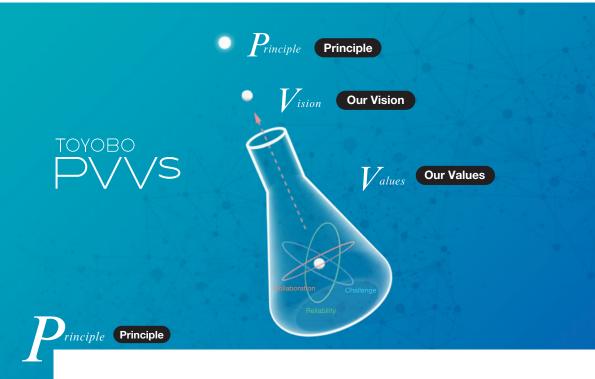


TOYOBO

REPORT

2 0 2 1

Year Ended March 31, 2021



## "Jun-Ri-Soku-Yu" (Adhering to reason leads to prosperity)

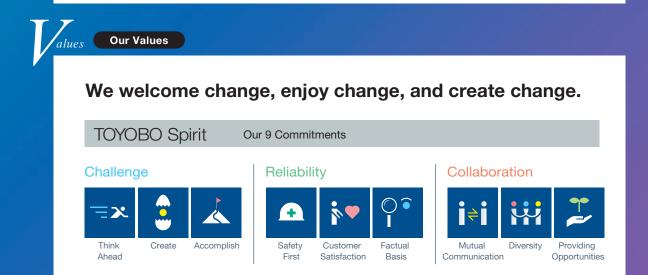
"Jun-Ri"
Do what must be done positive standpoint
Don't do what must not be done defensive standpoint
"Soku-Yu"
Adhering to "Jun-Ri" leads to a prosperous society

while also realizing self-growth

This is the founding spirit of our company and is our belief.

ision Our Vision

We will continue to create the solutions needed by people and the earth with materials and science.





President & CEO

Flow Takenchi

A fire that broke out at Toyobo's Inuyama Plant in September 2020 resulted in the loss of two employees and injury to another employee. Besides offering my prayers for the employees who lost their lives, I would also like to express my sincere condolences to their family members. I offer my heartfelt apologies to the injured employee, to local residents, and to all other affected parties.

Also in fiscal 2021, the company experienced some quality fraud incidents in relation to engineering plastics products, which were a significant source of inconvenience and worry for our customers and other stakeholders. I am deeply sorry for this. Going forward, we will learn from this experience, which our company's management is united in taking very seriously, and the company as a whole will be working together to implement measures for preventing re-occurrence. We will be working to thoroughly strengthen awareness of Toyobo's corporate spirit, based on the *Jun-Ri* part of the company's founding principle, *Jun-Ri-Soku-Yu*, which requires that we "Do what must be done," and "Don't do what must not be done."

#### Editorial policy

Since 2019, Toyobo has issued an "Integrated Report" instead of the "CSR Report" and "Annual Report" we issued previously. This single publication contains an overview of financial and non-financial information, including Environmental, Social, and Governance (ESG) related data. Through this Integrated Report, we aim to deepen understanding of the Company among our wide range of stakeholders, including our shareholders and investors. We introduce our philosophy and business activities, our growth strategy and outlook for the future, along with messages from senior management. Our intention is that this report will be actively employed as a tool for dialogue with our stakeholders, and will enhance the Group's corporate value.

Reference Guidelines, etc. :

- GRI "Sustainability Reporting Standards"
- Ministry of the Environment "Environmental Reporting Guidelines" (2018 versions)
- Ministry of Economy Trade and Industry "Guidance for Collaborative Value Creation"
- International Integrated Reporting Council

#### Reporting entity:

Unless otherwise stated, the report refers to TOYOBO CO., LTD. (non-consolidated basis), and references to "Toyobo" or the "Company" mean TOYOBO CO., LTD. Numerical data in financial information is reported on a consolidated basis.

Reporting period:

April 2020–March 2021 (Partially includes information dated after April 2021)
Published:

October 2021 (next scheduled publication: September 2022)

#### Contents Please see page 15 for details of "Fire prevention measures" and page 17 "Response to quality fraud incidents."

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The Basis of Value Creation  The Basis of Value Creation
Overview of Fiscal 2021  Key Events in Fiscal 2021

#### **Financial Information**

#### **Non-financial Information**



#### **TOYOBO REPORT (Integrated Report)**

This report outlines our company's value creation-oriented growth strategy, and presents an overview of our business operations. We actively utilize this report as a tool for dialog with shareholders, investors and other stakeholders.

https://ir.toyobo.co.jp/en/ir/library/integrated.html

#### Website

#### **Investor Relations**

https://ir.toyobo.co.jp/en/ir.html

#### Annual Financial Report

https://ir.toyobo.co.jp/en/ir/library/securities.html

#### TOYOBO NOW shareholder newsletter (in Japanese)

https://ir.toyobo.co.jp/ja/ir/library/toyobonow.html

#### FACT BOOK

https://ir.toyobo.co.jp/en/ir/library/fact.html

#### Vebsite

#### Sustainability

https://www.toyobo-global.com/sustainability/

#### Sustainability Reports

https://www.toyobo-global.com/ sustainability/report/ PDF versions, compiled in November each year, of sustainability related information posted on the company website

#### Corporate Governance Report

https://ir.toyobo.co.jp/en/ir/library/governance.html

# Our Origins

Molding and processing

Film



Polymerization

Osaka Boseki

Japan's first large-scale spinning company

Eiichi Shibusawa

Jun-Ri-Soku-Yu



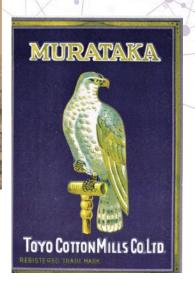




Mie Boseki

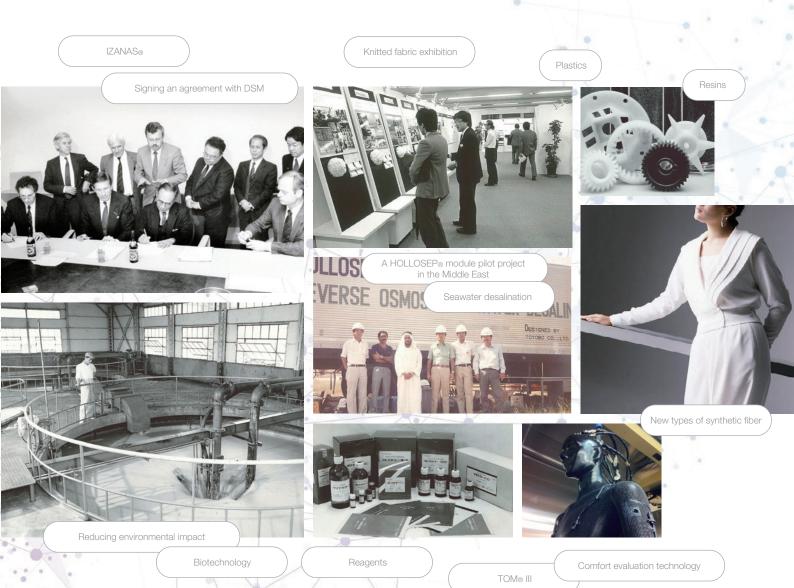


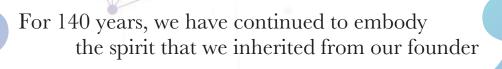
Merger with Kureha Boseki



MURATAKA trademark

 $<sup>^{\</sup>star}$  Names followed by the  $\ensuremath{\text{@}}$  symbol or by "TM" are registered trademarks or pending trademarks respectively in Japan of TOYOBO CO., LTD.





The spirit of *Jun-Ri-Soku-Yu* (adhering to reason leads to prosperity), which was one of our founder's mottos and subsequently became our corporate philosophy, has been the foundation for our growth.

Osaka Boseki, one of the companies that later evolved into Toyobo, came into being in 1882 with Eiichi Shibusawa, renowned as the "father of Japan's modernization," as its founder. The company went on to expand the scope of its business from natural fiber to synthetic fiber, and brought the world a wide range of textile products that have brightened up the era they were created in and helped people to enjoy comfortable lives.

In the 1960s, Toyobo launched its film business, and the company later expanded into other business areas, including plastics, bio-business and functional membranes. With polymerization, modification, molding and processing, and biotechnology, as its core technologies, Toyobo steadily expanded into new business areas.

From the late 1990s onwards, Toyobo has focused on actively expanding its business into the areas of films, functional polymers, industrial materials, automotive and healthcare, and the company has generated a steady stream of high-value-added products that have contributed towards solving social issues.

The attitude that Jun-Ri-Soku-Yu represents—in terms of helping to solve various issues that have affected society at different times, contributing to the prosperity of society, and the way that the company itself has achieved growth—can be thought of as a forerunner of today's concept of Creating Shared Value (CSV).

# Who We Are

Films, functional materials (VYLON®, HARDLEN® / plastics processed products

Engineering plastics, airbag fabrics, etc.

Films and Life science-related functional materials products ▶p.47 ▶p.53

**Mobility-related** products ▶p.49

Lifestyle and environmental products

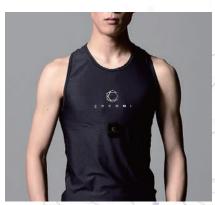
▶p.51

Bioproducts, medical membranes, medical equipment, etc.

Desalination membranes, equipment for VOC emissions treatment, etc.

COCOMI®

Health consciousness





Life Science

QOL enhancement

Dialysis







Reducing greenhouse gas emissions



## We are working in four areas to help solve the issues affecting our customers and society as a whole



We are putting into practice principle of *Jun-Ri-Soku-Yu* (adhering to reason leads to prosperity), by CSV in four solution fields.

Playing a key role in this process are the four Solutions Divisions—Films and Functional Materials, Mobility, Lifestyle and Environmental, and Life Science—that were established in Toyobo's organizational restructuring in fiscal 2021. The aim of this reorganization was for Toyobo to be able to do what needs to be done, from a customer and societal perspective rather than a manufacturer perspective, in order to continue contributing to the resolution of social issues over the long term in the future.

In line with this approach, when providing, for example, a solution for optimal PET bottle packaging,

Toyobo has worked to provide a total solution by integrating the activities of units handling film products and those handing adhesives, etc., which in the past would have been operating separately.

With this system as the foundation, Toyobo has generated a series of products that contribute towards solving social issues, including films that keep food fresh for long periods and help to reduce food loss and waste, yarn and fabric for manufacturing the airbags that help to keep vehicle users safe, film used in seawater desalinization plants in areas of the Middle East that are affected by water shortages, and reagents that make COVID-19 testing significantly more efficient.



Reducing environmental impact









Mobility

Filims and Functional Materials

Food loss and waste reduction



## Where We Are Heading

Digital society





Creating the solutions needed by people and the earth

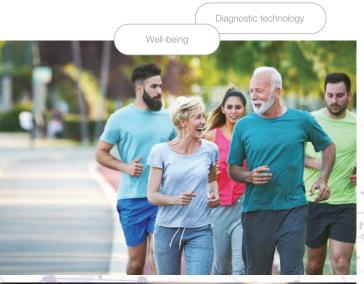


Clean technology

Material recycling

Eco-conscious film

Chemical recycling





Smart cities







Future mobility

Open innovation

Synergy with other companies

# Pr

## Providing value for the world by continuing to create the solutions needed by people and the earth

Over the past few years, the expectations that the market, and society as a whole, have of companies have grown increasingly diverse and more demanding, for example in relation to the United Nations Sustainable Development Goals (SDGs).

In order to clearly demonstrate, both within the company and externally, our determination to respond properly to these expectations, in fiscal 2020 Toyobo signed up to the United Nations Global Compact (UNGC), and also announced its support for the proposals made by the Task Force on Climate-related Financial Disclosures (TCFD). Furthermore, starting from fiscal 2021, Toyobo has been identifying materiality (i.e., key issues) that the company needs to address from a long-term perspective. Toyobo has established related targets and KPIs, and has put in place a company-wide, horizontal organizational

framework to accelerate Toyobo's development into a carbon-neutral company. By implementing a project to consider the value that Toyobo Group will need to provide in the future, and by promoting alliances and open innovation with a wide range of other companies, Toyobo is speeding up its generation of innovative ideas that contribute towards solving social issues.

In fiscal 2022, Toyobo will be making an all-out effort to regain trust, which is the company's key priority at present. Besides formulating the Sustainable Vision 2030, which embodies the company's long-term vision, Toyobo is also drawing up the next medium-term management plan, which will begin in fiscal 2023, and working towards our goal of making Toyobo Group a group that continues to create the solutions needed by people and the earth.

From surviving to sustainable

—Now is the time for change

Ikuo Takeuchi President & CEO



Management approach

## A company where people work with pride and purpose

The true leaders of our Company are the people at our worksites—By worksites, I mean the people behind the scenes at our production sites and R&D facilities, in our back offices, and in our sales and marketing departments.

A company can only grow sustainably if every employee at every worksite is actively engaged and fulfilling their potential. I have come to believe this even more strongly in the last few years since joining the management ranks.

I remember one time in particular three years ago when a talk with employees at the Iwakuni Membrane Plant left a very strong impression on me. Several employees told me that they are proud that our products are at the forefront of medical care and are supporting the lives of many dialysis patients. It is the motivation and efforts of our employees at our work sites that drive our business. I realized that business managers only play a supporting role; our biggest responsibility is to create an environment where our people can work with pride and purpose and have a sense of their personal growth.

Creating a company that employees can be proud about and feel a sense of purpose is precisely the spirit of the Group philosophy. A company's sustainability increases when it provides a workplace that enriches the lives of its employees by enabling each employee to perform to their full potential at their workplace and feel that they are growing through their work.

This cannot be achieved without the fundamental elements of a safe and secure work environment and a trustworthy company. Unfortunately, the regrettable fire accident and quality fraud incidents in fiscal 2021 have greatly shaken the foundations of our business.

