



# Annual Report **2017**

Year Ended March 31, 2017

## IDEAS & CHEMISTRY

### Interview with the President

Fiscal 2017 was a year in which we continued to build the foundations for growth based on our medium-term action plan.

### Special Features

1. Toyobo's Presence in the Automotive Field
2. Toyobo's Human Resource Strategy



*Ideas & Chemistry*



## Striving to solve social challenges through our technologies

Toyobo believes in the importance of integrating corporate management and CSR activities in its business operations. For example, we are contributing to society and the environment through our business activities in such areas as technology to convert seawater into drinking water for countries suffering from water shortage, VOC gas processing equipment that aids in energy conservation in plants and environmental protection, and reducing CO<sub>2</sub> emissions by enhancing efficiency in logistics.

### Cover Story

# Providing a solution to the world's water crisis

## Desalinating seawater to drinking water, and recycling the residue

### Toyobo's Reverse Osmosis (RO) Membranes for Seawater Desalination Selected for Use in the World's Largest Seawater Desalination Plants

Toyobo's "HOLLOSEP" RO membrane elements have been selected for use at the Ras Al Khair Plant, which is located in the eastern part of Saudi Arabia on the Arabian Gulf. The Ras Al Khair Plant will be one of the largest seawater desalination plants in the world, with a capacity of 1,000,000m<sup>3</sup> of freshwater per day. Of this total daily output, 345,000m<sup>3</sup> will be produced using the RO method and the remainder using the multi-stage flush method. The hollow fiber type RO membrane module of Toyobo is used extensively in Saudi Arabia and the Middle East, where seawater desalination by RO is considered to be difficult.





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### Disclaimer

This report contains statements related to the future performance of the Toyobo Group. The reader should bear in mind that these statements are not guarantees of future performance, as they assume various risks and uncertainties. Furthermore, the purpose of this report is to provide information, and while such information could be referred to when making investment decisions, the report is not intended to encourage investment in the Company.

### Cross Reference

On our investor relations site we publish a wide range of resources, including news releases, information for shareholders, our statements of accounts, and explanations of our business results, as well as videos and other materials related to business information meetings. The site also supports interactive communication, allowing investors to ask questions and offer opinions that will help us to improve the quality of our IR activities.

#### Website

<http://www.toyobo-global.com>



#### Investor Relations

<http://www.toyobo-global.com/ir>



#### Sustainability

<http://www.toyobo-global.com/sustainability>



## Advancing Technology, Evolving Businesses — Toyobo's 130 Years of Innovation

For over 130 years since its inception, Toyobo has changed to meet the needs of the times, starting with spinning and then expanding with new technology into a variety of areas. Taking that history as a cornerstone for further growth, Toyobo is now seeing the fruition of its past endeavors in the birth of new future-oriented business. Here we offer an overview of the evolution of six highlighted areas.

When the first president of Toyobo, Takeo Yamanobe, was studying economics in London, he met the renowned businessman Eiichi Shibusawa, who encouraged him to study the spinning industry. This took place in 1879, a date that proved historic.



Eiichi Shibusawa (l) and Takeo Yamanobe (r)

### 1880 Foundation

Forerunner of Modern Spinning

In 1882 one of the cornerstones of Toyobo, Osaka Boseki, came into being. It employed a modern English production system and the first use by a private enterprise of Edison's direct current lighting. It was Japan's first large-scale spinning plant.



Spinning room, Osaka Boseki

### 1950 Leap Forward

Starting Point for Business Expansion

In 1914 Mie Boseki and Osaka Boseki merged to form Toyobo. In keeping with Eiichi Shibusawa's hope that it would be the largest such company in the East, Toyobo moved from rayon to synthetic fibers, and in the 1930s became the world's largest spinning company.



Yokkaichi main plant, Mie Boseki

### 1970 Breakthrough

Moving beyond Fibers

In the 1950s, after World War II, Toyobo began producing petroleum-based synthetic fibers like acrylics and polyester. In 1966 it merged with Kureha Boseki and commenced manufacturing nylon. Thereafter it became the largest spinning company in Japan.



Signing agreement for introduction of polyester technology

### 1980 Transformation

Centennial-Expansion of Non-fibers

From the 1970s to the 1990s, in the process of becoming a comprehensive fiber manufacturer, Toyobo accumulated research data on polymer chemistry, biochemistry, and other related areas, opening the way for new non-fiber fields of business and leading to Toyobo's era of transformation.



- 1882 • Foundation of Osaka Boseki
- 1886 • Foundation of Mie Boseki
- 1914 • **Merges of Osaka Boseki and Mie Boseki: birth of Toyobo**
- 1927 • Begins production of rayon
- 1930 • Establishes Chemical Research Center in Katata plant of Showa Rayon Inc.
- 1931 • Merges with Osaka Godobo
- 1948 • Begins research on disposal of pulp fluid waste

- 1951 • Foundation of Toyobo New York Inc. founded (overseas expansion)
- 1955 • Establishes TOYOBO DO BRASIL PARTICIPACOES LTDA.
- 1956 • Begins production of synthetic fiber
  - Two years later begins manufacture of acrylic fiber
- 1963 • Begins production of film
- 1963 • Develops "ESPA" spandex yarn
  - Develops the cast polypropylene film "Pylon"
- 1966 • **Merges with Kureha Boseki, making Toyobo the largest spinning company in Japan**

- 1970 • **Enters into plastics business**
- 1972 • Enters into biochemistry business
- 1972 • Develops "Uricolor400," a uric acid measurement reagent
- 1973 • Begins research on the activated carbon fiber "K-FILTER"
- 1976 • Develops the polyester elastomer "PELPRENE"
  - Establishes Tsuruga plant for manufacturing spunbond
  - Creates a comprehensive research center by integrating the Takatsuki and Katata centers
- 1977 • Develops the water-wash photosensitive printing plate "Printight"
- 1978 • Begins manufacturing functional membranes
- 1979 • Develops the world's first reverse osmosis membrane module for seawater desalination

- 1981 • Develops hollow fiber membranes for artificial kidneys
- 1982 • **Centennial**
  - Marks 100 years of company history
  - Establishes the Toyobo Biotechnology Foundation
- 1982 • Develops Microclimate within Clothing technology for use in clothing design
  - Develops a life science reagent (restriction enzyme)
- 1988 • Develops the ultra high-strength polyethylene fiber "Dyneema" (now "IZANAS")
- 1989 • Develops "TOM-III," a sweat-producing mannequin for use in comfort evaluation
  - World's largest seawater desalination plant starts operation in Saudi Arabia using Toyobo's "HOLLOSEP"

- Company evolution
- Product development

In the 1980s research and development in healthcare and medicine reached significant proportions with the development of hollow fiber membranes for artificial kidneys as well as enzymes for genetic engineering, and other technologies. In

the fibers field, development proceeded in new textures and high-function materials with added strength.



Toyobo Main Office

In the 1990s, responding rising to interest in environmental issues, Toyobo began developing an array of products that would contribute to betterment of the environment, including prevention of global warming and reduction of toxic

chemicals. In addition, Toyobo announced development of the "ECO-PARTNER SYSTEM."



"Honey-Rotor" absorption and concentration apparatus

Entering the 21st century, non-fiber businesses surpassed fiber in consolidated sales, and new growth areas expanded, including healthcare and the environment, focusing on high-function materials.



First plant established in Saudi Arabia for manufacture and sales of desalinated seawater using a reverse osmosis membrane module

In 2012, on the 130th anniversary of its founding, Toyobo encapsulated its central philosophy in the new corporate slogan: "Ideas and Chemistry."



It is our intention to continue to contribute to the improvement of people's lives through the Ideas that lead to the creation of high-function materials and chemistry that produces "new materials."



## 2000 Pursuit

Toward High Functionality and High Added Value

## 2010 Creation

130th Anniversary

— Entwining the Present with the Limitless Future

## To the Future

- 1990** • Completes construction of the Otsu Pharmaceuticals Plant
- 1991** • Begins production of high-performance fiber
- 1991** • Develops the polyester synthetic paper "Crisper"
  - Develops "t-PA PLASMINAR" injection, Toyobo's first pharmaceutical product
- 1993** • Develops non-coated fabric for airbags
  - Develops Toyobo Miracle Care for shape-retention shirts
- 1995** • Develops the acrylate moisture-absorbing and heat-generating fiber "[eks]"
  - Develops the high-function cushion material "BREATHAIR"
- 1998** • Commences sales of "Echorclub," recycled polyester fiber for use in textiles
- 1998** • Begins full-scale production of the PBO fiber "ZYLON"

- 2002** • **Consolidated sales of non-fiber products surpass fiber products**
- 2002** • Develops Toyobo "GS Catalyst," world's first aluminum (heavy-metal free) polyester catalyst
- 2008** • Establishes Toyobo STC Co., Ltd.
  - Formulates Toyobo Group CSR Charter
- 2008** • Develops the high-strength polyethylene fiber "Tsunoooga"
  - Develops "POCube," a compact chemiluminescent auto-analyzer, and "GENECUBE," a fully automatic gene analyzing system
- 2009** • Develops the natural cosmetic ingredients "SurfMellow" (now "CERAMELA"), "AminoPGALE," and "PHYTOPOLYAMINE"

- 2010** • Merges with Toyo Kasei Kogyo Inc.
  - Establishes a company for manufacturing and selling RO membrane elements for seawater desalination in Saudi Arabia
- 2010** • Commences sales of "VYLOAMIDE," a new polymide resin manufactured using biomass

- 2012** • 130th Anniversary
  - Introduces the new corporate slogan: Ideas & Chemistry
  - **Changes name of company to Toyobo Co., Ltd. (Toyobo Kabushiki-gaisha)**
- 2012** • Begins sales of a nerve regeneration-inducing conduit for medical use
  - Begins sales of "BREATHLEATHER," an artificial leather for automotive seats
- 2013** • Acquires Spain's Spinreact S.A., manufacturer and marketer of diagnostic reagents and instruments
  - Begins manufacture of "BREATHAIR" in Europe
  - Begins full-fledged manufacture of the copolyester resin "VYLON" in Thailand
- 2013** • Begins sales of "COSMOSHINE SRF," a polyester-based super retarder film

# Message from the President



## Reviewing Fiscal 2017, a Year When We Continued to Build the Foundations for Growth

Fiscal 2017 (ended March 31, 2017) was the third year of our four-year Medium-Term Management Plan covering the period through to the fiscal year ending March 31, 2018. Toyobo, which aims to become “the category leader, continuing to create new value that contributes to society in the environment, healthcare, and high-function product fields,” is working to expand the markets for new products, including “COSMOSHINE SRF,” a polyester-based polarizer protective film for liquid crystal displays (LCDs) and “Nerbridge,” a nerve bridging device. Overseas, we are focusing on growing those businesses with real growth potential in the international market, such as engineering plastics and airbag fabrics. We also sought to improve asset efficiency, which included terminating our textile operation in Brazil as well as structural reform of our acrylic fiber business.

