed innovative fabrication technologies for carbon fiber reinforced plastics (CFRP), which are usually molded by placing prepreg (an intermediate material in sheet form) on a mold and cured using hot air heating. However, hot air heating has the disadvantage that it suffers from inefficient heat transfer and it requires time to heat up. There is also dimensional accuracy problem after hardening in large, complex-shaped parts with varying thicknesses.

However, the newly developed fabrication technology achieves an energy savings of about 50% by placing a predetermined number of sheet heaters on the mold's surface, with contact heating taking place under vacuum pressure. The application of optimum temperature distribution to each part allows parts to be fabricated into a shape and dimension closer to the original design, and also requires less time. We will verify this new technology and expand its use to for aircraft, automotive, and general industrial-use applications.

Development of an X-ray Scintillator Panel Enabling Clear X-ray Images

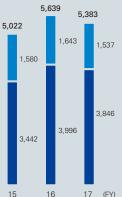
Toray has developed a pixelated X-ray scintillator panel for delivering X-ray images that are 2-4 times higher spatial-resolution than those produced by previous panels. In previous X-ray scintillator panels, images could be blurry as visible light created from the X-rays was spread in all directions and detected by a wide range of sensor pixels. To overcome this issue, we applied our unique high-definition barrier rib formation technology. Also, the new X-ray panel uses technologies filling a barrier rib with scintillator material uniformly and improving efficiency of light utilization, which partitions the scintillator into the size of the pixel of a sensor, allowing limits on the spread of visible light. This in turn allows the panel to produce even higher spatial-resolution images.

This product can be used for X-ray mammography and non-destructive X-ray evaluation, which could contribute to the early detection of breast cancer and improved product safety through the detection of small defects and foreign matter in electronic components, aircraft components, lithium-ion batteries, and the like.

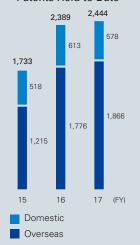
Intellectual Property







Patents Held to Date



Basic Policies on Intellectual Property

Toray Group has formulated and executes the following four intellectual property strategies as its basic policies on intellectual property.

Intellectual property strategies, as a part of the strategy trinity, that conform to management principles

Toray Group regards intellectual property as one of its vital management resources. We integrate our intellectual property strategies mutually and organically with our business strategies and R&D strategies, and as part of this "trinity," we designate intellectual property strategies as one of the most important elements of our management strategies.

2 Promoting the procurement of rights

In order to protect Toray Group's products and technologies and to ensure profits in terms of intellectual property, we hold as many useful patent rights as possible and build patent portfolios. At the same time, we pay close attention to efficient patenting by raising the quality of each patent and not making needless applications.

3 Respecting the rights of others

Toray has operated a system for comprehensively investigating the relations between its own products and technologies and patents owned by other companies, and we thoroughly educate employees to prevent infringement on patent rights of other parties.

Rightful enforcement of our own rights

When Toray Group's patent rights are infringed upon by another party, we take proper steps depending on the circumstances by exercising our patent rights, such as demanding that infringement cease, receiving monetary profits from licensing, and using our patent rights for cross-licensing with the patent rights of other parties.

Intellectual Property Strategies in Line with Our Management Strategies Promoting global intellectual property strategies of Toray Group

We will promote Toray's patent applications and patenting in countries other than Japan, particularly in those growth countries and regions where we aim to achieve business expansion in the future. Together with this, we will support global business growth by working to strengthen patent applications and patenting from overseas subsidiaries and affiliated companies to ensure the appropriate protection of inventions created in our bases in each country. We will also establish Group-wide intellectual property strategies that bind Toray Group's research and technology development for each business field. In addition, we will establish and strengthen patent and trademark management systems at each company in Toray Group.

Pirmly maintaining our technological advantage through strategic patent applications and other such efforts and rolling them out at subsidiaries and affiliated companies in Japan and overseas

At Toray Group, we are working to build patent portfolios with emphasis on the "Green Innovation Business Expansion (GR) Project" and "Life Innovation Business Expansion (LI) Project" while avoiding careless disclosure of technical information through the publication of patent applications. We expect these initiatives to support our businesses in the growth fields as a powerful barrier against entry in the future. We will also spread these efforts to our subsidiaries and affiliated companies in Japan and overseas.

Executing intellectual property strategies that are organically linked to our business

In order to promote the execution of intellectual property strategies linked to our individual business activities, Toray Group will strengthen participation in the patent activities of business divisions, and together with this, will work on intellectual property education according to the needs of the individual business divisions.

Strengthening utilization of our brand and trademarks

Together with our aim to enhance the value of our technology through technology brands, we will deal strictly with imitation products and other infringements of Toray Group's trademarks amid surging growth in the number of online transactions.

5 Developing human resources to support global intellectual property activities

Toray carries out multifaceted and multilevel education for everyone from management to new employees and front-line sales representatives, covering domestic and overseas patent systems and practice. Additionally, at the Intellectual Property Division, together with encouraging the acquisition of patent attorney qualification, we actively support staff in their efforts to strengthen their foreign language capabilities and dispatch staff to overseas subsidiaries and affiliated companies.

We are also making concerted efforts to provide the same kind of intellectual property education at subsidiaries and affiliated companies in and outside of Japan. Moreover, we will assign intellectual property specialists to companies actively engaging in R&D and work to improve education for researchers and engineers.

Improve capacity to address social issues

Toray Group will work to instill a greater awareness of CSR among employees, aiming to do its part to address social issues—such as global environmental problems as well as health maintenance and longevity. The Group will also work to improve its ability not only to seize upon opportunities, but also to deal with risks.

Strengthen CSR activities throughout the entire supply chain

By facilitating CSR initiatives group-wide, Toray Group will work to instill CSR awareness and promote CSR activities at suppliers.

Step up efforts on group-wide CSR activities

Now that Toray Group has established comprehensive policies and material issues for CSR as key performance indicators, the Group will implement CSR activities with an eye on actual conditions at individual Group companies.

Facilitate activities to meet the expectations of stakeholders

In order to gain a high degree of trust from all stakeholders, Toray Group will actively disclose non-financial information and engage in dialogue with stakeholders, and make the most of this process in its CSR activities.

SUSTAINABLE MANAGEMENT SYSTEM

We at Toray Group recognize that business expansion and CSR are the two fundamentals of growth. In addition to working to solve social issues through the performance of our business activities, we position the promotion of CSR as a priority management issue and aim for sustainable growth based on a mutual understanding with shareholders, customers, employees, business partners, local communities and all of our stakeholders.

Toray Group Sustainability Vision

Toray Group provides innovative technologies and advanced materials that contribute to achieving SDGs by addressing global issues.

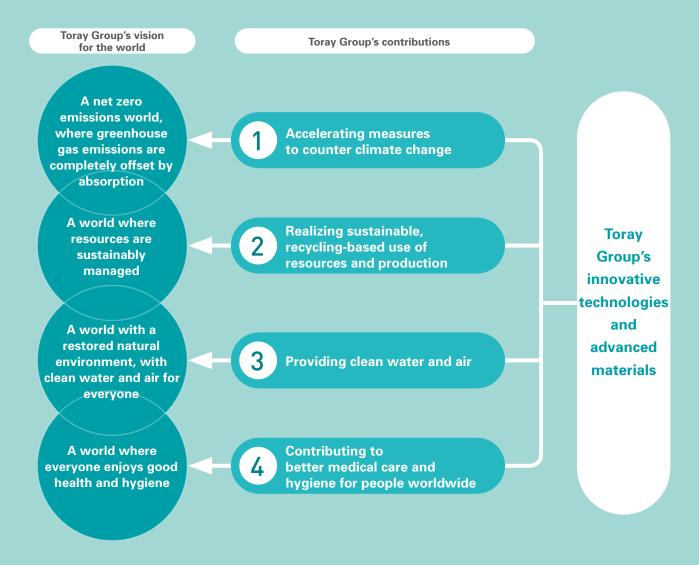
Formulation of Toray Group Sustainability Vision

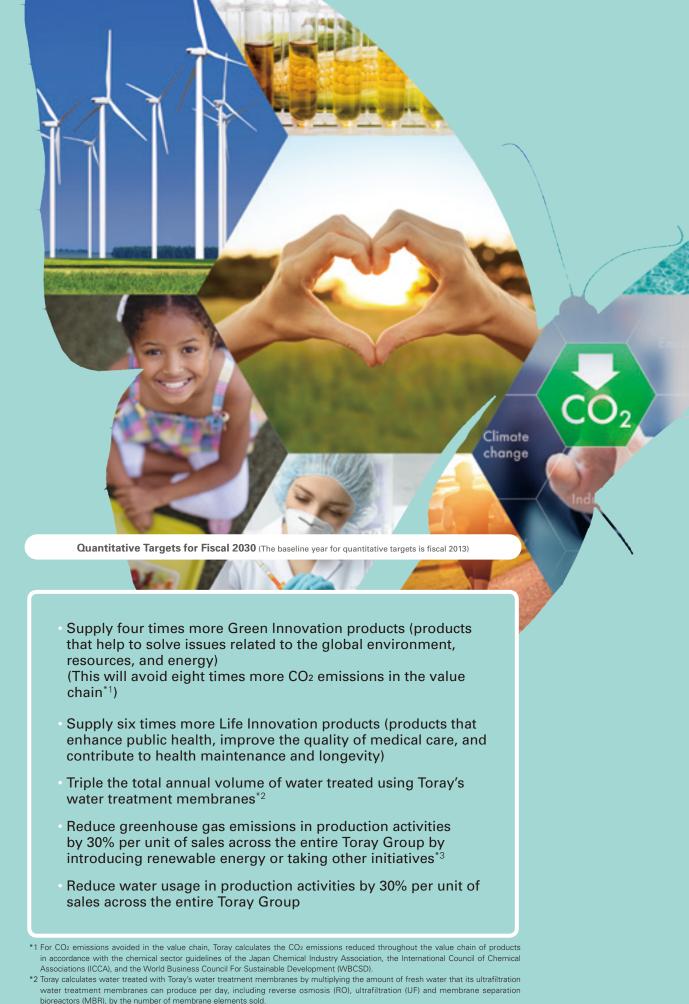
Since Toray's founding in 1926, based upon our belief that materials can change our lives, we have delivered innovative technologies and advanced materials that provide solutions to various challenges the world faces regarding the balance between development and sustainability. Through this we have also been able to serve society, which is a foundation of our existence. This holds true for today as well. Many of the projects that Toray Group promotes under its Medium-term Management Program work to contribute solutions to global environmental issues and human longevity, and can be considered, by their very nature, to address sustainable development goals (SDGs). Given this, and with an ever-greater awareness of sustainability issues, we have formulated Toray Group Sustainability Vision that incorporates The World as Envisioned by Toray Group in 2050, and to achieve that, Toray Group Initiatives, as well as Quantitative Targets for Fiscal 2030.

As we look to the year 2050, and in consideration of the value that it is capable of providing to the world, Toray Group is aiming for 1) a net zero emissions world, where greenhouse gas emissions are completely offset by absorption; 2) a world where resources are sustainably managed; 3) a world with a restored natural environment, with clean water and air for everyone; and 4) a world where everyone enjoys good health and hygiene.

Formulation of KPIs and Contributing to Meeting SDGs and Other Global Objectives

To contribute to realizing the four above stated specific initiatives, Toray Group has formulated key performance indicators (KPIs) as it approaches fiscal 2030. By incorporating these into issues to be addressed by management, and given the organic growth generated, we will do our utmost to eliminate any negative impact on global sustainability, and in tandem with that, expand a supply of products that contribute solutions to problems, while setting our sights on accomplishing SDGs and other global objectives.





bioreactors (IVIBH), by the number of memorane elements sola. *3 In Japan, Toray works to surpass the reduction target set for the industrial sector by the Japanese government (absolute emissions reduced by 7%), which is based on the Paris Agreement. With the use of renewable energies and other zero emission power sources rising worldwide, Toray Group aims to employ zero-emission power sources at a rate equivalent to or better than the targets in each country by 2030.

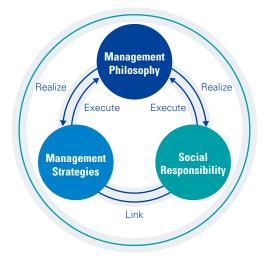
Sustainability in Toray Group

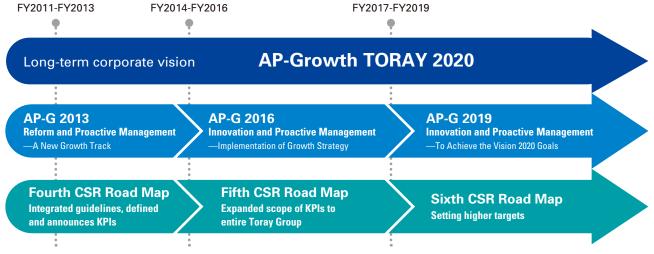
In order to achieve sustainable growth, corporations must do business in a way that earns the broad trust of stakeholders. To live up to its philosophy, Toray Group implements its management strategies hand-in-hand with its efforts to fulfill corporate social responsibilities.

Unification of Management Strategies and CSR

Toray Group is committed to making a proactive contribution to social development and environmental stewardship, providing high value to all stakeholders, and aims to continually increase its revenues and profits. Therefore, through its Medium-term Management Program Project AP-G 2019, it stresses the importance of practicing corporate social responsibility through a commitment to safety, accident prevention, environmental preservation, corporate ethics, and legal compliance. Meanwhile, the Group has set out the Sixth CSR Road Map, which covers the same time frame as Project AP-G 2019. The road map mandates the Group to expand its efforts to realize the creation of new value and implement more robust environmental, social and governance (ESG) practices. In addition, in fiscal 2015 Toray Group adopted its CSR materiality (material issues for CSR) which incorporated input from thought leaders, and reevaluated this process with the fiscal 2017 start of the Sixth CSR Road Map, setting forth KPIs and managing its progress every fiscal year.







Pursuing Our Corporate Philosophy and SDG Initiatives

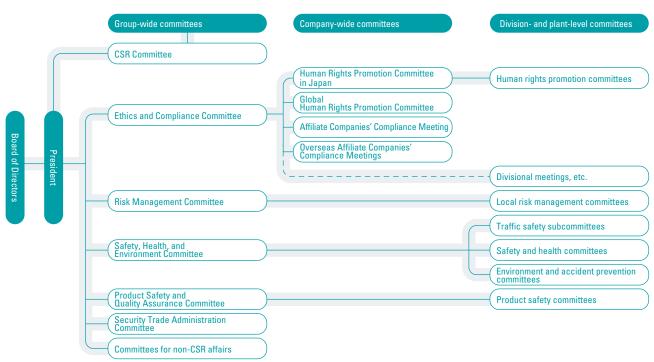
Since its foundation in 1926, Toray has upheld a corporate philosophy of "contributing to society through creating new value," and developed innovative materials from a long-term perspective based on the concept of being a "entity for society" and of "people-centric management." Through providing the materials, Toray has aimed to help solve social issues that include global environmental problems.

In addition, operating throughout the globe, Toray has expanded overseas businesses with the idea of contributing to each country's industrial development, export growth, and increasing technological levels from a long-term perspective.

In this way, Toray Group's initiatives taken to date are in keeping with finding solutions to global social problems that have been raised as sustainable development goals (SDGs). Based on its corporate philosophy, Toray Group aims in the years ahead to contribute further to solving social issues such as global environmental problems and realizing societies where people live long and healthy lives.

Organizational Structure for Corporate Social Responsibility

Toray Group's CSR Committee serves as a Group-wide deliberative organization for important issues concerning corporate social responsibility. The committee promotes CSR activities in cooperation with five other Group-wide committees, assigns tasks along with the themes in the CSR Guidelines to the five committees, and build a system for the Group as a whole promoting CSR.



Committee and Implementation Organization

SDGs and Toray's Initiatives

02.00		
	Green Innovation Businesses (trial introduction of tube-shaped planters Roll Planter™*1)	Research grants to young researchers through Toray Science Foundation and science foundations in three ASEAN countries and the Republic of Korea
3 ACCREATING	Life Innovation Businesses Prevention of air pollution at plants (reduction of atmospheric emissions of chemical substances)	• Green Innovation Businesses (reinforcement of wooden roof with para-aramid fiber, Kevlar ^{@*2})
4 duality Literations	Support for science education at schools Workshops at the Science Museum, Tokyo, Japan Support through the Science Education Award sponsored by Topologic the science for additional formation in the science of the science formation in the science of the science formation in the science formation in the science formation in the science formation in the science formation is science formation.	 Green Innovation Businesses (utilization of biological resources and promotion of product recycling) Reduction of waste from production sites
	Toray Science Foundation and science foundations in three ASEAN countries and the Republic of Korea	• Green Innovation Businesses (curbing CO ₂ emissions throughout the product lifecycle)
5 GENDER	 Promotion of women's active participation (Toray Industries, Inc.) Support for events to train female high school students in science 	Reduction of CO ₂ emissions at the manufacturing stage
Ţ	and technology courses	• Prevention of water pollution at plants
6 CLEANNITE MESSARIVER	Green Innovation Businesses (securing safe drinking water with	• Green Innovation Businesses (waterless printing technology)
Q	water treatment membranes, and other activities) • Water management in plants	Initiatives under the Toray Group Biodiversity Basic Policy Survey of his based rew meterial programmet
7 слантнее	Green Innovation Businesses (contribution to dissemination of renewable energy)	 Survey of bio-based raw material procurement Initiatives pursuant to Toray Group Basic Policy for Increasing Green Areas (greening activities at plants) Various environmental preservation activities at Headquarters, plants, etc.
8 BEEDI WERK AND ELORSHE ERVITE	 Promotion of work-life balance Promotion of employment of the disabled and the elderly Respect for human rights in CSR Procurement Guidelines Establishment of Toray Group Policy for Human Rights 	 *1 Roll PlanterTM is a registered trademark of Mitsukawa Co., Ltd. *2 Kevlar[®] is a registered trademark of E. I. du Pont de Nemours and Company

Environmental Management Initiatives



Greenhouse Gas Emissions and Greenhouse Gas Emissions Per Unit of Sales (Toray Group in Japan)





Promoting Life Cycle Management

In addressing global environmental issues, it is vital to consider the entire life cycle of products and services in order to reduce environmental impact while also delivering improved economic and social value. To this end, Toray Group practices life cycle management. Life cycle management is the basis for Toray's Green Innovation products, and the Group has adopted life cycle assessment^{*1} and Toray Eco-Efficiency Analysis (T-E2A)^{*2} tool and is working to ensure these are employed thoroughly in all of its businesses.

- *1 Life cycle assessment (LCA) is a method for quantitatively assessing resources that have gone into a product, its environmental burden, and the environmental impact the product has on the Earth and the ecosystem throughout the life cycle of the product.
- *2 T-E2A is an environmental analysis tool developed by Toray. It produces a map of multiple products plotted along the axes of environmental impact and economic performance, enabling users to select the most environmentally friendly and economical products.

Progress on the Fifth Medium-Term Environmental Plan

Toray Group is now implementing its Fifth Medium-Term Environmental Plan, which runs from fiscal 2016 to fiscal 2020. The plan aims to further reduce the Group's environmental impact.

Amid further projected increases in production volumes for high-performance films and carbon fiber, the Group will continue to pursue environmental initiatives in order to achieve the challenging targets of the new plan.

Initiatives to Curb Global Warming

Toray has set its goal for the reduction of greenhouse gas emissions as "maintaining emissions at least 15% below the fiscal 1990 level, by fiscal 2020" and implements planned reduction measures. CO_2 emissions in fiscal 2017 increased by 18,000 tons from the previous fiscal year's level due to higher production in line with business expansion. Greenhouse gas emissions rose 1.1%, to 2.03 million tons from the previous fiscal year, although this was a reduction of 20.1% from the fiscal 1990 level, continuing to meet its reduction target.

Toray and its Group companies in Japan work to curb global warming with the goal of reducing greenhouse gas emissions by 15% on a per-unit-of-sales basis by fiscal 2020, compared to the fiscal 1990 level. Toray and its Group companies' emissions of greenhouse gas were down 1.1% in fiscal 2017 compared to the previous fiscal year. Greenhouse gas emissions per unit of sales improved 3.1 points compared to the previous fiscal year and were 23.5% below the base year.

Fiscal 2017 greenhouse gas emissions for Toray Group worldwide were 5.48 million tons-CO₂ equivalent, a decline of 2.4% compared to the previous fiscal year. All Toray Group manufacturing companies and plants will work to achieve the Group's goal of reducing the per-unit energy consumption rate by 2% each fiscal year and strive to reduce greenhouse gas emissions throughout the Group.

Energy Conservation Measures

Toray has set a goal of reducing its per-unit energy consumption by 2% annually and vigorously works on energy conservation measures. In fiscal 2017, Toray increased energy consumption by 4% compared to the previous fiscal year mainly on account of higher production. However, it improved its per-unit energy consumption by 1.3% year on year as a result of energy conservation measures taken at each plant, energy conservation diagnostics performed by the Company's own energy efficiency specialists, and other initiatives. This was an improvement from the base year of 18.4%.

• Utilizing Natural Energy and Converting to Natural Gas for Fuel

Toray Group is systematically switching to natural gas for fuel and deploying cogeneration systems with the goal of conserving energy. In addition, in fiscal 2016, as an initiative for effective use of renewable energy, Toray's Nagoya Plant installed a small hydroelectric system that generates power using the incoming industrial water pressure, and in fiscal 2017, Toray's Seta Plant installed a solar power generation system. Both systems have commenced operations.



Atmospheric Emissions of PRTR Law-Specified Substances





VOC Atmospheric Emissions







Waste Recycling Rate





Voluntary Initiatives to Reduce Atmospheric Emissions of Chemical Substances

As a corporate group that does business in the chemicals sector, Toray Group places the highest priority on reducing emissions of chemicals into the atmosphere in order to reduce its environmental impact.

In fiscal 2017, Toray Group's atmospheric emissions of PRTR Law-specified substances were 873 tons, which represented a 67% reduction compared to the base year of fiscal 2000. VOC atmospheric emissions amounted to 1,108 tons, a 72% reduction compared to fiscal 2000. The Group is executing reduction measures with the aim of achieving the objectives of the Fifth Medium-Term Environmental Plan.