Restoring trust in the Company is my highest priority as the new CEO leader of the Group. I feel a profound sense of crisis and will do everything in my power to implement change.

#### Inheritor of Eiichi Shibusawa's aspirations

Our founder, Eiichi Shibusawa, has been receiving a lot of attention recently in Japan. I do not think that is just a passing fad, in many ways I think this is a reflection of the times.

Even though he lived 150 years ago, many of his ideas and actions were ahead of his time. As can be seen in corporate efforts related to the SDGs and ESG, balancing a "contributing to social issues" and the "pursuit of profits" is a very important theme in modern corporate management. Yet, 150 years ago Shibusawa said, "A company's reason for existing is to enrich society," and even went so far as to say that the profit a company makes from its business is "nothing more than the residue." He was ahead of his time, but the times now seem to have caught up to his insights.

As one of the companies that he founded, over our long history we have contributed to solving social issues in various areas. The TOYOBO PWs corporate philosophy framework we redefined two years ago (fiscal 2020) centers on the Shibusawa's personal maxim the principle of Jun-Ri-Soku-Yu (adhering to reason leads to prosperity) and sets our vision to "continue to create the solutions needed by people and the earth with materials and science." My mission as CEO is to steadily raise corporate value by following the TOYOBO PVVs corporate philosophy and building our performance results by contributing to solving social issues. I believe this embodies the aspirations and thoughts that we have inherited from our founder, Eiichi Shibusawa.

Fiscal 2021 overview / Outlook for fiscal 2022

## Forecasting higher sales and profits in fiscal 2022

Our overall business performance was solid in fiscal 2021 and the results exceeded our initial forecast. The global COVID-19 pandemic severely impacted economic activity worldwide. The Group also had businesses that were significantly affected, such as automobile-related products and textile, but in addition to the steady performance of the films business, the life science field saw an increase in

production of reagents and raw materials for PCR testing as we actively responded to the needs of society.

In fiscal 2021, the Toyobo Group recorded consolidated net sales of ¥337.4 billion (down 0.6% year on year) and operating profit of ¥26.7 billion (up 16.9%). Profit attributable to owners of the parent amounted to ¥4.2 billion, representing a 69.5% decline, which owed mainly to impairment losses in the acrylic fiber business.

The outlook for fiscal 2022 includes concerns about an ongoing impact from the COVID-19 pandemic and higher raw material prices. At the same time, we expect a positive effect from increasing our film production volume. For fiscal 2022, we forecast net sales of ¥365 billion (+8.2% year on year), operating profit of ¥29 billion (+8.8%), and profit attributable to owners of parent of ¥13 billion (+209.4%).

Note: Outlook for fiscal 2022 is as of August 5, 2021.

#### Restoring trust is the top priority

Our management strategy in fiscal 2022 will hinge on four core initiatives designed to remodel our management base for sustaining business growth.

The first core initiative is restoring trust in the Company,



which is our top priority. We will focus particularly on making a comprehensive and concerted Group effort in safety, disaster prevention, and quality assurance and on fortifying our risk management system. In the area of disaster prevention, we aim to fully establish an organizational culture that prioritizes safety over all else. During the year, we will actively execute a master plan for disaster prevention that includes speeding up investment in disaster prevention equipment and providing training in safety and disaster prevention. Quality assurance will be bolstered by restructuring the quality management system, strengthening and expanding compliance training, and various other measures to raise awareness and recreate our corporate culture.

Risk management will be strengthened throughout the Group. The newly established Risk Management Committee will be dedicated to identifying and preventing risk along with executing measures for early detection and response.

The second core initiative is accelerating the portfolio reform process. Each business will be classified as expansion, stability and sustainability, and improvement and managed based on their profit and growth potential. Aggressive investment will be focused on the film, life science, environmental, and other businesses where we have a competitive advantage and where we expect the markets to grow.

The third core initiative is exploring avenues for future business. We will be launching the Company-wide Mirai Value Proposition Project to pursue development themes of digital society, healthcare, and environment with the aim of establishing businesses in each area beginning in fiscal 2031. We will also form and execute digital transformation strategies for our businesses.

Environmental initiatives are a key part of preparation for the future. We will step up our efforts to establish Company-wide systems and processes aimed at achieving carbon neutrality. We will also develop films composed of biomass and recycled raw materials to reduce the amount of plastic in our products and work with other companies to achieve zero waste.

The fourth core initiative is rebuilding the foundation of our Company. We will lay a firm foundation for sustaining growth by elevating the onsite capabilities of our manufacturing operations, creating an open work environment, and developing our human resources while

promoting the active participation of women and along with diversity and inclusion in our workforce. We will also strengthen our internal auditing functions and implement measures to ensure thorough compliance.

These initiatives will lead us to become the Company we envision for ourselves—a company using its business to address social issues, providing an atmosphere where employees work with pride and a sense of purpose, and generating sustaining growth.

Long-term vision and strategy

#### From survival to sustainable

A prerequisite for a company to grow sustainably is to have a solid foundation from which we can build a growth trajectory for the future. The fire accident and quality fraud incidents in fiscal 2021 give us the opportunity to thoroughly reexamine every aspect of our foundation.

Over the past six months, our corporate officers have gathered many times not only to discuss the direct causes of accidents and incidents but also to consider and verify how our corporate culture and management approach contributed to the incidents.

The distant cause of the fire accident and quality incidents may be an effect of structural reforms that lasted for about 15 years until 2010. Throughout those years, management was cutting costs and reducing staff so the Group could survive a fiercely competitive environment and severe financial situation. It was a crisis situation, and management at the time may have had little choice but to get rid of anything that would not have an immediate negative impact or could help improve results. Consequently, improvements in important areas like quality and safety were insufficient. Their all-out efforts to eliminate losses and reform the business structure were ultimately successful as they brought us through the financial crisis. Although times have changed, all of us at the management level have come to see how the experience from that success has been influencing our decision-making and business operations. That understanding has led our management team to redouble its efforts to establish sustainable management focused on 10 and 20 years in the future.

## Companywide strengthening of safety, disaster prevention, and quality management

The first step in the transformation is reforming the organizational structure for safety, disaster prevention, and quality assurance. In December 2020, we established the dedicated Safety and Disaster Management Division with subdivisions of the Disaster Management Department and the Occupational Safety Department. We followed this in April 2021 by establishing the Quality Assurance Division. The safety, disaster prevention, and quality management operations that were previously part of the Production Technology Innovation Division all were set up under a separate, independent structure. We intend to continue strengthening management in these areas by linking these bodies with the Internal Audit Department and all of the business divisions.

Also in April 2021, we created the Risk Management Committee, of which as President & CEO I serve as chair, to provide centralized management of the Group's safety, disaster prevention, and quality risks. This committee formulates top-down risk management policies for the Group and supervises overall risk management activities, including forming organizational structures related to risk. Under the committee's supervision, departmental managers implement the risk management system and take steps to reduce risk.

One specific measure to strengthen our safety and disaster prevention systems will be clarifying the risks and responsibilities at the factory level, business unit level, and group management level and by formulating a system to smoothly apply Check-Act-Plan-Do (CAPD, a modified version of PDCA that starts with Check and Act) focused specifically on safety and disaster prevention.

In addition, we will give priority to high-risk areas identified by a comprehensive disaster prevention inspection. We will also diligently proceed with the maintenance of equipment and facilities and renovation of aging buildings. The system for safety and disaster prevention management will incorporate advice from third-party experts into its measure to reinforce weak points. We also plan to provide regular disaster safety and disaster prevention training as part of an education program for all officers and employees.

We will address the quality issue by thoroughly investigating the quality incidents to identify those cause and why we were unable to detect the situation.

#### Creating our vision for the Company in 2030

During fiscal 2022, we plan to announce our next medium-term management plan with our targets for fiscal 2026 and our Sustainable Vision 2030. Some ideas we are considering for the vision are to be "a company providing solutions for people and the earth," "a company capable of sustaining growth," and "a company people want to continue working for because they can work with pride and a sense of purpose." In other words, we aim to use our business to help achieve global sustainability and enable our sustainable growth.

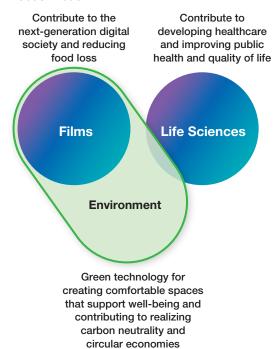
We will not change the fundamental concept of practicing Jun-Ri-Soku-Yu (adhering to reason leads to prosperity) to pursue both economic and social value as a way to raise corporate value. But we intend to change the whole Group by creating a vision for 10 and 20 years in the future, which to date has not been a significant part or our approach.

Although we have been aware of the importance of revising the business portfolio, we understand that the reason we have not realized significant change is that we did not have a sufficient long-term perspective. From now on, we will backcast from the Sustainable Vision 2030 and evaluate and classify each business based on profitability and growth potential, then concentrate our resources primarily in the core focus areas of films and life sciences and in businesses, such as Mobility and Lifestyle and Environment, that can contribute to solving society's environmental issues. Determining which areas to focus on will be extremely important, but I would like to set an earning rate of 8% as a baseline target for selecting which businesses to retain and renew. ROCE is a yardstick the Company uses to measure the capital costs.

#### Concept of the Next Medium-Term Management Plan (MTP)

#### Preparations for the future Reorganization of the business portfolio 1. Concentration of resources toward priority expansion projects Sustainable 2. Improvement of asset efficiency Backcasting Vision 2030 (Sustainable growth) Laying the foundation for sustainable growth \*Scheduled to be released in fiscal Thorough safety, disaster prevention, and quality assurance FY 3/21 FY 3/26 FY 3/31 2025 MTP MTP for the term after next term "Achieve growth" '4 years to remake and prepare'

#### **Focus Areas**



#### People and connections are the key

The people in our Group are important stakeholders. Our worksites drive our business, and all of our employees must feel pride and a sense of purpose in what they do. That is the key to providing the products and services that our customers expect and for us to carry out the TOYOBO PWs corporate philosophy.

People are the key to the sustainable growth of the Group, and we believe that creating a work environment that maximizes that power is the most important management issue. We have had an ongoing group-wide project examining the personnel system for two years, and we plan to launch a completely new personnel system in fiscal 2023 (see page 33).

We will also work to reform the "corporate culture" that fosters our human resources and reinforces our organizational capabilities. Our culture has suffered as the number of experienced employees decreased, our staff became more homogeneous, and our workstations became more like silos, leading to fewer cross-organizational connections and making it difficult for employees to converse. I want to create a workplace that encourages open communication across organizations and ranks so employees can speak casually and openly with superiors and colleagues.

sales in the textile business, a subsidiary in China, and in the functional membrane and environmental businesses. I am very familiar with Toyobo's corporate culture before the structural reforms and have seen the Company go through trial and error for more than 30 years. From that perspective, I take pride in the fact that the reforms will not just address issues in each business, but will be embraced by the entire Company.

That is why, when I took the position as the new CEO, I declared our slogan for fiscal 2022 to be "Now is the time for change."

Our top priority is restoring the trust in the Company, but I also see this growing sense of crisis as an opportunity the entire Group to change. We will change the Group and present clear long-term scenarios to everyone inside and outside the Company. We already know what we must do, and I am confident that making those changes will transform Toyobo.

We would like to ask all our stakeholders for their continued understanding and support.

Skuo Takenchi

President & CEO

Message for stakeholders

#### Now is the time for change

Providing return to shareholders is a management priority.

At this stage we are not able to significantly increase payout via dividends because of the need to strengthen our infrastructure, including spending for disaster prevention and to refurbish aging equipment and facilities, and the need to invest to prepare the Company for the future. We believe that steadily implementing the next medium-term management plan is the most judicious route to reestablishing our ability to provide more dynamic dividend payment and shareholder return.

My career started in business planning and took me to

## Fire prevention measures

#### Overview of the fire at the Inuyama Plant

#### Situation regarding the outbreak of the fire

#### Place of outbreak

Packaging film production line TOYOBO CO., LTD. Inuyama Plant 344, Aza Maehata, Oaza Kizu, Inuyama City, Aichi Prefecture

#### Time of outbreak

Approximately 21:00 on Sunday, September 27, 2020

#### Developments following the outbreak Sunday, September 27, 2020

Approximately 21:00 Fire breaks out on a film production line at the Inuyama Plant

#### Monday, September 28, 2020

01:10 Public fire department announces that it has the fire under control

07:45 Public fire department announces that it has extinguished the fire

#### **Damage**

#### Casualties

Two deaths and one injury (all Toyobo employees)

#### Property damage

Damage to the packaging film production building and some production equipment

#### Revisions to the safety framework

Following the fire accident in September 2020, the Toyobo Group completely revised the framework, education, and all elements related to disaster prevention and created an Occupational Safety and Disaster Prevention Roadmap.

In December 2020, the Group established the Disaster Management Department and the Occupational Safety Department in the Safety and Disaster Management Division, which is directly overseen by the president. The two new departments are leading the Group's efforts to apply the PDCA cycle for improving the Group's safety, security and disaster prevention framework. In addition, the Business Division, Management and Administrative Division, Audit Division adopted a "three lines of defense" structure with each division holding respective responsibilities for implementing risk reduction measures related to safety and security risks.

The Business Division carries out comprehensive disaster prevention and site inspections using a safety management system (SMS) and emergency management system (EMS). The Management and Administrative Division identifies risk at factories and in audit projects, from which it creates a risk map. The Risk Management Committee and the Safety and Disaster Management Division use the risk map to implement risk reduction measures throughout the Group. The Risk Management Committee also recommends risk reduction measures to the Board of Directors (see page 87).

#### Revisions to the safety education system

The Company has expanded its safety education programs provided at worksites and has also created an education

program for management level employees with the aim of promoting awareness among all employees about the importance of placing the highest priority on safety and security and the prevention of accidents.