Against this backdrop, fiscal 2017 was a year in which we continued to build the foundations for growth based on our medium-term action plan.

In concrete terms, we expanded sales of “COSMOSHINE SRF,” which is now being quickly adopted for application in TVs by a major polarizer manufacturer, more than doubling sales compared with last year. In addition, increased the number of cases adopting “Nerbridge” in Japan, while also achieving U.S. Food and Drug Administration (FDA) clearance in the United States as we pushed ahead with preparations for sales there.

In engineering plastics, we decided to build a new sales site in India with the aim of developing business in the high-potential Indian market. In airbag fabrics, we are establishing production sites in the United States and Thailand, and continuing to receive certifications from major airbag manufacturers overseas with the aim of achieving full-fledged application from the second half of the fiscal year ending March 31, 2018.

Regarding the results for fiscal 2017, performance in the film business was up sharply, especially with the increase in sales of “COSMOSHINE SRF,” while sales of polyphenylene sulfide (PPS) material and acrylic fiber for bag filters in China were slow. As a result, operating profit increased 0.9% year on year to ¥23.3 billion. Profit attributable to owners of parent was down 6.9% year on year to ¥9.4 billion, following the recording of extraordinary losses associated with structural reform.

## Fiscal 2018 Forecasts and the Shift to a Growth Track

In fiscal 2018, we can expect considerable increases in sales for “COSMOSHINE SRF” due to more shipments to a major polarizer manufacturer. In addition, we are forecasting full-scale shipments of airbag fabric to airbag manufacturers overseas from the second half of the fiscal year.

While we anticipate expansion in these two growth drivers and a resulting contribution to higher profits, uncertainty remains in the business environment due primarily to rising raw material prices. For this reason, we are forecasting that operating profit will increase 7.1% year on year to ¥25.0 billion in fiscal 2018. We are also forecasting profit attributable to owners of parent to increase 42.9% year on year to ¥13.5 billion due to a reduction in extraordinary losses.

I ask for the continued support and understanding of our shareholders and investors going forward.

August 2017

A handwritten signature in black ink, appearing to read 'S. Narahara'.

Seiji Narahara  
President & Chief Operating Officer

As of June 28, 2017

## Board of Directors

### Chairman, Board of Directors

#### Ryuzo Sakamoto

Apr. 1972 Joined Toyobo  
 Jun. 2002 Director  
 Jun. 2005 Director, President and Chief Operating Officer  
 Apr. 2014 Director, Chairman, Board of Directors (to present)



### President and Chief Operating Officer Controlling Supervisor of Internal Audit Department

#### Seiji Narahara

Jan. 1988 Joined Toyobo  
 Jun. 2011 Director, Corporate Officer  
 Apr. 2014 Director, President and Chief Operating Officer (to present)



### Corporate Senior Executive Officer Controlling Supervisor of Plastics Division, Fibers, Textile & Functional Products Division and Healthcare Division

#### Kazumasa Koyama

Apr. 1974 Joined Toyobo  
 Apr. 2012 Director, Corporate Executive Officer  
 Apr. 2016 Director, Corporate Senior Executive Officer (to present)



## Board of Corporate Auditors

Hisao Nishinaka  
 Taneaki Nagata  
 Shiro Takenaka\*  
 Hiroyuki Sugimoto\*

\* Outside Corporate Auditor

## Corporate Officers

### Chief Operating Officer

Seiji Narahara

### Corporate Senior Executive Officer

Kazumasa Koyama

### Corporate Executive Officers

Yuji Oita  
 Masaru Watanabe  
 Hiroyuki Sato  
 Shigeo Takenaka  
 Toshitake Suzuki  
 Teruo Ohigashi  
 Hitoshi Ueno

### Corporate Executive Officer

Controlling Supervisor of Procurement & Logistics Department, Human Resources Department, Law Department, Compliance Department, General Administration Department, Real Estate Operating Department, Tokyo Branch and Nagoya Branch

#### Yuji Oita

Apr. 1980 Joined Toyobo  
 Jun. 2016 Director, Corporate Executive Officer (to present)



### Corporate Executive Officer

Controlling Supervisor of Finance Department, Accounting and Control Department

#### Masaru Watanabe

Apr. 1979 Joined Toyobo  
 Jun. 2017 Director, Corporate Executive Officer (to present)



### Corporate Executive Officer

Head, Membranes & Environment Division

#### Hiroyuki Sato

Apr. 1976 Joined Toyobo  
 Jun. 2017 Director, Corporate Executive Officer (to present)



### Corporate Executive Officer

Head, Films Division  
 Head, Specialty Chemical Division  
 Controlling Supervisor of Tsuruga Research and Production Center

#### Shigeo Takenaka

Apr. 1981 Joined Toyobo  
 Jun. 2017 Director, Corporate Executive Officer (to present)



### Outside Director

#### Taketoshi Oka

Apr. 1974 Registered as attorney  
 Jun. 2015 Outside Director, Toyobo (to present)



### Outside Director

#### Masaru Nakamura

Apr. 1977 Joined Sumitomo Corporation  
 Jun. 2017 Outside Director, Toyobo (to present)



### Corporate Officers

Yasuo Ohta  
 Yasuhiro Iizuka  
 Shigeo Nishiyama  
 Takayuki Tabo  
 Chikao Morishige  
 Hiroshi Otsuki

# Financial Highlights

Snapshot

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## Net sales

¥ 329.5 billion

## Operating profit

¥ 23.3 billion

## Profit attributable to owners of parent

¥ 9.4 billion

## Total assets

¥ 450.8 billion

FY	¥ million						Thousands of U.S. dollars (Note 1)
	2017	2016	2015	2014	2013	2012	2017
Net sales	<b>¥329,487</b>	¥347,763	¥351,279	¥351,577	¥339,009	¥349,505	<b>\$2,936,866</b>
Films & functional polymers	<b>138,574</b>	143,398	146,029	148,000	137,394	138,437	<b>1,235,172</b>
Industrial materials	<b>69,214</b>	70,522	71,520	71,704	71,891	71,221	<b>616,936</b>
Healthcare	<b>27,134</b>	27,723	28,777	27,344	24,839	26,580	<b>241,858</b>
Textiles and trading	<b>77,552</b>	85,486	85,093	79,089	79,211	87,999	<b>691,256</b>
Real estate	<b>4,444</b>	4,203	4,001	3,670	3,741	3,793	<b>39,611</b>
Other businesses	<b>12,569</b>	16,432	15,859	21,770	21,932	21,474	<b>112,033</b>
Operating profit	<b>23,332</b>	23,123	20,580	21,006	17,081	18,305	<b>207,969</b>
Profit attributable to owners of parent	<b>9,444</b>	10,150	8,117	8,154	7,639	4,587	<b>84,179</b>
EBITDA	<b>38,271</b>	37,557	35,496	35,044	30,327	37,778	<b>341,127</b>
Depreciation and amortization	<b>14,939</b>	14,434	14,916	14,038	13,246	19,473	<b>133,158</b>
Capital expenditure	<b>18,360</b>	17,336	17,491	20,074	18,041	16,517	<b>163,651</b>
R&D expenses	<b>11,114</b>	11,266	10,819	10,473	9,966	10,820	<b>99,064</b>
Total assets	<b>450,790</b>	444,587	465,809	456,256	447,445	437,841	<b>4,018,094</b>
Shareholders' equity (excluding non-controlling interests)	<b>167,773</b>	156,915	157,989	142,310	138,024	130,572	<b>1,495,436</b>
Interest-bearing debt	<b>169,230</b>	165,358	177,085	170,721	159,430	154,888	<b>1,508,423</b>
Net cash provided by operating activities	<b>26,872</b>	32,337	20,107	23,927	30,354	14,192	<b>239,522</b>
Net cash used in investing activities	<b>(14,132)</b>	(10,636)	(20,089)	(22,218)	(11,294)	(15,061)	<b>(125,965)</b>
Net cash provided by (used in) financing activities	<b>(324)</b>	(21,384)	797	(10,839)	(2,636)	(11,531)	<b>(2,888)</b>
				Yen			U.S. dollars (Note 1)
<b>Per share data:</b>							
Basic earnings per share	<b>¥10.64</b>	¥11.43	¥9.14	¥9.18	¥8.61	¥5.17	<b>\$0.095</b>
Cash dividends per share	<b>3.50</b>	3.50	3.50	3.50	3.50	3.50	<b>0.031</b>
<b>Financial ratios:</b>							
ROA (%) (Note 2)	<b>5.2</b>	5.2	4.4	4.6	3.8	4.2	
ROE (%)	<b>5.8</b>	6.4	5.4	5.8	5.7	3.6	
Equity ratio (%)	<b>37.2</b>	35.3	33.9	31.2	30.8	29.8	
D/E ratio (times) (Note 3)	<b>1.01</b>	1.05	1.12	1.20	1.16	1.19	

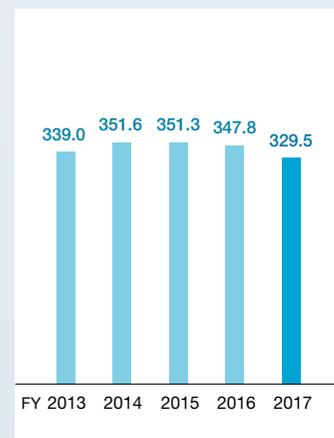
Notes: 1. The U.S. dollar amounts in this report represent translations of yen for convenience only at the rate of ¥112.19 to \$1.00.