Initiatives to Prevent Air and Water Pollution

Toray Group implements ongoing initiatives at production sites to reduce sulfur oxide (SOx) emissions by installing desulfurization equipment and switching to cleaner fuels, and reduce chemical oxygen demand (COD) by expanding wastewater treatment facilities.

-• Initiatives for Managing Water Resources

Toray Group has always been working through its water treatment business to provide solutions to water resource problems around the world. Toray Group practices the 3Rs (reduce, reuse, recycle) in consuming water resources, and monitors the quality of water that is released into public bodies of water. Additionally, at overseas-based Group companies located in drought-stricken regions in particular, we conduct recycling of cooling and effluent water and also work to reduce the volume of water used for industrial purposes.

In fiscal 2017, Toray Group used 228 million tons of water, an increase of 1% over the previous fiscal year. Compared to the amount used per unit of sales in fiscal 2001, set to an index value of 100, usage in fiscal 2017 stood at 54.0 points, an improvement of 5.5 points from the previous fiscal year.

Initiatives to Reduce Waste

Toray Group is carrying out zero emission initiatives as it works toward the realization of a sustainable, recycling-based world. Under the Fifth Medium-Term Environmental Plan, the Group worked to achieve its fiscal 2020 targets for rates of simply disposed waste^{*1}, land-fill waste^{*2} and recycled waste^{*3}, which have been set as indicators for measuring progress toward attaining zero emissions.

- *1 Simply disposed waste rate = (incineration +landfill) / total waste
- *2 Landfill waste rate = landfill waste / total waste

*3 Recycling rate = (recycled resources + resources with monetary worth) / (total waste + resources with monetary worth)

Biodiversity Initiatives

Toray Group has positioned biodiversity, along with reducing greenhouse gas emissions, as an important theme regarding global environmental problems, and pursues biodiversity initiatives in accordance with a three-year action road map and sets its priorities based on the Group's Biodiversity Initiatives. Plants at Toray and Group companies in Japan operate greenery policies and plans through around 2020, guided by Toray Group Basic Policy for Increasing Green Areas^{*1}. The plans encompass initiatives to conserve green areas as much as possible, including healthy natural forests^{*2}, that have been protected since the plants began operating. These sustainable greenery conservation initiatives also help to conserve the environment for communities.

- *1 Natural groves or forestation by species based on potential native vegetation
- *2 Toray Group Basic Policy on Increasing Green Areas was established in 2012, evolving out of greenery policies that were first established in 1973.

Human Resource Development and Training



• Committed to Human Rights

We at Toray Group believe respect for human rights is a mandatory management principle for ensuring the continuity of corporate activities and building positive relationships with all of the Group's stakeholders. Based on this principle, in December 2017 we formulated Toray Group Policy for Human Rights. The Group also works to promote and raise awareness of human rights, for instance by declaring its commitment to the respect of human rights in its Corporate Ethics and Legal Compliance Code of Conduct. In the Code, discrimination of any kind based on race, creed, skin color, gender, religion, nationality, language, physical characteristics, socioeconomic status, place of birth or any other personal characteristics is strictly forbidden in every process from recruiting and hiring to work placement, treatment, training, and retirement.

Since fiscal 2014, the Group has also been tackling the issue of discrimination based on gender identification and sexual orientation. In January 2017, the Group established a dedicated hotline for LGBT (sexual minority) issues, Nijiiro Consultation Service.

Toray Group Policy for Human Rights

We at Toray Group believe that respect for human rights is a mandatory principle for corporate management. Therefore, we respect international standards such as the United Nations Universal Declaration of Human Rights and the International Labor Organization's standards in compliance with the laws and regulations of countries and regions where we operate, and will endeavor to fulfill our duty of respect for human rights as a good corporate citizen.

- 1. We will respect human rights, character and individuality of employees and eliminate harassment and discrimination in workplaces. Furthermore, we will prohibit child labor, forced labor and unfair low-wage labor.
- 2. We will strive to promote respect for human rights throughout the entire supply chain related to our business activities. In addition, we will not be complicit in infringing on the human rights.
- 3. We will endeavor to understand adverse human rights impacts associated with our business activities and to avoid or reduce such influences.
- 4. If it becomes evident that we have caused or contributed to adverse human rights impacts, we will promptly take appropriate actions.
- 5. We will promote educational activities about issues of human rights for every employee and foster a proper understanding of issues among them.

Basic Policy on Human Resources Hiring

The success or failure of a company is decided by its people—employees shape its destiny. Guided by this concept, Toray Group, both in and outside of Japan, regards human resources as the most important management resources and considers securing and developing outstanding human resources capable of performing on a global stage as a fundamental management priority. Based on the following four goals, Toray Group is promoting human resource development.

- Development of fair-minded individuals who act with high ethical standards and a sense of responsibility
- Training of professionals with advanced expertise, technical skills and originality in problem solving
- Development of leaders who act with foresight and a sense of balance
- Development of individuals, professionals, and leaders who can play an active role in global business

To achieve these goals, Toray Group is taking deliberate measures to conduct a variety of training that will strengthen and raise an array of capabilities for employees at every level and field.





Women in Management Positions





Percent of Companies Achieving Legally Mandated Employment Rate of Persons with Disabilities





Percentage of Available Annual Paid Leave Used by Employees



Diversity Promotion Initiatives

Fostering an Organizational Culture Conducive to the Career Advancement of Women

Toray has long advanced the creation of workplace environments in which women will feel comfortable in performing their duties. As of April 2018, women held 9.0% of unit manager or higher positions, and 4.6% of section manager or higher positions. In fiscal 2016, based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace, enacted in that same year, Toray developed an action plan to increase the percentage of female employees promoted to managerial positions by focusing on making and steadily implementing individualized career plans and raising awareness of career development. Under this action plan, Toray has set as its immediate target to ensure an average promotion rate for women that is at least 80% that of men^{*1} for the five-year period from fiscal 2016 to fiscal 2020. This figure is the Japanese Ministry of Health, Labour and Welfare's yardstick for determining whether or not excessive discrepancy exists based on gender.

*1 Promotion rate of women to managerial positions compared to that of men = Percentage of female employees promoted to managerial positions / Percentage of male employees promoted to managerial positions Percentage promoted to managerial positions = Individuals promoted to managerial positions / No. of employees who were initially hired into the G Course who are eligible for promotion to managerial position that year

• Employment of Persons with Disabilities

Toray Group hires and employs persons with disabilities, from those with physical challenges to persons with intellectual and mental challenges. The Group is making workplace improvements to remove physical barriers for persons with handicaps as well as instituting safety measures. Additionally, the Group provides comprehensive training upon work placement and gathers feedback from persons with disabilities to make workplace improvements.

Further, Toray meets Japan's legal minimum of 2.2% persons with disabilities, as do 60.0% of Toray Group companies in Japan. Group companies actively seek to hire persons with disabilities through public organizations and job placement agencies. However, some individual Group companies do not meet the mandated legal requirement, although the Group companies collectively meet the minimum. Toray will continue to focus on this issue moving forward.

Helping Employees Maintain Work-Life Balance

Toray has worked to further improve systems that help employees achieve a harmonious balance between work and family life by offering a wider variety of lifestyle options for both men and women. Toray has put in place systems that allow employees to work from home or have lower-hour work schedules for child care or care giving, and a coreless flex system for all Tokyo and Osaka head office employees.

As part of its commitment to workplace innovation to balance work and family life, Toray strives to create a comfortable environment throughout its work sites. Since fiscal 2008, (1) regular discussions are held in each workplace to raise awareness of different working styles; (2) working late at night or on holidays is in principle prohibited; (3) all lights are turned off at a certain time at night; and (4) Company-wide "no overtime days" take place one day each month. Toray has also been working on ongoing initiatives to cut overtime hours and to encourage employees to take annual paid leave. (Employees used 88.4% of available annual paid leave in fiscal 2017).

Employee Health

Toray views employee health management as a management priority. Strategic initiatives are now underway, including some undertaken in collaboration with the employee health insurance association. Toray is also addressing mental health. Since fiscal 2011 the Company has been independently implementing employee stress check-ups through an external provider, and has added content in accordance with revisions to Japan's Industrial Safety and Health Act. Group companies in Japan also implement similar employee stress check-ups. In recognition of these efforts, in February 2018 Toray was certified as a Health and Productivity Management Organization (White 500).

Stakeholder Engagement

Toray Group has established Basic Policies to Promote Dialogue with Stakeholders. We are proactively communicating with various stakeholders in all aspects of our corporate activities.



Engaging with Stockholders and Investors

The Group actively communicates with institutional investors and securities company analysts by providing information materials when requested and holding same-day results briefings when quarterly earnings are announced. The Group also provides a wide variety of information about management policy and strategy as well as financial and earnings information through its annual report, IR presentation materials, and information pages on its website for stockholders and investors.

In fiscal 2017, Toray held four results briefings and held 676 meetings with investors and analysts.



Engaging with Customers

Toray believes that the customer comes first. We closely communicate with our customers, mainly through our marketing and sales departments, and periodically conduct customer satisfaction surveys. The results of these surveys are shared internally at Board meetings and through inhouse newsletters as we strive to provide even higher quality customer service.



Engaging with Business Partners

While providing materials and products as a manufacturer of advanced materials, Toray Group must engage in upstream management of its supply chains to better fulfill the needs of its customers, including the areas of production facilities and procured raw materials and resources. Accordingly, the Group has established its Basic Purchasing Policies and Basic Distribution Policies to emphasize this approach and ensure fair business activities. Throughout the Group we are promoting proper and fair transactions, adherence to laws, environmental preservation, respect for human rights, improvements in quality and other policies in initiatives with regard to corporate responsibility in procurement, purchasing, and distribution.

Engaging with Employees

The Group communicates with employees through in-house newsletters, intranet, company-wide bulletin boards and other media. To share information and deepen understanding of management and business topics, messages from the President, Japanese, English, and Chinese versions of in-house newsletters, and explanations of management and business topics and projects are made available via all types of media. In addition, in 2017, we established TORAY NAVI Lite, an intranet site geared toward Group companies in and outside of Japan, representing the construction of global infrastructure for the sharing of information.



Engaging with the Mass Media

Toray recognizes that public relations and corporate communication activities have a role in fulfilling responsibilities for information disclosure as well as influencing public opinion. Accordingly, Toray's Corporate Communications Department reports directly to the President, and actively engages with a wide range of media organizations, acting as the public's point of contact with the Company. Based on Toray's Information Disclosure Principles, the department provides fair and impartial information, even if it may cast the Company in a bad light, in a timely and appropriate manner.

In fiscal 2017, the Company issued 187 press releases and responded to 318 media requests for information.



Engaging with Local Communities

Toray Group strives to engage in more active dialogue with nearby residents in a variety of settings, including participating in events sponsored by local governments and inviting local residents onto plant grounds for summer festivals. Following Toray Group Social Initiative Policies, we aim for our social contribution activities to contribute to sustainable development while meeting the expectations of local communities. A specific example of this is the establishment of Toray Science Foundation in Japan, and similar foundations in Malaysia, Thailand, Indonesia and the Republic of Korea, which contribute to raising the level of science and technology in these countries. We also actively promote sports in Asia by co-sponsoring the Shanghai International Marathon.

External Evaluation

Toray was included in the following SRI indices as of March 31, 2018.

Dow Jones Sustainability Index Asia Pacific

Toray is included in the Asia Pacific Index of the Dow Jones Sustainability Indices (DJSI), an SRI index administered by U.S.based Dow Jones and Switzerland-based RobecoSAM.

Dow Jones Sustainability Indices

In Collaboration with RobecoSAM 🐽

MSCI ESG Indexes

Toray is included in the MSCI ESG Indexes. MSCI provides institutional investors (from pension funds to hedge funds) across the globe with various tools to support investment decisions.

MSCI Select Leaders Index

MSCI (1) 2018 Constituent MSCI Japan Empowering Women Index (WIN)

Ethibel Pioneer & Excellence Registers

Toray is included in the Ethibel Pioneer and Ethibel Excellence investment registers of Forum Ethibel, a Belgian non-profit organization that promotes socially responsible investment.



Morningstar Socially Responsible Investment Index (MS-SRI)

Toray is included in the Morningstar Socially Responsible Investment (MS-SRI) Index. Morningstar Japan K.K. selects 150 listed companies in Japan that have been assessed for outstanding social responsibility, indexing the prices of their shares. MS-SRI is the first SRI index in Japan.



Sompo Japan Nipponkoa Asset Management (SNAM) Sustainability Index

Toray is included in the SNAM Sustainability Index managed by Sompo Japan Nipponkoa Asset Management (SNAM). The SNAM Sustainability Index is an SRI index fund for pension funds and institutional investors that broadly invest in corporations that rate highly for environmental, social, and governance (ESG).

Corporate Governance

Basic Policy

From the outset, one of Toray Group's managerial principles has been that the purpose of a company is to contribute to society. The Group has developed a Management Philosophy that incorporates this principle.

The Group systematizes the Management Philosophy as a Corporate Philosophy, Corporate Missions, and Corporate Guiding Principles. Among these, the Corporate Missions call for desirable relationships with stakeholders and enunciate the Group's commitment "To provide our shareholders with dependable and trustworthy management." In addition, the Corporate Guiding Principles stipulate the Group's commitment to "Obtaining the trust of society and meeting the expectations by acting fairly while maintaining high ethical standards and a strong sense of responsibility and maintaining transparency in management."

When establishing the corporate governance structure, the Group seeks to realize these philosophies as its basic policy.

Systems for Executing and Supervising Management

Toray is a company with Board of Corporate Auditors, and the members of the Board and corporate auditors are elected at the general meeting of stockholders.

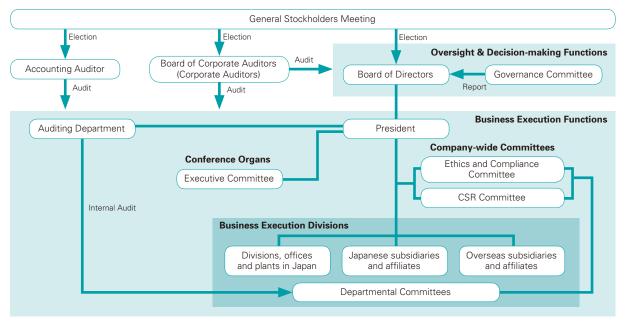
Members of the Board and corporate auditors, as officers directly elected at the general meeting of stockholders, clearly recognize fiduciary responsibility to stockholders who have entrusted the management and appropriately fulfill their respective roles while discharging accountability about management status to stockholders and other stakeholders.

Toray's Board of Directors consists of 19 members. Since Toray Group supplies a wide range of industries with basic materials and globally plays an active part in a broad scope of business fields, it is necessary to evaluate various risks multilaterally based on expertise relevant to the worksites, not only for management judgment and decision-making but also for oversight. To that end, the Board of Directors formulates a structure in which members of the Board familiar with Toray Group businesses oversee management and make decisions from various viewpoints.

Furthermore, the Board of Corporate Auditors oversees the execution of operations by the members of the Board based on professional knowledge in fields such as finance, accounting and law in addition to an understanding about businesses, from a standpoint entirely independent of the Board of Directors as a system to secure transparency and fairness of oversight and decision-making.

Toray established the Governance Committee as an advisory organ to the Board of Directors in order to report to the Board of Directors on important issues regarding the Company's corporate governance over the mid- to long-term. The Governance Committee consists of the Chairman of the Board, President, and all of the outside directors, and an outside director serves as a chairperson. Deliberation at the Governance Committee encompasses matters regarding the Company's overall corporate governance matters, including the following.

- Structure of the Board of Directors and the Board of Corporate Auditors
- Evaluation of the management and operation of the Board of Directors
- Policy on nominating candidates for members of the Board and corporate auditors
- Remuneration system for members of the Board and corporate auditors
- Basic policy on electing member of the senior management, including the President



Corporate Governance System

Election of Outside Directors

At Toray, we ensure objectivity and transparency of corporate governance by establishing and disclosing standards for independence of outside directors and outside corporate auditors. Toray's outside directors and outside corporate auditors meet Toray's standards for independence and meet the independence requirements set by the Tokyo Stock Exchange.

We, therefore, have submitted notification to the Tokyo Stock Exchange of their status as independent officers.

The following table outlines the basis for election of our outside directors/corporate auditors and details of their independence.

Kunio Ito (Director)	 Is highly expert in accounting and business administration as a university professor Has extensive experience as a corporate outside director No matters affect his independence from Toray
Ryoji Noyori (Director)	 Has extensive experience as a university professor and highly specialized expertise in organic synthetic chemistry, which is a core Toray technology Has experience as a corporate outside director No matters affect his independence from Toray
Toshio Nagai (Corporate auditor)	 Has an excellent track record of high standing in the legal profession and a solid character and judgment, so we believe he can audit appropriately from an objective standpoint No matters affect his independence from Toray
Kazuya Jono (Corporate auditor)	 Has held key positions in the corporate world and has solid character and judgment, so we believe he can audit appropriately from an objective standpoint Formerly employed by Sumitomo Mitsui Banking Corporation and Citibank Japan Ltd. (current Citibank, N.A., Tokyo Branch); Toray has regular banking transactions with both banks. With respect to Sumitomo Mitsui Banking Corporation, over three years have passed since he retired from the board, and we have no borrowing from Citibank, N.A., therefore independence is not affected. Toray's balance of borrowing from Sumitomo Mitsui Banking Corporation (including syndicated loans) as of 31 March 2018 is 0.7% of total assets, which is not high compared with other banks.

Basic Policy on Internal Control System

To realize the Management Philosophy, the Company shall establish a structure to execute its business legally and effectively by improving its internal control system according to the following basic policy as a structure to enable it to appropriately establish organization, formulate regulations, communicate information, and monitor the execution of operations.

- 1. System to ensure that the execution of duties by members of the Board and employees complies with laws and regulations and the Company's Articles of Incorporation
- Toray shall establish the Ethics and Compliance Committee, as one of the company-wide committees to promote observance of corporate ethics and legal compliance, and shall take other measures to improve the required internal systems, including the establishment of dedicated organizations.
- Toray shall establish the Corporate Ethics and Legal Compliance Code of Conduct as specific provisions to be observed by members of the Board and employees, and shall take other measures to improve the required guidelines, etc. Especially with regard to eliminating relations with antisocial forces, the Company shall act as one to stand firmly against them.
- Toray shall establish an internal reporting system (whistle-blowing system) for the reporting of the discovery of violation of laws, regulations, or the Company's Articles of Incorporation.

• Toray shall establish Security Trade Control Program, one of the most important legal compliance issues, and establish an organization dedicated to security export control.

2. System to ensure the efficient execution of duties by members of the Board

- Toray shall establish the Authority of Top Management to stipulate matters with respect to which decision-making authority is reserved by the Board of Directors and matters with respect to which decision-making is delegated to the President, General Managers, etc., from among matters necessary for decision-making.
- Toray shall establish the Executive Committee as deliberative organs for important matters decided by the Board of Directors or the President. The Executive Committee shall be responsible for the general direction of policy, and shall be in charge of issues related to implementation.

3. System for preserving and managing information pertaining to the execution of duties by the members of the Board

 Toray shall establish regulations for important documents and important information related to management, confidential information and personal information, and appropriately preserve and manage them in accordance with the rules.

Corporate Governance

4. Regulations and other systems pertaining to controls over risks of loss

- Toray shall identify potential risks in business activities, promote company-wide risk management to strive to reduce the level of risk under normal business conditions, and prevent future crises, as well as improve regulations and establish an internal committee to enable immediate implementation in the event of a major crisis.
- Toray shall establish an internal control system for financial reporting that ensures the reliability of financial reporting.

5. System for ensuring appropriate business operations within subsidiaries

- To establish a system under which subsidiaries report to the Company on matters regarding the execution of duties by members of the Board, etc. of the subsidiaries, the Company shall provide regulations on the regular reporting of important management information to the Company and regularly hold conferences at which the Company's management receives direct reports on the status of the management of the subsidiaries.
- To establish regulations and other systems pertaining to controls over risks of loss for subsidiaries, the Company shall provide subsidiaries with guidance to help them to establish risk management systems appropriate for their respective business forms and business environments, and shall receive regular reports on the status of their activities.
- To establish a system for ensuring that members of the Board, etc. of subsidiaries effectively execute their duties, the Company shall provide regulations on the scope under which the Company can reserve its authority over the execution of business operations. In addition, the Company shall endeavor to grasp management information in a unified manner and provide assistance and guidance necessary for subsidiaries by determining divisions, etc. with control over its respective subsidiaries.
- To establish a system for ensuring that the execution of duties by members of the Board, etc. and employees of subsidiaries complies with laws and regulations and the Articles of Incorporation, the Company shall thoroughly familiarize its subsidiaries with the Company's Corporate Ethics and Legal Compliance Code of Conduct as a code of conduct in common for Toray Group. At the same time, the Company shall request the subsidiaries to establish their own codes of conduct, guidelines, etc. in consideration of the laws and regulations, business practices, business forms, and other factors in their respective countries. In addition, the Company shall direct its subsidiaries to establish systems under which the status of internal whistle-blowing by

members of the Board, etc. and employees of the subsidiaries is appropriately reported to the Company.

- 6. System for reporting to corporate auditors and systems for ensuring that persons who report to corporate auditors are not treated disadvantageously because of their reporting
- Members of the Board, etc. and employees of Toray Group and corporate auditors of subsidiaries shall report matters regarding the execution of duties to corporate auditors in response to requests from the corporate auditors.
- Department in charge of the internal reporting system (whistle-blowing system) shall regularly report the status of internal whistle-blowing in Toray Group to the corporate auditors.
- Toray shall stipulate regulations to the effect that members of the Board and employees who report to corporate auditors shall not be subjected to any disadvantageous treatment because of the said reporting, and shall provide subsidiaries with guidance to help them stipulate the same regulations.
- 7. Items pertaining to the handling of expenses and liabilities arising from the execution of duties by corporate auditors
- Toray shall pay expenses, etc. incurred from the execution of duties by corporate auditors.
- 8. Items pertaining to employees assisting with corporate auditors' duties, items pertaining to the independence of said employees from members of the Board, and items pertaining to the assurance of effectiveness of instructions from the corporate auditors to said employees
- Toray shall assign a full-time employee to provide assistance if and when corporate auditors request assistance. The said employee shall exclusively follow the corporate auditors' commands and instructions, and the Company shall consult with corporate auditors in advance with respect to the personnel arrangements for the said employee.