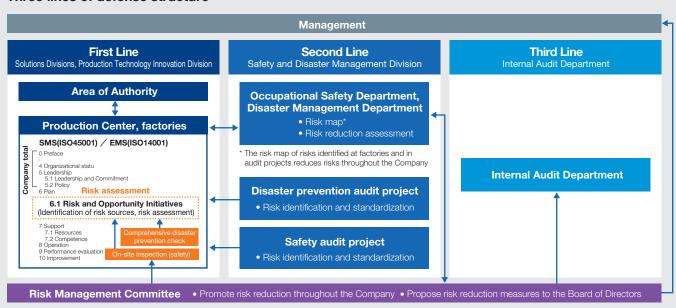
In fiscal 2021, we plan to introduce a new safety education program created by external institutions and designed for specific position levels in the Company. The new program will first be provided to corporate officers and then to other position levels in stages.

#### On-site disaster prevention activities

We will initiate on-site disaster prevention activities related to equipment, personnel, systems, and the organization with the aim of ensuring safe and secure production at our factories.

Equipment	Update aging equipment and strengthen maintenance		
Personnel  Disaster prevention training, focus on education promoting "not being passive about accidents setting up training centers, company-wide safeducation, hire coaches, meetings between departments and the divisions			
Systems	Visualization (reporting) of on-site risk, standardized risk assessment, creating guidelines, funds, number of days of Securing disaster prevention budgets such as visualization (visualization) of on-site risks, standardization of risk judgments, creation of guidelines, set up a disaster prevention budget with funds to cover work stoppage days and personnel		
Organization Appoint disaster prevention specialists, increase personnel, appoint on-site disaster prevention personnel, reviews of manufacturing personnel			

#### Three lines of defense structure



#### Occupational safety and disaster prevention roadmap

	Fiscal 2022	Fiscal 2023	Fiscal 2024	Fiscal 2025 and forward
Priority issues for the year	Top management commitment statement Start on-site dialogues Start safety and disaster prevention workshops Organize the mission of the Safety and Disaster Management Division Organize the SMS and EMS policies of all companies	Establish on-site dialogue as standard     Establish safety and disaster prevention workshops as standard     Construct a Group SMS and EMS system     Create overview of on-site inspection activities     Start of human resource development exchange meetings	Expand to all Group companies     Establish the Group SMS and EMS system     Stablish human resource development exchange meetings as standard	Develop for overseas sites
Fostering a culture of safety	Mostly dependent stage <sup>1</sup>		Increasing independent stage1	Emerging interdependent stage <sup>1</sup>
(employee behavior and awareness)	Top management commitment An expression of management of		stration of tangible leadership (Declarat	tion of Action, on-site dialogues)
Reestablish shared values and communications		Workshops for specific position	n <b>levels</b> (all levels → broaden to Group	companies and overseas bases)
	3S <sup>2</sup> activities (production innov Continuously improve ability to		resources capable of noticing and rec	ctifying abnormalities
Safety infrastructure (systems,	Establish safety and disaster proprevention education program	revention training centers at all bas	es, construct a disaster	
human resource development)	Appoint disaster prevention per	rsonnel, strengthen organization (s	ecure personnel and specialists)	
Steadily implement emergency response and incorporate into daily	Reconstruct the safety and sec Continuous risk management a	eurity disaster prevention risk mana t all companies	gement system	
management	Audit Project			
Synchronize with all-company risk	Conduct on-site inspections	Establish RA activities, review	of case studies (strengthen horizonta	al development)
management activities	Review the comprehensive disaster prevention checks	Disaster prevention budget, se	t work stoppage schedule	
Mechanism to establish a tradition of learning	Inspect ducts Duct fire	countermeasures		
	Medium-term safety and disaste	er prevention plan (update aging equi	ipment, remove wooden buildings, rep	lace firefighting equipment, etc.)

<sup>1.</sup> These stages are derived from the DSS Bradley Curve of the progressive maturity of a safety culture. 2. 3S activities: Seiri (sort), Seiton (set in order), and Seiso (shine)

## Response to the quality misconduct incident

#### Incident of inappropriate third-party certification

In September 2020, during certification verification tests of products certified by Underwriters Laboratories (UL), a third-party U.S. organization engaged in product safety science certification, Toyobo discovered discrepancies in the product numbers of some of the engineering plastic products that had received UL certification and found samples of products with different chemical compositions from those being sold to our clients. A subsequent investigation in January 2021 found that some items were being manufactured at factory locations that had not been authorized to produce the UL certified materials. After Toyobo informed UL about the misconduct, UL rescinded its certification of one product on October 28, 2020 and additionally rescinded its certification of an additional three products on February 3, 2021. Upon request by Toyobo, UL further rescinded its certification of specific product numbers among the three products on March 26, 2021. To date, Toyobo has received no reports of accidents related to final products using the non-compliant products.

Lloyd's Register Quality Assurance (LRQA) Ltd., a certification/registration agent for the International Organization for Standardization (ISO), after special investigation cancelled the ISO 9001 certification granted to certain Toyobo departments related to the non-compliant products and temporarily suspended sections of the multi-site certification granted to Toyobo on January 28, 2021. The temporary suspension was subsequently lifted on June 9, 2021.

#### Steps to prevent incidents of quality misconduct

Following the incidents discovered in fiscal 2021, Toyobo is aiming to prevent and eliminate any potential for quality-related misconduct by changing its culture, systems, and awareness related to quality with the aim of conducting manufacturing that fulfills its promise to provide safety and security from the customer's perspective.

Toyobo is planning to implement several changes to fulfill our promise to customers. We are forming the new three lines of defense structure, which includes the Quality Assurance Division directly headed by the Company president, and strengthening the check system when transferring business. In addition, we will fortify the internal auditing function and compliance training systems, promote the use of the internal reporting and employee rotation systems, and strengthen the quality management system by engaging outside experts to participate in special projects centering on quality topics.

#### Investigation and response to the incident

Toyobo established a case committee to review the "PLANAC" and other engineering plastics involved in the quality incident, which was composed of outside directors and auditors to ensure the investigation's fairness and independence from the Company's executive bodies. In

addition, the Company engaged lawyers without any affiliation with the Company to conduct an investigation.

The results of the investigation into the causes of the incidents and recommendations for measures to prevent recurrence produced are shown in the following chart.

The Company is diligently implementing measures following the recommendations.

#### **Quality incident investigation findings** (causes and prevention measures)

Cause	Prevention Measures
Inadequate check system for business transfer	Revise and apply rules for due diligence at the time of business transfer
Insufficient auditing function	Expand the audit scope, conduct on-site sampling and unannounced inspections
Low compliance awareness	Provide compliance training to improve officer and employee awareness
Malfunctioning internal reporting system	Provide compliance training to improve officer and employee awareness
Internal conditions of the division in charge	Investigate and respond to the sense of reluctance to use the system

#### Specific measures to prevent incidents of quality misconduct

Objective: Manufacturing that promises safety and security to customers from the customer's perspective

#### Respond to the four elements behind misconduct: Opportunity x Motivation x Justification x Ignorance

(■ under way, □ priority measure)

Ignorance ⇒Increase understanding

#### Opportunity ⇒ Change the system Motivation ⇒ Change the culture ■ QA system compliance (strengthening gate check) ☐ Revise the PL/QA assessments ■ Corporate Philosophy: Return to the roots of Jun-Ri-Soku-Yu Add sampling and unannounced inspections ■ Top management policy: Deeply instill "safety first" ■ Create a system for handling quality data \* Safety = Occupational, environmental, products, equipment ☐ Strengthen the quality-related organizational structure ☐ Human resource rotation and performance evaluation • Three lines of defense $\hfill \Box$ Construct a visual system for risk monitoring ☐ Revise the compliance training ☐ Strengthen the QA education program • Create an environment encouraging dialogue and • Train new employees consultation • Educate on-site leaders ■ Produce a Quality Assurance Manual Case Report • Educate upper and lower management ■ Provide PL accident response training, present PL/QA ■ Raise awareness of rules, professional expertise, laws

Roadmap for Building the Quality System

Justification ⇒ Change awareness

	FY2022	FY2023	FY2024	FY2025 and forward
Priority Issues	Regain trust			Unwavering trust
	Inspections to guarantee quality, build quality in the processes			Instill the concept of quality assurance across the product lifecycle
Emergency	Respond to external certifications			
Measures	Revise assessment processes			
	Respond to customers			
Corrective Measures	Create guidelines for Quality DX	Horizontally expand to affiliates and overseas offices		
Weasures		Horizontally develop quality DX	examples ⇒ Accelerate conversion t	o smart factories
Standardization Management structure (verification of effectiveness): Three lines of defense system, Risk Management Communication			Committee	
		Diligent quality assurance mana	gement (actively apply ISO to operat	ions)
		Create a map of quality-related the professional system	human resources, train and actively	use specialists in
Changing Awareness	Corporate Philosophy: Return to	the roots of Jun-Ri-Soku-Yu, deepl	y instill "safety first"	
Awaieliess	Change the organizational culture and awareness	Instill QA as an activity for every	rone!	
	Train QA personnel and foster q	uality awareness		

<sup>\*</sup> Quality control and quality assurance using DX (Digital Transformation)

#### Value Creation Process

Our value creation process arises from the TOYOBO PWs corporate philosophy framework and demonstrates how we use various types of capital to create value and increase value for all stakeholders. Through this process, the Toyobo Group aims to accumulate and convert capital to continue creating "the solutions needed by people and the earth."

## **Values & Philosophy Corporate Philosophy Framework** TOYOBO Our diverse value creation activities are permeated by the spirit of Jun-Ri-Soku-Yu (adhering to reason leads to prosperity). This can be described as the forerunner of ►See page 01

#### **Focal Points in Value Creation**

#### **Core Technology**

#### **Technology** "Manufacturing" for demand

Providing optimal value throughout the value chain, in terms of quality, cost, and lead time



#### **Market Demand for** "Products & Experience"

Creating customer value by providing products, services and solutions

> **Social Demands** (SDGs, etc.)

#### **External Environment**

- (1) Carbon neutral
- 2 Circular economy
- 3 Technological innovation
- 4 Demographic changes
- 5 Progress of globalization
- 6 Respect for human rights, **Diversity & Inclusion**
- (7) Food loss

#### **INPUT**

#### Capital for value creation

#### **Financial capital**

Stable financial structure (Rating and Investment Information, Inc. (R&I) Evaluation A-)

#### Manufacturing capital

- 7 production bases in Japan. production bases in 15 countries / regions
- Capital investment of ¥23.3 billion (FY2021)

#### Intellectual capital

- Sales-R&D expenses ratio 3.8% (FY2021)
- 3 primary R&D bases
- Core technologies (polymerization, modification, molding, processing, biotechnology)
- Number of patents acquired 228 (2020)

#### **Human capital**

- 10,149 employees (as of end-March 2021)
- Ratio of female managers 3.1% (as of end-March 2021)
- Number of employees engaged in R&D Approximately 500 (as of June

#### Social / relationship capital

- Strong relationships with customers and suppliers
- · Open innovation with other companies and universities
- Participation in various initiatives

#### **Natural capital**

• Energy consumption 13,166 TJ (FY2021)

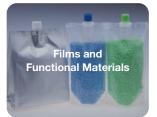
#### **Business activities**

Sustainable Vision 2030 (to be announced in FY2022)

#### Medium-term management plan

Accumulation of various types capital through businesses

### Solutions businesses creating social and economic value



Contributing to food security and safety, protecting global environment



Contributing to solving environmental issues, such as climate change and water shortage



Contributing to improving the safety and comfort of all types of mobile spaces



Contributing to growing needs related to longevity and health

#### **OUTCOME**

Value provided directly to stakeholders

(Customer)
Provide solutions

(Global environment) Circular economy Reduce environmental impact and GHG emissions

> (Employees) Secures and safe workplace, meaningful and rewarding work

(Business partners and cooperating firms) Co-existence, mutual prosperity

(Local communities) Coexist with local communities

(Shareholders and Investors) Enhance corporate value, stable dividends

#### **Our Vision**

A Group with sustainable growth through Jun-Ri-Soku-Yu



A Group that continually creates "the solutions needed by people and the Earth"



Conversion to capital by internalizing the external economy and other methods

Matariality

Materiality ►See page 21

Management Base (Basic preconditions on materiality)

## **Materiality**

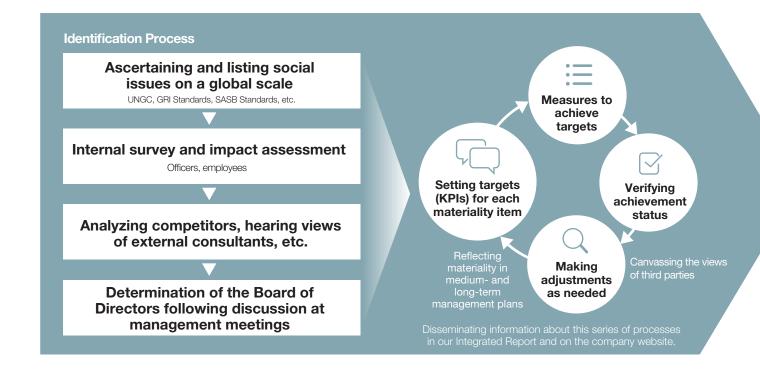
Strengthening progress management by assigning company officers and setting targets (KPIs) for each materiality item

In recent years, the expectations placed on companies, in terms of becoming carbon-neutral and contributing towards the realization of a circular economy, have grown. Enterprises need to address a wide range of issues, such as human rights, working conditions, and the impact of climate change.

In fiscal 2021, responding to the demands and expectations of our stakeholders, Toyobo Group identified CSV- and ESG-related material issues in eight items, to

realize our vision of being a "Group that continually creates the solutions needed by people and the earth." We have also positioned three items for which society's expectations are particularly high as Management Base (Basic preconditions to materiality). These items represent the foundations of the Toyobo Group's business activity.