2. ROA: Operating profit basis

3. D/E ratio: Interest-bearing debt/net assets excluding non-controlling interests

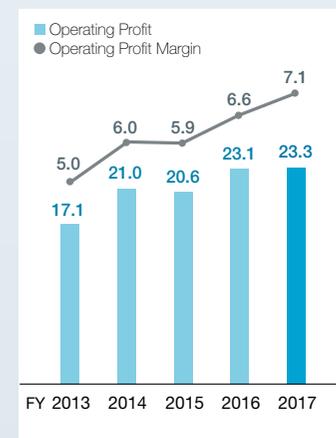
## Net Sales

(¥ billion)



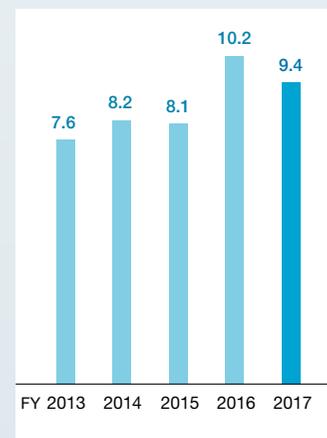
## Operating Profit and Operating Profit Margin

(¥ billion, %)



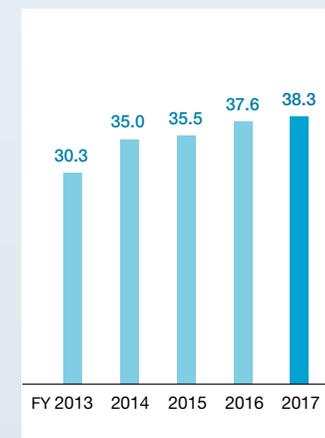
## Profit Attributable to Owners of Parent

(¥ billion)



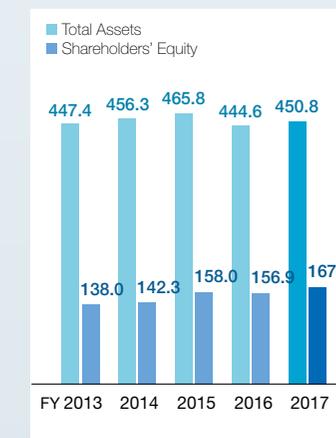
## EBITDA

(¥ billion)



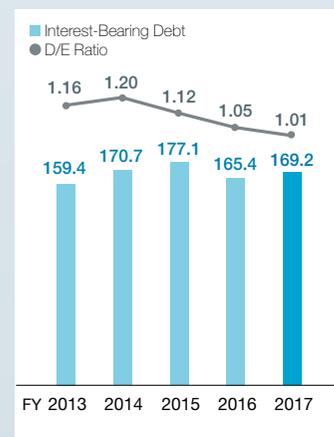
## Total Assets and Shareholders' Equity

(¥ billion)



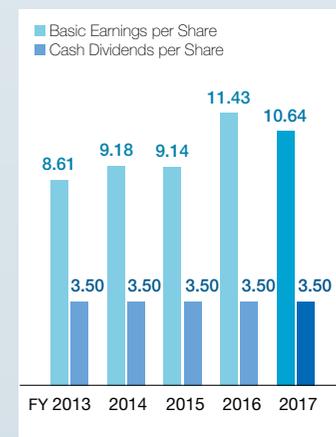
## Interest-Bearing Debt and D/E Ratio

(¥ billion, times)



## Basic Earnings per Share and Cash Dividends per Share

(¥)



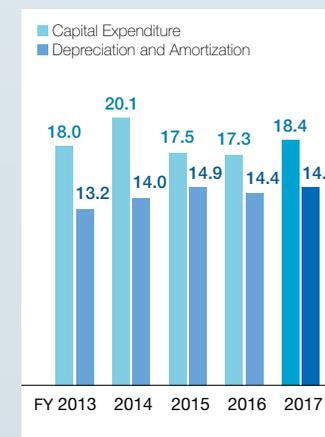
## ROA and ROE

(%)



## Capital Expenditure and Depreciation and Amortization

(¥ billion)



## 4 core technologies

Toyobo's core technologies are composed of a range of elemental technologies that, when combined and integrated, create new systemized techniques that lead to the development of products.

Polymerization

Modification

Processing

Biotechnology

## 3 specialty businesses

To accelerate the creation of new specialty businesses, Toyobo is reinforcing its unique core technologies and pushing forward with combination and integration of existing technologies, including technology transfer.

Films & Functional Polymers

Industrial Materials

Healthcare

## 5 important markets

Toyobo has identified five targeted market fields. By developing the high-function products required for each of these markets, Toyobo aims to be an integral part of the lifestyles and culture of the 21st century.

Automotive



Electronics & Information Display



Environment



Healthcare



Lifestyle & Safety



# TOYOBO's Competitiveness



### Food packaging films:

Sales of  
**¥50 billion**  
and overall top producer in Japan



### Airbag fabric yarn:

**40% market share**  
and in the leading group internationally  
for airbag fabric yarn production



### Engineering plastics:

Overseas sales rate  
**41%**  
the previous fiscal year



### Enzymes for diagnostic reagents:

In the top **4** of the leading  
group internationally, specifically **No.1**  
for sales of enzymes for self-monitoring  
of blood glucose



### Equipment for volatile organic compound (VOC) emissions treatment:

**1,300 sets installed**  
in Japan and other countries



### Reverse osmosis membrane elements for seawater desalination:

**50% market share**  
in the GCC\* countries of the Middle East  
\* GCC: Gulf Cooperation Council

## Value Creation

Environment-friendly

Healthcare

High-function products

Contribution to society



**Seiji Narahara**

President and Chief Operating Officer

## **Results of the Medium-Term Management Plan**

**Q1** How do you view fiscal 2017, the third year of the Medium-Term Management Plan?

**A1** One very significant factor was the more than doubling of year-on-year sales of “COSMOSHINE SRF,” one of our designated growth drivers. It has taken more time than expected since commercialization in 2013 to expand sales, but we have worked hard to resolve issues, and success there gave the whole company confidence. We received extremely positive feedback from investors during our investor relations activities overseas last year, as well.

Conversely, sales of polyphenylene sulfide (PPS) material for bag filters and acrylic fiber to China were slow, while terminating our textile business in Brazil put immense pressure on our business results. When rolling out a diverse range of products in broad markets and fields, it is of course natural that some products will not catch on due to changes in the business environment, but growth can be realized by making up for the minuses and building on the positive aspects. Responding to changes in the business environment forced us to revise forecasts for fiscal 2017, and that is something we want to take a serious look at.

Going forward, we aim to drive growth by assessing changes and risks in the business environment early on and then responding quickly and effectively, and by expanding businesses that are the key to growth in line with our plan.

**Q2** You will miss your Medium-Term Management Plan target of ¥30 billion in operating profit for fiscal 2018 with a projection of ¥25 billion. In contrast, the ¥13.5 billion forecast for profit attributable to owners of parent is close to your target of ¥14 billion. Can you explain the discrepancy?

**A2** We focused on building foundations for growth over the three years to March 2017, and as a result of costs associated with this, coupled with the impact of changes in the business environment in China, South America and other regions overseas, operating profit for fiscal 2018 is forecast to fall short of our Medium-Term Management Plan target of ¥30 billion.

The Medium-Term Management Plan formulated in 2014 is designed to put the Company on a growth track toward our financial goals: net sales of ¥500 billion and operating profit of ¥50 billion. I am confident that we have established the platform to get on this growth track, for example by expanding sales of

“COSMOSHINE SRF” and airbag fabrics, and by developing the business for engineering plastics overseas. Going forward, we intend to achieve this growth as we head toward our goals, with fiscal 2018 positioned as a checkpoint along the way.

At the same time, profit attributable to owners of parent of ¥13.5 billion would be an historic high for us. Note that non-operating expenses and extraordinary losses have been reduced compared with past results.

## New Products, Key Growth Fields

### Q3 Can you tell us about the progress of “Nerbridge” and your sales target in the United States?

A3 Applications of “Nerbridge,” a nerve bridging device, has grown in Japan, particularly by doctors seeking state-of-the-art treatments, and the number of cases adopting this product has steadily increased. Despite this, many doctors still use traditional autogenous nerve grafting techniques, leading to slow sales overall. In fiscal 2018, we are forecasting a certain level of recovery and expect increased application of “Nerbridge” from fiscal 2019 onward.

Regarding developments in the United States, we received FDA clearance on June 22, 2016, and are currently selecting sales partners there. We plan to start sales in the United States during fiscal 2018.

### Q4 How has progress been in the focused areas for growth?

A4 Toyobo has set three focused areas to realize future growth: regeneration-inducing materials, overseas business development for packaging films, and separation membranes.

We are developing bone regeneration-inducing materials as one of the materials we are concentrating on in addition to “Nerbridge,” and clinical trials are underway for dental and oral surgery. We are aiming for commercialization in fiscal 2019 after we apply for approval for production and sales.

In overseas business development for packaging films, we pushed ahead with preparations to expand business overseas for food packaging films to complement the core Japanese market. We are also looking into collaborating with other companies, especially for high-function films, such as shrink and barrier films.

In the separation membranes field, we are developing forward osmosis (FO) membranes that create more energy-efficient systems than conventional reverse osmosis membranes for use in seawater desalination. Our FO membranes have been rated highly in multiple verification tests overseas.

Every project we are developing in the three focused areas has high potential for growth. We will build on these businesses with the aim of making them into new growth drivers under the next Medium-Term Management Plan.



## Financial Strategy

**Q5** What are your thoughts on the financial strategy?

**A5** We set the management targets of 7% ROA (5.2% in fiscal 2017 on an operating profit basis) and a debt to equity ratio of 1.00 in our Medium-Term Management Plan, which runs until fiscal 2018. Our challenges over the near term are to reduce interest-bearing debt, increase shareholders' equity and lower the debt to equity ratio to 1.00. In fiscal 2017, we were able to reduce this figure to close to our target with a result of 1.01. We have reached our target of 7% ROA and have set a new goal of 8% ROE as a result (5.8% in fiscal 2017).

## Returns to Shareholders

**Q6** What is your philosophy for returns to shareholders and your future dividend policy?

**A6** We consider providing returns to shareholders as one of our highest priorities. Our basic policy is to continually provide a stable dividend in wide-ranging consideration of such factors as profit levels, retention of earnings for future investment and improving our financial position to provide returns to shareholders, including the acquisition of treasury shares, with a target total return ratio<sup>\*1</sup> of 30%.

Toyobo paid a year-end dividend of ¥3.5 per share for fiscal 2017. For fiscal 2018, we currently expect to pay a dividend of ¥35.0 per share (amount in consideration of the impact of a consolidation of shares).<sup>\*2</sup> However, this will be reviewed in the future based on the policy outlined above.

Notes:

\*1 Total return ratio = (Total dividend + total amount of share buybacks) / profit attributable to owners of parent

\*2 Please refer to the "Notice Regarding Change of Share Trading Unit, Consolidation of Shares and Partial Changes to the Articles of Incorporation Therefor" announced on April 25, 2017.

## "Zylon" Litigation

**Q7** When do you expect the "Zylon" litigation to come to an end?

**A7** Toyobo has responded to all discovery requests. We aim to bring a resolution to the prolonged litigation as soon as possible and will continue doing our best to achieve this.