9. Other systems for ensuring effective implementation of audits by corporate auditors

- Corporate auditors shall attend Board of Directors meetings and other important meetings so that they may ascertain important decision-making processes and the execution of operations.
- Corporate auditors shall hold regular meetings with members of the Board and management and conduct regular visiting audits of Toray offices, plants, and subsidiaries.

Remuneration for members of the Board

Given their roles, remuneration for internal members of the Board consists of monthly remuneration, a bonus and stock acquisition rights as stock options. Remuneration for outside directors consists of monthly remuneration only. Remuneration is set at a level that enables the Company to secure superior human resources and further motivate them to improve performance, referring to the results of a survey of other companies' remuneration by an external third-party organization. With respect to monthly remuneration, the maximum limit of total remuneration is determined at general meetings of stockholders. Within the scope of the maximum limit, monthly remuneration to each member of the Board is determined by the President based on the Company's internal regulations with a resolution at a Board of Directors meeting.

The provision and the total amount of bonuses are determined each time at a general meeting of stockholders. Particulars of the agenda at the general meeting of stockholders are resolved by the Board of Directors through conference among the senior management, including the President, in consideration of the consolidated and non-consolidated business results for each fiscal year plus the historical record. A bonus to each member of the Board is determined by the President according to each member's performance based on the Company's internal regulations with a resolution at a Board of Directors meeting.

The maximum limit of total number of Stock Acquisition Rights as well as the limit of remuneration relating to the granting of the Stock Acquisition Rights as stock options to members of the Board is resolved at the general meeting of stockholders, and within that limit, the total number of Stock Acquisition Rights to be allocated to the members of the Board shall be decided at the Board of Directors meeting based on the Company's internal regulations.

Given their roles, remuneration for corporate auditors consists of monthly remuneration only. Remuneration is set at a level that enables the Company to secure superior human resources, referring to the results of a survey of other companies' remuneration by an external third-party organization.

With respect to monthly remuneration, the maximum limit of total remuneration is determined at general meetings of stockholders. Within the scope of the maximum limit, monthly remuneration to each corporate auditor is determined through consultation by corporate auditors based on the Company's internal regulations.

The Governance Committee continuously reviews the remuneration system for members of the Board and corporate auditors.

Details of Remuneration in Fiscal 2017

	Total _	Total remur				
Position	remuneration (millions of yen)	Basic	Bonuses	Stock options as remunerations	Recipients	
Members of the Board (excluding outside directors)	1,360	906	214	240	26	
Corporate auditors (excluding outside corporate auditors)	80	80	_	_	3	
Outside directors	24	24		_	2	
Outside corporate auditors	19	19		_	2	

Notes: 1. Recipients included three members of the Board and one corporate auditor who retired during fiscal 2017. 2. Total amounts of remuneration do not include the ¥93 million paid in salaries to eight employee-directors.

Total Remuneration Received by Members of the Board and Corporate Auditors

	Total consolidated		Status of	Total consolidated remuneration by type (millions of yen)				
Name	remuneration (millions of yen)	Position	Status of company	Basic	Bonuses	Stock options as remuneration		
Akihiro Nikkaku	157	Member of the Board	Filing company	104	29	24		

Status of Compliance Initiatives

Toray Group recognizes the absolute importance of compliance with laws, regulations, and social norms. Top management takes a clear position on corporate ethics and legal compliance in the execution of their own duties and guides the entire Group's approach to compliance.

Framework for Promoting Corporate Ethics and Legal Compliance

Toray has established the Ethics and Compliance Committee, as a company-wide committee, chaired by the President. The Committee deliberates on policies and discusses measures relating to corporate ethics, while advancing initiatives through the joint efforts of labor and management. Acting as leaders, divisional and departmental general managers at each worksite

Corporate Governance

adopt a top-down approach toward promoting initiatives.

Affiliate Companies' Compliance Meeting as well as Overseas Affiliate Companies' Compliance Meetings have been established as subordinate organizations of the Ethics and Compliance Committee with respect to subsidiaries and affiliates in Japan and overseas. These meetings study and promote compliance activities implemented in each company, country, and region.

In addition, the Corporate Ethics and Legal Compliance Code of Conduct is a strict set of standards that every Toray Group executive and employee closely follows when performing corporate activities. In the event that a violation is discovered, strict discipline is carried out in consultation with the Company's Rewards and Sanctions Committee. Toray has put together the Corporate Ethics and Legal Compliance Handbook, which explains the code and gives details of the compliance helpline, to ensure comprehensive understanding for all Toray and its Japanese Group companies' executives and employees, including contracted, part-time and temporary workers. Group companies outside Japan prepare national and regional editions of the Corporate Ethics and Legal Compliance Handbooks. Every executive and employee of Group companies outside Japan receives a copy of the handbook to ensure that they are fully informed of the corporate policy on the code of conduct.

Toray established and is advancing the following common company-wide challenges related to corporate ethics and legal compliance for fiscal 2017. Activities are also being undertaken based on Toray's common company-wide challenges at subsidiaries and affiliates in Japan and overseas.

- Implemented self-monitoring and mutual inspection system for internal control
- · Provided thorough training on security trade controls
- Provided all employees with comprehensive information on antitrust laws and anti-bribery rules around the world
- · Implemented initiatives to ensure strict compliance

Status of Risk Management Initiatives

Toray has established a Risk Management Committee as a subordinate organization under the CSR Committee. The CSR Operations Department serves as a secretariat office for the Risk Management Committee, by which Toray monitors the progress of risk reduction across Toray Group under normal business conditions, and maintains a framework for planning, drafting, and promoting company-wide risk management measures. In addition, Toray established local risk management Committees as subordinate organizations of the Risk Management Committee at each of Toray's divisions, departments, offices, and plants. These committees have taken actions to reduce risk by implementing company-wide measures together with individually established risk measures.

However, in response to an incident where quality data was overwritten at a Group company in Japan, Toray once again recognized that strengthening risk management group-wide has emerged as an urgent management issue. Subsequently, Toray established a dedicated organization within the Corporate Strategic Planning Division, which is under the direct control of the President, in April 2018 as part of the management strategy for the purpose of strengthening and promoting risk management throughout Toray Group to a greater degree than in the past, closely communicating with the top management. Toray has since transferred the risk management functions from the CSR Operations Department to this organization.

As an organization to deliberate and provide information regarding risk management throughout Toray Group, in May 2018 Toray also established the Risk Management Committee (company-wide committee) with Corporate Strategic Planning Division manager as chairperson. This company-wide Committee absorbed the responsibilities of the original Risk Management Committee and inherited the local risk management committees that were formed as subordinate organizations of the original Risk Management Committee. Furthermore, the Overseas Crisis Management Committee and the local Crisis Management Committees, in charge of managing overseas travel for employees and collecting information on overseas risk during normal business conditions, have now been similarly organized as subordinate organizations of the Risk Management Committee.

Toray Group Risk Management System

Chairperson: Corporate Strategic Planning Division manager



Quick Response System During Emergencies

Toray Group has established Crisis Management Regulations, a set of clear fundamental principles that form the basis of a company-wide response in the event of a major crisis. The Group works to ensure the thorough implementation of these regulations when required. Moreover, the Group reviews the regulations as appropriate to prepare for new risks that emerge due to changes in the social environment. Along with the changes made to the risk management system in April 2018, Toray significantly overhauled the risk management system during normal business operations and the quick response system for emergencies, and revised these regulations in June 2018. In particular, a rule was established calling upon divisions and departments in which an emergency has occurred to always report first to the Corporate Strategic Planning Division so that rapid management decisions can be made in the event of an emergency.

Toray has also recognized the security control for overseas business travels and measures against political instability and terrorism as material risk issues for some time, and continues to keep employees informed with up-to-date information under the direction of the responsible division or department as part of the Group's emergency responses.

Addressing Priority Risks

Once every three years, Toray identifies and assesses company-wide risks, and reviews the priority risks based on the results of this action. In terms of the selected priority risks, Toray promotes activities to reduce risks through a three-year PDCA cycle.

Fiscal 2017 was the final fiscal year of the third PDCA cycle. The remaining issues from the past two years of this PDCA cycle were reorganized, and Toray advanced the necessary measures for each risk. Moreover, Toray conducted its fourth company-wide risk identification and assessment, and selected the fourth Toray Group priority risks, covering three years starting from fiscal 2018, as the priority risks to be shared throughout the Group.

From fiscal 2018, Toray will work to reduce these priority risks throughout Toray Group, including Group companies in Japan and overseas.

Supply Chain Risk Reduction

In fiscal 2017, Toray analyzed the responses to the CSR procurement survey distributed to its suppliers, after which a supplier-specific assessment sheet was drawn up for each supplier and shared with each Group company. Moreover, Toray followed-up on the CSR procurement progress status of each Group company outside of Japan, and provided support as necessary, including sending CSR procurement survey templates from the Head Office to those companies in which initiatives were insufficient.

In addition, Toray reviews the usage status of conflict minerals and the country of origin for all of its products every year. Toray also conducted this survey in fiscal 2017.

Maintaining Information Security

Toray provides security education to employees every year as a means of managing information management (leaks) risks. In addition to providing this education, in fiscal 2017, Toray conducted a simulation exercise involving targeted e-mail attacks for all employees in seeking to nurture and elevate the security awareness among the employees.

Addressing Existing Major Risks

In terms of addressing existing major risks, such as legal compliance, fluctuations in raw material prices, business strategies, economic condition and currency fluctuations, and security export controls, the staff divisions and departments, and related group-wide committees whose normal business activities serve directly as risk measures continuously undertake and follow-up on activities to reduce risk.

Detecting Major Foreseeable Risks

Toray vigilantly maintains an eye on trends in Japan and around the world in order to detect risks which may give a significant impact on the management of Toray Group. When a relevant risk is detected, Toray Corporate Strategic Planning Division takes the lead in drafting a response measure without delay and implements the necessary measures throughout the Group.

Educating Employees

In order to cultivate an awareness of risk management among employees, Toray has set up the implementation of risk management education as one of the KPIs for the Sixth CSR Road Map. Based on the situation of the individual countries, in fiscal 2017 Toray implemented e-learning and group education with a focus on human rights issues and activities aimed at reducing risks at the individual companies.

Preparedness for Major Earthquakes

Toray Group continues to maintain and review its business continuity plan (BCP) for large-scale earthquakes, which has been identified as one of the priority risks.

For the important products selected for each business in compliance with the procedures for developing BCPs for designated priority products in the case of an earthquake, in fiscal 2017 Toray formulated BCPs, and continued with the systematic quake-resistant upgrading of our plant buildings.

Moreover, Toray Group has conducted drills to establish a temporary Group-wide headquarters based on a scenario involving a large-scale earthquake every year since fiscal 2012. In fiscal 2017, Toray held a drill based on a scenario involving a massive earthquake along the Nankai Trough. This drill involved the operation of the employee safety confirmation system introduced at Toray and its Group companies in Japan. The drill also included realistic specifications, including intentionally not disclosing some aspects of the scenario beforehand in order to harden the rapid judgment skills of those on the ground. In conjunction with this drill, Toray also reviewed those operations considered to be of highest priority for the Head Office staff divisions and departments in order to maintain the minimum amount of corporate functionality during a disaster.

In addition, Toray Group also deployed Toray Disaster Map System following the Great East Japan Earthquake in order to rapidly and accurately map the extent of damage based on location data for business partners and Toray Group.

Board of Directors and Corporate Auditors

(As of June 26, 2018)



President and Representative Member of the Board Akihiro Nikkaku



Executive Vice President and Representative Member of the Board Koichi Abe



Executive Vice President and Representative Member of the Board Ryo Murayama



Executive Vice President and Representative Member of the Board Yukichi Deguchi



Senior Vice President (Member of the Board and Member of the Executive Committee) Mitsuo Ohya



Senior Vice President (Member of the Board and Member of the Executive Committee) Hiroshi Otani



Senior Vice President (Member of the Board and Member of the Executive Committee) Toru Fukasawa



Senior Vice President (Member of the Board and Member of the Executive Committee) Kazuo Morimoto



Senior Vice President (Member of the Board and Member of the Executive Committee) **Osamu Inoue**



Senior Vice President (Member of the Board) Yasuo Suga



Senior Vice President (Member of the Board) Hirofumi Kobayashi



Senior Vice President (Member of the Board) Tetsuya Tsunekawa



Senior Vice President (Member of the Board) Takashi Fujimoto



Senior Vice President (Member of the Board) Kazuyuki Adachi



Vice President (Member of the Board) Shigeki Taniguchi



Vice President (Member of the Board) Hideki Hirabayashi



Vice President (Member of the Board) Hiroshi Enomoto



Vice President (Member of the Board)



Vice President (Member of the Board) Ryoji Noyori*1



Corporate Auditor Shogo Masuda

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Corporate Auditor **Shoshiro Taneichi**



Corporate Auditor Toshio Nagai*2



Corporate Auditor Kazuya Jono*2



*2 Toshio Nagai and Kazuya Jono are outside corporate auditors.

*1 Kunio Ito and Ryoji Noyori are outside directors.

Organization (As of July 1, 2018)

Board of Directors Corporate Strategic Planning Division General Administration & Communications D President & Executive Vice Presidents	
President & Executive Vice Presidents	vision
President & Executive Vice Presidents Legal & Compliance Division	
Personnel & Industrial Relations Division	
Finance & Controller's Division	
Quality Assurance Division	
Auditing Dept.	
Executive Committee Intellectual Property Division	
Information Systems Division	
Purchasing & Logistics Division	
Corporate Marketing Planning Dept.	
Automotive Material Strategic Planning	ept.
Global Environment Business Strategic Plann	ng Dept.
Life Innovation Business Strategic Planni	ng Dept.
Branches	
Affiliated Companies Division	
Fibers & Textiles Division	
Resins & Chemicals Division	
Board of Corporate Auditors Films Division	
Torayca & Advanced Composites Division	
Corporate Auditors Electronic & Information Materials Division	
Pharmaceuticals & Medical Products Division	
Water Treatment & Environment Division	
HS Business Development Dept.	
Technology Center	
Manufacturing Division	
Engineering Division	

Toray Group Worldwide Network

(As of March 31, 2018)

Toray Group operates businesses in 26 countries and regions including Japan.

	Japan	Overseas	Tota
Consolidated subsidiaries	61	101	162
Subsidiaries accounted for by equity method	26	34	60
Total subsidiaries	87	135	222
Affiliates accounted for by equity method	13	22	35
Companies subject to consolidation	100	157	257

EUROPE

United Kingdom

Consolidated Subsidiaries

 Toray Textiles Europe Ltd. (TTEL) Toray International U.K. Ltd. (TIUK)

France

Consolidated Subsidiaries

- Toray Films Europe S.A.S. (TFE) Toray Carbon Fibers Europe S.A. (CFE)
- Switzerland

Subsidiary Accounted for by Equity Method

Toray Membrane Europe AG (TMEu)

Italy

Consolidated Subsidiary

Alcantara S.p.A.

- Subsidiaries Accounted for by Equity Method
 - Toray International Italy S.r.I. (TIIT) Composite Materials (Italy) S.r.I. (CIT)
 - Delta-Tech S.p.A. (DELTA)

Czech Republic

Consolidated Subsidiary

Toray Textiles Central Europe s.r.o. (TTCE)

Germany

- **Consolidated Subsidiaries**
 - Euro Advanced Carbon Fiber Composites GmbH (EACC)
 - Toray International Europe GmbH (TIEU) Others

ASIA

China **Consolidated Subsidiaries**

- Toray Industries (China) Co., Ltd. (TCH)
 - Toray Fibers (Nantong) Co., Ltd. (TFNL)
 - Toray Sakai Weaving & Dyeing (Nantong)
 - Co., Ltd. (TSD)
 - Toray Polytech (Nantong) Co., Ltd. (TPN)
- Toray Plastics (China) Co., Ltd. (TPCH)
- Toray Plastics (Shenzhen) Ltd. (TPSZ)
- Toray Plastics (Chengdu) Co., Ltd. (TPCD) Toray Plastics Precision (Hong Kong) Ltd. (TPPH)
- Toray Plastics Precision (Zhongshan) Ltd. (TPPZ)
 - Toray Industries (H.K.) Ltd. (THK)
 - Toray International (China) Co., Ltd. (TICH)
 - Toray Film Products (Hong Kong) Ltd. (TFH)
 - Toray Film Products (Zhongshan) Ltd. (TFZ)
 - Toray BlueStar Membrane Co., Ltd. (TBMC) Toray Medical (Qingdao) Co., Ltd. (TMQ) Others
- Affiliate Accounted for by Equity Method
- Yihua Toray Polyester Film Co., Ltd. (YTP)

Taiwan

Consolidated Subsidiary

Toray Advanced Film Kaohsiung Co., Ltd. (TAFK)

Subsidiaries Accounted for by Equity Method Toray International Taipei Inc. (TITP)

Others

Republic of Korea **Consolidated Subsidiaries**

Torav Advanced Materials Korea Inc. (TAK) STEMCO, Ltd. (STEMCO)

Annual Report 2018

- Toray Chemical Korea Inc. (TCK)
- Affiliates Accounted for by Equity Method STECO, Ltd. (STECO)

Others

60

Malaysia **Consolidated Subsidiaries**

Penfabric Sdn. Berhad (PAB)

- Penfibre Sdn. Berhad (PFR) Toray Plastics (Malaysia) Sdn. Berhad (TPM)
- Others
- Subsidiary Accounted for by Equity Method Toray Industries (Malaysia) Sdn. Berhad
- (TMI) Affiliate Accounted for by Equity Method
- Toray BASF PBT Resin Sdn. Berhad (TBPR)

Singapore Consolidated Subsidiary

Toray International Singapore Pte. Ltd. (TISP)

Japan

Consolidated Subsidiaries

- Ichimura Sangyo, Co., Ltd.
 Toray Fine Chemicals Co., Ltd.
- Toyo Plastic Seiko Co., Ltd.
- Toray Advanced Film Co., Ltd.
 - Toray KP Films Inc. Soda Aromatic Co., Ltd.
- Toray Engineering Co., Ltd.
- Toray Carbon Magic Co., Ltd.
- Toray Construction Co., Ltd.
- Suido Kiko Kaisha, Ltd.
- Toray Medical Co., Ltd
- Toray Research Center Inc.
- Toray International, Inc.
- Chori Co., Ltd.

Others Subsidiaries Accounted for by Equity Method Toyo Business Support Inc.

Others Affiliates Accounted for by Equity Method

- Du Pont-Toray Co., Ltd.
- Toray Opelontex Co., Ltd.

Dow Corning Toray Co., Ltd.

Major Office in Japan

Nakanoshima Mitsui Building,

3-3, Nakanoshima 3-chome,

Telephone: 81 (6) 6445-4101

Facsimile: 81 (6) 7688-4001

Kita-ku, Osaka 530-8222,

Osaka Head Office

Japan

 Sanyo Chemical Industries, Ltd. Others Regional Supervisory Organization

Fibers & Textiles

Overseas Offices

NY 10017, U.S.A.

U.S.A

(TAM)

Germany

China

Office

GmbH (TEU)

IT-related Products

Performance Chemicals

Toray Industries (America), Inc.

9th Fl., 461 Fifth Ave., New York,

Toray Industries, Europe Office

Telephone: (49) 6102-7999-1000

Facsimile: (49) 6102-7999-1008

Toray Industries, Inc., Beijing

Beijing Fortune Bldg., No. 702, 5,

District, Beijing 100004, China

Facsimile: 86 (10) 6590-8964

Dong San Huan Bei-Lu, Chao Yang

Telephone: 86 (10) 6590-8961-3

Telephone: 1 (212) 697-8150

Facsimile: 1 (212) 972-4279

Hugenottenallee 175, 63263

Neu-Isenburg, Germany

Indonesia

- **Consolidated Subsidiaries**
 - P.T. Acryl Textile Mills (ACTEM) P.T. Century Textile Industry Tbk (CENTEX)
 - P.T. Easterntex (ETX)
- P.T. Indonesia Synthetic Textile Mills (ISTEM)
- P.T. Indonesia Toray Synthetics (ITS)
- P.T. Toray Polytech Jakarta (TPJ)
- Subsidiaries Accounted for by Equity Method P.T. Toray Industries Indonesia (TIN)
- Others Affiliates Accounted for by Equity Method

P.T. Petnesia Resindo (PNR)

Others Thailand

Consolidated Subsidiaries

U.S.A

Mexico

(CMA)

Others

Consolidated Subsidiary

Trading

Republic of Korea

Republic of Korea

India

(TID)

Brazil

Nadu, INDIA

- Consolidated Subsidiaries Luckytex (Thailand) Public Co., Ltd. (LTX) Thai Toray Textile Mills Public Co., Ltd. (TTTM) Thai Toray Synthetics Co., Ltd. (TTS)
- Subsidiaries Accounted for by Equity Method
- Toray Industries (Thailand) Co., Ltd. (TTH)
- Carbon Magic (Thailand) Co., Ltd. (CMTH) NORTH AMERICA

Toray Fluorofibers (America), Inc. (TFA)

Toray Composite Materials America, Inc.