We will also regularly review the material issues through communication and engagement with our stakeholders.



## Identifying materiality based on social impact

When identifying materiality, we selected candidate social issues with reference to external initiatives and 12 international guidelines, including the GRI Standards.

We then clarified the positive and negative impact of these social issues through internal surveys and interviews. The Board of Directors made the final determination on materiality, taking into account the views of external parties such as institutional investors. Our materiality is organized along the two axes of "materiality for stakeholders" and "materiality for the Group."

## Appointing responsible company officers and setting targets (KPIs)

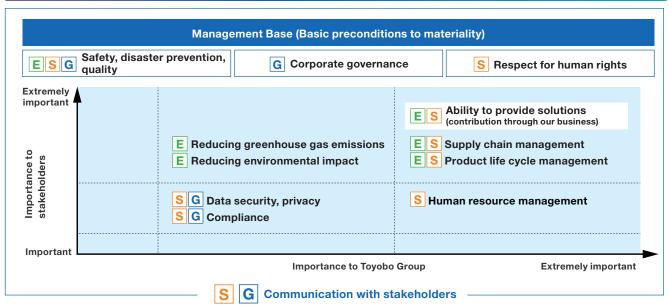
In November 2020, we appointed company officers to be responsible for each materiality item, and we also drew up the relevant targets (KPIs), so as to further enhance progress management in this area (see p.23).

Regarding the targets (KPIs) for Ability to provide solutions and for Product life cycle management, we will be discussing and deciding on these in concert with strategy formulation for the company's next medium-term management plan, implementation of which is scheduled to begin in fiscal 2023.

#### **Identified Material Issues**

Continuing to be a Group that "creates the solutions needed by people and the earth"

Innovation based on responsibility for the future: Realizing clean technology,
high QOL, and future mobility



E Environment S Social G Governance

Related ESG	Management Base (Basic preconditions to materiality)	Related SDGs
E S G	Safety, disaster prevention, quality	8
G	Corporate governance	16
S	Respect for human rights	10

Related ESG	Materiality	Related SDGs
ES	Ability to provide solutions (contribution through our business)	6 12 13 14
ES	Supply chain management	12
ES	Product life cycle management	3 12
E	Reducing greenhouse gas emissions	7 13
Е	Reducing environmental impact	6 12 14 15
S	Human resource management	5 8
SG	Data security, privacy	17
SG	Compliance	16

S G Communication with stakeholders	17
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## **Materiality**

In line with the identification of the company's materiality, in November 2020 new KPIs were established to support the implementation of related initiatives. These KPIs are adjusted as necessary to correspond to the target achievement status. The results are reported once annually to the Board of Directors.

ory			KPIs: timeframe for achievement set for each theme			
Category	Main topic	Officer in charge	Themes	Targets	FY2021 results	
ality)	Safety and disaster prevention	Chikao Morishige Senior Managing Executive Officer Head, Safety and Disaster Management Division	1) No. of major incidents* 2) Frequency rate of workplace accidents resulting in lost workdays 3) No. of fires or explosions 4) No. of environmental incidents * Major incidents: Defined according to internal standards based on the definition stipulated by the Ministry of Health, Labour and Welfare	1) 0 incidents per year 2) 0.25 or less 3) 0 incidents per year 4) 0 incidents per year All targets apply every year (calendar year)	1) 1 incident 2) 0.70 3) 1 incident 4) 0 incidents	
nater			We are continuing to conside	er target setting for "accident prevention init	iatives"	
Management base (basic preconditions to materiality)	Quality	Yoshio Araki Director, Executive Officer Head, Quality Assurance Division Controlling Supervisor of Production Technology Innovation Division	No. of incidents related to products*     Implementation status of product safety and quality assurance training 'ncidents related to products: Defined according to internal standards based on the definition stipulated by the Ministry of Economy, Trade and Industry	1) 0 incidents per year 2) 100% (All targets apply every year)	1) 0 incidents 2) 80%	
e (basic			We are continuing to consider target setting for "Quality-related" themes			
Management base	Corporate governance	Masakatsu Shirai Director, Executive Officer Controlling Supervisor of HR and Corporate Communication Division	No. of meetings of the Board of Directors / committees     Attendance rate of officers at meetings included in 1.     Disclosure of details of evaluation of the Board of Directors' effectiveness	Disclosure of results     Disclosure of results     Disclosure of details of effectiveness evaluation	1) See page 80 2) See page 77 3) See page 82	
	Respect for human rights	Masakatsu Shirai Director, Executive Officer Controlling Supervisor of HR and Corporate Communication Division	Implementation status of human rights education and training	1) Once a year for 20% of nonconsolidated* employees * "Nonconsolidated" here refers to TOYOBO CO., LTD., TOYOBO STC CO., LTD., and TOYOBO INFORMATION SYSTEM CREATE CO., LTD.  Target for FY2026	1) 24.1 %	
	Ability to provide solutions	We plan to discuss and consider this when formulating the next Medium-term Management Plan from April 2021				
Materiality	Supply chain management	Nobuya Fujiwara Executive Officer Controlling Supervisor of Procurement and Logistics Department	Ratio of CSR procurement surveys returned     Ratio of reduction in CO <sub>2</sub> emissions related to logistics	1) 90% or above (In years when a survey is not implemented, we carry out dialogue with business partners that past survey had issues) 2) Year on year reduction of 0.5%	1) Establishing a system for conducting questionnaires 2) Year on year reduction of 0.6%	
	Product life cycle management	We plan to discuss and consider this when formulating the next Medium-term Management Plan from April 2021				
Σ	Reducing greenhouse gas emissions	Yoshio Araki Director, Executive Officer Head, Quality Assurance Division Controlling Supervisor of Production Technology Innovation Division	1) Greenhouse gas emissions 2) R&D investment targeting climate change 3) TCFD / scenario analysis disclosure	1) 30% reduction* from FY2014 2) We will start to discuss and respond to this issue from now on 3) We will start to discuss and respond to this issue from 2H FY2022  *Target for FY2031 Set target in anticipation of increase in greenhouse gas emissions accompanying net sales growth (FY2031: Y500.0 billion)	1) 902 thousand tonnes 2) — 3) —	

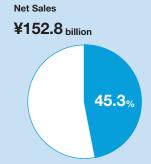
					As of April 2021
<u> </u>			KPIs: timeframe for achievement set for each theme		
Category	Main topic	Officer in charge	Themes	Targets	FY2021 results
Materiality	Reducing environmental impact	Yoshio Araki Director, Executive Officer Head, Quality Assurance Division Controlling Supervisor of Production Technology Innovation Division	1) Atmospheric emissions of VOC substances 2) Discharge of hazardous substances into water 3) Amount of waste emission 4) Final disposal (landfill disposal) rate 5) Expanding products and services that contribute to the environment (ECO-PARTNER SYSTEM®)	1) 60% reduction* from FY2015 2) 80% reduction* from FY2015 3) 15% reduction from FY2016 4) Less than 1% every year 5) Sales ratio of products and services that contribute to the environment 40% (TOYOBO CO., LTD. only)  *Targets for FY2031	1) 50% reduction compared to FY2015 2) 53% reduction compared to FY2015 3) 4% increase compared to FY2016 4) 0.2% 5) 29.9%
	Human resource management	Masakatsu Shirai Director, Executive Officer Controlling Supervisor of HR and Corporate Communication Division	1) Formulation and disclosure of a Human Resources Development Plan 2) Training core overseas personnel in Japan 3) Training investment per employee 4) Achievement of female manager ratio target 5) Ratio of annual paid leave taken 6) Reduction in overtime work exceeding annual statutory permitted overtime hours (no. of employees working more than 360 hours of overtime / total no. of employees) 7) Ratio of male employees taking childcare leave 8) Employment ratio of people with disabilities	1) Completion and sharing on the Company website 2) 15 employees per year* 3) ¥50,000 per year* 4) 5.0% or above 5) 75%* 6) Reduction of 20% (2.0%)* 7) Total number of days of absence leave taken increased by at least 20% for at least 80% of those eligible for absence leave* 8) 2.3 %  *Targets for FY2026	1) Completed Website posting 2) Canceled because of COVID-19 3) ¥24,000 4) 3.1% 5) 64% 6) (3.0%) 7) 80% 12 days absence leave taken 8) 2.2%
	Compliance	Masakatsu Shirai Director, Executive Officer Controlling Supervisor of HR and Corporate Communication Division	1) Increase in awareness of compliance     2) Awareness and use of compliance     consultation desks     3) No. of serious legal violations	1) Improvement in compliance questionnaire responses  • Whether company emphasizes compliance  • Awareness of "Compliance Mini Study" Compliance study sessions (Managers) Various other trainings held  2) Improvement in compliance questionnaire responses  • Awareness of compliance consultation desks  • Ease of use of compliance consultation desks  Consultation desks support 3) 0 violations per year	1) • I feel that way, or I somewhat feel that way 88% (down 5%) • (down 8%) 11 times (1,209 participants) + video delivered to all employees 13 times 2) • 92% • Want to use it 62% 37 3) 2 violations
	Data security, privacy	Naoki Fujii Executive Officer Controlling Supervisor of Corporate Planning Division	1) No. of instances of information security education provision¹ 2) No. of incidents¹ (information leaks, service outages, etc.) 3) Implementation of information security measures² ¹ Scope is TOYOBO CO., LTD., TOYOBO STC CO., LTD., and Toyobo Information System Create Co., Ltd. ² Scope is consolidated subsidiaries (determined while monitoring the situation) Specific measures aimed at consolidated subsidiaries  • Application of Information Security Policy • Roll out of measures to strengthen office automation and factory automation	1) 15 times per year     2) 0 incidents per year     3) Disclosure of promotion contents  All targets for FY2021	1) 19 times 2) 0 3) Under discussion at the Cyber Security Committee
All inclusive	Communication with stakeholders	Masakatsu Shirai Director, Executive Officer Controlling Supervisor of HR and Corporate Communication Division	No. of press releases     No. of interviews with investors     Frequency of meetings with employees and labor unions     Frequency of engagement with stakeholders	1) 75 per year 2) 150 per year 3) At least 30 times per year 4) Twice a year  All targets for FY2021	1) 90 2) 144 3) 14 times 4) 2 times

## **CSV Examples by Solution**

From fiscal 2021, Toyobo Group has organized the fields where the Group can create value that is shared with society into four categories, and established individual Solutions Divisions. Each division provides products and services that contribute to solving social issues.

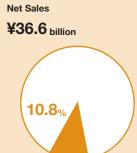
**Solutions Sales Ratio Key Products** 



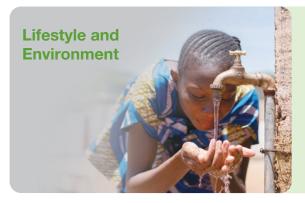


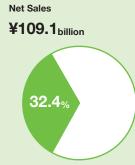
- Films
- Functional materials





- Engineering plastics
- Airbag fabrics





- Desalination membranes
- Wastewater treatment systems
- Equipment for VOC emissions treatment
- High-performance nonwoven fabrics
- Air purification filters
- Chemical synthetic fiber
- Super fibers
- Textiles



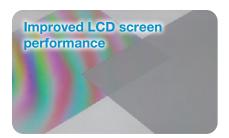
¥27.1<sub>billion</sub> 8.0%

**Net Sales** 

- Bio-related reagents
- Pharmaceutical products (contract manufacturing of injections, etc.)
- Medical membranes
- Medical equipment

Process

#### **Examples**



LCD film with more natural color

Boasts a high market share in response to trend toward larger and bezel-less LCD TVs



Transparent vapor-deposited film **ECOSYAR**®

Superior gas barrier properties for the long-term storage of food



Film of recycled PET resin CYCLE CLEAN®

Achieves 80% use of recycled resin while maintaining product properties



Airbag yarn and fabrics

Produces yarn and fabrics for over 20% of the world's airbags



#### **Engineering plastics**

Contributes to weight reduction as metal substitutes, such as products that far exceed global standards with 70% reinforced fibers



#### Manipularer® concept car

Incorporates more than 50 of our materials and technologies based on the concept of manipulating



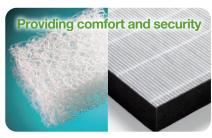
#### RO membranes for seawater desalination

Contributes to resolving water shortages in the Middle East through adoption in local large-scale desalination plants



#### **Equipment for VOC emissions treatment**

Delivered more than 1,500 equipment for VOC emissions treatment using active carbon fiber in Japan and overseas



#### Global-leading functional nonwoven fabrics

Responded to changes in social needs during the COVID-19 pandemic, contributing to the addition of comfort and security functions to end products



SARS-CoV-2 Detection Kit

Provides fast results using general-purpose equipment



#### Nerve regeneration conduit Nerbridge®

Promotes the regeneration of peripheral nerves severed or damaged as a result of an injury or related causes



Artificial kidney hollow fiber membranes of stable and reliable quality

Boasts outstanding filtering performance and stable waste removal performance with little degradation over time

## Value Creation Strategy Director Dialogue

#### Naoki Fujii

Executive Officer, Controlling Supervisor of Corporate Planning

#### **Profile**

Mr. Fujii joined Toyobo in 1987. He became Head of the Procurement Department in 2007, Head of the Iwakuni Production Center in 2015, and Head of the Corporate Planning Department in 2018. He was appointed as Executive Officer in April 2021.



## Director Dialogue

## Controlling Supervisors of Corporate Planning and Administration Divisions

In this section, two executive officers involved in formulating business strategies that included the CSV concept and supervising the management of financial and ESG aspects, discuss the Company's portfolio strategy, approach to investments, and the objectives they are pursuing as the Company formulates the new long-term vision and medium-term management plan.