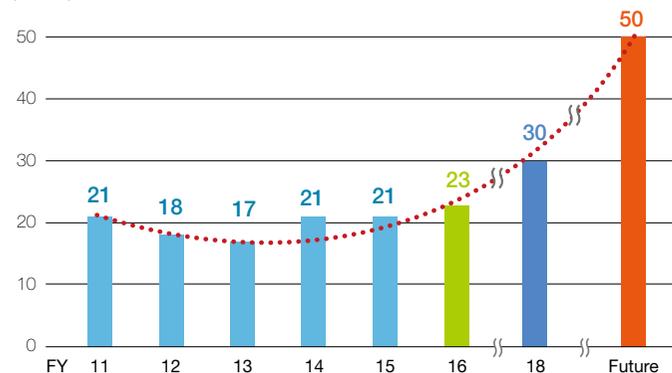


# Medium-Term Management Plan

Aiming to become the category leader, continuing to create new value that contributes to society in the environment, healthcare, and high-function product fields

## Operating Profit

(¥ billion)



Targets for the Future (Consolidated)

Net sales

**¥500** billion

Operating profit

**¥50** billion

ROA

**10%**

Overseas sales

**¥200** billion

## Total

(¥ billion)

	FY2014	FY2018
Net sales	351.6	<b>420.0</b>
Overseas sales (Overseas sales ratio)	93.6 (27%)	<b>170.0 (40%)</b>
Operating profit	21.0	<b>30.0</b>
Operating profit margin	6.0%	<b>7.1%</b>
Profit attributable to owners of parent	8.2	<b>14.0</b>
Total assets	456.3	<b>460.0</b>
ROA	5%	<b>7%</b>
ROE	6%	<b>8%</b>
Interest-bearing debt	170.7	<b>&lt;150.0</b>
Shareholders' equity	142.3	<b>&gt;150.0</b>
D/E ratio	1.20	<b>1.00</b>
Depreciation and amortization	15.0	—

## Five Action Plans

1. Accelerating overseas business development
2. Developing new products and creating new businesses
3. Increasing competitiveness of domestic businesses
4. Improving asset efficiency
5. Strengthening global Group management

## Focused Areas



1

### Toyobo's Presence in the Automotive Field

Advanced materials for automobiles that contribute to lighter weight and low fuel consumption, essential for the eco-cars of today

A variety of materials used throughout the automobile are underpinned by exceptional design technology for polyester resin

1

### Light weight, compact dimensions, and low fuel consumption achieved through material technology and ingenuity

When it comes to next-generation automobiles, environmental performance simply cannot be ignored, as is the case with comfort. One challenge concerns improving fuel consumption, which requires the car to be lighter and smaller. Against this backdrop, component manufacturers in the auto industry are engaged in fierce competition in development, while material manufacturers also have a key role to play. The fabric used for airbags must be thin, light, low-cost and recyclable, while maintaining sufficient strength to protect lives. A nylon-resin coated fabric called NAC fabric developed by Toyobo meets these requirements. Although silicon resin is generally used for the coating agent covering the nylon fabric, using the same nylon as the fabric has made possible a recyclable product that can easily be taken apart. This keeps disposal and other costs down and reduces the amount of coating needed, which has resulted in reduced weight.

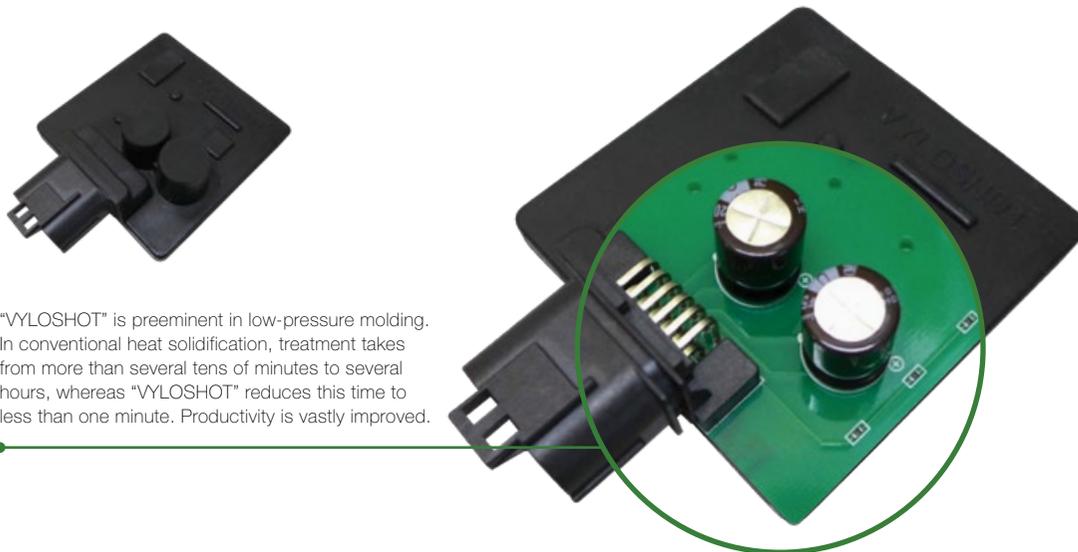


Nylon resin-coated airbag fabric

2

## High-performance resin supporting electric vehicles

Toyobo has recombined several kinds of raw material according to the attributes required for safe, comfortable eco cars using design technology that comes up with creative specifications for polyester resin, of which there are countless possibilities. This technology has now become indispensable in automobiles incorporating more and more electronic controls thanks to the increasingly widespread use of hybrid cars and similar vehicles. The role of high-performance resin has now become more important than ever as a sealing material protecting electronic components such as the circuit board from external elements such as heat, water, dust and shock, and as an adhesive making sure components remain connected under grueling conditions. "VYLOSHOT" polyester resin for low-pressure molding is a good example. It can be applied within a wide temperature range between  $-50^{\circ}\text{C}$  and  $100^{\circ}\text{C}$ , and can be swiftly covered to fit the exact shape of the component with less than one-tenth the pressure of conventional methods and then cooled and solidified. This contributes to lighter weight, smaller size and greater productivity by reducing the materials used.



"VYLOSHOT" is preeminent in low-pressure molding. In conventional heat solidification, treatment takes from more than several tens of minutes to several hours, whereas "VYLOSHOT" reduces this time to less than one minute. Productivity is vastly improved.



The opportunities for Toyobo to contribute to the safety and comfort of our cars will undoubtedly continue to expand into the future



## Toyobo's Human Resource Strategy

Led by the Women Empowerment Promotion Group, we aim to be a company with a pleasant work environment for both men and women.

We support women's career advancement so that they can continue being motivated at work

## 1 Promoting the role of women

As the first step to utilizing diverse human resources, Toyobo established the Women Empowerment Promotion Group within the Human Resources Department in 2015. The Group is currently undertaking full-fledged efforts to promote the role of women. First, briefings are being held in each business location related to the promotion of female participation so that all employees, both male and female, are aware of the initiative. In addition, we are working to change mindsets through management seminars for supervisors aimed at maximizing the potential of their female workers, and vision creation seminars for female employees. We have also introduced a new babysitter support system. Here, Toyobo covers the entire cost of the babysitter when an employee goes on a business trip, to help support career advancement. A nursery has been set up so that women can take overnight-type business creation seminars even if they have children. Employees have commented how pleased they are that they can go on business trips and attend seminars even with children, so that they are not forced to give up anything.

We are continuing to undertake the active employment of females. The proportion of females among new graduate recruits to general employment stood at 50% for fiscal 2017 and 40% for fiscal 2018 as we strive to improve the ratio of women in regular positions.



A vision creation seminar for female leaders

Awareness-building and training

	Times	Participants	FY2018 target
Briefings	60	1,521	Continuous
Seminars for supervisors	10	216	Hold five times
Seminars for women	10	266	Hold eleven times

Proportion of female employees with manager-level qualifications



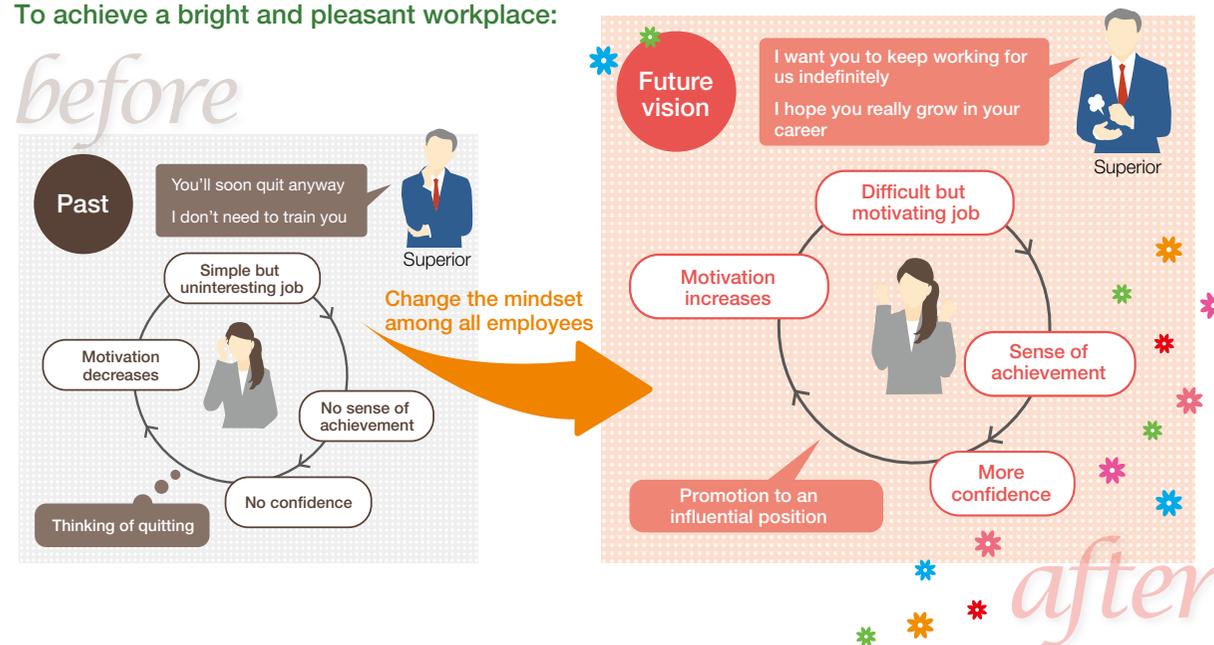
## 2 Interview with the Women Empowerment Promotion Group



Women Empowerment Promotion Group Manager  
Noriko Tsuchiya

After starting work as manager of the Women Empowerment Promotion Group, I began to see the day-to-day potential of women through interviews and networking events with women in different positions. Now, I am confident that the Company will grow if women who are motivated in their work are allowed to fulfill their potential. Besides this, a bright and pleasant place for women to work will also be a bright and pleasant place for males. To achieve this, I hope that everyone in the Company acts with an awareness of all their colleagues.

To achieve a bright and pleasant workplace:



## Topic 1



### Dialogue between President Narahara and an artist appears in an advertisement

Toyobo created an advertisement targeting job-seeking students and their parents. The same ad was placed in the special edition of “Mynavi,” which provides employment information in the Nihon Keizai Shimbun newspaper (the Nikkei), and the national morning edition of the Nikkei.