Toray International America Inc. (TIAM)

Toray Resin Mexico, S.A. de C.V. (TRMX)

Carbon Fiber Composite Materials

Environment & Engineering
 Life Science & Other Businesses

Toray Industries, Inc., Seoul Office

Toray Industries (India) Private Limited

Salai, Teynampet, Chennai 600035, Tamil

Av. Paulista, 1048-Conj 71 Bela Vista Sao

Telephone/Facsimile: 55 (11) 4314-7792

12th Fl., Prestige Polygon, 471 Anna

Telephone: 91 (44) 4003-6100

Facsimile: 91 (44) 4003-6101

Toray do Brasil Ltda. (TBL)

Paulo - SP 01310-100, Brasil

36FI., FKI Tower, 24, Yeoui-daero,

Yeongdeungpo-gu, Seoul, 07320

Telephone: 82 (2) 707-0381-2

Facsimile: 82 (2) 707-0067

Toray Plastics (America), Inc. (TPA)

Toray Resin Co. (TREC)

Zoltek Companies, Inc. (Zoltek)

Toray Membrane USA, Inc. (TMUS)

FINANCIAL SECTION

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Ten-Year Summary of Selected Financial Data

Toray Industries, Inc. and Consolidated Subsidiaries Years ended March 31

	2009	2010	2011	
Net sales ^{*1, 3}	¥ 1,471,561	¥ 1,359,631	¥ 1,539,693	
Fibers & Textiles	568,996	525,204	584,115	
Performance Chemicals	_	_	_	
Carbon Fiber Composite Materials	70,390	50,676	67,018	
Environment & Engineering	160,207	159,787	178,183	
Life Science	_	46,656	52,430	
Others	_	14,140	13,621	
Plastics & Chemicals	377,644	332,735	382,299	
IT-related Products	229,421	230,433	262,027	
Life Science & Other Businesses	64,903	—	—	
Operating income	36,006	40,107	100,087	
Income (loss) before income taxes	(19,751)	(2,415)	82,893	
Net income (loss) attributable to owners of parent	(16,326)	(14,158)	57,925	
Net cash provided by operating activities	38,447	166,215	129,214	
Depreciation and amortization	83,764	74,904	70,479	
Capital expenditures	92,349	57,073	55,942	
Total assets	1,523,603	1,556,796	1,567,470	
Property, plant and equipment, net	596,261	580,344	531,595	
Interest-bearing liabilities	663,945	632,160	493,509	
Net assets	512,610 518,216		640,970	
Per share of common stock:				
Net income (loss) attributable to owners of parent:				
Basic	¥ (11.66)	¥ (10.12)	¥ 36.41	
Diluted	—	_	34.43	
Cash dividends	7.50	5.00	7.50	
Net assets	335.04	336.65	363.90	
Ratios:		·		
Operating income to net sales	2.45	2.95	6.50	
Net income (loss) attributable to owners of parent to net sales	(1.11)	(1.04)	3.76	
Equity ratio	30.8	30.3	37.8	
Return on equity	(3.1)	(3.0)	10.9	
Debt/equity ratio (times)	1.42	1.34	0.83	
Common stock price range:				
High	¥ 694	¥ 591	¥ 643	
Low	350	390	420	
Number of employees	37,924	37,936	38,740	

*1 Effective from the year ended March 31, 2011, "Revised Accounting Standard for Disclosures about Segments of an Enterprise and Related Information" (Accounting Standards Board of Japan (ASBJ) Statement No.17, March 27, 2009) and "Guidance on the Accounting Standard for Disclosures about Segments of an Enterprise and Related Information" (ASBJ Guidance No. 20, March 21, 2008) are applied. Accordingly, segment information for the year ended March 31, 2010 is restated.

*2 Effective from the year ended March 31, 2014, certain overseas subsidiaries applied IAS 19 "Employee Benefits" (revised on June 16, 2011). As this change in accounting policy is applied retrospectively, the related financial data for 2013 reflect the retrospective application.

*3 Toray Group changed the reportable segments from the year ended March 31, 2018. Accordingly, the actual figures for the year ended March 31, 2017 are restated to reflect the changes in reportable segments.

							Millions of yen
, ,	2012	2013 ^{*2}	2014	2015	2016	2017	2018
¥ 1	,588,604	¥ 1,592,279	¥ 1,837,778	¥ 2,010,734	¥ 2,104,430	¥ 2,026,470	¥ 2,204,858
	638,375	632,150	755,474	856,676	892,039	856,124	913,610
	—	—	—	—	—	724,648	803,310
	69,914	77,620	113,342	158,365	186,196	161,608	177,949
	170,247	178,355	180,197	179,988	183,324	212,548	238,256
	55,554	56,599	58,205	57,039	55,841	54,150	53,803
	13,295	14,127	14,277	14,321	14,720	17,392	17,930
	397,815	395,835	470,542	496,370	521,238		- 1
	243,404	237,593	245,741	247,975	251,072	—	
	—	—	—	—	—	—	
	107,721	83,436	105,253	123,481	154,480	146,893	156,464
	101,091	77,828	97,760	114,469	137,808	139,012	136,612
	64,218	48,477	59,608	71,021	90,132	99,418	95,915
	104,410	100,815	161,455	141,282	196,142	173,958	129,180
	67,443	67,588	78,743	81,480	91,168	89,073	95,815
	98,384	99,135	118,207	124,929	136,556	152,039	153,324
1,	,581,501	1,731,933	2,119,683	2,357,925	2,278,386	2,396,785	2,592,914
	561,923	627,240	781,235	855,593	830,612	881,434	927,029
	481,906	532,002	654,163	700,258	704,253	716,399	816,325
	674,149	778,626	944,625	1,080,757	1,024,909	1,100,176	1,169,188
							Yen
¥	39.41	¥ 29.75	¥ 36.59	¥ 44.33	¥ 56.38	¥ 62.17	¥ 59.97
	37.46	28.90	35.70	44.28	56.31	62.10	59.90
	10.00	10.00	10.00	11.00	13.00	14.00	15.00
	384.90	444.45	527.32	616.70	591.50	638.64	681.92
							%
	6.78	5.24	5.73	6.14	7.34	7.25	7.10
	4.04	3.04	3.24	3.53	4.28	4.91	4.35
	39.7	41.8	40.5	41.8	41.5	42.6	42.1
	10.5	7.2	7.5	7.7	9.3	10.1	9.1
	0.77	0.73	0.76	0.71	0.74	0.70	0.75
							Yen
¥	631	¥ 654	¥ 786	¥ 1,057.5	¥ 1,146.0	¥ 1,027.5	¥ 1,208.0
	511	421	584	626	871.7	854.0	903.1
	011	121	004	020	0,1.7	001.0	
	40,227	42,584	45,881	45,789	45,839	46,248	45,762

Management's Discussion and Analysis

OVERVIEW

For the year ended March 31, 2018, the U.S. and European economy continued to register a gradual recovery. There were signs of the economy picking up in many emerging countries. The Japanese economy, in general, continued on its gradual recovery track on the back of improving employment and income situation.

In the meantime, the rise in raw material and fuel prices had a negative impact on Toray Group's profits.

Under such circumstances, Toray Group, in April 2017, embarked on the new medium-term management program "Project AP-G 2019" that spans over three years from fiscal year 2017 to 2019 and has been implementing the growth strategy with focus on taking advantage of growth business fields, pursuing business expansion in growth countries and regions as well as further bolstering its cost competitiveness.

As a result, Toray Group posted record net sales and operating income.

INCOME ANALYSIS

Net Sales

Net sales for the year ended March 31, 2018 were in ¥2,204.9 billion, up by ¥178.4 billion (8.8%) from the previous year. Regarding the sales by business segment, net sales in the Fibers & Textiles, Performance Chemicals, Carbon Fiber Composite Materials, Environment & Engineering and Others segments increased, while those in the Life Science segments decreased.

Costs and Expenses

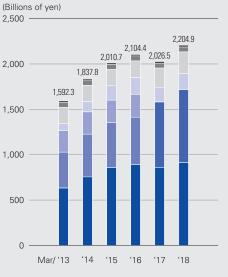
The ratio of total costs and expenses to net sales for the year ended March 31, 2018 was 92.9%, slightly up by 0.2 percentage points year on year.

Net sales and cost of sales increased from the previous year by 8.8% and 9.5%, respectively. As a result, the cost of sales ratio rose by 0.5 percentage points to 79.3%.

Selling, general and administrative expenses increased by ¥17.3 billion (6.1%) to ¥300.4 billion. The ratio of selling, general and administrative expenses to net sales declined by 0.3 percentage points to 13.6%.

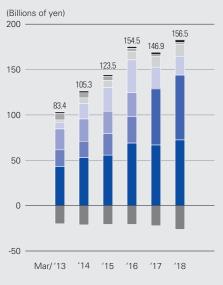
R&D expenses increased by ¥7.0 billion (11.8%) to ¥66.2 billion.

Net Sales by Segment



Fibers & Textiles Performance Chemicals Plastics & Chemicals
 IT-related Products Carbon Fiber Composite Materials
 Environment & Engineering Life Science Others

Operating Income by Segment



[■] Fibers & Textiles ■ Performance Chemicals ■ Plastics & Chemicals

IT-related Products Carbon Fiber Composite Materials

Environment & Engineering Life Science Others

Adjustment

*1 Toray Group changed the reportable segments from the year ended March 31, 2018. Accordingly, the actual figures for the year ended March 31, 2017 are restated to reflect the changes in reportable segments.

*2 Operating income by segment that is not attributable to any segment is included in "Adjustment."

Operating Income and Net Income

Operating income climbed by ¥9.6 billion (6.5%) year on year to ¥156.5 billion, the ratio of operating income to net sales declined slightly by 0.2 percentage points to 7.1%. Operating income by business segment increased in the Fibers & Textiles, Performance Chemicals, Environment & Engineering and Others segments, while decreasing in the Carbon Fiber Composite Materials and Life Science segments.

In net other income (expenses), Toray Group reported net expenses of ¥19.9 billion in the year ended March 31, 2018, up by ¥12.0 billion (151.9%) from the previous year. Interest and dividend income increased by ¥0.2 billion (4.2%) to ¥5.2 billion, and interest expense also climbed by ¥0.4 billion (9.4%). As a result, net financial income of ¥0.1 billion was recorded in the year ended March 31, 2018, down ¥0.2 billion compared with the previous year. Equity in earnings of unconsolidated subsidiaries and affiliated companies rose year on year by ¥1.7 billion (22.8%) to ¥9.2 billion. Net loss on sales and disposal of property, plant and equipment climbed by ¥2.1 billion (42.5%) to ¥7.1 billion. Loss on impairment of fixed assets increased by ¥1.0 billion (34.8%) to ¥3.9 billion. Net gain on sales and loss on write-down of investment securities grew by ¥0.5 billion (16.7%) to ¥3.4 billion. In the year ended March 31, 2018, the Group posted a loss on liquidation and devaluation of subsidiaries and affiliated companies of ¥3.6 billion and environmental expenses of ¥2.6 billion.

As a result of the aforementioned, income before income taxes declined by ¥2.4 billion (1.7%) year on year to ¥136.6 billion. After deductions for income taxes and net income attributable to non-controlling interests, net income attributable to owners of parent amounted to ¥95.9 billion, down ¥3.5 billion (3.5%) year on year.

Net income per share was ¥59.97, a decrease of ¥2.2. In light of profit conditions for the year ended March 31, 2018 and outlook for the next year, the total annual dividend for the year ended March 31, 2018 was set at ¥15.00 per share. This comprised an interim cash dividend of ¥7.00 per share and a year-end cash dividend of ¥8.00 per share.

Business Performance by Segment

Toray Group changed the reportable segments from the year ended March 31, 2018. The following analysis bases on the new reportable segments and the accordingly restated figures for the year ended March 31, 2017.

Fibers & Textiles

In Japan, demand for some industrial applications such as automobiles was strong and apparel applications saw gradual improvement in store sales of final products. Against this background, Toray Group not only strived to expand sales in both apparel and industrial applications but also worked to expand the business format that integrates fibers to textiles to final products while focusing on strengthening cost competitiveness.

Overseas, business performance of some subsidiaries in Southeast Asia and Republic of Korea remained slow. On the other hand, materials for automotive applications and hygiene products remained strong in general and the Group expanded the integrated business for apparel applications.

As a result, overall sales of Fibers & Textiles segment increased 6.7% to ¥913.6 billion from the previous year and operating income rose 8.5% to ¥72.4 billion.

Performance Chemicals

In the resin business, shipment for automotive applications was strong in general, mainly in Japan. Besides automotive applications, Toray Group also promoted sales expansion of ABS and PPS resins. In the film business, shipment of battery separator films for lithium-ion secondary batteries increased reflecting demand growth, while films for electronic parts which are used for applications such as smartphones continued to be favorable. In the electronic & information materials business, demand for OLED panels increased and shipment of related materials expanded.

As a result, overall sales of Performance Chemicals segment increased 10.9% to \$803.3 billion from the previous year and operating income increased 15.5% to \$71.4 billion.

Carbon Fiber Composite Materials

With the final demand for the aircraft remaining strong in the aerospace applications, shipments showed signs of recovery as the inventory adjustment in the supply chain was completed. In the industrial applications, demand showed a recovery trend primarily in the environment and energy-related field led by compressed natural gas tank applications and wind turbine blade applications. The segment was affected by increases in raw material prices as well as intensifying competition.

As a result, overall sales of Carbon Fiber Composite Materials segment increased 10.1% to ¥177.9 billion from the previous year while operating income fell 13.3% to ¥20.8 billion.

Environment & Engineering

In the water treatment business, demand for reverse osmosis membranes and other products in general grew strongly in Japan and abroad.

In terms of domestic subsidiaries in the segment, industrial machinery and electronics-related equipment performed strongly at an engineering subsidiary.

As a result, overall sales of Environment & Engineering segment increased 12.1% to ¥238.3 billion from the previous year and operating income rose 13.5% to ¥13.3 billion.

Life Science

In the pharmaceutical business, shipment of pruritus treatment REMITCH[®]* expanded due to the impact of the introduction of a new dosage form and approval of new indications. On the other hand, shipment of natural-type interferon beta preparation FERON[®] and orally active prostacyclin derivative DORNER[®] remained sluggish due to the impact of alternative medicines and generic drugs, and royalty income on some products decreased.

In the medical devices business, shipment of dialyzers grew strongly.

As a result, overall sales of Life Science segment declined 0.6% to ¥53.8 billion from the previous year and operating income fell 9.6% to ¥1.9 billion.

*REMITCH® is a registered trademark of Torii Pharmaceutical Co., Ltd.

Others

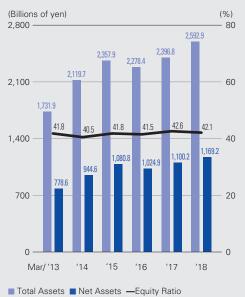
Net sales increased 3.1% to ¥17.9 billion from the previous year and operating income as well increased 10.4% to ¥2.9 billion.

FINANCIAL POSITION

Analysis of Assets, Liabilities and Net Assets

As of March 31, 2018, Toray Group's total assets stood at ¥2,592.9 billion, up ¥196.1 billion from the end of the previous year. Current assets rose ¥86.0 billion as trade notes and accounts receivable as well as inventories increased, while

Total Assets and Net Assets



*Effective from the year ended March 31, 2014, certain overseas subsidiaries applied IAS 19 "Employee Benefits" (revised on June 16, 2011). As this change in accounting policy is applied retrospectively, the related financial data for 2013 reflect the retrospective application. noncurrent assets expanded ¥110.2 billion due to increases in property, plant and equipment and investment securities.

Total liabilities rose \pm 127.1 billion from the end of the previous year to \pm 1,423.7 billion, due primarily to an increase in interest-bearing debts.

Net assets expanded by ¥69.0 billion compared with the end of the previous year to ¥1,169.2 billion, reflecting an increase in retained earnings due to net income for the year. Net assets less non-controlling interests and stock acquisition rights stood at ¥1,090.7 billion. The equity ratio at the end of the year came to 42.1%, a 0.5 percentage-point decrease compared with the level at the end of the previous year.

CASH FLOWS

For the year ended March 31, 2018, net cash used in investing activities exceeded net cash provided by operating activities by ¥57.5 billion. Meanwhile, net cash provided by financing activities came to ¥61.8 billion owing mainly to the increase in interest-bearing liabilities. As a result, after counting exchange rate changes and cash and cash equivalents at subsidiaries not previously included in consolidation, cash and cash equivalents as of March 31, 2018 amounted to ¥134.3 billion, up by ¥2.9 billion (2.2%) compared with the end of the previous year on a consolidated basis.

Cash Flows from Operating Activities

Net cash provided by operating activities decreased by ¥44.8 billion (25.7%) compared with the previous year to ¥129.2 billion. Major cash-increasing factors included income before income taxes of ¥136.6 billion, down ¥2.4 billion, and depreciation and amortization of ¥95.8 billion, up ¥6.7 billion. Major cash-decreasing factors, on the other hand, were the increase in trade receivables of ¥62.0 billion, up ¥37.0 billion, and income taxes paid of ¥34.3 billion, up ¥6.0 billion.

Cash Flows from Investing Activities

Net cash used in investing activities totaled ¥186.7 billion, up ¥51.4 billion (38.0%) compared with the previous year. Major cash-decreasing factors included capital expenditures of ¥147.9 billion, up ¥4.0 billion, and purchases of investment securities of ¥67.3 billion, up ¥62.7 billion.

Cash Flows from Financing Activities

Net cash provided by financing activities came to ¥61.8 billion, a turnaround of ¥79.8 billion from the net cash used in financing activities of the previous year. Major cash-increasing factors included proceeds from long-term debt of ¥178.9 billion, up ¥128.0 billion. The major cash-decreasing factor, on the other hand, was repayment of long-term debt of ¥111.4 billion, up ¥62.1 billion.



Interest-bearing Liabilities and D/E Ratio

Interest-bearing Liabilities
 D/E Ratio

Cash Flows



Cash Flows from Operating Activities

Cash Flows from Investing Activities

-Free Cash Flows

BUSINESS RISKS

Operational and other risks faced by Toray Group that could have a major influence on the decisions of investors are described below. Toray Group works constantly to avoid such potential risks, minimize their impact, and build a system to enable swift responses and accurate information disclosure on the occurrence of unforeseen situations. Please note that the risks described below are those identified by Toray Group when this annual report was produced, and do not represent all the operational and other risks that could affect Toray Group.

(1) Domestic and overseas demand and market trends

As a supplier of basic materials to a broad range of industries, Toray Group is exposed to various factors that could cause a sharp drop in demand for its products. These include changes in both worldwide and regional supply-demand conditions, increased use of substitute materials, and changes to the purchasing policies of business partners. In addition to severe competition with other companies, Toray Group's various businesses also face the risk of new players entering the market. Price fluctuations, stemming from the reduction of National Health Insurance (NHI) drug prices and reimbursement prices, also affect the pharmaceuticals and medical products business. Although Toray Group takes steps to maintain its competitive advantage, a decline in demand for, or falling prices of, such items, or the appearance of a credit risk affecting Toray Group's business partners, could have a negative impact on Toray Group's results of operations and financial conditions.

(2) Rising prices of fuel and raw materials

The prices of petrochemical raw materials and fuel used by Toray Group are subject to significant fluctuations. If Toray Group is unable to fully pass the increases in such prices on to its product prices, or cannot raise its product prices due to lack of progress in shifting to high-value-added products, its results of operations and financial conditions could be negatively affected.

(3) Capital expenditures, joint ventures, alliances and acquisitions

Toray Group makes capital expenditures in a wide range of business fields. Its other activities include formation of various joint ventures or strategic alliances with third parties, as well as business acquisitions.

When Toray Group becomes involved in capital expenditures, joint ventures, alliances and acquisitions, it considers the potential for profitability and return on investment. However, there is not necessarily any guarantee that the outcome will be consistent with expectations. If unforeseen market changes or significant discrepancies between actual results and initial business plans occur due to sudden changes in the operating environment, there could be a loss on impairment of fixed assets or equity in losses of unconsolidated subsidiaries and affiliated companies. As a result, Toray Group's results of operations and financial conditions could be negatively affected.

(4) Foreign currency, interest rate and securities market fluctuations

Foreign currency exchange rate fluctuations affect Toray Group's consolidated financial statements when the financial statements of the overseas operations presented in local currencies are translated into yen. Toray Group takes measures, such as entering forward exchange contracts, to alleviate risks associated with transactions denominated in foreign currencies. However, unforeseen exchange rate fluctuations could have an impact on Toray Group's results of operations and financial conditions.

Moreover, rapid and unforeseen changes in interest rates and other aspects of financial market turmoil, as well as changes in the value of securities and pension assets held by Toray Group, may have an impact on Toray Group's results of operations and financial conditions.

(5) Changes in assumptions on which forecasts are based that might affect employee retirement benefit obligations and deferred tax assets

Toray's consolidated financial statements contain employee retirement benefit obligations based on future pension payments calculated in accordance with certain criteria, as well as deferred tax assets stated according to likely tax refunds based on taxable income estimates for the future fiscal years. However, if changes in the criteria used to calculate pension payments were to occur, or if fluctuations arose in the estimates of future taxable income, Toray Group's results of operations and financial conditions could be affected.

(6) Overseas operations

Toray Group is developing a broad geographical presence, with operations in various countries of Asia, Europe, and the Americas. Some of the major potential risks associated with various regions are summarized below. If such risks were to become reality, Toray Group's results of operations and financial conditions could be negatively affected.

- Unforeseen introduction, changes or abolition of laws and regulations such as changes in taxation systems
- Unforeseen economic or political events
- Social upheaval, including acts of terror or war

(7) Product liability

Toray Group strives to supply the world's best-in-class product quality. However, it cannot always guarantee against a major unforeseen quality problem. If quality related serious situations were to occur, Toray Group's results of operations and financial conditions could be negatively affected.

(8) Lawsuits

In the course of conducting its wide range of business activities, Toray Group faces the risk of being targeted by legal action pertaining to various matters such as intellectual property, product liability, environment, and labor issues. If Toray Group were subject to a major lawsuit, its results of operations and financial conditions could be negatively affected.

(9) Laws and regulations, taxes, competition policies and internal controls

Various laws and regulations apply in the countries and regions where Toray Group conducts its business. These laws and regulations include regulations related to the environment, commercial trading, labor, intellectual property, taxation and foreign exchange, investment approval protocols and import/export controls, and policies on competition based on antitrust laws. Through the establishment and maintenance of internal control systems, Toray Group endeavors to comply with all such laws and regulations. However, changes to such laws and regulations, including the introduction of new environmental regulations and taxes, as well as changes to the corporate income tax rate could affect Toray Group's results of operations and financial conditions. Also, if Toray Group is judged as having violated such laws and regulations, is subject to government sanctions initiated by a fair trade commission, receives a notice of correction from tax authorities, has an employee who engages in illicit behavior, or is unable to uphold internal controls pertaining to financial statements, its results of operations and financial conditions could be negatively affected.

(10) Natural disasters and accidents

Toray Group places top priority on safety, accident prevention, and environmental preservation. To minimize losses caused by the suspension of production, Toray Group conducts regular accident prevention inspections, maintenance of its manufacturing facilities, and safety activities. However, the advent of a major natural disaster or unprecedented accident could cause damage to Toray Group's manufacturing facilities, or could cause inadequate supply of raw materials, which could have a negative impact on its results of operations and financial conditions.