#### Hiroshi Otsuki

Director, Managing Executive Officer, Controlling Supervisor of Administration

#### **Profile**

After joining Toyobo in 1987, Mr. Otsuki worked in various finance and accounting positions, including General Manager of Finance and Senior Coordinator of Corporate Planning in 2010, and also served as Manager of Film Business Management Office and other duties. He was appointed Executive Officer in 2017, and Director and Managing Executive Officer in June 2020.

#### Living through survival mode

**Otsuki** Mr. Takeuchi, who became the CEO in April 2021, and I have for many years been aware of the need to find a way to improve the business portfolio. He has a corporate planning background and I'm from finance and accounting, and we struggled to find a cohesive way to deal with what should be done with low-profit businesses and how to control costs and the size of our asset portfolio.

**Fujii** I first worked with Mr. Takeuchi around 2001 when he was in corporate planning, and I was the Head of Procurement at the Iwakuni Production Center. The Group was in an extremely precarious financial position at the time, and we were embarking on a plan to drastically reorganize our partner supply companies, which had never been done before. We worked together on many occasions to carry out the plan.

As Head of Corporate Planning, I have been working with him on the management strategy since last year when he was Controlling Supervisor of Corporate Planning.

Otsuki Looking back, I can see how you, I, and everyone were really struggling during that period and the pressure that existed to take "survival action" to come through crisis. Our Directors and Executives had more meetings and spent more time than ever in discussions in fiscal 2021 because of Inuyama Plant fire and quality fraud incidents. The discussions led us back to the Company's very foundations and reinforced the obvious that our highest priority must be on safety and that without compliance our business cannot grow.

I also think that the long period that we spent fighting for our survival weakened our corporate culture because it caused many employees to seriously wonder why they were working for the Company and ask themselves what they were getting out of their jobs and if they felt proud of their work. I also think that organizationally the Company wasn't adequately

prepared to deal with all the different ways that employees were engaged with the Company.

I, myself, feel very deeply that our employees and our company as whole should think again about the importance of Mr. Takeuchi's words that "our worksites drive our business."

## Planning (offense) and management (defense) for sustainability

**Fujii** I think my main role is to think of ways to create CSV, to understand the social issues and ask, "what solution can we offer?" along with "how can we grow our business?" and to create plans and management strategies focused on those questions.

When plans are being activated, there are times when you really need to step on the accelerator. There are also times when it's best for the Company if you apply the brakes at the right time or with the right amount of pressure. You are in charge of the brakes. We need to have the right balance of both, so we gather speed rather than just hurtle forward. Controlling that difference is extremely important.

Otsuki I certainly will apply the brakes when we need it. At the same time, though, the business environment is changing, so the brakes need to be used differently than in the past. When we were reforming our business structure, we faced major financial challenges and were reluctant to invest sufficiently in a project that carried even just a little risk, even if we thought that if we kept pushing it would have a good chance to become a solid business. With where we are now, rather than avoiding risk completely, I think it's very important that we seek to effectively manage risk.

Like a ship with a waterline on its hull, when you invest in a project there should be no danger that a hole will open below the waterline. However, you sometimes have to take a chance with a ship that has a hole above

the waterline.

Fujii In other words, when risk exists, if you decide that the risk is tolerable, then you should take it.

Otsuki Precisely. Basically, I think that if an opportunity is in line with the Jun-Ri-Soku-Yu (adhering to reason leads to prosperity), management philosophy, then I believe we should pursue it. One of our financial waterlines is ROE near 8%.

The finance department also needs to find a way to quantify investments in terms of time to show how long an investment should be continued or increased, and when an investment should be reduced. Clear answers would provide a solid foundation for medium- to long-term management. For example, the debt-to-equity ratio is a key indicator. When we were struggling financially, we were doing all we could to bring the ratio under 1.0. We've stabilized it now, and it was at 1.01 in fiscal 2021, but new investment projects could very well lift it temporarily to 1.2 or 1.3. Investors expecting short-term results will want to know if upfront investments are viable. My job is to show them that they are and when we expect to see the investment return.

#### Taking the initiative on social issues

Fujii Upfront investment will also be in businesses that address social issues. I believe we need to focus particularly on the two environmental issues of carbon neutrality and contributing to a circular economy. Manufacturing operations that support these issues are extremely important for us and fundamental to a sustainable company.

They are essential for us because they present significant business opportunity.

Otsuki Financial institutions and other service industries cannot really contribute directly in these areas without some sort of technology. The Toyobo Group, however, can directly contribute with its products and

technologies. This is a clear business opportunity, and we should certainly actively conduct upfront investments for future business.

Fujii Becoming carbon neutral will require various measures along with technological innovation to reduce the greenhouse gas emission from our manufacturing operations. We also view it as a business opportunity, and in April 2021 we created the Carbon Neutral Strategies Cross-Functional Team to lead our efforts in that direction.

Otsuki We also need to clarify what we must to do and how much we will have to spend to achieve carbon neutrality. In other words, we will need to turn the non-financial information into financial information for the future. That's another point where I want to take decisive action.

Fujii The circular economy presents very different prospects, and I am very concerned that it could cause a major shift in our sources of profit. The Toyobo Group has generated its profits through manufacturing, but a society with a circular economy could place more value on the collection system than the manufacturing operation. If so, then being a platformer for the circular economy would be ideal; however, deviating from that platform could then cause you to lose all of your business.

It is very difficult to say whether the Group would be able to create a platform like that on our own. We will need to carefully consider business models that encompass associations and alliances with various types of companies and organizations.

#### Forming medium- to long-term growth strategies

Fujii One of the main initiatives of the medium-term management plan is to eliminate conglomerate discounts. In many of our businesses, we had a strategy of an "all-at-once advance." That strategy was effective during recession, but it

caused us to spread our resources too thin, which was one of the reasons we were unable to grow our overall profits. The next medium-term management plan, which we plan to announce in fiscal 2022, will sharpen our management focus by concentrating resources on the films and life science businesses.

Otsuki From the perspective of investment, decisions can use the scale and cash flow return of past investments as a guide. The life science business is different from films, however, and doesn't have such a clear cut time axis for investment and return. There are many avenues for developing the life science business, including basic research and product development, M&A for sales channels, and alliances with other companies. Pursuing those should eventually lead to business growth, but the time scale will certainly be longer than the film business. Fujii Although slightly outside the management focus that I mentioned earlier, the Group also has numerous cutting-edge technologies in areas other than films and life science. Those technologies may not promise major business growth as they are now, but there is potential for a breakthrough that does lead to growth.

You are absolutely right when you say that it will take more time to grow the life science business, and that's why finding the "third pillar" business is one of my main missions. We may even need to ally with other companies that can boost our capabilities in areas we are insufficient, such as intelligence, certain functions, and assets.

**Otsuki** Once you decide on a focus area and resolve to realize a breakthrough, you are faced with the question of how much resources to allocate to it. I am looking for various ways to bring in additional resources. A short-term perspective like we've had in the past will not play, we will need to take a long term view.

**Fujii** That long-term perspective is built into our Sustainable Vision 2030. Our vision is to be a group that "creates the solutions needed by people and the

earth with materials and science" and grow from focusing on the materials market to the greater market of providing solutions for society. We cannot do that on our own. We need to have the courage to take steps we have never used before to develop business, such as developing products using not only the Group's own materials but with various types of content, pursuing innovation, and creating alliances with other companies. In that sense, the Vision is a message from management telling how we are going to survive and grow into the future. I really hope all of our employees will be excited about implementing our vision.

**Otsuki** Cultivating the human resources with the right skills to support a sustainable Group business will be key.

When the Company was struggling, we cut fixed costs left and right and we had little room to consider how much fixed costs we needed to bear to sustainably continue our business. For a time, we even thought rationalizing employees might be necessary.

As an investment in the future, there is nothing more important to our long-term growth than creating a psychologically safe workplace for all employees and securing and fostering human resources to lead us into the future.

#### In conclusion

Fujii Our PVVs corporate philosophy framework will be our polestar as our Company makes a concerted effort to make us known as the "Sustainable Toyobo Group."

Otsuki I would like us to enhance our corporate value by raising both economic and social value with management rooted in sustainability. I look forward to fulfilling the expectations of all of our stakeholders.

## **KAERU Project: Beginning of Change**

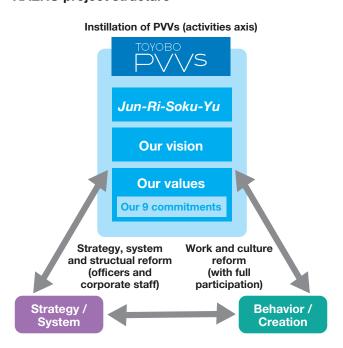
#### Overview of the project

The Group's growing moves toward change took shape in April 2018 with the launch of the KAERU Project (kaeru means "to change") throughout the Group with the participation of all officers and employees. The meaning behind the KAERU Product is that the Group will work to "change work," "change systems," and "change awareness" without being constrained by conventional methods, while also clarifying "what must remain unchanged" and "what must be treasured and passed on."

This was because many employees agreed with the idea of volunteer executives, who felt it was necessary to create workplaces where everyone can continue to work with comfort and energy, and a company that can plot a course for growth while continuing to change.

We first redefined our corporate philosophy and established the TOYOBO PWs corporate philosophy framework (hereinafter, "the PVVs") in March 2019. We have made reform our slogan, with becoming a Group that will continue to create the solutions needed by people and the earth as our vision, and this has become the foundation of our business strategy. In addition, we have placed welcoming, enjoying and creating change as our values (see page 01).

#### **KAERU** project structure



In the past three years, we have focused on manifesting the vision of what we want Toyobo to be, centered on the PVVs.

These efforts are broadly divided into "strategy, system and structural reform" and "work and culture reform," with PVVs sharing activities to support them.

For "strategy, system and structural reform," we plan to formulate a medium-term management plan based on the PWs and our long-term growth story in fiscal 2022 (see page 09). Furthermore, a reformed system, including personnel system (see page 33), will be enforced in fiscal 2022 to enable us to implement strategies and contribute to realizing PWs.

For "work and culture reform," we have worked on manifesting ideal work styles based on the PVVs, visualizing business process reengineering, improving efficiency, and so forth, while utilizing the realizations and opinions of employees.

For "PVVs Sharing," we produced and distributed comics explaining the PVVs to promote their awareness and understanding among employees. Moreover, in order for employees to get more personally involved, we have held series of online dialogue workshop, including "dialogue with the CEO," incorporated the PVVs into performance evaluations, multifaceted evaluations, education and training, and improvement proposal activities.

In an employee survey, the percentage who felt positive changes in their workplace increased from 37% (March 2020, 2,540 respondents, 57% response rate) to 51% (March 2021, 3,394 respondents, 83% response rate). Amid these changes, a fire (see page 15) and quality fraud incidents (see page 17) occurred, and we further recognized the need for change when reviewing the situation.

We will continue our company-wide initiatives so that these reforms take root in each workplace, the realizations of each employee are utilized, and a culture of positive change continues into the future.



Online social events (FY2021)

Value Creation Process

#### Major achievements and issues

In	itiatives	Results	Issues and future initiatives	
Management and strategy	Established the PVVs corporate philosophy framework and reflected it in the management policy and strategy	Demonstrated our desire to more actively work to achieve abundance and linked it to Toyobo Group sustainability by redefining the corporate philosophy, Jun-Ri-Soku-Yu (adhering to reason leads to prosperity), and systematizing it as the TOYOBO PWs.	Reflect in medium-term management plan using backcasting from long-term growth scenarios Instill the PVVs in all employees, including those in domestic and overseas Group companies Note: Refer to "Instillation of PVVs Corporate Philosophy framework" section	
Strategy,	Reorganization	Reorganized to promote and expand the business of providing solutions to customers and social issues in line with the vision of the PVVs  Reorganized into Solutions Divisions for each market area  Reorganized corporate staff  Newly established sustainability, DX, and marketing departments	Substantiate into mission, vision, action plans, and KPIs for each organization	
system and structural reform	Performance management system reform	Defined the performance management indicators to focus on as a company in relation to the PVVs	Design and implement a performance management system based on the new indicators shown to the left	
	Personnel system reform (See page 33)	Realized a system where each of our employees can feel their own growth, and work with pride and purpose to achieve the PVVs  Enforced multifaceted evaluation system  Formulated reform plans for the job level, compensation, and evaluation systems	Hold consultations between labor and management, and briefing sessions for the implementation of the reform plans described to the left by the end of fiscal 2023     Enhance the ability of managers to operate the system     Note: Refer to "Work and culture reform" section	
	Dialogue and interaction planning	Held 16 online talks with CEO that were joined by 83 employees     Held 10 workplace workshops that were joined by 89 employees	Measure instillation through dialogue between CEO and other executives with employees, and between employees at different workplaces, in order for executives and employees to naturally practice and pass them on in their everyday actions (including domestic and overseas Group companies)  Dialogue between Heads of Solutions Division and employees, and workshops throughout the company	
Instillation of PVVs	Incorporation into personnel and incentive systems	Incorporated the values of the PVVs corporate philosophy framework and the TOYOBO Spirit to provide motivation  Behavioral evaluation items for performance evaluations  Multifaceted evaluation items  Evaluation of small group activities and improvement proposal activities  Episodes submitted by applicants during the recruitment process	Conduct evaluator training to ensure proper performance evaluations  Note: Refer to "Work and culture reform" section	
	Enhancing awareness	Provided explanation and message by CEO Produced and distributed instillation tools  Produced and distributed instillation tools	Provide explanations and messages by Heads of Solutions Division Online serialization of PVVs system comic, and translation into English and other languages Increase awareness among domestic and overseas Group companies	
	Work reforms (business efficiency improvements, standardization, core system renewal)	Visualized and improved efficiency of work through work faultfinding and workflow creation, and created a system enabling its continuation (Progress) Work faultfinding: 82%; Workflow creation: 64% Note: As of the end of FY2021  Prepared for business standardization through the creation of standard workflows	Continue work faultfinding and workflow creation Team building for business standardization and core system renewal	
Work and culture reform	Work style reform	Presented the "Work Style Reform Map," a reform policy leading to the achievement of the PWS  [Place] Develop infrastructure to support the diversification of work styles and workplaces  [Time] I ncrease productivity and reduce working hours by streamlining and standardizing work, and developing systems  [People] Revise awareness and behavior toward work styles and health  Trust managers, team members and colleagues, and build good relationships  Obtained certification under the Certified Health & Productivity Management Outstanding Organizations Recognition Program  Proposed work styles (meetings, 3S (sort, sweep, and standardize), thorough awareness, guidance and training, business manners, utilization of IT tools)	Promote teamwork (hold workplace workshops, and courses for promoters) Improve workplace environments (office, information sharing, flextime, etc. systems) Activities to instill work styles (see left) New management training system to enhance and support management skills (improve personnel system operational capabilities through evaluator training, improved dialogue skills, etc.)  Support for the autonomy of employees careers	
		Improved work environments (office improvements, paperless, telecommuting, etc.)     Developed information sharing infrastructure (digital signage, etc.)     Held events to encourage communication (family office tours, etc.)		