The special edition is sent directly to the residences of job-seeking students registered with Mynavi. The papers were sent out en masse in mid-December. An ad with the same design was also placed in the Nikkei newspaper to coincide with the special edition to promote the appeal of the Company to the students and their parents. The ad included an interview featuring Toyobo’s president in two-thirds of the top space. The dialogue, conducted with Hikaru Cho, a creator who has been involved with the visual advertisements placed at Kansai International Airport since August 2016, concerned how Toyobo is changing and the challenges it is tackling. The two also discussed communality with the works of the artist. The bottom third of the ad mirrored the design of the ad used at Kansai airport.



The recording was made in Toyobo’s main conference room.



The dialogue was conducted in a relaxed and friendly atmosphere. The two discussed a variety of topics in a lively talk that belied their first-time meeting.



The dialogue part of the ad, which was placed in the Nihon Keizai Shimbun.

## Topic 2

## Contributing to industry diversification in Saudi Arabia through “ALL TOYOBO”

On September 1, 2016, Mohammad bin Salman Al Saud, the deputy crown prince of Saudi Arabia, as well as key Saudi cabinet members and top individuals in the economic community, visited Japan. At the Vision 2030 Business Forum held in Tokyo, top management from more than 20 companies representing Japan, including President Narahara of Toyobo, expressed their desire to cooperate in the field of industry diversification in Saudi Arabia, which is aiming to move away from reliance on petroleum.

On October 7, representatives from the aforementioned companies, together with Minister of Economy, Trade and Industry Hiroshige Seko, returned the courtesy with a visit to Saudi Arabia. Hiroyuki Sato, Head of the Membranes & Environment Division, also took part, attending the general meetings and proposing Toyobo's policy for “Vision 2030” to members of the Saudi government. ALL TOYOBO will seek to realize the potential of solution-based business centered on the environment and healthcare with the cooperation of the entire organization. It will do this by leveraging its brand power in Saudi Arabia in such areas as “HOLLOSEP” reverse-osmosis membrane elements for the desalination of seawater and fabric for the *thoub*, the national dress of Saudi Arabia.



Key individuals responsible for the economy and culture in Japan and Saudi Arabia came together on October 7 in Riyadh, Saudi Arabia.

## Column

### A desalination plant in Saudi Arabia using “HOLLOSEP” enters the Guinness Book of Records

On November 27, the Ras Al Khair desalination plant in Saudi Arabia was certified in the Guinness Book of Records as the world's largest desalination plant, with a daily production volume of 1,036,000m<sup>3</sup>.

Toyobo's “HOLLOSEP” reverse-osmosis membrane element for desalination is in use at the plant, which confirms the capabilities of the product. Going forward, Toyobo will aim to boost its share of the reverse-osmosis membrane market in desalination plants throughout Saudi Arabia and the Gulf States.



“HOLLOSEP” plays a major role inside the Ras Al Khair desalination plant.

## Topic 3

## Representatives from Mercedes-Benz visited Toyobo's airbag fabric production plant

On November 9, 2016, representatives of Mercedes-Benz, a major automobile manufacturer in Germany, visited ERAWAN TEXTILE CO., LTD. in Thailand, an affiliate engaged in airbag fabric production, to observe the inside of the airbag plant.

Including those from Mercedes-Benz, some 10 representatives took part, among them staff from airbag and car interior developers and quality managers. From Toyobo, relevant staff from the Head Office and TOYOBO INDUSTRIAL MATERIAL (THAILAND) LTD. attended, providing explanations of the Toyobo Group and the airbag business. Subsequently, participants observed the different elements of the manufacturing process.

Representatives from Mercedes-Benz diligently asked and answered questions about the manufacturing process as well as safety and quality assurance. In addition, directives were given and opinions exchanged in a very amicable manner.

Toyobo has also received a number of business inquiries from European and U.S. manufacturers such as Mercedes-Benz since acquiring PHP Fibers GmbH with Indorama Ventures Public Co., Ltd. in 2014. Toyobo plans to make the most of this acquisition to accelerate global development of the airbag business.



Representatives from Mercedes-Benz and other companies engaged in open-minded discussion with members of Toyobo.



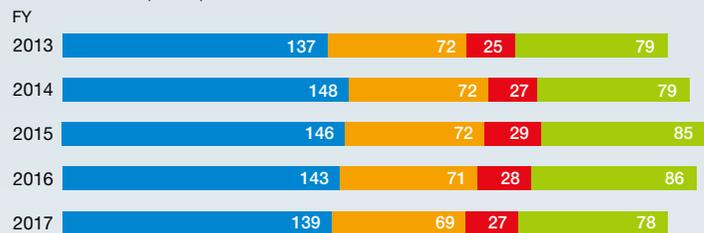
# Business Segments and Fields

## Operational Results

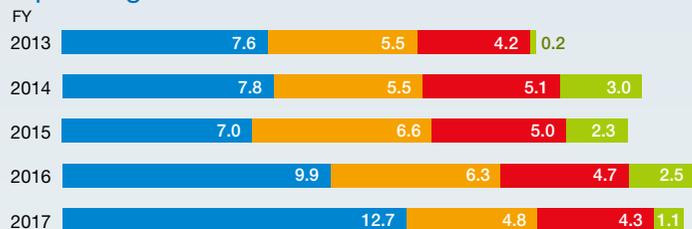
Consolidated net sales for the fiscal year under review decreased ¥18.3 billion (5.3%) from the previous fiscal year to ¥329.5 billion. Operating profit increased ¥0.2 billion (0.9%) to ¥23.3 billion, ordinary profit increased ¥0.3 billion (1.3%) to ¥20.7 billion, and profit attributable to owners of parent decreased ¥0.7 billion (6.9%), to ¥9.4 billion.

- Films & Functional Polymers
- Industrial Materials
- Healthcare
- Textiles and Trading

### Net Sales (¥ billion)



### Operating Profit (¥ billion)



Films & Functional Polymers



Healthcare

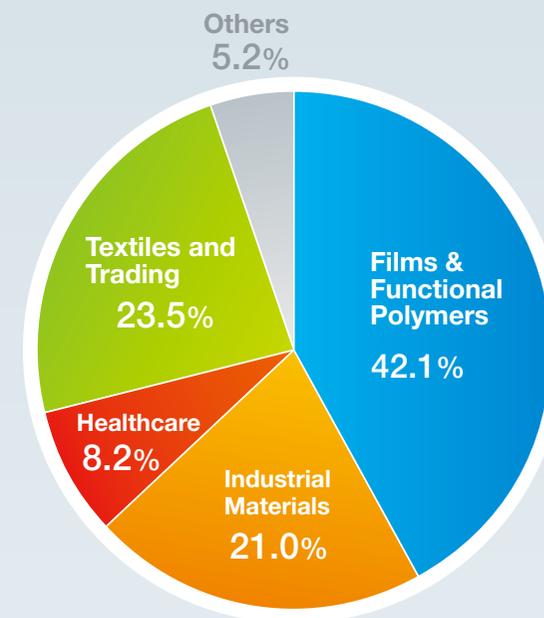


Industrial Materials



Textiles and Trading

## Percentage of Net Sales FY2017





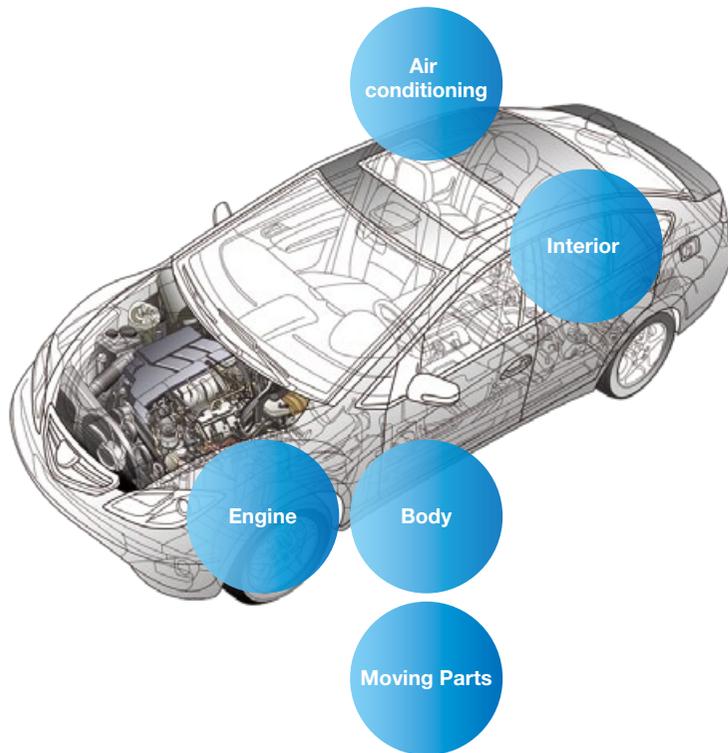
# Automotive field

## At work in all parts of the automobile

Aiming for harmony between people, automobiles and the earth  
High-performance materials supporting safety and comfort

Toyobo's high-performance materials are used in each and every component of the automobile, from interior and exterior material to parts, tires and air conditioning, helping to realize enhanced durability and safety amid increasingly tough environments.

We support the creation of automobiles that meet the needs of the times.



## Air conditioning

- **Car coolers, air cleaners** → "Elitolon," "KF Paper S," "K-Filter"
- **Air filters** → "CELFINE S," "CELFINE N"

## Engine

- **Engine covers**  
→ Nylon resin, "ECOVYLOPET," "ECOKURELEAF," "SARLINK"
- **Wire harness, cable outers** → "PELPRENE"
- **Engine silencers** → "ECULE"
- **Gear cases** → "VYLOPET"
- **Ignition parts, carburetors, etc.** → Toyobo PPS resins
- **Control units** → "VYLOSHOT"
- **Adhesives for engine oil pans, adhesives for fuel filters**  
→ "VYLON"

## Moving Parts

- **Brakes, clutch materials, constant velocity universal joints**  
→ "PELPRENE"
- **Gear cases** → "VYLOPET"
- **Boots, ducts** → "SARLINK"
- **Vulcanizing agent for tires** → Carbon disulfides

## Body

- **Door mirror stays, door handle covers** → Nylon resin
- **Extension, rear wiper arms** → "VYLOPET"
- **Emblems, door latches, etc.** → "PELPRENE"
- **Wind stabilizers** → "IZANAS"
- **Packing** → "SARLINK"
- **Lamp holders** → Toyobo PPS resin
- **Electronic sensors** → "VYLOSHOT"
- **Bumpers** → "HARDLEN"

## Interior

- **Cup holders** → Nylon resin
- **Car seats** → "HEIM"
- **Airbags** → Nylon 66 fiber
- **Airbag holding covers** → "ECOKURELEAF"
- **Airbag emblems** → "PELPRENE"
- **Interior materials** → "GLENTANNER," "TAFTIC"
- **Ceiling materials, carpets, spring support** → Non-woven fabrics
- **Sound absorbing materials** → "SOUNDBLOCK"
- **Tonneau covers** → "CATENA"
- **Car audios systems, car navigation systems, etc.** → "COSMOSHINE"
- **Electronic sensors** → "VYLOSHOT"
- **Inflators for airbags** → Tetrazoles



# Information display and electronics field

## Groundbreakers in film and functional resin

Increasing added value to meet the needs of the times with technology and the power of ideas gained from many years of overcoming challenges

## Industrial film

### Film for slim displays with exceptional transparency

Toyobo's film for touch panels and displays is finding widespread application amid the increasing use of smartphones and tablet PCs. In addition to exceptional transparency on the surface of the film, our unique coating technology minimizes interference fringes.