(11) Information security risk

Toray Group's information systems and networks are fundamentally essential elements in the execution of the Group's business operations and every security precaution is taken in their development and operation. However, if such an incident as a work stoppage, a loss of trust in the Group, and a leak of confidential information were caused by unauthorized access, data alteration, theft or deletion, an interruption of system operations, or any other information security threats, Toray Group's earnings and financial conditions could be negatively affected.

Consolidated Balance Sheets

Toray Industries, Inc. and Consolidated Subsidiaries March 31, 2018 and 2017

	Million	s of yen	Thousands of U.S. dollars (Note 2
Assets	2018	2017	2018
Current assets:			
Cash (Note 5)	¥ 108,379	¥ 97,920	\$ 1,020,518
Time deposits (Notes 4 and 5)	32,722	45,191	308,117
Trade receivables (Notes 5 and 7):			
Notes receivable	55,499	53,213	522,589
Accounts receivable	434,050	372,909	4,087,100
Inventories (Note 3)	439,673	409,332	4,140,047
Deferred tax assets (Note 10)	25,641	26,438	241,441
Prepaid expenses and other current assets (Notes 5 and 6)	58,739	63,911	553,098
Allowance for doubtful accounts	(2,037)	(2,205)	(19,181)
Total current assets	1,152,666	1,066,709	10,853,729
Property, plant and equipment (Notes 4 and 13):			
Land	78,370	79,831	737,947
Buildings	631,681	602,423	5,948,032
Machinery and equipment	1,902,003	1,859,050	17,909,633
Construction in progress	120,514	107,562	1,134,783
Other	115,121	111,307	1,084,002
	2,847,689	2,760,173	26,814,397
Accumulated depreciation	(1,920,660)	(1,878,739)	(18,085,311)
Property, plant and equipment, net	927,029	881,434	8,729,087
Intangible assets (Note 13):			
Goodwill	40,146	45,779	378,023
Other	28,501	31,516	268,371
Total intangible assets	68,647	77,295	646,394
Investments and other assets:			
Investments in unconsolidated subsidiaries and affiliated companies (Note 5)	172,315	113,206	1,622,552
Investment securities (Notes 4, 5 and 6)	201,314	186,512	1,895,612
Long-term loans receivable	1,447	1,566	13,625
Deferred tax assets (Note 10)	12,902	13,513	121,488
Other (Notes 4 and 8)	59,555	59,813	560,782
Allowance for doubtful accounts	(2,961)	(3,263)	(27,881)
Total investments and other assets	444,572	371,347	4,186,177
Total assets	¥ 2,592,914	¥ 2,396,785	\$ 24,415,386

See accompanying notes to consolidated financial statements.

Liabilities and Net Assets Current liabilities: Short-term bank loans (Notes 4, 5 and 7) Current portion of long-term debt (Notes 4, 5 and 7) Commercial paper (Note 5) Trade payables (Notes 5 and 7): Notes payable Accounts payable Income taxes payable (Note 10) Accrued liabilities	2018 ¥ 135,936 63,203	2017 ¥ 132,014	2018
Short-term bank loans (Notes 4, 5 and 7) Current portion of long-term debt (Notes 4, 5 and 7) Commercial paper (Note 5) Trade payables (Notes 5 and 7): Notes payable Accounts payable Income taxes payable (Note 10)		¥ 132,014	
Current portion of long-term debt (Notes 4, 5 and 7) Commercial paper (Note 5) Trade payables (Notes 5 and 7): Notes payable Accounts payable Income taxes payable (Note 10)		¥ 132,014	
Commercial paper (Note 5) Trade payables (Notes 5 and 7): Notes payable Accounts payable Income taxes payable (Note 10)	63,203		\$ 1,280,000
Trade payables (Notes 5 and 7): Notes payable Accounts payable Income taxes payable (Note 10)		110,244	595,132
Notes payable Accounts payable Income taxes payable (Note 10)	46,000	19,000	433,145
Accounts payable Income taxes payable (Note 10)			
Income taxes payable (Note 10)	38,433	40,814	361,893
	207,117	188,378	1,950,254
Accrued liabilities	13,966	18,560	131,507
	62,363	58,244	587,222
Other current liabilities (Notes 4 and 10)	109,508	102,722	1,031,149
Total current liabilities	676,526	669,976	6,370,301
Long-term debt (Notes 4, 5 and 7)	567,657	450,757	5,345,169
Deferred tax liabilities (Note 10)	48,361	43,320	455,377
Net defined benefit liability (Note 8)	101,786	103,459	958,437
Customers' guarantee deposits and other liabilities (Note 4)	29,396	29,097	276,798
Total liabilities	1,423,726	1,296,609	13,406,083
Commitments and contingent liabilities (Note 12) Net assets (Note 11):			
Stockholders' equity:			
Common stock: Authorized—4,000,000,000 shares Issued—1,631,481,403 shares	147,873	147,873	1,392,401
Capital surplus	117,572	121,091	1,107,081
Retained earnings	763,504	691,290	7,189,303
Treasury stock, at cost	(20,631)	(20,822)	(194,266)
Total stockholders' equity	1,008,318	939,432	9,494,520
Accumulated other comprehensive income:	.,	500, 102	0,104,020
Net unrealized gains (losses) on securities	74,290	66,513	699,529
Net deferred gains (losses) on hedges	(901)	21	(8,484)
Foreign currency translation adjustments	4,830	13,764	45,480
Remeasurements of defined benefit plans	4,158	1,542	39,153
Total accumulated other comprehensive income	82,377	81,840	775,678
Stock acquisition rights (Note 9)	1,334	1,205	12,561
Non-controlling interests	77,159	77,699	726,544
Total net assets	1,169,188	1,100,176	11,009,303
Total liabilities and net assets	¥ 2,592,914	¥ 2,396,785	\$ 24,415,386

Consolidated Statements of Income

Toray Industries, Inc. and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

	Million	Millions of yen		
	2018	2017		2018
Net sales	¥ 2,204,858	¥ 2,026,470	\$	20,761,375
Costs and expenses:				
Cost of sales (Notes 3, 8, 13 and 14)	1,748,017	1,596,472		16,459,670
Selling, general and administrative expenses (Notes 8, 9, 13 and 14)	300,377	283,105		2,828,409
	2,048,394	1,879,577		19,288,079
Operating income	156,464	146,893		1,473,296
Other income (expenses):				
Interest expense	(5,091)	(4,654)		(47,938)
Interest and dividend income	5,222	5,010		49,171
Equity in earnings of unconsolidated subsidiaries and affiliated companies	9,221	7,506		86,827
Loss on sales and disposal of property, plant and equipment, net	(7,084)	(4,971)		(66,704)
Loss on impairment of fixed assets (Note 15)	(3,944)	(2,925)		(37,137)
Gain on sales and loss on write-down of investment securities, net	3,445	2,951		32,439
Loss on liquidation and devaluation of subsidiaries and affiliated companies	(3,591)	_		(33,814)
Environmental expenses	(2,597)	_		(24,454)
Other, net	(15,433)	(10,798)		(145,320)
	(19,852)	(7,881)		(186,930)
Income before income taxes	136,612	139,012		1,286,365
Income taxes (Note 10):				
Current	34,851	31,361		328,164
Deferred	(1,419)	1,708		(13,362)
	33,432	33,069		314,802
Net income	103,180	105,943		971,563
Net income attributable to non-controlling interests	(7,265)	(6,525)		(68,409)
Net income attributable to owners of parent	¥ 95,915	¥ 99,418	\$	903,154

See accompanying notes to consolidated financial statements.

Consolidated Statements of Comprehensive Income

Toray Industries, Inc. and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

	Million	s of yen	nousands of dollars (Note 2)
	2018	2017	2018
Net income	¥ 103,180	¥ 105,943	\$ 971,563
Other comprehensive income (Note 16)			
Net unrealized gains (losses) on securities	8,100	5,131	76,271
Net deferred gains (losses) on hedges	(997)	643	(9,388)
Foreign currency translation adjustments	(5,820)	(14,114)	(54,802)
Remeasurements of defined benefit plans	2,635	6,305	24,812
Share of other comprehensive income of unconsolidated subsidiaries and affiliated companies accounted for by the equity method	(1,770)	(1,950)	(16,667)
Total other comprehensive income	2,148	(3,985)	20,226
Comprehensive income	¥ 105,328	¥ 101,958	\$ 991,789
Total comprehensive income attributable to: Owners of parent	¥ 96,452	¥ 95,914	\$ 908,211
Non-controlling interests	8,876	6,044	83,578

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Net Assets

Toray Industries, Inc. and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

							Millions of yer	ı					
		Sto	ockholders' ec	luity			Accumulated (other compre	hensive incor	ne			
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total stockholders' equity	Net unrealized gains (losses) on securities	Net deferred gains (losses) on hedges			Total accumulated other compre- hensive income	Stock acquisition rights	Non- controlling interests	Total net assets
Balance as of April 1, 2016	¥ 147,873	¥ 119,180	¥ 614,334	¥ (21,163)	¥ 860,224	¥ 61,272	¥ (490)	¥ 29,270	¥ (4,708)	¥ 85,344	¥ 1,181	¥ 78,160	¥ 1,024,909
Changes in:													
Dividends			(22,396)		(22,396)								(22,396)
Net income attributable to owners of parent			99,418		99,418								99,418
Purchase of treasury stock				(25)	(25)								(25)
Disposition of treasury stock		(43)		366	323								323
Change in equity attributable to parent arising from transaction with non-controlling shareholders		1,911			1,911								1,911
Other		43	(66)		(23)								(23)
ltems other than stockholders' equity, net						5,241	511	(15,506)	6,250	(3,504)	24	(461)	(3,941)
Total changes	_	1,911	76,956	341	79,208	5,241	511	(15,506)	6,250	(3,504)	24	(461)	75,267
Balance as of March 31, 2017	¥ 147,873	¥ 121,091	¥ 691,290	¥ (20,822)	¥ 939,432	¥ 66,513	¥ 21	¥ 13,764	¥ 1,542	¥ 81,840	¥ 1,205	¥ 77,699	¥ 1,100,176
Balance as of April 1, 2017	¥ 147,873	¥ 121,091	¥ 691,290	¥ (20,822)	¥ 939,432	¥ 66,513	¥ 21	¥ 13,764	¥ 1,542	¥ 81,840	¥ 1,205	¥ 77,699	¥ 1,100,176
Changes in:													
Dividends			(22,402)		(22,402)								(22,402)
Net income attributable to owners of parent			95,915		95,915								95,915
Purchase of treasury stock				(3)	(3)								(3)
Disposition of treasury stock		2		194	196								196
Change in equity attributable to parent arising from transaction with non-controlling shareholders		(3,521)			(3,521)								(3,521)
Other			(1,299)		(1,299)								(1,299)
Items other than stockholders' equity, net						7,777	(922)	(8,934)	2,616	537	129	(540)	126
Total changes	_	(3,519)	72,214	191	68,886	7,777	(922)	(8,934)	2,616	537	129	(540)	69,012
Balance as of March 31, 2018	¥ 147,873	¥ 117,572	¥ 763,504	¥ (20,631)	¥ 1,008,318	¥ 74,290	¥ (901)	¥ 4,830	¥ 4,158	¥ 82,377	¥ 1,334	¥ 77,159	¥ 1,169,188

						Thousand	s of U.S. dolla	ars (Note 2)					
	Stockholders' equity Accumulated other comprehensive income												
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total stockholders' equity	Net unrealized gains (losses) on securities	Net deferred gains (losses) on hedges			Total accumulated other compre- hensive income	- Stock acquisition rights	Non- controlling interests	Total net assets
Balance as of April 1, 2017	\$ 1,392,401	\$ 1,140,217	\$ 6,509,322	\$ (196,064)	\$ 8,845,876	\$ 626,299	\$ 198	\$ 129,605	\$ 14,520	\$ 770,621	\$ 11,347	\$ 731,629	\$ 10,359,473
Changes in:													
Dividends			(210,942)		(210,942)								(210,942)
Net income attributable to owners of parent			903,154		903,154								903,154
Purchase of treasury stock				(28)	(28)								(28)
Disposition of treasury stock		19		1,827	1,846								1,846
Change in equity attributable to parent arising from transaction with non-controlling shareholders		(33,154))		(33,154)								(33,154)
Other			(12,232)		(12,232)								(12,232)
Items other than stockholders' equity, net						73,230	(8,682)	(84,124)	24,633	5,056	1,215	(5,085)	1,186
Total changes		(33,136)) 679,981	1,798	648,644	73,230	(8,682)	(84,124)	24,633	5,056	1,215	(5,085)	649,831
Balance as of March 31, 2018	\$ 1,392,401	\$ 1,107,081	\$ 7,189,303	\$ (194,266)	\$ 9,494,520	\$ 699,529	\$ (8,484)	\$ 45,480	\$ 39,153	\$ 775,678	\$ 12,561	\$ 726,544	\$ 11,009,303

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows

Toray Industries, Inc. and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

	Million	s of yen	Thousands of U.S. dollars (Note
	2018	2017	2018
Cash flows from operating activities:			
Income before income taxes	¥ 136,612	¥ 139,012	\$ 1,286,365
Adjustments to reconcile income before income taxes to net cash provided by operating activities:			
Depreciation and amortization	95,815	89,073	902,213
Loss on impairment of fixed assets	3,944	2,925	37,137
Interest and dividend income	(5,222)	(5,010)	(49,171)
Equity in earnings of unconsolidated subsidiaries and affiliated companies	(9,221)	(7,506)	(86,827)
Interest expense	5,091	4,654	47,938
Loss (gain) on sales and disposal of property, plant and equipment, net	7,084	4,971	66,704
Loss (gain) on sales and write-down of investment securities, net	(3,239)	(3,010)	(30,499
Increase (decrease) in net defined benefit liability	193	(234)	1,817
Decrease (increase) in trade receivables	(61,969)	(24,993)	(583,512
Decrease (increase) in inventories	(31,492)	(16,483)	(296,535
Increase (decrease) in trade payables	11,594	17,982	109,171
Other, net	3,271	(3,714)	30,800
Subtotal	152,461	197,667	1,435,603
Interest and dividends received	16,111	9,175	151,704
Interest paid	(5,052)	(4,572)	(47,571)
Income taxes paid	(34,340)	(4,372)	(323,352)
Net cash provided by operating activities	129,180		
Net cash provided by operating activities	123,100	173,958	1,216,384
and flaure from investing activities.			
Cash flows from investing activities:	(147.025)	(1.4.2.00.4)	(1 202 001)
Capital expenditures	(147,925)	(143,894)	(1,392,891)
Purchases of investment securities	(67,274)	(4,616)	(633,465)
Proceeds from sales of property, plant and equipment	2,996	2,114	28,211
Proceeds from sales of investment securities	13,421	7,009	126,375
Other, net	12,097	4,145	113,908
Net cash used in investing activities	(186,685)	(135,242)	(1,757,863)
ash flows from financing activities:			
Net increase (decrease) in short-term debt	30,520	8,621	287,382
Proceeds from long-term debt	178,912	50,929	1,684,670
Repayment of long-term debt	(111,446)	(49,323)	(1,049,397)
Cash dividends paid	(24,439)	(24,316)	(230,122)
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(10,480)	(3,064)	(98,682)
Other, net	(1,294)	(865)	(12,185)
Net cash provided by (used in) financing activities	61,773	(18,018)	581,667
ffect of exchange rate changes on cash and cash equivalents	(1,924)	(847)	(18,117)
let increase (decrease) in cash and cash equivalents	2,344	19,851	22,072
	_,	,	,
ash and cash equivalents at beginning of year	131,405	109,778	1,237,335
eginning balance of cash and cash equivalents at subsidiaries not previously included in consolidation	566	1,712	5,330
ncrease in cash and cash equivalents resulting from nerger with unconsolidated subsidiaries	-	64	-
	¥ 134,315	¥ 131,405	\$ 1,264,736

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Toray Industries, Inc. and Consolidated Subsidiaries Years ended March 31, 2018 and 2017

1. SIGNIFICANT ACCOUNTING POLICIES

a) Basis of Presenting Consolidated Financial Statements

The accompanying consolidated financial statements of Toray Industries, Inc. (the Company) and its consolidated subsidiaries have been prepared in accordance with the provisions set forth in the Financial Instruments and Exchange Act of Japan and its related accounting regulations, and in conformity with accounting principles and practices generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards.

For the preparation of consolidated financial statements, the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should be unified, in principle. However, financial statements prepared by overseas subsidiaries in accordance with International Financial Reporting Standards or the generally accepted accounting principles in the United States tentatively may be used for the consolidation process. In addition, some items should be adjusted in the consolidation process so that net income is accurately accounted for, unless they are not material.

Certain items presented in the original consolidated financial statements in Japanese have been reclassified for the convenience of readers outside Japan.

b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and substantially all of its subsidiaries.

Assets and liabilities of the consolidated subsidiaries are revalued to fair market value when the Company acquires control over the subsidiaries.

Investments in unconsolidated subsidiaries and affiliated companies are accounted for by the equity method.

All intercompany accounts and transactions have been eliminated in consolidation. The difference between the acquisition cost and the underlying net assets of the subsidiaries is recognized as goodwill and amortized principally over its estimated useful life not exceeding twenty years on a straight-line method.

c) Cash and Cash Equivalents

Cash and cash equivalents at March 31, 2018 and 2017 include cash, short-term time deposits which may be withdrawn on demand without diminution of principal and highly liquid investments with original maturities of three months or less. Cash and cash equivalents consisted of:

. .

Millions	s of yen	U.S. dollars
2018	2017	2018
¥108,379	¥ 97,920	\$1,020,518
32,722	45,191	308,117
(6,786)	(11,746)	(63,898)
_	40	_
¥134,315	¥131,405	\$1,264,736
	2018 ∉108,379 32,722 (6,786) —	#108,379 ¥ 97,920 32,722 45,191 (6,786) (11,746) — 40

d) Financial Instruments Derivatives:

All derivatives are stated at fair value, with changes in fair value included in net income or loss for the period in which they arise, except for derivatives that are designated as "hedging instruments" (see Hedge Accounting below).

Securities:

Held-to-maturity debt securities that the Company and its consolidated subsidiaries have the intent to hold to maturity, are stated at cost after accounting for premium or discount on acquisition, which are amortized over the period to maturity.

Other securities for which market quotations are available are stated at fair value. Net unrealized gains or losses on these securities are reported as a separate item in net assets at a net-of-tax amount.

Other securities for which market quotations are unavailable are stated at cost, except as stated in the paragraph below.

In cases where the fair value of held-to-maturity debt securities or other securities has declined significantly and such impairment of the value is not deemed temporary, those securities are written down to fair value and the resulting losses are included in net income or loss for the period.

Hedge Accounting:

Gains or losses arising from changes in fair value of derivatives designated as "hedging instruments" are deferred as a separate item of net assets at a net-of-tax amount and included in net income or loss in the same period during which the gains and losses on the hedged items or transactions are recognized.

The derivatives designated as hedging instruments by the Company and its consolidated subsidiaries are principally interest rate swaps and forward foreign exchange contracts. The related hedged items are trade accounts receivable and payable, long-term bank loans and debt securities issued by the Company and its consolidated subsidiaries.

The Company and its consolidated subsidiaries have a policy to utilize the above hedging instruments in order to reduce their exposure to the risk of interest rate and foreign currency fluctuations. Thus, their purchases of the hedging instruments are limited to, at maximum, the amounts of the hedged items.

The Company and its consolidated subsidiaries evaluate the effectiveness of hedging activities by reference to the accumulated gains or losses on the hedging instruments and the related hedged items from the commencement of the hedges.

e) Allowance for Doubtful Accounts

In the Company and its domestic consolidated subsidiaries, an allowance for doubtful accounts, including receivables and loans, is determined from the amounts considered unlikely to be recovered, estimated from past actual bad debt ratio records for general receivables and from studying the probability of recovery in individual cases where there is concern over claims.

f) Inventories

Inventories are stated at the lower of acquisition cost, principally determined by the moving average method, or net selling value to reflect any decreased profitability of inventories.

g) Property, Plant and Equipment

Property, plant and equipment are stated at cost.

Depreciation for property, plant and equipment (except leased assets) is principally computed by the straight-line method at rates based on estimated useful lives that are as follows:

Buildings	3–60 years
Machinery and equipment	3–15 years

Principally, a depreciation method of leased assets is identical to the method applicable to its own fixed assets.

h) Income Taxes

Income taxes of the Company and its domestic consolidated subsidiaries consist of corporate income taxes, local inhabitants taxes and enterprise taxes. Deferred income taxes are determined using the asset and liability approach, where deferred tax assets and liabilities are recognized for temporary differences between the tax basis of assets and liabilities and their reported amount in the financial statements. The Company also provides for the anticipated tax effect of future remittances of retained earnings from subsidiaries and affiliated companies.

The Company and some of its consolidated subsidiaries adopt the consolidated taxation system.

i) Consumption Taxes

Transactions subject to consumption taxes are recorded at amounts exclusive of consumption taxes.

j) Retirement Benefits

The Company and its domestic consolidated subsidiaries have an unfunded lump-sum benefit plan, a funded contributory pension plan and a defined contribution pension plan covering all eligible employees.

Under the terms of the unfunded lump-sum benefit plan, eligible employees are entitled under most circumstances, upon mandatory retirement or earlier voluntary severance, to indemnities based on compensation at the time of severance and years of service.

The funded contributory pension plan and the defined contribution pension plan provide, in general, pension payments for life commencing from age 60.

To provide for the payment of retirement benefits to employees, net defined benefit liability is recognized at an amount equal to the expected retirement benefit obligations net of the fair value of pension assets at the end of the period.

Past service cost is amortized as incurred using the straightline method over a certain period within the employees' average remaining years of service (primarily 12 years).

Actuarial gains and losses are amortized from the following fiscal year after recognition using the straight-line method over a certain period within the employees' average remaining years of service (primarily 12 years).

Unrecognized actuarial gains and losses and unrecognized

past service cost are recognized in remeasurements of defined benefit plans in accumulated other comprehensive income under the net assets section, net of deferred taxes.