## Feature Strengthening Human Capital

— Creating a human resource reform system to achieve the growth strategy —



Kenji Fujihashi General Manager, Human Resources Department

#### Aiming for an environment where everyone can individually work and grow with pride in what they do

Everyone working together for the group are important stakeholders. We cannot realize the TOYOBO PVVs corporate philosophy framework unless each of our employees is able to play an active part with pride in what they do.

In that sense, we believe that the key to the Group's sustainable growth is its people, or human capital. Based on this idea, we are currently reviewing our human resource system and will introduce the new one in fiscal 2023. This is the first revision in 22 years since 2000. For the company to continue growing, we must also change the human resource system that supports our

employees, which is why we decided to revise it.

The human resource management policy that forms the basis of the system has the following of the system has the following

- 1. Treat and evaluate field leaders, organization heads, etc. according to their current responsibilities
- 2. Clarify the expected competencies for each rank and to improve these competencies over the medium to long term
- 3. Assign and rotate human resources for the early selection and development of human resources responsible for management
- 4. Evaluate, treat and encourage the activities of diverse specialized human resources in areas including research and

We will create a system to treat and train specialized human resources so that various personnel can play active roles for future development, and also foster management personnel early on to raise the whole of management.

On the other hand, we will continue to promote organizational development and activities that increase connection between people within the company, along with individual human resource development. We will create workplaces where real conversations can be had throughout the organization and hierarchies. Our aim is to create workplaces that guarantee psychological safety, where employees can comfortably speak honestly with their superiors and colleagues.

We conducted an engagement survey in March 2021. We will use the results of the survey on organizational climate and employee job satisfaction in future policies.

#### Overview of New Human Resources System

#### Toyobo's ideal form and importance of human capital

**Contribution to resolving social issues** 

Realization of sustainable growth

Leadership by sites, and sense of pride and satisfaction Growth centered on solutions in each market field



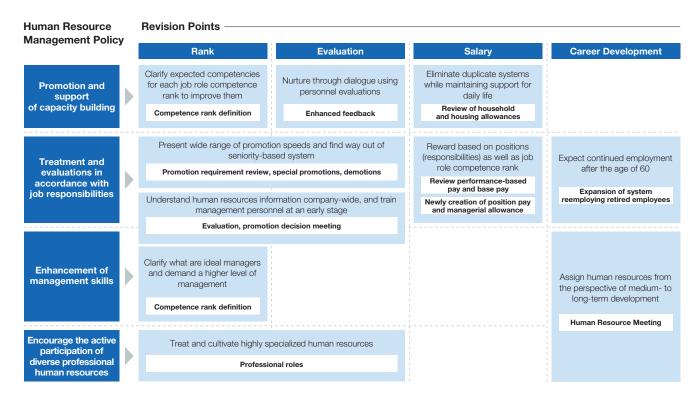
Strengthen management base through investments in facilities and human resources

Solid foundation, growth strategy, and people to achieve it are important

#### **Goal of New Human Resources System**

Each of our employees can individually work with a sense of growth, pride, and satisfaction

#### **Revised Measures**



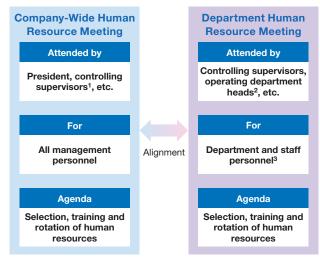
#### **Enhancement of management skills**

#### Started the Human Resource Meeting to discuss training measures for the early education of management personnel

For Toyobo Group's initiative to train the next generation of management, the Group plans to provide chosen personnel with internal and external management executive development training. In order to further broaden their experience, we will also give them the opportunity to undertake business operation and management duties to hone their management skills, which will help us achieve our succession plan.

Moreover, in order to expand the perspective of developing human resources of not just business divisions or departments but the entire company, we will visualize positions and human resources, and determine exactly who should have what experience.

The Group will begin holding the Human Resource Meeting to discuss measures to cultivate the next generation of management from fiscal 2022. The meeting will be divided into the Company-Wide Human Resource Meeting, which mainly discusses the succession of management positions, and the Department Human Resource Meeting, which mainly discusses the succession of positions with high levels of operational expertise, and topics will include the selection and rotation of human resources and support for the training of successor candidates. We will be able to find and develop human resources and increase their effectiveness through coordination between these two meetings.



- 1 Oversees each division and Management and Administration Division
- 2 Oversees specific fields across multiple business divisions
- 3 "Corporate divisions" including corporate planning, management and administration, and human resources



## Feature Toyobo's promotion of women's participation and advancement

#### Progress so far, and the key issues

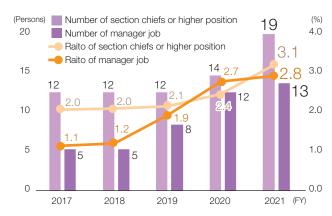
Promoting women's participation and advancement from the three perspectives of recruitment, cultivation, and support for employment continuation

Toyobo's initiative to promote women's participation and advancement in the workplace got underway in earnest in fiscal 2016 with the establishment of a dedicated organization: the Women Empowerment Promotion Group.

When this initiative was first launched, there were relatively few women on the managerial career track<sup>1</sup> at Toyobo, and the company was not providing adequate opportunities for women's participation and advancement. To improve this situation, we formulated an action plan to be implemented by fiscal 2021, with the aim of putting in place the environment and organizational culture needed for women's advancement. We set ourselves the goal of doubling the number of female managers<sup>2</sup> (compared to fiscal 2016), and of making sure that women accounted for at least 15% of all employees on the managerial career track. We also began to implement various measures from the three perspectives of recruitment, cultivation, and support for employment continuation. The targets set in this initial action plan were met, with the number of female managers rising three-fold to 13, and the female share of employees on the managerial career track increasing to 17.1%.

One factor that contributed greatly towards the achievement of these goals was the adoption of a new recruitment policy that emphasized having women account for at least 40% of recent graduates recruited onto the global career track<sup>3</sup>. In parallel with this, we have also been expanding the range of work roles open to women, substantially increasing the number of female employees on the managerial career track assigned to the sales and manufacturing divisions, which in the

#### **Number and Raito of Female Managers**



#### Main measures implemented

#### **Seminars**

Female leader development seminars Held 7 times

Career planning seminars Held 19 times

Seminars for managers on managing female employees Held 38 times Male employees taking

Held with a cumulative

Activities implemented continuously over a Promotion Project: four-year period, with changing participants

Babysitter support system Childcare costs incurred while

Entirely covered by the company

#### Mentoring system:

A total of 226 mentoring pairs (achieved over a period of two years, with pairs being changed every six months)

Establishment of a nursery within the company (at the Research Center)

25 children over three years

Notes; 1. Defined as all employees on the managerial career track, including those who have only just joined the company.

- 2. Including all female employees with the rank of section chief or higher. 3. Career track for employees who are expected to be active throughout the entire company.
- 4. Career track for employees whose career is expected to be confined to one specific business site.

Process



## Realizing diversity and inclusion (D&I) by promoting women's advancement

It is vitally important to make effective use of the skills and knowledge of a diverse range of human talent in order to innovate and achieve sustainable corporate growth. Promoting women's advancement has been positioned as the first step in this process, and everyone is focused on identifying one's own capabilities and on creating

Message from Manager

# Noriko Tsuchiya



opportunities to utilize these capabilities to maximum effect. Since it was first established, the Women Empowerment Promotion Group has benefited from being composed of both male and female employees with a diverse range of viewpoints and experience, and I feel that the Group has been able to utilize this diversity effectively in its activities. In implementing our activities, we have attached particular importance to listening carefully to employees' views, and then reporting these properly to senior management. Fortunately, management has implemented speedy decision-making that takes employees' views into account. For example, when the new nursery was opened at the Research Center in Otsu City in fiscal 2019, this had taken just 10 months to achieve since the concept was first put forward. Looking ahead to the future, both managerial and non-managerial staff will be making a serious effort to put in place the environment needed to accelerate the fostering of diversity and inclusion, through both bottom-up and top-down approaches.

past had very few managerial career track female personnel. As a result, the issue of women's advancement has been made more directly relevant for many managers, and we have been able to promote a change in attitudes and a transformation of the organizational culture.

Nevertheless, the percentage of female managers is still not sufficiently high, and the relatively limited number of female candidates for managerial positions is also an issue that needs to be addressed. In response to this situation, in fiscal 2021 we set the ratio of female managers as a KPI for Toyobo Group. The Group is now working to achieve this target.

## Formulating new targets and action plans

In April 2021, Toyobo launched a new women empowerment promotion action plan. Besides setting various numerical targets, including raising the ratio of female managers to 5.0% by fiscal 2026, the new action plan also continues to maintain the target of having women account for at least 40% of recent graduates recruited onto the managerial career track, in order to increase the pool of candidates for cultivation as future female managers.

In addition, we introduced a new Career Development Support Program for female employees who are currently on the regional career track<sup>4</sup>. Participants meet with their supervisor over a period of three vears to discuss a career development cultivation plan that incorporates a formal schedule for the acquisition of specialist technical know-how and other knowledge, for example through on-the-job training, as well as self-development, etc., with an implementation cycle that includes an annual progress report and refresher training.

Whereas in the past there was no clear career development path for female employees the regional career track, such a path has now been created, and the company is continuing to provide support to help female employees to fully develop their capabilities. In addition, by having individual units compile and implement female employee cultivation action plans, we are fostering self-directed activities at the workplace level.

Toyobo also has a policy of participating actively in external initiatives. The company has already expressed its support for 30% by 2030 Challenge<sup>5</sup> goal announced by the Japan Business Federation (Keidanren) to raise the ratio of female executives to 30% by 2030, and for the Women's Empowerment Principles<sup>6</sup>, which outline a code of conduct for actively promoting female empowerment; Toyobo has signed a statement committing itself to act in accordance with the WEPs. Through these activities, Toyobo is aiming to secure 2-star Eruboshi certification<sup>7</sup> for promoting women's advancement by fiscal 2022.

#### racts and Initiative Content

largets and initiative Content			
	Target No. 1 Raise the sha	are of managers who are women to at least 5.0% by the end of fiscal 2026 (compared to 3.1% in March 2021)	
	April 2021 onwards: Implement female leader cultivation training for female managers and female candidates for managerial positions (continued implementation since August 2017)		
April 2021 onwards: Implement female leader cultivation training for female section chiefs and female candidates for section chief p (continued implementation since September 2019)		Implement female leader cultivation training for female section chiefs and female candidates for section chief positions (continued implementation since September 2019)	
	April 2021 onwards:	Implement mid-career hiring of female managers	
September 2021 conwards:  Establish and implement women empowerment promotion action plans at the unit level onwards:  Target No. 2  Raise the share of women on the career track to at least 22% by the end of fiscal 2026 (compared to 17.1% in March		Establish and implement women empowerment promotion action plans at the unit level	
		are of women on the career track to at least 22% by the end of fiscal 2026 (compared to 17.1% in March 2021)	
	April 2021 onwards: Maintain women's share of new graduate recruitment at a level of at least 40%		

No. 2		
April 20	21 onwards:	Maintain women's share of new graduate recruitment at a level of at least 40%

April 2021 onwards:	Maintain women's snare of new graduate recruitment at a level of at least 40%
April 2021 onwards:	Actively promote mid-career hiring of female employees
April 2021 onwards:	Implement follow-up interviews for female employees (continued implementation since April 2015
April 2021 onwards:	Establishment and operation of a three-year career development support program

## Raise the percentage of eligible male employees taking childcare leave to at least 80%, and increase the number of days of childcare leave taken by at least 20% by the end of fiscal 2026 (compared to 80% and 12 days respectively in fiscal 2021)

April 2021 onwards: Make eligible employees aware of the childcare leave system (continued implementation since April 2019) April 2021 onwards: Send eligible employees' supervisors details of the encouragement that should be provided to subordinates to encourage them to take childcare leave (continued implementation since September 2019)

- 6. The Women's Empowerment Principles were formulated jointly by UNGC and UN Women in 2010
- 7. Eruboshi (2-star) criteria: Must meet 3-4 of the specified criteria, and must demonstrate continued improvement for a period of at least two consecutive vears.

<sup>5.</sup> This is one of the targets for promoting D&I to realize sustainable growth in line with ". The NEW Growth Strategy" announced by the Keidanren in November 2020.

# The Future our **R&D** is Creating

The Toyobo Group is advancing innovation to prepare for the future to fulfil our corporate vision.

We are pursuing innovation various directions ranging from researching clean technology for carbon neutrality and a circular economy to developing new life science products which are become increasingly important amid concern about the potential spread of infectious diseases. With the advances in digitalization, we are also exploring the promise of new technologies, such as Materials Informatics, that are opening the door to new possibilities.