### "COSMOSHINE"

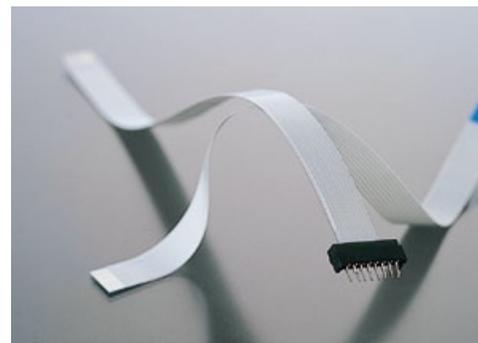


## Copolyester resin

### Eco-friendly, super diverse "VYLON"

First produced in 1965, "VYLON" is Japan's first saturated copolyester resin with a high molecular mass. It has exceptional adhesiveness, durability, hygiene and chemical resistance and is used in such fields as electrical equipment and automobiles, meeting needs for fewer resources and eliminating solvent use as a replacement for adhesives and coating agents.

### "VYLON"



Adhesive for flat cables

### "VYLOSHOT"



Example of sealing on an electronic component

# Environmental field

With an eye on ecology since the 1970s

Toyobo's original fiber technology contributes significantly to all aspects of environmental protection, including the air, water and resources

## Air

Providing clean air through advanced absorption, separation and removal technologies

Our VOC absorption treatment systems using our activated carbon fiber "K-FILTER" — which led the world with commercial viability in the 1970s— and our inorganic material "ZEOLITE" air purification filter contribute to environmental preservation and a reduction in production costs in other industries.

"Honey-Rotor" VOC concentration apparatus



## Water

Turning seawater into drinking water

Toyobo helps alleviate issues with water resources

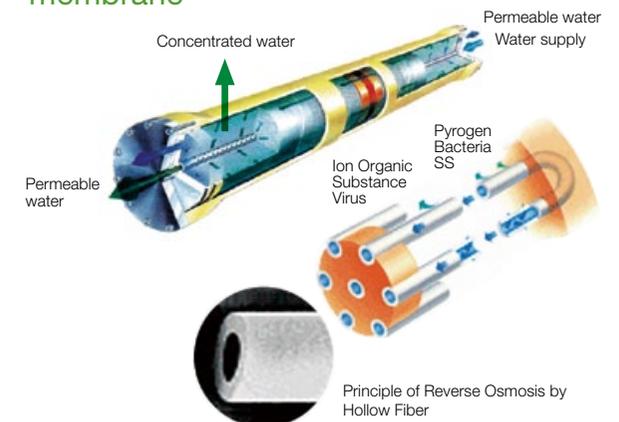
The "HOLLOSEP" hollow fiber type reverse-osmosis membrane module refers to seawater desalination equipment that can remove not only bacteria and viruses from water but also low molecular elements such as ions and organic material.

Toyobo was the first in the world to start commercial production in 1979, and the product has gained high praise worldwide since then.

Seawater desalination equipment



Hollow fiber type reverse osmosis membrane





## Healthcare field

### Started from yeast cultivation as an antipollution measure

Contributes to advanced medical care, supporting good living with wide-ranging life-science technology

## Bio

Contributes to enhanced quality of life through reliable products and commissioned services

Toyobo contributes to better medical care through enzymes for diagnostic pharmaceuticals that enable speedy examination and analysis via disease diagnosis and attributes, and commissioned production of pharmaceuticals using expertise accumulated in medical research. As an example, a plant-derived catalytic agent (protein) is used in advanced medical care, including genetic diagnostics, reagent development and immuno-analytics, with further applications expected.

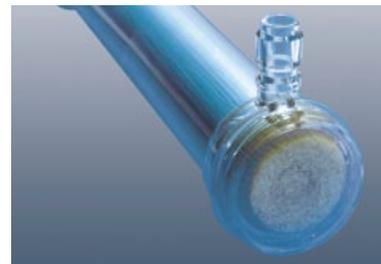
### Genetic diagnostics



## Medical equipment

Advancement and application of fiber technology in the medical equipment field drives next-generation treatment

### Hollow fiber membranes for artificial kidneys



Harmful substances in the blood can be efficiently filtered with micropores by way of advanced separation technology for cellulose triacetate material. We also achieve more efficient removal of waste matter through thinner membranes as well as more compact equipment.

### Conduits for nerve regeneration



This medical instrument promotes regeneration of ruptured or defective nerves using a conduit filled with special medical collagen. The conduit is absorbed into the body after a few months, contributing to swift nerve recovery.





# Lifestyle and safety field

**Toyobo's high-performance materials support people's lifestyles**

New materials created by Toyobo contribute to a more enriched and comfortable life

## Packing film

**Eco-friendly material for a better life**

Copolyester technology has led to polyester film boasting a variety of features. This film adds color to products depending on application; examples include biaxially oriented down-gauged shrink film and barrier film with exceptional barrier properties and flexibility.

“SPACECLEAN”



“ECOSYAL”



## Cushion material

**“BREATHAIR” employs a new kind of structure for more breathable properties**

This is a completely new cushion structure design made from random coils of elastic monofilaments. It has excellent air permeability and durability and is environmentally friendly due to its ability to be re-melted and recycled. It is used in such areas as bedding in the nursing care field and vehicle seats.

**Example of application: Seat material in the Shinkansen (“bullet train”)**



# Business Overview by Region

Composition of sales by region



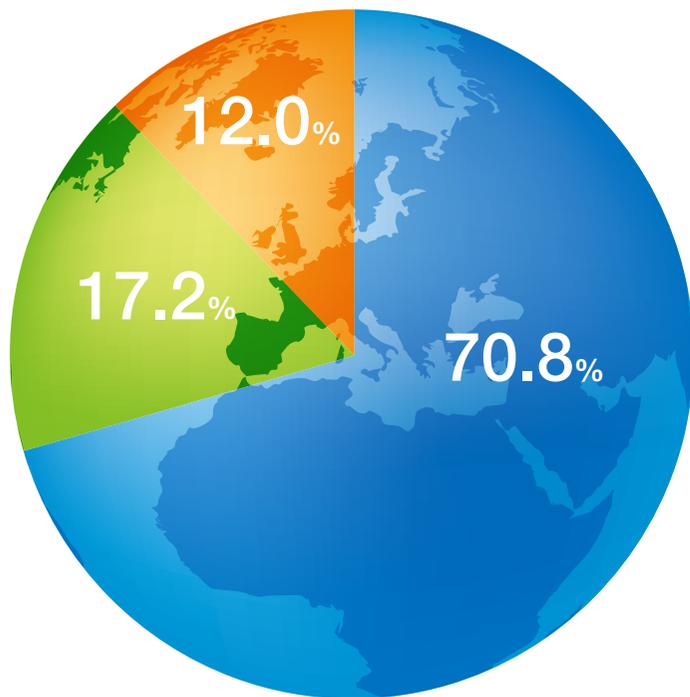
Japan



Asia



Other Areas



## JAPAN

- Production capacity bolstered for “COSMOSHINE SRF”

## ASIA

### Thailand

- Establishment of a new company for the production of airbag fabric
- Sales of coatings, inks and raw resins, such as industrial adhesives, were increased from a site established in 2013 that produces and sells “VYLON” copolyester resin.

### China

### South Korea and Taiwan

- Establishment of production sites continued for airbag fabrics.
- Sales of new product “COSMOSHINE SRF” steadily expanded.

## THE MIDDLE EAST

### Saudi Arabia

- Production facilities expanded for reverse osmosis membranes for seawater desalination plants
- Sold the fabric for *thoubs*, the traditional garment worn by Arab males in official settings in the Persian Gulf nations of the Middle East

## THE AMERICAS

### North America

- Establishment of production sites continued for airbag fabrics
- FDA 510(k) clearance was achieved for a new product (“Nerbridge”). Preparations are underway to begin sales.

### Mexico

- A sales site was established to create a supply system for engineering plastics to automotive parts makers in the Central American market.

### Brazil

- Expanded business for engineering plastics for automotive parts.

## EUROPE

### Spain

- Spinreact, S.A.U., a global manufacturer and marketer of *in vitro* diagnostic reagents and instruments, was acquired in 2013. Steady efforts are being made to expand the business by leveraging the biotechnology products and sales networks of Toyobo and Spinreact.

## Research and Development Strategy

### Combining Core Technologies to Accelerate New Business Creation

Creating new products and businesses is one of the strategic initiatives that we have been implementing to achieve growth. As in the past, R&D plays a key role in new business creation, and it will continue to do so in the years to come. In recent years, we have been spending more than ¥10 billion each year on R&D. As of August 1, 2017, 722 employees were working at the Toyobo Research Center in Otsu, Japan.

During our long history of more than 130 years, we have introduced and acquired a wide range of technologies. The Company's current core technologies include polymerization, modification, processing, and biotechnology. By combining these four core technologies and continuing in-depth research to respond quickly to customer needs, we have succeeded in establishing our current diversified business portfolio. For more improvements to the business portfolio, in line with our management policy, we will further accelerate new business creation through aggressive R&D.

### R&D Framework for Efficient Creation of New Businesses

Essentially, Toyobo pursues two categories of R&D: division research and corporate research. In addition, the Corporate R&D Administration Department oversees R&D management throughout the Company and supervises these two categories, from the technological point of view.

Division research aims to expand existing businesses under the supervision of individual business departments. Corporate research, on the other hand, includes core technology research, projects and Company-wide infrastructure, and aims to create new businesses that will sustain and expand Toyobo's overall operations, achieving medium- to long-term growth.

At the same time, as part of the Company's infrastructure, corporate research supports division research as well as production sites to develop new products and to solve technical problems, as part of troubleshooting. The technologies that we have accumulated to date include analytical technologies, sensation measurement and comfort evaluation technologies, and simulation technologies. All of these, as powerful problem-solving tools, make definitive contributions to our business expansion.