Allowance for retirement benefits for members of the Board and corporate auditors of the Company and certain of its domestic consolidated subsidiaries is provided based on the companies' pertinent rules and is calculated as the estimated amount which would be payable if all the executives were to retire at the balance sheet date. Any amounts payable to the executives upon retirement are subject to approval at the annual stockholders' meeting. The amount is included in "customers' guarantee deposits and other liabilities" on the consolidated balance sheets.

k) Appropriation of Retained Earnings

Cash dividends are recorded in the fiscal year when the proposed appropriation of retained earnings is approved by the Board of Directors and/or stockholders.

I) Foreign Currency Transactions

All monetary assets and liabilities denominated in foreign currencies, whether long-term or short-term, are translated into Japanese yen at the exchange rates prevailing at the balance sheet date. Resulting gains and losses are included in net income or loss for the period.

m) Translation of Foreign Currency Financial Statements

Translation of foreign currency financial statements of overseas subsidiaries into Japanese yen for consolidation purposes is made by using the current exchange rates prevailing at their balance sheet dates, with the exception that the translation of stockholders' equity is made by using historical rates. Revenue and expense accounts are principally translated at the average exchange rates during the year. Differences in yen amounts arising from the use of different rates are presented as "foreign currency translation adjustments" in net assets except for the portion belonging to non-controlling shareholders, which is included in "non-controlling interests" in net assets.

n) Standards Issued but Not Yet Adopted Accounting Standard and Implementation Guidance on Revenue Recognition

On March 30, 2018, the Accounting Standards Board of Japan (ASBJ) issued "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29) and "Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No. 30).

(1) Overview

This is a comprehensive accounting standard for revenue recognition. The standard establishes the following five-step model that an entity applies when recognizing revenue from customers:

- Step 1: Identify the contract(s) with a customer.
- Step 2: Identify the performance obligations in the contract.
- Step 3: Determine the transaction price.
- Step 4: Allocate the transaction price to the performance obligations in the contract.
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

(2) Scheduled Date of Adoption

The Company is currently deciding the date of adopting this accounting standard and implementation guidance.

(3) Impact of Adoption

The Company is currently evaluating the effect of adopting this accounting standard and implementation guidance on its consolidated financial statements.

o) Changes in Accounting Estimates

In accounting for retirement benefits, the actuarial gains and

2. U.S. DOLLAR AMOUNTS

The Company and its domestic consolidated subsidiaries maintain their accounting records in yen. The U.S. dollar amounts included in the accompanying consolidated financial statements and notes thereto represent the arithmetic results of translating yen into U.S. dollars at the rate of ¥106.2 to \$1.00, the approximate exchange losses and past service costs, which were previously amortized primarily over 13 years, are now amortized primarily over 12 years effective from the year ended March 31, 2018 because of a decrease in the employees' average remaining years of service.

This change resulted in increases of ¥2,540 million (\$23,917 thousand) and ¥2,573 million (\$24,228 thousand) in operating income and income before income taxes, respectively, for the year ended March 31, 2018.

The impact of this change on each reportable segment is explained in Note 17. SEGMENT INFORMATION in the Notes to the Consolidated Financial Statements.

rate prevailing on March 31, 2018. The inclusion of such U.S. dollar amounts is solely for the convenience of readers outside Japan and is not intended to imply that the assets and liabilities that originated in yen have been or could be readily converted, realized or settled in U.S. dollars at this or at any other rate.

3. INVENTORIES

At March 31, 2018 and 2017, inventories consisted of the following:	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Merchandise and finished goods	¥ 248,513	¥ 235,127	\$ 2,340,047
Work in process	92,501	78,646	871,008
Raw materials and supplies	98,659	95,559	928,992
	¥ 439,673	¥ 409,332	\$ 4,140,047

Losses recognized and charged to cost of sales as a result of valuation at March 31, 2018 and 2017 were ¥2,578 million (\$24,275 thousand) and ¥6,246 million, respectively.

4. SHORT-TERM BANK LOANS, LONG-TERM DEBT AND LEASE OBLIGATIONS

Short-term bank loans at March 31, 2018 and 2017 represented bank overdrafts and short-term notes. The Company is not required to pay commitment fees on unused balances of the bank overdraft agreements.

Long-term debt and lease obligations at March 31, 2018 and 2017 were as follows:

	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Loans principally from banks and insurance companies with interest rates primarily from 0.01% to 11.50%, maturing serially through 2026:			
Unsecured	¥ 388,821	¥ 420,399	\$ 3,661,215
Secured	546	592	5,141
Lease obligations maturing serially through 2036:			
Unsecured	3,529	4,384	33,230
Yen notes with an interest rate of 0.42% due 2018	—	10	-
Yen notes with an interest rate of 0.96% due 2018	4	—	38
Yen notes with an interest rate of 0.93% due 2022	20,000	20,000	188,324
Yen notes with an interest rate of 1.01% due 2023	20,000	20,000	188,324
Yen notes with an interest rate of 0.25% due 2024	40,000		376,648
Yen notes with an interest rate of 0.38% due 2027	60,000	_	564,972
Zero coupon convertible bonds due 2019	50,000	50,000	470,810
Zero coupon convertible bonds due 2021	50,000	50,000	470,810
Yen notes with a floating interest rate of 6 month Japanese yen TIBOR + 0% due 2024	1,488	_	14,011
	634,389	565,385	5,973,531
Less amounts due within one year	63,646	111,376	599,303
	¥ 570,743	¥ 454,009	\$ 5,374,228

At March 31, 2018, assets pledged as collateral were as follows:

	Millions of yen	U.S. dollars
Time deposits	¥ 922	\$ 8,682
Property, plant and equipment, net	1,312	12,354
Investment securities	1,279	12,043
Others	568	5,348
	¥ 4,081	\$ 38,427

The annual maturities of long-term debt and lease obligations subsequent to March 31, 2018 were as follows:

	Millions of yen	Thousands of U.S. dollars	
Years ending March 31:			
2019	¥ 63,646	\$ 599,303	
2020	93,260	878,154	
2021	90,674	853,804	
2022	78,091	735,320	
2023	71,746	675,574	
2024 and thereafter	236,972	2,231,375	
	¥ 634,389	\$ 5,973,531	

5. FINANCIAL INSTRUMENTS

Conditions of Financial Instruments

a) Policy in Relation to Financial Instruments

The policy of the Company and its consolidated subsidiaries is to manage funds only by short-term deposits, etc. and to raise funds by borrowing from banks and issuing corporate bonds. The Company and its consolidated subsidiaries use derivatives to hedge risks associated with foreign currency exchange rates and fluctuations of borrowing interest rates and do not enter into derivative transactions for speculative or trading purposes.

b) Contents and Risk of Financial Instruments and Risk Management System

Trade receivables are operating receivables and therefore are exposed to customer credit risk. Under its internal regulations, the Company carefully manages the payment periods for receivables and outstanding balances of all customers and regularly monitors the credit standing of major clients. Consolidated subsidiaries also monitor and manage the credit standings of their clients. Operating receivables and payables denominated in foreign currencies that arise from the global business operations are also exposed to foreign currency exchange risk. The Company and its consolidated subsidiaries hedge this risk mainly through the use of forward exchange contracts against positions after netting receivables and payables denominated in the same foreign currencies. Likewise, the Company and its consolidated subsidiaries mainly use currency swaps to hedge the foreign currency exchange risk of bank loans denominated in foreign currencies.

Investment securities are mostly the shares of corporations with which the Group has business relationships and are exposed to the risk of market price fluctuations. The fair value of the investment securities and financial positions of the issuing entities (clients) are regularly monitored.

Trade payables are operating payables, most of which are due and payable within one year.

Short-term bank loans and commercial paper are financing instruments mainly for operating transactions, while long-term bank loans and bonds (due within ten years, in principle) are primarily for capital expenditures. Bank loans and bonds are exposed to the risk of interest rate fluctuation. Those with floating rates bear the risk of higher nominal interest expenses when interest rates rise, whereas those with fixed rates bear the risk of higher real interest expenses when interest rates fall. The Company and its consolidated subsidiaries use derivative transactions (interest rate swap transactions) to minimize the risk of interest rate fluctuation, taking into consideration the balance between fixed interest rates and floating interest rates.

Hedging instruments, hedged items, the policy for utilizing such hedging instruments and the method for evaluating the effectiveness of hedging activities are described in Note 1. SIGNIFICANT ACCOUNTING POLICIES d) Financial Instruments, Hedge Accounting in the Notes to the Consolidated Financial Statements.

Derivative transactions are executed and managed in accordance with the internal regulations prescribing the authorization for transactions. To mitigate the credit risk, the Company and its consolidated subsidiaries carry out derivative transactions only with highly rated financial institutions.

c) Supplemental Explanation on Fair Value of Financial Instruments

The fair value of financial instruments is based on market prices, or reasonable estimate of fair value for instruments for which market prices are not available. Estimates of fair value are subject to fluctuation because they employ various factors and assumptions. In addition, the contract amount of derivatives in Note 7. DERIVATIVES in the Notes to the Consolidated Financial Statements is not an indicator of market risk associated with derivative transactions.

Fair Value of Financial Instruments

Carrying value, fair value and unrealized gain (loss) as of March 31, 2018 and 2017 were as follows.

In addition, financial instruments, for which it is extremely difficult to measure the fair value, are not included. (Please refer to Note 2 below).

		Millions of yen				
		2018				
	Carrying value	Fair value	Unrealized gain (loss			
Cash and time deposits	¥ 141,101	¥ 141,101	¥ —			
Trade receivables	489,549	489,549	—			
Investment securities						
Held-to-maturity debt securities	100	101	1			
Investment securities in subsidiaries and affiliated companies	75,608	62,736	(12,872)			
Other securities	191,975	191,975	_			
Assets	¥ 898,333	¥ 885,462	¥(12,871)			
Trade payables	¥ 245,550	¥ 245,550	¥ —			
Short-term bank loans	135,936	135,936	_			
Commercial paper	46,000	46,000	_			
Bonds *1	241,493	263,419	21,926			
Long-term bank loans *2	389,367	386,972	(2,395)			
Liabilities	¥1,058,346	¥1,077,877	¥ 19,531			
Derivative transactions *3						
Hedge accounting is not applied	¥ (614)	¥ (614)	¥ —			
Hedge accounting is applied	(1,479)	(1,479)	_			
Derivative transactions	¥ (2,093)	¥ (2,093)	¥ —			

		Millions of yen	
		2017	
	Carrying value	Fair value	Unrealized gain (loss)
Cash and time deposits	¥ 143,111	¥ 143,111	¥ —
Trade receivables	426,122	426,122	—
Investment securities			
Held-to-maturity debt securities	100	103	3
Investment securities in subsidiaries and affiliated companies	22,001	20,788	(1,213)
Other securities	177,825	177,825	_
Assets	¥ 769,159	¥ 767,949	¥ (1,210)
Trade payables	¥ 229,192	¥ 229,192	¥ —
Short-term bank loans	132,014	132,014	—
Commercial paper	19,000	19,000	—
Bonds *1	140,010	162,942	22,932
Long-term bank loans *2	420,991	420,261	(730)
Liabilities	¥ 941,207	¥ 963,409	¥ 22,202
Derivative transactions *3			
Hedge accounting is not applied	¥ (135)	¥ (135)	¥ —
Hedge accounting is applied	101	101	
Derivative transactions	¥ (34)	¥ (34)	¥ —

	Th	Thousands of U.S. dollars				
		2018				
	Carrying value	Fair value	Unrealized gain (loss)			
Cash and time deposits	\$1,328,635	\$1,328,635	\$ —			
Trade receivables	4,609,689	4,609,689	—			
Investment securities						
Held-to-maturity debt securities	942	951	9			
Investment securities in subsidiaries and affiliated companies	711,940	590,734	(121,205)			
Other securities	1,807,674	1,807,674	_			
Assets	\$8,458,879	\$8,337,684	\$(121,196)			
Trade payables	\$2,312,147	\$2,312,147	\$ —			
Short-term bank loans	1,280,000	1,280,000	_			
Commercial paper	433,145	433,145	_			
Bonds *1	2,273,945	2,480,405	206,460			
Long-term bank loans *2	3,666,356	3,643,804	(22,552)			
Liabilities	\$9,965,593	\$10,149,501	\$ 183,908			
Derivative transactions *3						
Hedge accounting is not applied	\$ (5,782)	\$ (5,782)	\$			
Hedge accounting is applied	(13,927)	(13,927)	_			
Derivative transactions	\$ (19,708)	\$ (19,708)	\$ —			

*1 Bonds include bonds due within one year.

*2 Long-term bank loans include long-term bank loans due within one year.

*3 Receivables and payables arising from derivative transactions are indicated in net amounts. Total net payables, if any, are shown in parentheses.

Notes:

1. Estimation method for fair value of financial instruments and items related to securities and derivative transactions Assets

Cash and time deposits and Trade receivables

Carrying value is used for fair value since the items will be settled within the short term and the fair value is approximately equal to the carrying value.

Investment securities

Securities are valued at quoted market price. Debt securities, etc. are valued at quoted market price or at the price provided by correspondent financial institutions. For information on securities classified by holding purpose, please refer to Note 6. SECURITIES of the Notes to the Consolidated Financial Statements.

Liabilities

Trade payables, Short-term bank loans and Commercial paper

Carrying value is used for fair value since the items will be settled within the short term and the fair value is approximately equal to the carrying value.

Bonds

The fair value of bonds with market price is based on market price. The fair value of bonds without market price is estimated by discounting the principal amounts and interest based on interest rates adjusted for the remaining periods and credit risk of the bonds. However, for floating-rate bonds and fixed-rate bonds converted to floating using interest rate swaps accounted for under the special accounting method for interest rate swaps, the fair value is approximately equal to the carrying value because the interest rates are adjusted periodically. Therefore, the fair value is based on the carrying value.

Long-term bank loans

The fair value of long-term bank loans is estimated by discounting the principal amounts and interest based on estimated interest rates if similar new loans were entered into in the current period. The fair value of long-term bank loans for which the special accounting method for interest rate swaps is applied is estimated by discounting the total principal amount and interest (accounted for together with the interest rate swaps) based on estimated interest rates if similar new loans were entered into in the current period. For long-term bank loans at floating interest rates, however, the fair value is approximately equal to the carrying value because the interest rates are adjusted periodically. Therefore, the fair value is based on the carrying value.

Derivative transactions

Please refer to Note 7. DERIVATIVES in the Notes to the Consolidated Financial Statements.

2. Financial instruments for which it is extremely difficult to determine the fair value

	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Unlisted equity securities	¥ 83,414	¥ 78,266	\$ 785,443
Unlisted debt securities	2,000	2,000	18,832

These securities have no quoted market price and the fair value is extremely difficult to determine. Therefore, they are not included in the preceding table.

3. Redemption schedule for receivables and investment securities with maturities at March 31, 2018 and 2017

		Millions of yen				
		20	018			
	Due within one year					
Cash and time deposits	¥ 141,101	¥ —	¥ —	¥ —		
Trade receivables	489,401	148	—	_		
Investment securities						
Held-to-maturity debt securities	7	81	12	_		
Other securities		12	53	_		
	¥ 630.509	¥241	¥ 65	¥ —		

		Millions of yen				
		4	2017			
	Due within one year					
Cash and time deposits	¥ 143,111	¥ —	¥ —	¥ —		
Trade receivables	426,112	10	_	_		
Investment securities						
Held-to-maturity debt securities	9	79	12	_		
Other securities	40	1	60	—		
	¥ 569,272	¥ 90	¥ 72	¥ —		

		Thousands of U.S. dollars				
		20	18			
	Due within one year					
Cash and time deposits	\$ 1,328,635	\$ —	\$ —	\$ —		
Trade receivables	4,608,296	1,394	—	_		
Investment securities						
Held-to-maturity debt securities	66	763	113	_		
Other securities	—	113	499	—		
	\$ 5,936,996	\$2,269	\$ 612	\$ —		

4. The redemption schedule for long-term debt is disclosed in Note 4. SHORT-TERM BANK LOANS, LONG-TERM DEBT AND LEASE OBLIGATIONS of the Notes to the Consolidated Financial Statements.

6. SECURITIES

At March 31, 2018 and 2017, information on securities classified as held-to-maturity debt securities was as follows:

		Millions of yen				Thousands	of U.S. dollars	
		2	018			2	018	
	Carrying value	Fair value	Unrealized gains	Unrealized losses	Carrying value	Fair value	Unrealized gains	Unrealized losses
Held-to-maturity debt securities	¥ 100	¥ 101	¥ 2	¥ 1	\$ 942	\$ 951	\$ 19	\$ 9
		Millior	ns of yen					
		2	.017					
	Carrying value	Fair value	Unrealized gains	Unrealized losses				
Held-to-maturity debt securities	¥ 100	¥ 103	¥З	¥ 0				

At March 31, 2018 and 2017, information on securities classified as other securities was as follows:

		Million	s of yen			Thousands o	of U.S. dollars	
		2018			2018			
	Carrying value	Acquisition cost	Unrealized gains	Unrealized losses	Carrying value	Acquisition cost	Unrealized gains	Unrealized losses
Other securities	¥ 191,975	¥ 87,263	¥ 104,906	¥ 194	\$ 1,807,674	\$ 821,685	\$ 987,815	\$ 1,827

	Millions of yen					
	2017					
	Carrying value	Acquisition cost	Unrealized gains	Unrealized losses		
Other securities	¥ 177,825	¥ 84,862	¥ 95,378	¥ 2,415		

7. DERIVATIVES

The Company and its consolidated subsidiaries had the following derivative contracts outstanding at March 31, 2018 and 2017:

Hedge accounting is not applied		Millions of yen		Thousands of U.S. dollars			
		2018			2018		
	Contract amount	Fair value	Unrealized gain (loss)	Contract amount	Fair value	Unrealized gain (loss)	
orward foreign exchange contracts:							
Buying U.S. dollar	¥ 10,350	¥ (252)	¥ (252)	\$ 97,458	\$ (2,373)	\$ (2,373)	
Buying euro	1,865	(32)	(32)	17,561	(301)	(301)	
Buying Thai baht	370	3	3	3,484	28	28	
Buying Malaysian ringgit	212	(2)	(2)	1,996	(19)	(19)	
Buying Japanese yen	1,077	2	2	10,141	19	19	
Selling U.S. dollar	14,057	117	117	132,363	1,102	1,102	
Selling euro	1,532	32	32	14,426	301	301	
Selling British pound	10	0	0	94	0	0	
Selling Chinese yuan	402	(9)	(9)	3,785	(85)	(85)	
Selling Thai baht	179	(1)	(1)	1,685	(9)	(9)	
Selling Indonesian rupiah	87	(0)	(0)	819	(0)	(0)	
Selling Japanese yen	5,806	(60)	(60)	54,670	(565)	(565)	
oreign currency swaps:							
Receiving U.S. dollar, paying Thai baht	3,592	(412)	(412)	33,823	(3,879)	(3,879)	
	¥ —	¥ (614)	¥ (614)	\$ —	\$ (5,782)	\$ (5,782)	

	Millions of yen				
		2017			
	Contract amount	Fair value	Unrealized gain (loss)		
Forward foreign exchange contracts:					
Buying U.S. dollar	¥ 9,964	¥ 36	¥ 36		
Buying euro	1,141	(10)	(10)		
Buying Thai baht	319	37	37		
Buying Japanese yen	4,397	(211)	(211)		
Selling U.S. dollar	9,098	(9)	(9)		
Selling euro	446	(5)	(5)		
Selling British pound	67	(0)	(0)		
Selling Chinese yuan	107	1	1		
Selling Japanese yen	2,053	(27)	(27)		
Foreign currency swaps:					
Receiving U.S. dollar, paying Thai baht	5,075	53	53		
	¥ —	¥ (135)	¥ (135)		

	s applied			Millions of yen
				2018
Hedge accounting method	Type of derivative and principal hedged items	Contract amo	ount Fairvalu	Le *1, 2 Estimation method for fair value
Deferral hedge	Forward foreign exchange contracts:			
method	For trade receivables and trade payables			
	Buying U.S. dollar	¥ 42	6 ¥	2 Forward foreign exchange quote
	Buying Japanese yen	2,51	2 2	29
	Selling U.S. dollar	85	4	(1)
	Selling euro	1,20	2	1
	Selling Chinese yuan	83	9	4
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Korean won	5,99	4 (24	40) The price provided by correspon-
	Receiving Japanese yen, paying Korean won	10,19	6 (32	21) dent financial institutions
	Interest rate swaps:			
	For long-term bank loans			The price provided by correspon-
	Floating-rate receipt, fixed-rate payment	54,98	5 15	53 dent financial institutions
Special accounting	Interest rate swaps:			
method for interest	For bonds and long-term bank loans			
ate swaps	Floating-rate receipt, fixed-rate payment	36	4	
	Floating-rate receipt, floating-rate payment	26,90	0	_
	Fixed-rate receipt, floating rate payment	40,00	0	
Allocation method	Forward foreign exchange contracts:			
or forward foreign	For forecast transactions denominated			
exchange contracts	in foreign currencies			
	Buying U.S. dollar	21,99	6 (18	83) Forward foreign exchange quote
	Buying euro	123,15	3 (1,34	43)
	Buying Chinese yuan	36	7	(1)
	Buying Thai baht	48	3 10	05
	Buying Korean won	17	7	(2)
	Selling U.S. dollar	9,58	3 28	80
	Selling euro	1,42	2 3	38
	Selling British pound	1	0	0
	Selling Thai baht	:	3	0
	Selling Japanese yen	3	0	0
	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying U.S. dollar	12,56	8	
	Buying euro	9	1	
	Buying Chinese yuan		8	
	Buying Korean won	3	1	
	Buying Japanese yen		7	_
	Selling U.S. dollar	25,30		
	Selling euro	3,85		
	Selling British pound	2		
	Selling Chinese yuan	7		
	Foreign currency swaps:	1.		
	For long-term bank loans			
	Receiving U.S. dollar, paying Japanese yen	131,04	6	—
	necerving 0.5. donal, paying Japanese yen	¥ –	- ¥ (1,47	