# **Toyobo Research Center innovation in** "leading-edge technology"

Research Center began operations in 1931 with the R&D of fibers and textiles and for 90 years has been expanding its research to meet changing needs for a full range of films, biotechnology, and high-performance products. The center has grown into an expansive research complex with its own production department and currently serves as the R&D base for the whole Toyobo Group.

Toyobo's Research Center has approximately 500 employees concentrating on strengthening and integrating basic technologies that will lead to new products and technologies and pursuing innovative technologies, products, and solutions that can contribute to solving social issues. Within the center, the Corporate Research Center directs our basic research by establishing the clear relationships from the proposal stage between our research themes and the 17 SDGs for the year 2030 and beyond.



Research Center

Value Creation



Yasuo Ota

Managing Executive Officer,
Controlling Supervisor of Innovation Division

# We are creating the Toyobo that will contribute to the society of 2030

Innovation is the source of the Group's competitiveness. Our focus in recent years has become geared more to the long term and to addressing social issues. The Mirai Value Proposition Project is bringing together members from various departments to envision Toyobo in the year 2030—what kind of business will we engaging in, what value do we want to be providing, and who will we be providing it to. We are not waiting for someone to take the lead; every person is making their own future.

# Spurring innovation through active collaboration

We are also engaging open innovation and other collaborative activities with other companies. Toyobo is at the middle of a value chain enabling smooth and quick communication both upstream and downstream. Our positioning facilitates open innovation and makes it one of our strengths. This strength gives us greater latitude to pursue our objectives. For example, we are approaching achieving carbon neutrality by using our technologies while also considering if sharing our technology with other companies could help us attain our goal.

We are also spurring open innovation with startup companies that can apply our technologies by actively providing venture capital investment in venture companies, universities, and research institutes designing advanced manufacturing technologies. One of our investment initiatives is to provide venture capital to support R&D and technological development of venture concepts with a

focus on seed ideas in the earliest stages at universities. The Toyobo Group has a successful history of building seed ideas from the R&D stage, and our investments are not focused on introducing technologies that are already developed but on technologies that we can build together.

In addition, we are rebuilding the Research Center to create an atmosphere of active and open innovation where it is easy for people to gather and generate various ideas. The institute also has systems and facilities designed to accommodate career professionals and foreign and female researchers to support the diversity that is key to innovation.

# A spirit of creating new businesses with tenacity and without fear of failure

To realize the Group vision and grow sustainably, we will continue expanding our R&D in markets we expect to grow and in which the Group has competitive leads, such as high-performance films and other functional materials, life sciences, and the environmental field. In functional materials, we will accelerate research on next-generation products that can provide solutions not just from the aspect of materials but from the perspective of customer needs. In the life science field, in addition to advancing our core business in diagnostics, we are also targeting fields where we can support well-being for a vast number of people. For example, we have developed our "kansei" engineering technology which is quantifying and evaluating comfort levels from 1970s. We are seeking to expand this technology to encompass psychological and physiological evaluations while also broadening our product range from clothing to living spaces. In the environmental field, we will develop technologies that will help realize a carbon neutral society and circular economy, beginning with our own various clean technologies and biopolymers. We also plan to give more emphasis to R&D related to carbon capture, use and storage (CCUS), such as in carbon dioxide immobilization and storage methods.

I tell our researchers that I want them to always have the spirit of creating a new business. I also encourage them to take on challenges without fear of failure and to broaden their radar and connections inside and outside our company and overseas as well.

The slogan we follow to encourage innovation is "Try many, fail quickly."

# Quick and accurate SARS-CoV-2 detection The development of ImmunoArrow<sub>TM</sub> SARS-CoV-2

Antigen test kits are increasingly being used in Japan and overseas as a reliable method for quick and accurate detection of SARS-CoV-2 (which causes COVID-19) and as an aid to preventing the spread of the disease. In June 2021, the Toyobo Group introduced the immunochromatographic ImmunoArrow™ SARS-CoV-2 antigen test kit for medical institutions and testing laboratories. The "arrow" in the name reflects the test's ability to detect the SARS-CoV-2 antigen as quickly and accurately as an arrow.

We responded to the urgency of the situation and strong social need by vastly accelerating our developmental processes. Below is a dialogue between two of the researchers involved in the project.

# We stepped up R&D to meet the urgency of the social situation and successfully created a product

**Okamoto** The Group has previously developed and delivered the GENECUBE® fully automated gene analysis system and SARS-CoV-2 genetic test reagents. We also



Jun Okamoto
Bio-Science & Medical Research Unit,
Corporate Research Center
New Development Group,
Biotechnology Research Laboratory

Kengo Nishimura

Bio-Science & Medical Research Unit, Corporate Research Center (Previously IVD Development Group, Biotechnology Research Laboratory) thought that creating an antigen test kit could lessen the burden on medical professionals and help prevent the virus from spreading.

**Nishimura** Polymerase chain reaction (PCR) testing requires equipment that is generally only available at larger medical institutions. We thought that there was a strong need for an antigen test kit that does not require special equipment so it could be used at smaller medical clinics and be available wider testing.

**Okamoto** We were already conducting R&D in immunochromatographic testing as one of our base technologies, and when the pandemic broke out we started talking about whether we could develop it for COVID-19. One of our biggest challenges was the fact that this was the first time we were trying to create a product that used the immunochromatographic technique.

**Nishimura** Honestly, we felt like we were in a huge hurry because we knew that it had to be developed quickly and also because the situation was rapidly changing and other makers had already released immunochromatographic products. But it was a fantastic experience to strongly believer that we could create a better product than what was available and then to bring it to full fruition.

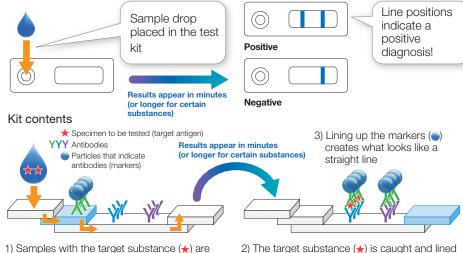
up by the antibodies (Y) in the kit

# What is immunochromatography?

Immunochromatography is a quick diagnostic method that using capillary action to measure antigen-antibody reaction, and is used around the world to diagnose influenza and test for pregnancy. The advantages of immunochromatography for SARS-CoV-2 testing and detection are that it is quicker than PCR tests and it does not require special equipment.

# Immunochromatography

absorbed and flow into the kit (→)



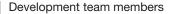
# Technological teamwork with the University of Toyama and others were critical

Nishimura The kit's accuracy requires highly sensitive and specific antibodies and particles to act as markers for visualizing the reaction. The antibodies were developed using the Company's base technologies and through technical cooperation with the University of Toyama. Working together, we conducted multifaceted evaluation testing and in a very short time were able to very efficiently identify promising antibodies from a huge number of candidates.\* Okamoto We selected the particles to use as markers by testing which ones had the highest sensitivity, which led to choosing particles different from those used in conventional immunochromatography methods. A major feature of this product is superior antibodies and particles that it uses. Nishimura We also enhanced kit performance by adding features like technology to suppress non-specific reactions and to enhance reactivity.

**Okamoto** That was our first experience with manufacturing, so we did many trial tests and made many improvements to the technology before we released the product.

**Nishimura** We had to work through many different opinions about how many trials to conduct and how to balance quality with the delivery period, but everyone wanted to put out a product that we all agreed on. We always returned to that as our starting point, and that enabled us to keep working with mutual understanding and respect.

**Okamoto** We were also hurrying to get it out because we were starting later than other companies and did not yet have a kit on the market. At the same time, everyone on our team felt it was essential to ensure the kit's reliability. **Nishimura** I think it was a major point that, through all of the many discussions, everyone on the team had the same mindset. Because of that, a sense of teamwork naturally



Diagnostic System Department



Bio-Science & Medical Research Unit, Corporate Research Center



Biotechnology Research Laboratory



ImmunoArrow™ SARS-CoV-2

developed. In the end, I think it worked really well because each person understood their role, and was able to work as a team while thinking independently about who should do what and when. I think the collaboration inside and outside the company is what ultimately made the project successful.

\* The antibody used in this product was produced in participation with the Research Program on Emerging and Re-emerging Infectious Diseases (second open recruitment) and Research on the development of immediate clinical testing systems for SARS-CoV-2 of the Japan Agency for Medical Research and Development (AMED) in fiscal 2020.

# Immunochromatography will continue to be used for quick action on infectious diseases and mutant viruses

**Okamoto** When we were creating the immunochromatography method for the kit, we developed our own antibodies, antigens, and other biomaterials in-house. But as we worked, I had the impression that the Company's base materials are fertile ground for creating many more materials. I think there is potential to fuse our non-woven fabrics, membranes, and other base materials with biomaterials to produce new all-Toyobo products with distinctive features.

**Nishimura** In addition to the PCR test reagents, I would like to build out and serialize the ImmunoArrow<sub>TM</sub> brand to provide a wide range of solutions for infectious diseases, which is one of our objectives in the life science field. I wonder if, in the future, testing can be easier and be done in more situations, such as before entering a stadium or train station.

We created this kit for COVID-19, but would like to continue improving our antibody acquisition and production technology and our development and production technology related to immunochromatography so we can make test kits more quickly when a highly infectious influenza virus or other type of new virus mutation appears.

I would like us to continue working in this area to become one of the leading companies in the solution business for diagnosing infectious diseases.

Whatever direction we go in, I would like us to continue placing the emphasis on teamwork.

# Transforming R&D with DX —Integrating materials informatics

Amid the rapid changes in our society, the Toyobo Group is aiming to use IT and DX to bring out the full potential of its technologies in various areas. Materials informatics (MI) is one of the key technologies we are integrating to our R&D operations. MI applies information science (informatics) methods with AI, machine learning, and statistical analysis to efficiently identify and develop materials.

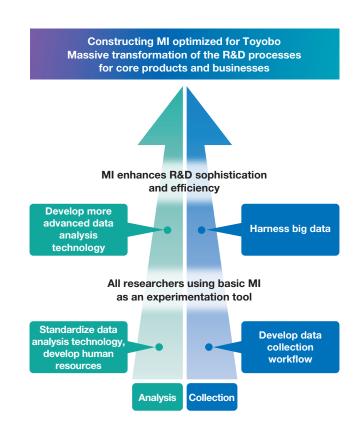
We are harnessing the power of digital technology to accelerate the creation of new solutions and businesses.

# Building a structure to utilize materials informatics throughout the Company

In fiscal 2021, the Group established the IT and DX Planning Department at the head office and the DX Promotion Office at the Research Center. These two departments are spearheading construction of the optimal MI system, which will enable a significant advance in the R&D processes for the Group's core products and businesses. The first objective is for all of our researchers using basic MI as an experimentation tool by the end of fiscal 2023.

Key will be storing and analyzing the experiment data. As we build a database capable of continuously collecting and storing experiment records from all of the Group's research centers, we will train analysts and standardize the technology needed for the data analysis.

Following is an interview with a Toyobo researcher who is using and developing MI at the Research Center.



# Making the technology as easy to use as possible

**Developing analysis technology** 

I work in two departments, the DX Promotion Office and the Computational Research Center. The DX Promotion Office is working with the people who will actually be using the MI with the aim of creating worksites where MI can easily be used. To that end, the office is creating a learning structure for MI-based analysis and the software needed for the analysis. I have worked on experiments as a researcher and understand that people who have not used MI before could feel reluctant to use it. That is why I'm always trying to make the software as easy to use as possible for people who are unfamiliar with the programs or digital tools.

At the Computational Research Center, we are working with the people who will actually be using the MI for experiments to broaden the range of areas where the MI will be used. In the future, we want to combine the MI and simulation to help further advance our material development.



Natsuki Ito
Computational Research Center, Corporate
Research Center and DX Promotion Office,
Research Center



Masafumi Shibuya Advanced Processing Technology Unit Corporate Research Center

# I want to examine and use data from both inside and outside the Company

MI and research on seawater desalination membranes

My research group is developing next-generation seawater desalination membranes. Membrane production must satisfy certain conditions, but each condition has numerous parameters and there is never enough time to test every parameter. We use MI to instantly organize the parameters and create the optimum production conditions. My group has just begun using MI, and we are both arranging the parameters and gathering data at the same time. I'm looking forward to sharing information with the DX Promotion Office so we can quickly develop the MI system to its full potential.

Collecting in-house data is undoubtedly important, but so is data from outside the Company, such as research papers and patents, so in the future I would like to also actively incorporate public data into our analysis. However, public data is not necessarily correct, so we will need to apply our own analysis to verify its veracity.

# MI provides new perspectives on R&D

MI and research on conductive adhesives

I use MI to accelerate the R&D on conductive adhesives. I struggled with using MI at first because it was a different approach from the usual R&D processes. However it was extremely quick to find materials which in my experience wouldn't normally be considered. As we continue using MI, I think it will enable even employees with minimal experience to engineer materials like experienced professionals. I also think that improving our R&D efficiency will lead to workstyle reform. Since I'm the team leader, I would like my team members to all be using MI as a normal part of their jobs.

I also think we need to rethink where we have our researchers expend their energies. Using MI will open up time for us to focus our attention in other areas. I would like to use that time to look at outcomes that are different from conventional knowledge, and analyze and consider what mechanisms are at work.



Michihiko Irie Chemical Research Unit Corporate Research Center



Masami Hamano

Vylon Technology Center

Hardlen and Vylon Development Department

# Collecting the data needed to find solutions

MI and the development of copolymerized polyester

At the Vylon Technology Center, we are using MI for both the analysis and collection of data. The ultimate goal is to be able to input the resin composition to the MI and instantly be able to determine the physical properties. We are improving our analysis methods and accumulating the data we will need to make that possible. Since ensuring accuracy will need a considerable amount of data and time, this is a multiyear project.

For the business divisions, it is important how quickly we can respond to customer requests for products. In the past, researchers would rely on their experience and repeated trial and error until they found the right solution. Sometimes we lost customers to competitors because they were quicker to produce a solution. Increasing the use of MI will make us faster and boost the competitiveness of our business divisions.