### Open Innovation for R&D Initiatives

To accelerate new business creation, open innovation, based on joint work outside Toyobo, will grow in importance.

An area that we will focus on for future growth is regeneration-inducing materials. As part of this focus, we have already launched "Nerbridge," a nerve bridging device for peripheral nerve regeneration. In addition, we are developing a bone regeneration material, aiming for commercialization in 2018. This development is an example of open innovation based on joint work with academia.

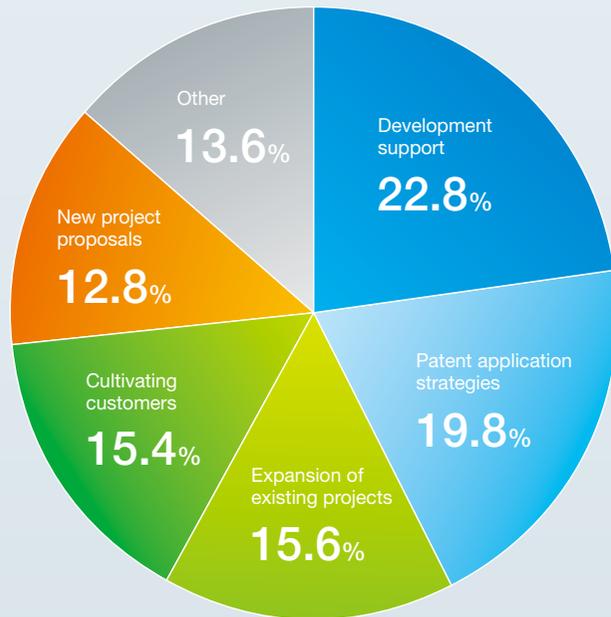
The MIRAI (in English, "the future") New Business Planning Group within the Corporate Planning Department has been promoting the development of new businesses.

In May, 2016, as part of new business development, we joined a venture capital fund focusing on technology. In this way, we intend to accelerate new business development in cooperation with other partners in the fund, targeting especially the areas of films, polymers and healthcare.

In the years ahead, we will continue to speed up the development of new products and services, while actively incorporating open innovation.

# Intellectual Property Management

Reasons for using patent information from other companies



## Intellectual Property Strategy

### Protecting intellectual property rights

We are protecting the results of our R&D via intellectual property rights to establish a dominant position over rivals and to expand existing businesses and create new opportunities.

For “accelerating overseas business development,” Toyobo is strengthening patent applications and the acquisition of rights overseas. In addition, we gather information from lawyers in other countries and patent attorneys and through the activities of specialty intellectual property associations so that we can conduct efficient, effective intellectual property-related activities that are suited to the ever-changing intellectual property environment of each country.

We are also boosting the level of application specifications by consulting with outside patent attorneys and through strict checks within our company. As a result, in Japan in fiscal 2017 we were granted more than 80% of the patents that we requested for examination.

### Using intellectual property information for business strategies

The Intellectual Property Department exchanges information on the status of intellectual property and holds discussions on how to deal with key issues with business and development-related divisions. This enables us to draw up an intellectual property strategy that is consistent with our business and development strategy. In this way, we are promoting intellectual property activities that are directly coupled to profit.

Moreover, in our business and development strategy we are working on ways to use the patent information that other companies have made public. As shown in the pie chart, we use the information for a variety of objectives, including development support, patent application strategies, expansion of existing projects, cultivating customers and new project proposals.

We analyze patent information from different angles to provide information that is beneficial to our operations.

# Corporate Social Responsibility

## Contributing to Society through CSR Activities Integrated with Business Activities

The Toyobo Group believes that corporate, business and CSR activities should be integrated. Proactively integrating CSR measures into management strategies is important for attaining sustainable development.



## 順理則裕 (*Jun-ri-soku-yu*): The Basis of Our CSR Activity

In 2012, Toyobo celebrated its 130th anniversary. The Company was founded in 1882 by Eiichi Shibusawa, who is widely known today as the father of Japanese capitalism. His personal motto was 順理則裕 (*Jun-ri-soku-yu*) which expresses the idea that “adhering to reason leads to prosperity.” This forms the basis of our corporate philosophy, which Toyobo has handed down from the time of its establishment. Under this corporate philosophy, the Company has succeeded in operating its business over a lengthy period of 130 years, always responding flexibly to changing times. 順理則裕 (*Jun-ri-soku-yu*) also forms the basis of our activities in CSR. We will continue to follow our corporate philosophy, as we pass the baton to future generations.



## Contributing to a Sound and Sustainable Society with the Awareness That Companies Are Members of Society

To implement its CSR activities, Toyobo has established the CSR Committee, chaired by the President. The mission of this committee is to fully comprehend and monitor overall activities related to all stakeholders, including shareholders and investors, suppliers, the community, employees, and the earth's environment.

The basis for these activities is Toyobo's CSR Charter, which states the Company's awareness that companies are members of society and calls for the Toyobo Group to actively fulfill its social responsibilities and contribute to the creation of a sound and sustainable society.

The CSR initiatives implemented by the Toyobo Group include the following. First, Toyobo has put in place a corporate governance system that enhances checking and monitoring functions and raises the transparency of decision-making and the execution of business activities. In addition, to create a compliance framework and raise awareness among employees of the necessity to maintain high standards of compliance with laws and regulations, the Company has issued a Compliance Manual containing the Toyobo Group Employee Guidelines for Action, which serves as the code of conduct. Moreover, the Toyobo Group conducts compliance training not only in Japan but also at Group companies overseas.

Regarding risk management, each of the committees is developing systems that can cope effectively with risks. To deal with environmental issues, based on its Basic Environmental Policy, Toyobo works to reduce the burden that its activities place on the natural environment, develop products that contribute to protecting the earth, conduct environmental preservation activities in the community, and respond affirmatively to biodiversity.

## Green Procurement

Aiming to create a sustainable society, Toyobo is taking initiatives to protect the natural environment through its products and manufacturing activities.

Toyobo places priority on procuring raw materials that have a minimum impact on the environment and strives to contribute to creating a sustainable society. As part of these activities, the Company pursues "green procurement" policies. Toyobo asks its business partners to supply information on the chemical substance content of the raw materials they use to ensure that (1) none of the substances forbidden by Toyobo regulations are contained in the products they supply and (2) the amounts of harmful substances specified by Toyobo are indicated.

In addition, for other items in general, the Company promotes the green procurement of products that bear the "Environment Label."

## Labor Safety and Health Safety as Major Prerequisites

Toyobo's basic stance is that ensuring safety is a major prerequisite for the conduct of corporate activities. Accordingly, the Company has worked to achieve a goal of zero accidents. Toyobo's safety management systems are based on its Safety and Security Promotion Committee. In addition, the Toyobo Group Environmental Safety Committee is responsible for implementing safety measures. During the fiscal year under review, there were four incidents of lost time due to accidents at Toyobo and six such incidents at other Toyobo Group companies. The Group as a whole continues to aim for zero lost time due to accidents.

## The Toyobo Group's Management Vision

Aiming to become the category leader, continuing to create new value that contributes to society in the environment, healthcare, and high-function product fields.

### The Toyobo Group's Image of an Ideal Employee

1. People who can think from the customers' perspective and create new value
2. People who can conceptualize what they want to be and can reform themselves
3. People who have a strong self-awareness and a sense of responsibility and take thoroughgoing initiatives in all they do
4. People who actively work to create networks inside and outside the Company
5. People who participate in teamwork and share a sense that work is worthwhile

### Code of Conduct (The Toyobo Group's CSR Charter)

Based on the recognition that "a company is a member of society," the Toyobo Group will continue to aggressively fulfill its social responsibilities so that it continues to be a company trusted by society. The Toyobo Group is also committed to contributing to the creation of a sound and sustainable society by providing socially beneficial products and services.

To meet these objectives in Japan and the rest of the world, the Toyobo Group conducts its activities with a strong sense of ethics based on the 10 principles set out in its CSR Charter (<http://www.toyobo-global.com/sustainability/charter/>), as it respects human rights and follows the prescribed laws and international rules as well as the spirit on which these laws and rules are based.

### The Toyobo Group's Basic Philosophy

順理則裕 (*jun-ri-soku-yu*)

## Basic Policy

The Toyobo Group, to respond to the changing times and enhance sustainable corporate value, has established the following three policies:

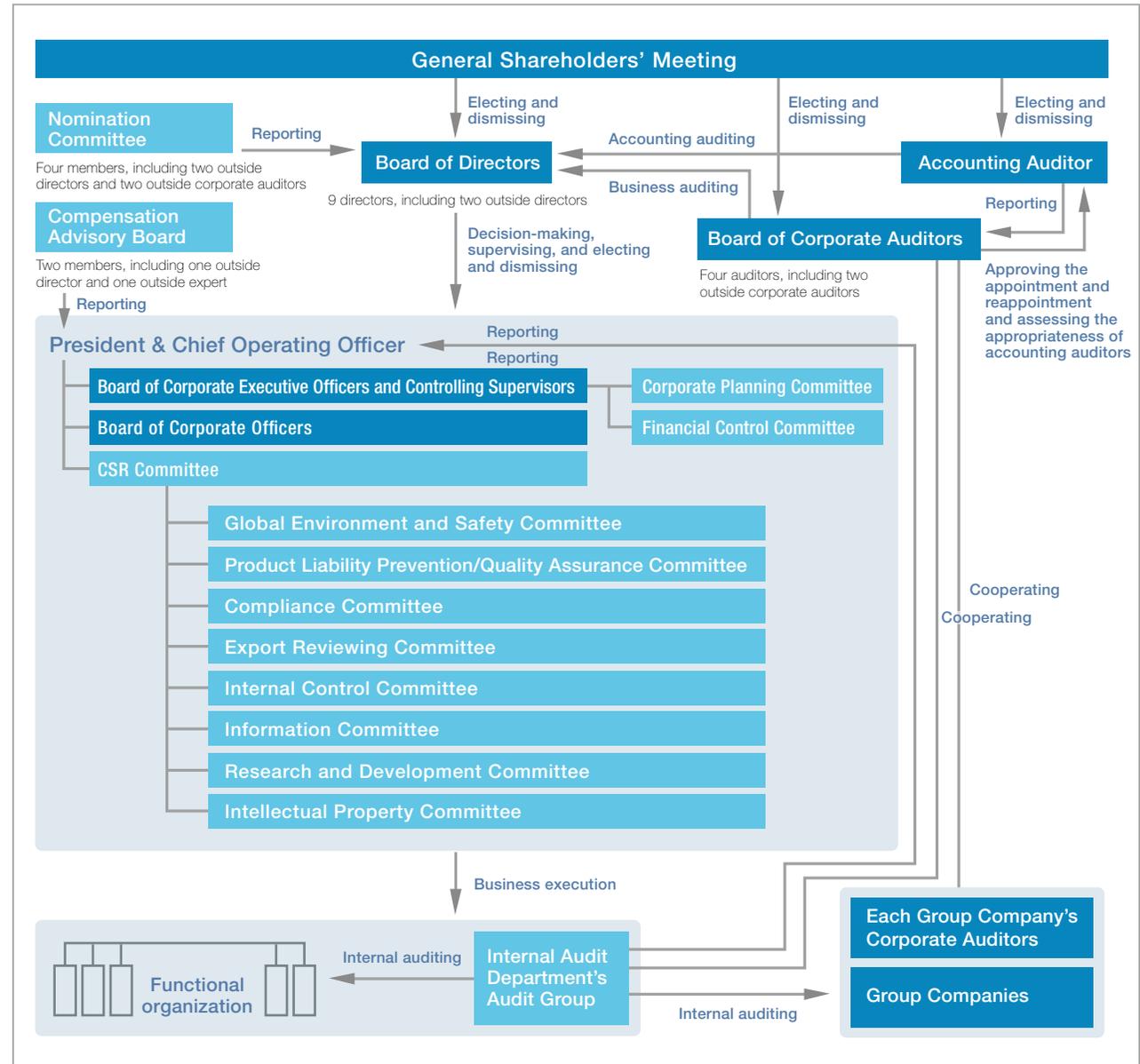
- (1) ensure timeliness and accuracy in decision-making,
- (2) ensure transparency in management, and
- (3) emphasize fairness.