				Millions of yen
				2017
Hedge accounting method	Type of derivative and principal hedged items	Contract amount	Fair value *1,	² Estimation method for fair value
Deferral hedge	Forward foreign exchange contracts:			
nethod	For trade receivables and trade payables			
	Buying Japanese yen	¥ 1,397	¥ 15	Forward foreign exchange quotes
	Selling euro	2,074	(25)	
	Selling Chinese yuan	652	2	
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Korean won	7,028	0	The price provided by correspon-
	Receiving Japanese yen, paying Korean won	16,000	(667)	dent financial institutions
	Interest rate swaps:			
	For long-term bank loans			The price provided by correspon-
	Floating-rate receipt, fixed-rate payment	86,468	221	dent financial institutions
Special accounting	Interest rate swaps:			
method for interest	For bonds and long-term bank loans			
rate swaps	Floating-rate receipt, fixed-rate payment	2,000		
	Floating-rate receipt, floating-rate payment	26,900		_
	Fixed-rate receipt, floating rate payment	40,000		
Allocation method	Forward foreign exchange contracts:	· · · · · · · · · · · · · · · · · · ·		
for forward foreign	For trade receivables and trade payables			
exchange contracts	(forecast transactions)			
	Buying U.S. dollar	16,655	302	Forward foreign exchange quotes
	Buying euro	655	5	
	Buying Chinese yuan	377	(2)	
	Buying Thai baht	900	118	
	Buying Korean won	333	5	
	Buying Indian rupee	259	1	
	Selling U.S. dollar	18,140	119	
	Selling euro	1,176	8	
	Selling British pound	17	0	
	Selling Chinese yuan	79	(1)	
	Selling Thai baht	61	0	
	Selling Japanese yen	12	0	
	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying U.S. dollar	13.044		
	Buying euro	232		
	Buying Chinese yuan	1,518		
	Buying Japanese yen	4		
	Selling U.S. dollar	25,972		
	Selling euro	3,310		_
	Selling British pound Selling Chinese yuan	24 502		
		502		
	Selling Thai baht	3		
	Foreign currency swaps:			
	For long-term bank loans	100.001		
	Receiving U.S. dollar, paying Japanese yen	160,981		—
	Receiving Australian dollar, paying Japanese yen			
		¥ —	¥ 101	

				Thousar	nds of U.S. dollars
					2018
Hedge accounting method	Type of derivative and principal hedged items	Сс	ontract amount	Fair value *1, 2	Estimation method for fair value
Deferral hedge	Forward foreign exchange contracts:				
method	For trade receivables and trade payables				
	Buying U.S. dollar	\$	4,011	\$ 19	Forward foreign exchange quotes
	Buying Japanese yen		23,653	273	
	Selling U.S. dollar		8,041	(9)	
	Selling euro		11,318	9	
	Selling Chinese yuan		7,900	38	
	Foreign currency swaps:				
	For long-term bank loans				
	Receiving U.S. dollar, paying Korean won		56,441	(2,260)	The price provided by correspon-
	Receiving Japanese yen, paying Korean won		96,008	(3,023)	
	Interest rate swaps:				
	For long-term bank loans				The price provided by correspon-
	Floating-rate receipt, fixed-rate payment		517,750	1,441	dent financial institutions
Special accounting	Interest rate swaps:				
method for interest	For bonds and long-term bank loans				
rate swaps	Floating-rate receipt, fixed-rate payment		3,427		
	Floating-rate receipt, floating-rate payment		253,296		_
	Fixed-rate receipt, floating rate payment		376,648		
Allocation method	Forward foreign exchange contracts:				
for forward foreign exchange contracts	For forecast transactions denominated in foreign currencies				
	Buying U.S. dollar		207,119	(1,723)	Forward foreign exchange quotes
	Buying euro	1	,159,633	(12,646)	
	Buying Chinese yuan		3,456	(9)	
	Buying Thai baht		4,548	989	
	Buying Korean won		1,667	(19)	
	Selling U.S. dollar		90,235	2,637	
	Selling euro		13,390	358	
	Selling British pound		94	0	
	Selling Thai baht		28	0	
	Selling Japanese yen		282	0	
	Forward foreign exchange contracts:				
	For trade receivables and trade payables				
	Buying U.S. dollar		118,343		
	Buying euro		857		
	Buying Chinese yuan		75		
	Buying Korean won		292		
	Buying Japanese yen		66		_
	Selling U.S. dollar		238,258		
	Selling euro		36,290		
	Selling British pound		264		
	Selling Chinese yuan		687		
	Foreign currency swaps:				
	For long-term bank loans				_
	Receiving U.S. dollar, paying Japanese yen	1	,233,955		
		\$	_	\$ (13,927)	

*1 The fair value of interest rate swaps to which a special accounting method is applied is included in the fair value of bonds and long-term bank loans in Note 5. FINANCIAL INSTRUMENTS of the Notes to the Consolidated Financial Statements because such interest rate swaps are accounted for together with the corresponding bonds and long-term bank loans.
*2 The fair value of forward foreign exchange contracts to which the allocation method is applied, except for forecast transactions, is included in the fair value of trade

*2 The fair value of forward foreign exchange contracts to which the allocation method is applied, except for forecast transactions, is included in the fair value of trade receivables, trade payables and long-term bank loans in Note 5. FINANCIAL INSTRUMENTS of the Notes to the Consolidated Financial Statements since such forward foreign exchange contracts are accounted for together with the corresponding trade receivables, trade payables and long-term bank loans.

8. RETIREMENT BENEFIT PLAN

The changes in the retirement benefit obligation during the years ended March 31, 2018 and 2017 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Retirement benefit obligation at beginning of the year	¥ 196,911	¥ 203,426	\$ 1,854,153
Service cost	7,552	7,281	71,111
Interest cost	1,596	1,500	15,028
Actuarial gains and losses	(1,573)	(682)	(14,812)
Retirement benefit paid	(14,178)	(14,856)	(133,503)
Other	(46)	242	(433)
Retirement benefit obligation at end of the year	¥ 190,262	¥ 196,911	\$ 1,791,544

The changes in the plan assets at fair value during the years ended March 31, 2018 and 2017 were as follows:

	Millions	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Plan assets at beginning of the year	¥ 121,774	¥ 131,360	\$ 1,146,648
Expected return on plan assets	2,560	2,490	24,105
Actuarial gains and losses	5,738	12,871	54,030
Contributions	6,602	6,552	62,166
Retirement benefit paid	(9,258)	(10,077)	(87,175)
Return of assets from retirement benefits trust	(9,931)	(21,632)	(93,512)
Other	(197)	210	(1,855)
Plan assets at end of the year	¥ 117,288	¥ 121,774	\$ 1,104,407

The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheets as of March 31, 2018 and 2017 for the Company's and its consolidated subsidiaries' defined benefit plans:

	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Funded retirement benefit obligation	¥ 96,258	¥ 102,223	\$ 906,384
Plan assets at fair value	(117,288)	(121,774)	(1,104,407)
	(21,030)	(19,551)	(198,023)
Unfunded retirement benefit obligation	94,004	94,688	885,160
Net liability for retirement benefits in the balance sheets	72,974	75,137	687,137
Net defined benefit liability	101,786	103,459	958,437
Net defined benefit asset (included in other non-current assets)	(28,812)	(28,322)	(271,299)
Net liability for retirement benefits in the balance sheets	¥ 72,974	¥ 75,137	\$ 687,137

The components of retirement benefit expense for the years ended March 31, 2018 and 2017 were as follows:

	Million	s of yen	l housands of U.S. dollars
	2018	2017	2018
Service cost	¥ 7,552	¥ 7,281	\$ 71,111
Interest cost	1,596	1,500	15,028
Expected return on plan assets	(2,560)	(2,490)	(24,105)
Amortization of actuarial gains and losses	622	648	5,857
Amortization of past service cost	(4,248)	(4,221)	(40,000)
Gain on return of assets from retirement benefits trust	_	(810)	
Retirement benefit expense	¥ 2,962	¥ 1,908	\$ 27,891

In addition to the above, special severance payments of ¥1,442 million (\$13,578 thousand) and ¥967 million were recognized for the years ended March 31, 2018 and 2017, respectively. Contributions to the defined contribution pension plan of ¥6,996 million (\$65,876 thousand) and ¥6,297 million were recognized for the years ended March 31, 2018 and 2017, respectively.

The components of remeasurements of defined benefit plans included in other comprehensive income (before tax effect) for the years ended March 31, 2018 and 2017 were as follows:

	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Past service cost	¥ (4,248)	¥ (4,221)	\$ (40,000)
Actuarial gains and losses	7,960	13,320	74,953
Total	¥ 3,712	¥ 9,099	\$ 34,953

The components of remeasurements of defined benefit plans included in accumulated other comprehensive income (before tax effect) as of March 31, 2018 and 2017 were as follows:

	Million	s of yen	Thousands of U.S. dollars
	2018	2017	2018
Unrecognized past service cost	¥ 46	¥ (4,202)	\$ 433
Unrecognized actuarial gains and losses	(6,010)	1,950	(56,591)
Total	¥ (5,964)	¥ (2,252)	\$ (56,158)

The fair value of plan assets, by major category, as a percentage of total plan assets as of March 31, 2018 and 2017 was as follows:

	2018	2017
Bonds	11%	12%
Stocks	50%	52%
Life insurance	26%	26%
Cash and time deposits	10%	8%
Other	3%	2%
Total	100%	100%

The expected return on plan assets has been estimated based on the anticipated allocation to each asset class and the expected long-term returns on assets held in each category.

The assumptions used in accounting for the above plans were as follows:

	2018	2017
Discount rate	primarily 0.6%	primarily 0.6%
Expected rate of return on plan assets	primarily 2.0%	primarily 2.0%
Expected rate of salary increase	primarily 7.5%	primarily 7.5%

9. STOCK OPTION PLANS

1. Stock option expense included in selling, general and administrative expenses amounted to ¥338 million (\$3,183 thousand) and ¥346 million for the years ended March 31, 2018 and 2017, respectively.

2. Information on stock options issued

The following table summarizes the stock options outstanding as of March 31, 2018.

Toray Industries, Inc.No.1 Stock Option PlanNo.2 Stock Option PlanNo.3 Stock Option PlanPosition and number of granteesMembers of the Board of the Company282626Type and number of shares to be issued upon exerciseCommon stock747,000 shares844,000 shares583,000 staGrant dateAugust 20, 2011August 4, 2012August 10Vesting conditionsBased on the number of months that have elapsed during the vesting periodJune 22, 2011June 22, 2012June 26, June 22, 2013June 25, June 25, 2013June 25, August 11Company nameCompany nameToray Industries, Inc.No.4 Stock Option PlanNo.6 Stock Option PlanNo.6 Stock Option PlanPosition and number of granteesMembers of the Board of the CompanyJune 25, 213233233Type and number of shares to periodMembers of the Board of the CompanyStock Option PlanNo.6 Stock Option PlanNo.6 Stock Option PlanNo.4 Stock Option PlanNo.5 Stock Option PlanNo.6 Stock Option PlanNo.6 Stock Option PlanNo.6 Stock Option PlanPosition and number of granteesMembers of the Board of the Company25233233233Type and number of shares of granteesMembers of the Company273130Type and number of sharesMembers of the Company273130Option and number of sharesMembers of the Company273130Option and number of sharesMembers of t	shares 0, 2013 number of ave elapsed sting period 2013- , 2014 1, 2013- 0, 2043 Dption Plan
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Directors of the Company 27 31 30	
Type and number of shares	
to be issued upon exercise Common stock 569,000 shares 358,000 shares 381,000 s	shares
Grant date August 9, 2014 August 22, 2015 August 24	
Based on the number of Vesting conditions Based on the number of months that have elapsed during the vesting period Based on the number of months that have elapsed during the vesting period Based on the number of months that have elapsed during the vesting period	ave elapsed
June 25, 2014- June 24, 2015 June 24, 2015- June 28, 2016 June 28, June 27,	
August 10, 2014- Exercise period August 10, 2014- August 9, 2044 August 23, 2015- August 22, 2045 August 21 August 20	
Company name Toray Industries, Inc.	
No.7 Stock Option Plan	
Resition and numbers of the Board 23	
of grantees of the Company 23 Directors of the Company 31	
Type and number of shares	
to be issued upon exercise	
Grant date August 19, 2017 Based on the number of	
Vesting conditions months that have elapsed during the vesting period	
Vesting period June 27, 2017- June 26, 2018	
Exercise period August 20, 2017- August 19, 2047	
Company name Toray Chemical Korea Inc.	
No.2 Stock Option Plan	
Position and number of grantees Executives of the Company 1	
Type and number of shares to be issued upon exercise Common stock 18,815 shares	
Grant date July 22, 2008	
Holders must be in continuous employment from the grant date to the vesting date of July 21, 2011	
Vesting period July 22, 2008-July 21, 2011	
Exercise period July 22, 2011-July 21, 2018	

The following table summarizes movements of stock options during the year and price information on stock options as of March 31, 2018. The number of stock options are translated into the number of shares. (1) Number of stock options

Company name		Toray Industries, Inc.	
	No.1 Stock Option Plan	No.2 Stock Option Plan	No.3 Stock Option Plan
Stock acquisition rights not yet vested			
As of March 31, 2017	-	—	—
Granted	-	—	—
Forfeited	-	_	—
Vested	—	—	—
As of March 31, 2018	—	—	—
Stock acquisition rights already vested			
As of March 31, 2017	242,000	355,000	306,000
Vested	-	-	—
Exercised	24,000	65,000	54,000
Forfeited	—	—	_
As of March 31, 2018	218,000	290,000	252,000

Company name		Toray Industries, Inc.	
	No.4 Stock Option Plan	No.5 Stock Option Plan	No.6 Stock Option Plan
Stock acquisition rights not yet vested			
As of March 31, 2017	-	—	110,000
Granted	-	—	—
Forfeited	-	—	
Vested	—	—	110,000
As of March 31, 2018	—	—	—
Stock acquisition rights already vested			
As of March 31, 2017	365,000	286,000	271,000
Vested	-	—	110,000
Exercised	63,000	45,000	51,000
Forfeited	—	_	_
As of March 31, 2018	302,000	241,000	330,000

Company name	Toray Industries, Inc. No.7 Stock Option Plan	Toray Chemical Korea Inc. No.2 Stock Option Plan
Stock acquisition rights not yet vested		
As of March 31, 2017	_	_
Granted	374,000	_
Forfeited	_	_
Vested	265,000	_
As of March 31, 2018	109,000	_
Stock acquisition rights already vested		
As of March 31, 2017		18,815
Vested	265,000	_
Exercised	-	18,815
Forfeited	_	_
As of March 31, 2018	265,000	_

(2) Price information

		Yen			
Company name		Toray Industries, Inc.			
	No.1 Stock Option Plan	No.2 Stock Option Plan	No.3 Stock Option Plan		
Exercise price	¥ 1	¥ 1	¥ 1		
Weighted average price at exercise	948.8	948.8	948.8		
Fair value per share at the grant date	513	394	546		

	fen			
Company name	Toray Industries, Inc.			
	No.4 Stock Option Plan	No.5 Stock Option Plan	No.6 Stock Option Plan	
Exercise price	¥ 1	¥ 1	¥ 1	
Weighted average price at exercise	948.8	948.8	948.8	
Fair value per share at the grant date	605	987	902	

	Yen	Won
Company name	Toray Industries, Inc. Toray Chemical Korea	
	No.7 Stock	No.2 Stock
	Option Plan	Option Plan
Exercise price	¥ 1	₩ 8,480
Weighted average price at exercise	—	19,000
Fair value per share at the grant date	899	7,067

		U.S. dollars			
Company name		Toray Industries, Inc.			
	No.1 Stock Option Plan	No.2 Stock Option Plan	No.3 Stock Option Plan		
Exercise price	\$ 0.01	\$ 0.01	\$ 0.01		
Weighted average price at exercise	8.93	8.93	8.93		
Fair value per share at the grant date	4.83	3.71	5.14		

		U.S. dollars		
Company name	Toray Industries, Inc.			
	No.4 Stock Option Plan	No.5 Stock Option Plan	No.6 Stock Option Plan	
Exercise price	\$ 0.01	\$ 0.01	\$ 0.01	
Weighted average price at exercise	8.93	8.93	8.93	
Fair value per share at the grant date	5.70	9.29	8.49	

	U.S. dollars		
Company name	Toray Industries, Inc. Toray Chemical Korea I		
	No.7 Stock	No.2 Stock	
	Option Plan	Option Plan	
Exercise price	\$ 0.01	\$ 7.97	
Weighted average price at exercise		17.87	
Fair value per share at the grant date	8.47	6.65	

3. Estimation method and assumptions used for the per share fair value of stock options

- (1) Estimation method
- Black-Scholes model
- (2) Assumptions used for the per share fair value of stock options

Company name	Toray Industries, Inc.
	No.7 Stock Option Plan
Expected volatility*1	26.630%
Expected holding period ^{*2}	7 years
Expected dividend ^{*3}	¥14 per share (\$0.13)
Risk-free rate ^{*4}	(0.056)%

*1 The expected volatility is based on actual share prices during 7 years from August 20, 2010 to August 18, 2017.
*2 The expected holding period is calculated based on the service period of past members of the Board.
*3 This is based on the dividend for the year ended March 31, 2017.
*4 The risk-free interest rate is the yield on Japanese government bonds for the period that corresponds to the remaining life of the option.

Because it is difficult to reasonably estimate the number of options that will expire in the future, only the number of options that have actually forfeited is applied.

10. INCOME TAXES

The statutory tax rate in Japan for the years ended March 31, 2018 and 2017 was 30.9%.

At March 31, 2018 and 2017, significant components of deferred tax assets and liabilities were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Deferred tax assets:			
Accrued bonuses	¥ 6,134	¥ 5,978	\$ 57,759
Depreciation and impairment loss	10,876	10,680	102,411
Net defined benefit liability	32,101	33,396	302,269
Tax loss carryforwards	13,473	17,136	126,864
Unrealized intercompany profits	15,401	16,512	145,019
Investments in subsidiaries and affiliated companies	21,764	19,593	204,934
Other	33,481	33,005	315,264
	133,230	136,300	1,254,520
Valuation allowance	(44,992)	(41,168)	(423,653)
Total deferred tax assets	88,238	95,132	830,866
Deferred tax liabilities:			
Reserve for advanced depreciation	4,571	4,854	43,041
Depreciation	18,419	22,070	173,437
Undistributed earnings of subsidiaries and affiliated companies	19,870	17,749	187,100
Unrealized gains on securities	31,776	28,768	299,209
Other	23,450	25,064	220,810
Total deferred tax liabilities	98,086	98,505	923,597
Net deferred tax assets (liabilities)	¥ (9,848)	¥ (3,373)	\$ (92,731)

At March 31, 2018 and 2017, deferred tax assets and liabilities were classified as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Deferred tax assets - current	¥ 25,641	¥ 26,438	\$241,441
Deferred tax assets - non-current	12,902	13,513	121,488
Deferred tax liabilities - current (included in other current liabilities)	30	4	282
Deferred tax liabilities - non-current	48,361	43,320	455,377

The reconciliation of the statutory tax rate and the effective income tax rate for the years ended March 31, 2018 and 2017 was as follows:

	2018	2017
Statutory tax rate	30.9%	30.9%
Increase (decrease) in taxes resulting from:		
Permanent differences	0.7	0.4
Recognition of certain deferred tax assets by reversal of valuation allowance	(0.2)	(2.4)
Equity in earnings of unconsolidated subsidiaries and affiliated companies	(2.1)	(1.7)
Income taxes for prior periods	(0.2)	(1.7)
Differences of tax rates for overseas consolidated subsidiaries	(3.9)	(2.9)
Undistributed earnings of subsidiaries and affiliated companies	1.6	1.4
Impact of the Tax Cuts and Jobs Act in the United States	(3.2)	_
Amortization of goodwill	2.0	1.9
Other	(1.1)	(2.1)
Effective income tax rate	24.5%	23.8%

On December 22, 2017, the Tax Cuts and Jobs Act was enacted in the United States, effectively lowering the federal corporate income tax rate effective for the periods beginning on or after January 1, 2018. Consequently, the federal corporate income tax rate applicable to the Company's consolidated subsidiaries in the U.S. was reduced from 35% to 21%. As a result, as of and for the year ended March 31, 2018, net deferred tax liabilities have decreased by ¥4,822 million (\$45,405 thousand), deferred income taxes have decreased by ¥4,838 million (\$45,556 thousand) and remeasurements of defined benefit plans have decreased by ¥16 million (\$151 thousand).

11. NET ASSETS

The Corporation Law of Japan provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the earned reserve) be transferred to the capital reserve and the earned reserve, respectively, until the sum of the capital reserve and the earned reserve equals 25% of the capital stock account. Such distributions can be made at any time by resolution of the stockholders, or by the Board of Directors if certain conditions are met.

At the June 2018 annual stockholders' meeting, stockholders approved the payment of cash dividends of ¥8.00 per share, aggregating to ¥12,802 million (\$120,546 thousand) which has not been reflected in the accompanying consolidated financial statements for the year ended March 31, 2018.

12. COMMITMENTS AND CONTINGENT LIABILITIES

At March 31, 2018, commitment line of credit to unconsolidated subsidiaries and affiliated companies was as follows:

	Millions of yen	Thousands of U.S. dollars
Total commitment line of credit	¥ 380	\$ 3,578
Loans receivable outstanding	212	1,996
Balance	¥ 168	\$ 1,582

This commitment does not necessarily imply that the unused amount may be fully utilized.

At March 31, 2018 and 2017, contingent liabilities were as follows:

	Millions of yen		U.S. dollars
	2018	2017	2018
As guarantors of loans to:			
Unconsolidated subsidiaries and affiliated companies	¥ 5,959	¥ 5,774	\$ 56,111
Other	3,494	2,849	32,900
	¥ 9,453	¥ 8,623	\$ 89,011
Notes discounted	¥ 1,922	¥ 307	\$ 18,098
Export bills discounted	2,820	785	26,554
Notes endorsed	1,538	1,162	14,482
Contingent liabilities associated with securitization of receivables	¥ 1,216	¥ 3,255	\$ 11,450

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13. LEASES

Finance leases

The Group holds certain buildings, machinery and equipment and intangible assets by leases.

Operating leases

Future minimum lease payments under noncancellable operating leases subsequent to March 31, 2018 and 2017 were as follows:

	Million	Thousands of U.S. dollars	
	2018	2017	2018
Due within one year	¥ 358	¥ 343	\$ 3,371
Due after one year	952	1,193	8,964
Total	¥ 1,310	¥ 1,536	\$ 12,335

14. RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses included in cost of sales and selling, general and administrative expenses for the years ended March 31, 2018 and 2017 were ¥66,229 million (\$623,625 thousand) and ¥59,230 million, respectively.

15. LOSS ON IMPAIRMENT OF FIXED ASSETS

The Company and its consolidated subsidiaries grouped assets used for business based on the classification under the management accounting. For assets to be disposed and idle assets, each asset is considered to constitute a group.

For the year ended March 31, 2018, the carrying value of certain business-use assets for which profitability declined were written down to the recoverable amount.

As a result, the Company and its consolidated subsidiaries recognized loss on impairment of fixed assets in the amount of ¥3,944 million (\$37,137 thousand).

The major assets for which a loss on impairment was recognized were as follows:

			Millions of yen	Thousands of U.S. dollars
Location	Use	Classification	Loss on ir	npairment
Esslingen, Germany, etc.	Manufacturing facilities for carbon fiber composites	Buildings	¥ 156	\$ 1,469
		Machinery and equipment	893	8,409
		Construction in progress	1,781	16,770
		Other	94	885

The recoverable amount of the above assets was measured at the net selling value. The net selling value was calculated based on the appraisal value.

For the year ended March 31, 2017, the carrying value of certain business-use assets for which profitability declined were written down to the recoverable amount.

As a result, the Company and its consolidated subsidiaries recognized loss on impairment of fixed assets in the amount of ¥2,925 million.

16. OTHER COMPREHENSIVE INCOME

The following table presents reclassification adjustments and tax effects allocated to each component of other comprehensive income for the years ended March 31, 2018 and 2017.

	Millions of yen					
	2018	2017	2018			
Net unrealized gains (losses) on securities:						
Amount arising during the year	¥ 15,089	¥ 11,004	\$ 142,081			
Reclassification adjustments for gains and losses included in net income	(3,400)	(3,454)	(32,015)			
Before tax effect	11,689	7,550	110,066			
Tax effect	(3,589)	(2,419)	(33,795)			
Net unrealized gains (losses) on securities	8,100	5,131	76,271			
Net deferred gains (losses) on hedges:						
Amount arising during the year	(1,302)	918	(12,260)			
Reclassification adjustments for gains and losses included in net income	(104)	15	(979)			
Before tax effect	(1,406)	933	(13,239)			
Tax effect	409	(290)	3,851			
Net deferred gains (losses) on hedges	(997)	643	(9,388)			
Foreign currency translation adjustments:						
Amount arising during the year	(4,471)	(14,953)	(42,100)			
Reclassification adjustments for gains and losses included in net income	(1,375)	838	(12,947)			
Before tax effect	(5,846)	(14,115)	(55,047)			
Tax effect	26	1	245			
Foreign currency translation adjustments	(5,820)	(14,114)	(54,802)			
Remeasurements of defined benefit plans:						
Amount arising during the year	7,338	13,482	69,096			
Reclassification adjustments for gains and losses included in net income	(3,626)	(4,383)	(34,143)			
Before tax effect	3,712	9,099	34,953			
Tax effect	(1,077)	(2,794)	(10,141)			
Remeasurements of defined benefit plans	2,635	6,305	24,812			
Share of other comprehensive income of unconsolidated subsidiaries and affiliated companies accounted for by the equity method:						
Amount arising during the year	(1,697)	(1,938)	(15,979)			
Reclassification adjustments for gains and losses included in net income	(73)	(12)	(687)			
Share of other comprehensive income of unconsolidated subsidiaries and affiliated companies accounted for by the equity method	(1,770)	(1,950)	(16,667)			
Total other comprehensive income	¥ 2,148	¥ (3,985)	\$ 20,226			

17. SEGMENT INFORMATION

(Segment information)

1. Outline of reportable segments

The reportable segments of the Group are components for which discrete financial information is available and whose operating results are regularly reviewed by the Board of Directors to make decisions about resource allocation to the segments and assess performance.

The Company identifies the following five segments according to the nature of the products and market for their products.

Reportable segment	Main products
Fibers & Textiles	Filament yarns, staple fibers, spun yarns, woven and knitted fabrics of nylon, polyester, acrylic, etc.; non-woven fabrics; ultra-microfiber non-woven fabric with suede texture; apparel products
Performance Chemicals	Nylon, ABS, PBT, PPS and other resins and molded products; polyolefin foam; polyester, polyethyl- ene, polypropylene and other films and processed film products; raw materials for synthetic fibers and other plastics; fine chemicals; electronic and information materials and graphic materials
Carbon Fiber Composite Materials	Carbon fibers, carbon fiber composite materials and their molded products
Environment & Engineering	Comprehensive engineering; condominiums; industrial equipment and machinery; IT-related equipment; water treatment membranes and related equipment; materials for housing, building and civil engineering applications
Life Science	Pharmaceuticals and medical devices

Changes in Reportable Segments

The Company changed the reportable segments from six reportable segments of Fibers & Textiles, Plastics & Chemicals, IT-related Products, Carbon Fiber Composite Materials, Environment & Engineering and Life Science to five reportable segments by integrating the Plastics & Chemicals and IT-related Products segments into the Performance Chemicals segment, effective from the year ended March 31, 2018. IT-related equipment business and service-related business such as information processing, previously classified in IT-related Products, were reclassified to Environment & Engineering and Others, respectively.

Accordingly, the actual figures for the year ended March 31, 2017 are restated to reflect the changes in reportable segments.

2. Measurement of sales, income, assets and other material items of reportable segments

The accounting policies for the reportable segments are the same as those described in Note 1. SIGNIFICANT ACCOUNTING POLICIES. The figures of segment income are based on operating income. Intersegment sales are determined based on consideration of the market price and related information.

Changes in Accounting Estimates

As noted in Note 1. SIGNIFICANT ACCOUNTING POLICIES, in accounting for retirement benefits, the actuarial gains and losses and past service costs, which were previously amortized primarily over 13 years, are now amortized primarily over 12 years effective from the year ended March 31, 2018 because of a decrease in the employees' average remaining years of service.

This change increased segment income in the year ended March 31, 2018 by ¥679 million (\$6,394 thousand) in Fibers & Textiles, ¥1,022 million (\$9,623 thousand) in Performance Chemicals, ¥349 million (\$3,286 thousand) in Carbon Fiber Composite Materials, ¥274 million (\$2,580 thousand) in Environment & Engineering and ¥216 million (\$2,034 thousand) in Life Science segments.

3. Information on sales, income, assets and other material items of reportable segments

					Millions of yen				
Year ended March 31, 2018:	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Total	Adjustments	Consolidated Total
Sales to outside customers	¥ 913,610	¥ 803,310	¥ 177,949	¥ 238,256	¥53,803	¥ 17,930	¥2,204,858	¥ —	¥2,204,858
Intersegment sales	1,248	17,902	591	69,453	_	24,456	113,650	(113,650)	_
Total sales	¥ 914,858	¥ 821,212	¥ 178,540	¥ 307,709	¥53,803	¥ 42,386	¥2,318,508	¥ (113,650)	¥2,204,858
Segment income	¥ 72,418	¥ 71,363	¥ 20,764	¥ 13,287	¥ 1,942	¥ 2,897	¥ 182,671	¥ (26,207)	¥ 156,464
Segment assets	¥ 783,869	¥ 981,288	¥ 466,119	¥ 274,219	¥ 79,015	¥65,044	¥2,649,554	¥ (56,640)	¥2,592,914
Depreciation and amortization	28,186	37,451	21,575	4,719	2,572	1,418	95,921	(106)	95,815
Investment in unconsolidated subsidiaries and affiliated companies accounted for by the equity method	84,079	48,318	8,073	10,930	2,780	7,867	162,047	(240)	161,807
Capital expenditures	48,761	61,362	32,604	5,978	2,768	1,564	153,037	287	153,324

					Millions of yen				
Year ended March 31, 2017:	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Total	Adjustments	Consolidated Total
Sales to outside customers	¥856,124	¥724,648	¥161,608	¥212,548	¥54,150	¥17,392	¥2,026,470	¥ —	¥2,026,470
Intersegment sales	1,001	16,684	519	68,588	2	23,666	110,460	(110,460)	_
Total sales	¥857,125	¥741,332	¥162,127	¥281,136	¥54,152	¥41,058	¥2,136,930	¥ (110,460)	¥2,026,470
Segment income	¥ 66,768	¥ 61,807	¥ 23,963	¥ 11,710	¥ 2,148	¥ 2,625	¥ 169,021	¥ (22,128)	¥ 146,893
Segment assets	¥722,078	¥890,870	¥460,968	¥ 233,890	¥79,732	¥63,650	¥2,451,188	¥ (54,403)	¥2,396,785
Depreciation and amortization	27,460	33,077	19,967	4,737	2,581	1,365	89,187	(114)	89,073
Investment in unconsolidated subsidiaries and affiliated companies accounted for by the equity method	26,827	44,398	8,563	10,058	2,763	7,727	100,336	(414)	99,922
Capital expenditures	41,143	56,824	46,459	5,053	3,445	1,394	154,318	(2,279)	152,039

	Thousands of U.S. dollars								
Year ended March 31, 2018:	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Total	Adjustments	Consolidated Total
Sales to outside customers	\$ 8,602,731	\$ 7,564,124	\$ 1,675,603	\$ 2,243,465	\$ 506,620	\$ 168,832	\$ 20,761,375	s —	\$ 20,761,375
Intersegment sales	11,751	168,569	5,565	653,983	_	230,282	1,070,151	(1,070,151)	-
Total sales	\$ 8,614,482	\$ 7,732,693	\$ 1,681,168	\$ 2,897,448	\$ 506,620	\$ 399,115	\$ 21,831,525	\$ (1,070,151)	\$ 20,761,375
Segment income	\$ 681,902	\$ 671,968	\$ 195,518	\$ 125,113	\$ 18,286	\$ 27,279	\$ 1,720,066	\$ (246,770)	\$ 1,473,296
Segment assets	\$ 7,381,064	\$ 9,240,000	\$ 4,389,068	\$ 2,582,100	\$ 744,021	\$ 612,467	\$ 24,948,719	\$ (533,333)	\$ 24,415,386
Depreciation and amortization	265,405	352,646	203,154	44,435	24,218	13,352	903,211	(998)	902,213
Investment in unconsolidated subsidiaries and affiliated companies accounted for by the equity method	791,704	454,972	76,017	102,919	26,177	74,077	1,525,866	(2,260)	1,523,606
Capital expenditures	459,143	577,797	307,006	56,290	26,064	14,727	1,441,026	2,702	1,443,729

Notes:

1) "Others" represents service-related businesses such as analysis, physical evaluation and research.

2) a) "Adjustments" of segment income for the year ended March 31, 2018 of ¥(26,207) million (\$(246,770) thousand) includes intersegment eliminations of ¥(1,600) million (\$(15,066) thousand) and corporate expenses of ¥(24,607) million (\$(231,704) thousand). "Adjustments" of segment income for the year ended March 31, 2017 of ¥(22,128) million includes intersegment eliminations of ¥(630) million and corporate expenses of ¥(21,498) million. The corporate expenses consist of the headquarters' research expenses, etc. that are not allocated to each reportable segment.

b) "Adjustments" of segment assets for the year ended March 31, 2018 of ¥(56,640) million (\$(533,333) thousand) includes intersegment eliminations of ¥(77,624) million (\$(730,923) thousand) and corporate assets of ¥20,984 million (\$197,589 thousand). "Adjustments" of segment assets for the year ended March 31, 2017 of ¥(54,403) million includes intersegment eliminations of ¥(71,372) million and corporate assets of ¥16,969 million. The corporate assets consist of the headquarters' research assets, etc. that are not allocated to each reportable segment.

3) "Segment income" is reconciled to operating income.

(Related information) Geographic information

Sales to outside customers		Millions of yen					
		A	sia	North America,			
Year ended March 31, 2018:	Japan	China	Others	 Europe and other areas 	Total		
Sales to outside customers	¥ 1,005,260	¥ 386,520	¥ 421,456	¥ 391,622	¥ 2,204,858		
			Millions of yen				
		A	sia	North America,			
Year ended March 31, 2017:	Japan	China	Others	 Europe and other areas 	Total		
Sales to outside customers	¥ 976,839	¥ 335,469	¥ 376,134	¥ 338,028	¥ 2,026,470		
		Th	ousands of U.S. dol	lars			
		A	sia	North America,			
Year ended March 31, 2018:	Japan	China	Others	 Europe and other areas 	Total		
Sales to outside customers	\$ 9,465,725	\$ 3,639,548	\$ 3,968,512	\$ 3,687,589	\$ 20,761,375		

Sales amounts are allocated to countries or regions according to the customers' location.

Property, plant and equipment, net	et Millions of yen							
		Asi	ia	North Ame and oth				
March 31, 2018:	Japan	Republic of Korea	Others	U.S.A.	Others	Total		
Property, plant and equipment, net	¥ 326,679	¥ 199,721	¥ 153,741	¥ 123,042	¥ 123,846	¥ 927,029		
		Millions of yen						
		Asi	ia	North Ame and oth	_			
March 31, 2017:	Japan	Republic of Korea	Others	U.S.A.	Others	Total		
Property, plant and equipment, net	¥ 316,310	¥ 186,259	¥ 155,441	¥ 122,890	¥ 100,534	¥ 881,434		
			Thousands o	of U.S. dollars				
		Asi	ia	North Ame and oth	_			
March 31, 2018:	Japan	Republic of Korea	Others	U.S.A.	Others	Total		
Property, plant and equipment, net	\$ 3,076,073	\$ 1,880,612	\$ 1,447,655	\$ 1,158,588	\$ 1,166,158	\$ 8,729,087		

(Information about loss on impairment of fixed assets by reportable segments)

				Millions	s of yen			
Year ended March 31, 2018:	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Loss on impairment	¥ 24	¥ 899	¥ 2,924	¥ 36	¥ 61	¥ —	¥ —	¥ 3,944
				Millions	s of yen			
Year ended March 31, 2017:	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Loss on impairment	¥ 1,095	¥ 877	¥ —	¥ 15	¥ 938	¥ —	¥ —	¥ 2,925
				Thousands o	f U.S. dollars			
Year ended March 31, 2018:	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Loss on impairment	\$ 226	\$ 8,465	\$ 27,533	\$ 339	\$ 574	\$ —	\$ —	\$ 37,137

(Information about amortization and balance of goodwill by reportable segments)

				Millions	s of yen			
Year ended	Fibers &	Performance	Carbon Fiber Composite	Environment &			Elimination &	
March 31, 2018:	Textiles	Chemicals	Materials	Engineering	Life Science	Others	Corporate	Total
Amortization of goodwill	¥ 1,289	¥ 4,186	¥ 2,613	¥ 777	¥ —	¥ —	¥ —	¥ 8,865
Balance of goodwill	7,440	15,094	13,474	4,138		_		40,146
				Millions	s of yen			
Year ended	Fibers &	Performance	Carbon Fiber Composite	Environment &			Elimination	
March 31, 2017:	Textiles	Chemicals	Materials	Engineering	Life Science	Others	Corporate	Total
Amortization of goodwill	¥ 1,208	¥ 4,181	¥ 2,768	¥ 323	¥ —	¥ —	¥ —	¥ 8,480
Balance of goodwill	8,657	17,966	16,842	2,314			_	45,779
				Thousands o	f U.S. dollars			
Year ended	Fibers &	Performance	Carbon Fiber Composite	Environment &			Elimination &	
March 31, 2018:	Textiles	Chemicals	Materials	Engineering	Life Science	Others	Corporate	Total
Amortization of goodwill	\$12,137	\$ 39,416	\$ 24,605	\$ 7,316	\$ —	\$ —	\$ —	\$ 83,475
Balance of goodwill	70,056	142,128	126,874	38,964	_	_	_	378,023

18. AMOUNTS PER SHARE

Basic net income per share is computed based on the net income attributable to owners of parent available for distribution to stockholders of common stock and the weighted-average number of shares of common stock outstanding during the year.

Diluted net income per share is computed based on the net income attributable to owners of parent available for distribution to the stockholders and the weighted-average number of shares of common stock outstanding during the year after giving effect to the dilutive potential of shares of common stock to be issued upon the exercise of warrants and stock acquisition rights.

Amounts per share of net assets are computed based on the net assets available for distribution to the stockholders and the number of shares of common stock outstanding at year end.

Cash dividends per share represent the cash dividends proposed by the Board of Directors applicable to the respective years together with any interim cash dividends paid.

	Y	en	U.S. dollars
	2018	2017	2018
Net income attributable to owners of parent:			
Basic	¥ 59.97	¥ 62.17	\$ 0.56
Diluted	59.90	62.10	0.56
Cash dividends applicable to the year	15.00	14.00	0.14
Net assets	681.92	638.64	6.42

19. RELATED PARTY TRANSACTIONS

Corporate pension for employees Year ended March 31, 2018 No items to be reported.

 Year ended March 31, 2017

 Name
 Retirement benefit trust

 Category
 Corporate pension

 Relationship
 Plan assets under retirement benefit accounting

 Description of the transaction
 Return of part of assets

 Amount of the transaction
 ¥21,632 million

20. ADDITIONAL INFORMATION

Planned Share Purchase of TenCate Advanced Composites Holding B.V.

On March 14, 2018, the Company reached an agreement with Koninklijke Ten Cate B.V. to purchase the entire share of its subsidiary TenCate Advanced Composites Holding B.V. (TCAC).

(1) Objective of share purchase

TCAC is a prepreg manufacturer with its main manufacturing bases in Europe and the U.S. and has a track record of widely supplying thermoplastic prepreg and high heat resistance thermoset resin materials. Especially, TCAC is a global leading company of carbon fiber intermediate materials using thermoplastic resins. The acquisition is expected to generate significant synergies by combining the product lineup in which TCAC specializes with the broad range of carbon fiber as well as polymer technologies, which are the Company's strengths. Combining the two companies' distribution channels, the Company can offer a wider product lineup to the customers. The Company will respond swiftly to the expansion of the market for small-sized aircraft and expand the business further for industrial use applications including automobiles in the medium- to long-term.

(2) Name of the seller Koninklijke Ten Cate B.V.

(3) Outline of the acquired company

Name: TenCate Advanced Composites Holding B.V.

Business: Manufacture and distribution of carbon fiber composite materials

- Size of business (year ended December 31, 2017) Revenues: EUB 197 million
 - Total assets: EUR 148 million

(4) Number of shares to be purchased, purchase price and percentage ownership after purchase

Shares to be purchased: 100 shares

Aggregate purchase price: EUR 930 million

Percentage ownership after purchase: 100%

Note: The purchase price includes net debt in addition to the share purchase price. The purchase price will be adjusted in accordance with any adjustments stipulated in the share purchase agreement.

(5) Methods for fundraising

Own funds, borrowings, bonds, etc.



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Independent Auditor's Report

The Board of Directors Toray Industries, Inc.

We have audited the accompanying consolidated financial statements of Toray Industries, Inc. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2018, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Toray Industries, Inc. and its consolidated subsidiaries as at March 31, 2018, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

Convenience Translation

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 2.

Ernst & Young Shin Nikon LLC

Tokyo, Japan

A member firm of Ernst & Young Global Limited

Investor Information

(As of March 31, 2018)

Common Stock:

1,600,271,569 shares (excluding treasury stock) Number of Stockholders: 155,653

Annual General Meeting:

The annual general meeting of stockholders is normally held in June in Tokyo.

Listings:

Issued:

Common stock is listed on the Tokyo Stock Exchange.

Independent Auditors: Ernst & Young ShinNihon LLC

Transfer Agent:

Sumitomo Mitsui Trust Bank, Limited 1-4-1, Marunouchi Chiyoda-ku, Tokyo 100-0005, Japan

Cash Dividends Per Share

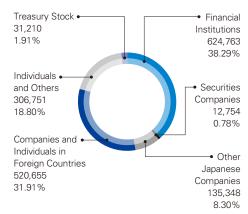
Years ended March 31	FY 2018	FY 2017
Total for the year	¥15.00	¥14.00
Interim	7.00	7.00

Principal Stockholders	Thousands of shares	Percentage of shares held
The Master Trust Bank of Japan, Ltd. (Trust Account)	117,902,200	7.37
Japan Trustee Services Bank, Ltd. (Trust Account)	91,157,200	5.70
Nippon Life Insurance Co.	71,212,250	4.45
Mitsui Life Insurance Co., Ltd.	35,961,000	2.25
State Street Bank West Client – Treaty 505234	31,680,351	1.98
Japan Trustee Services Bank, Ltd. (Trust 5 Account)	29,035,900	1.81
Sumitomo Mitsui Banking Corporation	28,522,000	1.78
Japan Trustee Services Bank, Ltd. (Trust 4 Account)	25,510,000	1.59
Japan Trustee Services Bank, Ltd. (Trust 7 Account)	21,638,700	1.35
Japan Trustee Services Bank, Ltd. (Trust 1 Account)	21,546,300	1.35

* Percentage of shares held is calculated excluding 31,209,834 shares of treasury stock.



Composition of Stockholders (Thousands of shares)



Corporate Data

(As of March 31, 2016)

Toray Industries, Inc.

Head Office

Nihonbashi Mitsui Tower, 1-1, Nihonbashi-Muromachi 2-chome, Chuo-ku, Tokyo 103-8666, Japan Telephone: 81 (3) 3245-5111 Facsimile: 81 (3) 3245-5054 URL: www.toray.com

Established: January 1926

Paid-in Capital: ¥147,873,030,771

Number of Employees: 45.762

40,702	
Parent company:	7,625
Japanese subsidiaries:	10,590
Overseas subsidiaries:	27,547



Toray Industries, Inc.

1-1, Nihonbashi-Muromachi 2-chome, Chuo-ku, Tokyo 103-8666, Japan Telephone: 81(3)3245-5111 Facsimile: 81(3)3245-5054 URL: www.toray.com For questions about this report: Contact IR Dept. Telephone: 81(3)3245-5113 Facsimile: 81(3)3245-5459 e-mail: ir@nts.toray.co.jp