Based on these principles, we are working to create and strengthen our corporate governance structure.

## Board of Directors and Corporate Officers

Toyobo is a “Company with Auditors” as defined by Japan’s Companies Act and, under this governance system, has appointed two outside directors and adopted the corporate officer system. The system is clearly defined by management regulations and involves the Board of Directors overseeing the business execution of Corporate Officers. It is also clearly defined in Corporate Officer regulations that Corporate Officers have an obligation to comply with laws and the Articles of Incorporation. Under Toyobo’s governance framework, a clear distinction is made between the roles of the Board of Directors, who concentrate on decision-making as they perform management oversight functions, and the Corporate Officers, who are in charge of business execution.

The Board of Directors comprises nine directors, including two outside directors. The term of office of a director is set at one year to ensure swift response to changes in the management environment and to clarify the responsibilities of



the directors. In view of the diverse and specialized nature of Toyobo's business, six directors, excluding the chairperson and outside directors, serve concurrently as Corporate Officers to enable fast and accurate decision-making.

The chairman of the Company serves as chairperson of the Board and makes decisions and reports on management policy, business plans and other areas and also monitors the business execution of each director and Corporate Officer. Scheduled Board of Directors meetings are held once a month, with provisional meetings convened as required.

### Corporate Auditor System

The Board of Corporate Auditors has four members, two of whom are outside corporate auditors. Their responsibilities include attending meetings of the Board of Directors and other important meetings, stating their opinions as necessary, and auditing the performance of duties by the Board of Directors based on audits of operations in the various divisions.

KPMG AZSA LLC has been appointed to conduct the independent audits required under Japan's Companies Act. The Board of Corporate Auditors receives plans for auditing and audit reports from the independent auditor and meets with the independent auditor periodically to exchange information.

The Internal Audit Department has been working as a function to monitor the effectiveness of internal governance. As of July 1, 2014, it was reorganized into the Internal Audit Division, which conducts the internal audit under the direct supervision of the President. The staff of the Internal Audit Division exchange information with the auditors periodically.

## Perspective of an Outside Director

### Oversee management while helping to enhance corporate value

I worked at a trading company for many years before being appointed an outside director at Toyobo. When I was working at a trading company in Osaka, I had a close relationship with the current management team and thus had a good insight into Toyobo. The first thing I noticed when I attended a Board of Directors meeting was the open atmosphere, where everyone felt free to speak their mind. My role as an outside director is to oversee management, or in other words, monitor conditions from a risk management perspective. Personally, however, by leveraging my experience with international markets during my time at the trading company I would also like to play a part in helping to drive Toyobo's proactive management forward as a way to expand business overseas. By doing this, I hope to do my part in building corporate value for the company.

### Realize growth through "new products and businesses" and "improving asset efficiency"

Of the five action plans<sup>\*1</sup> set out in the 2014 Medium-Term Management Plan, I will be focusing on (2) Developing new products and creating new businesses and (4) Improving asset efficiency.

Over its 135-year history, Toyobo has made significant changes to its business portfolio compared with the Company's earlier days. Going forward, it will be important to make improvements based on quantitative goals in order to further expand business in general. First, businesses that are not quite in tune with the times or have lost their competitiveness need to be reviewed, with the aim of improving their asset efficiency. At the same time, it is vital that Toyobo pushes ahead with the development of new products and the creation of new businesses. Further investigation into existing businesses is also required to ensure that Toyobo's growth is smooth moving

toward the attainment of these two goals. "People" and "organization" are the key components in realizing corporate growth through "new products and businesses" and "improving asset efficiency."

### Having the right people and the organization to realize growth

As part of my job, I will hold internal talks to determine the Company's framework for human resource development and the management's philosophy for this purpose. I intend to focus on the development of personnel across the board as well as the cross-functional skills within the organization needed to achieve this.

I believe that it should be a matter of course for exceptional employees to work overseas for up to 10 years after joining the Company. I have high expectations that Toyobo can develop human capital that can act not only from the standpoint of their own department but also from that of other businesses and the Company as a whole. As well, Toyobo needs to develop personnel who can apply what they know across the board, and who can promote the Toyobo brand, and build a platform for selling anywhere in the world.

Toyobo has built up a corporate culture, style and exceptional technology for over 135 years. If the Company can ensure the ability to turn a profit in the global market while passing on these strengths to the next generation, I'm sure it won't be long before Toyobo realizes the goals of ¥500 billion in net sales and ¥50 billion in operating profit.

I ask for the understanding and the support of investors.

August 2017

**Masaru Nakamura**  
Outside Director



\*1 Please refer to the page 13.

# Investor Information

(As of March 31, 2017)

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## Stock Listing

Tokyo

## Stock Code

3101

## Transfer Agent

Sumitomo Mitsui Trust Bank, Ltd.  
1-4-1, Marunouchi, Chiyoda-ku,  
Tokyo 100-8233, Japan

## Independent Auditors

KPMG AZSA LLC  
3-6-5, Kawara-machi, Chuo-ku,  
Osaka 541-0048, Japan

## Common Stock

Authorized: 2,000,000,000 shares  
Issued: 890,487,922 shares

## Paid-in Capital

¥51,730 million

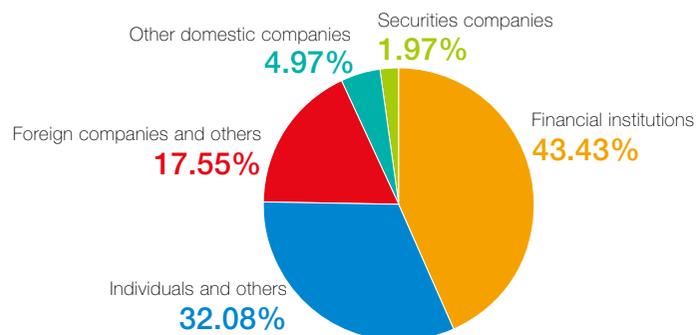
## Number of Shareholders

68,025

## Major Shareholders

	Number of shares held (thousands)	Percentage of voting rights (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	69,904	7.87
The Master Trust Bank of Japan, Ltd. (Trust Account)	67,398	7.59
National Mutual Insurance Federation of Agricultural Cooperatives	23,200	2.61
Japan Trustee Services Bank, Ltd. (Trust Account 9)	20,778	2.34
Nippon Life Insurance Company	17,508	1.97
Toyukai (Contractor Share Holding)	17,348	1.95
Trust & Custody Services Bank, Ltd. (Trust Collateral Account)	17,264	1.94
Japan Trustee Services Bank, Ltd. (Trust Account 5)	15,233	1.72
Meiji Yasuda Life Insurance Company	14,029	1.58
Toyobo Employee Stockholders' Association	13,970	1.57

## Composition of Shareholders



## Stock Prices

Highest/Lowest stock prices by term for the past five years

FY	2013	2014	2015	2016	2017
Highest (yen)	¥208	¥199	¥180	¥216	¥211
Lowest (yen)	80	142	145	140	155

Stock prices are Tokyo Stock Exchange (1st Section) market quotations.  
Fiscal 2017 ended on March 31, 2017

# Corporate Data

(As of March 31, 2017)

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## Head Office

2-8, Dojima Hama 2-chome, Kita-ku,  
Osaka 530-8230, Japan  
Telephone: +81-6-6348-3111

## Established

May 1882

## Number of Employees

3,021 (Nonconsolidated)

9,215 (Consolidated)

## Branches

### Tokyo Branch

Sumitomo Corporation Kyobashi Building,  
17-10, Kyobashi 1-chome, Chuo-ku,  
Tokyo 104-8345, Japan  
Telephone: +81-3-6887-8800

### Nagoya Branch

Miyuki Building, 390 Ichibagi-cho, Nishi-ku,  
Nagoya 452-0805, Japan  
Telephone: +81-52-856-1631

### Research Center

1-1, Katata 2-chome, Otsu, Shiga 520-0292, Japan

## Overseas

### TOYOBO (SHANGHAI) CO., LTD.

Room 2301-A, Dawning Centre Tower B,  
No. 500 Hongbaoshi Road, Shanghai, China  
Telephone: +86-21-6208-3030

### TOYOBO U.S.A., INC.

1540 Broadway, 25th Floor, New York, NY 10036, U.S.A.  
Telephone: +1-212-398-0550

### TOYOBO (THAILAND) CO., LTD.

1Q House Lumpini Building, 28th Floor,  
Room 2801/1, South Sathorn Road,  
Thungmahamek, Sathorn, Bangkok 10120, Thailand  
Telephone: +66-2285-6318~6324

### TOYOBO DO BRASIL PARTICIPACOES LTDA.

Praca Toyobo, 70, Jardim Paulistano,  
Americana, SP, BRASIL  
CEP 13471-579  
Telephone: +55-11-5509-7801 (São Paulo Office)

## Toyobo's Business Locations around the Globe



**TOYOBO CO., LTD.**

2-8, Dojima Hama 2-chome, Kita-ku,  
Osaka 530-8230, Japan  
Telephone: +81-6-6348-3111  
URL: <http://www.toyobo-global.com/>

**INVESTOR RELATIONS**

URL: <http://www.toyobo-global.com/ir/>  
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E-mail: [ir\\_g@toyobo.jp](mailto:ir_g@toyobo.jp)

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