# Feature Films

# Establishing a Foundation to Create Synergies in Expanding Markets



## Chikao Morishige

Representative Director & Senior Managing Executive Officer Head of Safety and Disaster Management Head of Films and Functional Materials Solutions

# Complementing the technologies and human resources of two companies

In fiscal 2020, Toyobo Group entered into a stock purchase agreement with Teijin Limited for its subsidiary Teijin Films Solutions Limited to become a member of our Group. We changed the name of the company to Toyobo Film Solutions Limited and completely integrated it within our existing businesses in fiscal 2022.

Since signing the purchase agreement, we have worked while being mindful of the post-merger integration (PMI) process. We specifically created a meeting structure for each process, including sales, technology, research and logistics, and both companies took various opportunities to hold discussions. Furthermore, we held monthly debriefing sessions to share information closely, experienced no major obstacles to the integration process by clearing all issues one by one, and are proceeding with operations smoothly even after the completion of the integration.

I think one of the main reasons for this was the shared values of helping the larger society and growing as companies in the corporate philosophies of the Teijin and Toyobo Groups, which are "In Harmony with Society" and Jun-Ri-Soku-Yu (adhering to reason leads to prosperity), respectively.

## **Demonstrating synergies**

With the demand for IoT-related products rapidly growing, we anticipate that demand for mold releasing films for MLCC will continue to steadily increase into the future.

Toyobo was always dominant in products for small ceramic capacitors, while Teijin Film Solutions Limited was strong in premium market segment products for larger sizes. We directly expect there to be synergies through integration in this field. There are also many other products and fields with demonstrable synergies. In fiscal 2021, we established an independent department within the Marketing Strategy Department to consider ideas that will bring about future development so we could further develop new products to grow sustainably. We plan to use this to plant the seeds that will become the pillars for our

Product	Synergies
Mold releasing films for MLCC	TEIJIN Has long sold large in-line release films, that form a coating layer during film formation, in the premium market segment  TOYOBO Developed release films for the production of extremely small ceramics  Combination allows sharing of various information and technologies
PEN films	TEIJIN Developed heat-resistant PEN films new to Toyobo TOYOBO Many film customers with optical applications and general industrial uses, and high market share Demand of PEN films is increasing due to insulation of wind power generation motors, etc. Plans to develop new products through combination of PEN films and Toyobo's strong markets, and by improving raw materials
Laminating films for cans	TEIJIN Lineup of laminating films for food cans TOYOBO Lineup of laminating films exclusively for beverage cans Demand for canned goods expected to increase, especially in U.S.



revenue in five and ten years in the future.

In addition, we will put our focus on providing products that are unique to the Group and cannot be emulated by others, and explore the possibility of multilaterally creating synergies.

## Investing in COSMOSHINE SRF®

We will also continue to concentrate on COSMOSHINE SRF $_{\odot}$ , a polarizer protective film for LCDs used in TVs and other devices. Demand is strong, and with the Inuyama Plant production line that was expanded in July 2020 to be fully operational in fiscal 2022, we will be able to provide a more stable supply to the world.

However, we will need to carefully ascertain how long this demand will continue in the medium- to long-term future. We have also seen the arrival of OLEDs, micro-LEDs and others as competing products to replace LCDs, and they may develop their advantages and expand in market share. In addition, LCD display manufacturers from South Korea are moving production to China, and Chinese manufacturers may have a large presence in the future. We will carefully watch these trends while considering capital and R&D investments.

# Becoming the No. 1 global manufacturer of eco-conscious films

Our long-term goal is to become the No. 1 global manufacturer of eco-conscious films in the films and functional materials field. Currently, by adopting bio-based raw materials, reducing the amount of raw materials through the development of thin and high-strength films, promoting the development of material recycling<sup>1</sup> and chemical recycling<sup>2</sup> for films and other such initiatives, we aim to contribute to the realization of a circular economy and measures to combat climate change. We have

expanded the food packaging film business and commercialized products as being eco-conscious, and they have received more attention in recent years, with sales growing steadily. We believe that this technology eventually can be adopted in industrial films.

The Group will continue to develop films with less environmental impact, in addition to various technologies contributing to creating a circular economy.

- 1 Reusing resins without changing their chemical composition
- 2 Reusing raw materials by changing their composition through chemical reactions

#### Message from the Executive Assistant to Head

### Yoshihiro Nomi

Executive Assistant to Head of Films and Functional Materials Solutions Division General Manager, Films and Functional Materials Marketing Strategy Operating Department

Served as President and Representative Director of Teijin Film Solutions Limited, and striving for synergies as the Executive Assistan to the Head since merger with Toyobo



## **Creating chemistry**

I personally have known about Toyobo for a long time, so I welcomed the opportunity when it came. However, because a number of employees still have some reservations, we have prepared communication plans for all levels while always remembering that we need to address these feelings respectfully. As a result, we successfully integrated two companies with histories of outstanding world-class human resources and technologies.

Before the integration, the main focus was inevitably on sustaining the business while finding a balance during the restructuring. After it was complete, there were changes such as proactive investment for sustainable business growth, and the implementation of bold strategies while assessing risks from a long-term perspective. These major differences in the stance of management toward the business were very refreshing.

We have fought as rivals and tried to find our own particular advantages, which is why I would like to create chemistry by combining both of our cultivated strengths.

# Feature Life Science

# -Strengths and Growth Strategy for the Diagnosing Infectious Diseases



Yutaka Ouchi Director & Managing Executive Officer Head of Life Science Solutions

# **Developing in vitro diagnostic reagents** for SARS-CoV-2 utilizing expertise cultivated through research reagents

Amid the rapid spread of COVID-19 in 2020, we launched SARS-CoV-2 genetic test reagents to be used when conducting research on the virus in April. It has been used in research ever since. In addition, we released in vitro diagnostic products in July and have supplied them to medical institutions and testing centers.

We have manufactured and sold research reagents for genetic testing since the 1980s, including reagents to test for norovirus, a common cause of gastroenteritis.

Due to the technical similarities with testing for SARS-CoV-2, we started development from the desire to contribute to society by utilizing these commonalities. We have continuously invested resources in research and

development in the genetic testing field and refined our technologies for more than 20 years, constituting our technological foundation. Because of this, we were able to quickly move forward with this development.

Furthermore, we launched an in vitro diagnostic SARS-CoV-2 detection kit using immunochromatography in June 2021 (see page 39 for more details).

# Promoting joint research for the establishment of more efficient testing methods

In fiscal 2021, we also undertook research aimed at improving the reliability and safety of tests, and shortening the time it takes from collecting specimens to assessing the results.

Reducing the duration of the test will allow us to test a larger volume of specimens, leading to more efficient testing. For this, we started a collaborative research project with the Kitasato Institute and Tsubakimoto Chain Co. to establish a next-generation automated testing system. This research started when the Kitasato Institute approached us after recognizing our achievements in the research reagents field. We strongly endorsed the meaningful project and decided to participate in the joint research. The research was adopted and started by the Japan Agency for Medical Research and Development (AMED) as part of the FY2021 Program to Develop Countermeasure Technologies against Viral and Other Infectious Diseases (3rd) (Development and Demonstration Research Support for Establishing New Testing Methods and Systems, etc. to Achieve Early and Mass Infectious Disease Testing).

The joint research uses a pooling test method. We previously had to collect saliva samples from one person, test it once, and then see if it was positive or negative. However, with the pooling test method, specimens from up

#### **History of Research Reagents**

1982	Started business with three restriction enzymes	2020	Gained approval for our SARS-CoV-2 genetic testing reagent
1989	Launched our first PCR enzyme, rTth DNA polymerase		to be covered by public medical insurance as a method in
1995	Launched the PCR enzyme KOD® DNA Polymerase, our current		conformance with the Manual for Pathogen Detection
	core brand, and have continued improvements		2019-nCoV (issued by the National Institute of Infectious
2014	Launched the Norovirus Detection Kit, a norovirus testing reagent,		Diseases)
	and have continued improvements		



Fully automated gene analysis system GENECUBE®

to five people can be collected and tested together at once. While we would normally have to perform 100 tests if we collected 100 different specimens, if they are all negative, it only takes 20 tests, or just one-fifth the number. When a group tests positive, we only need to test those five specimens again. This greatly reduces the number of tests and leads to increased efficiency and cost savings.

We are conducting this research not only in the medical field, but also with a view to utilizing it in entry screen at airports, which require rapid and mass testing systems, and the construction of testing infrastructure at venues such as large-scale international sporting events.

# Aiming to become the No. 1 provider of solutions for the diagnosis of infectious diseases

In the genetic testing field, we manufacture the reagents for PCR tests in addition to the raw materials for them. For example, according to our own estimates, we boast the world's second largest share of the raw materials for biochemical reagents used in the measurement of neutral fat and cholesterol during medical examinations and other settings. In addition, we possess an outstanding level of biotechnology, particularly with highly functional proteins such as enzymes and antibodies. For instance, the antigen testing kit using antibodies for SARS-CoV-2, which was developed in collaboration with the University of Toyama, is an example of the utilization of our unique technology for highly functional proteins. The antibodies it uses were developed through participation in AMED's FY2020 Research Program on Emerging and Re-emerging Infectious Diseases (2nd) (Research on the Development of Immediate Clinical Testing Methods for SARS-CoV-2).

Although the world had paid insufficient attention to the threat of infectious diseases, a global response is now required to combat the spread of COVID-19. In addition to COVID-19, there are other infectious diseases, including avian influenza, that risk causing pandemics in the future, and finding measures against them have become an important social issue.

In the future, we will actively invest in the infectious disease diagnostics area and set broader targets. We aim to become the top provider of solutions for diagnoses of infectious diseases not only domestically but also globally, with an eye on genetic testing and the entire diagnosis business at large. In this way, we want to contribute even more to solving the global issue of the spread of infectious diseases.



## **Creating edgy technologies**

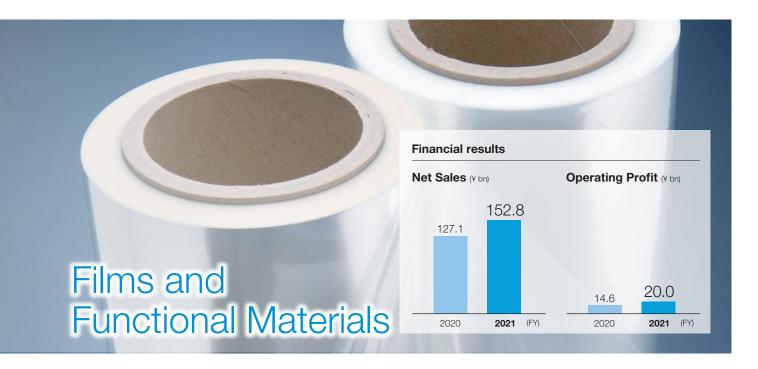
Our Group has been in the PCR business for more than 30 years. In 1995, we started selling PCR enzymes under the KOD® brand, and have continuously reviewed and changed models since then.

To improve the performance of PCR reagents, it is important to also remember the substances that assist the function of the main enzymes. Because both are made of proteins, we cannot produce good reagents without excellent technology to make proteins.

We have refined the technology to enhance the function of proteins and to produce them efficiently through many years of research. In addition, we have also enhanced the performance of reagents themselves by combining them with these highly functional proteins, as well as creating reagents with many distinct properties.

Thanks to these achievements, we enjoy a high degree of recognition in the reagent industry. The Group has many opportunities to participate in joint development and other activities as a result of being introduced to cutting-edge technologies by professors in academia.

# **Overview by Solution**



## **Overview of fiscal 2021**

# Sales and profit increasing from business integration, stay-at-home consumption, etc.

For fiscal 2021, net sales and operating profit increased to ¥152.8 billion and ¥20.0 billion (operating profit margin: 13.1%), respectively. The effect of the business integration with the Teijin Group's film department contributed approximately ¥20.0 billion yen to the increase in sales (see page 43 for details of the integration).

In the packaging film field, shipments of olefin-based films decreased because of the fire that broke out at the Inuyama Plant in September 2020. Although we benefited from lower raw material costs, we still saw a decrease in sales. In addition, due to the spread of COVID-19, foodservice-use product demand was sluggish; however, sales of sealed retort pouches of ready-to-eat food, 2-liter bottle labels, and other applications for food to eat at home remained strong due to stay-at-home consumption demand.

Sales of CYCLE CLEAN $_{\odot}$ , a packaging film with a recycled resin ratio over 80%, also grew as customer demand for eco-conscious products increased with growing environmental awareness in the wider society.

In the industrial film field, sales of COSMOSHINE SRF $_{\circledR}$ , a polarizer protective film for LCDs, and COSMOPEEL $_{\circledR}$ , a mold releasing film for MLCC, the two growth drivers of the field, expanded and drove the growth in profit. Sales of COSMOSHINE SRF $_{\circledR}$  in particular increased by around 30%. This was due to increased production and improved productivity thanks to the installation of a new production line at the Inuvama Plant.

For COSMOPEEL®, automobile demand fell in the first half of the fiscal year, but the significant recovery in the second half resulted in an approximately 20% increase in sales for the whole year.

In the functional materials business, sales of VYLON®, a copolymerized polyester and HARDLEN®, an adhesion promoter for polyolefin, recovered in the second half of the fiscal year, though this did not offset the decline in sales caused by the spread of COVID-19. On the other hand, in the photo functional materials business, which deals with photosenstive water-wash flexo printing plates, sales to China, Europe and the United States remained strong.

#### Forecast for fiscal 2022

#### Two growth drivers are leading revenue sources

New machines for COSMOSHINE SRF® at the Inuyama Plant will be fully operational in fiscal 2022, and we expect them to significantly contribute to our business performance. In addition, we have been continuing enhancements of the production system for COSMOPEEL®, at the Tsuruga Research and Production Center since fiscal 2021, and we expect the new line to contribute in the future. In addition, we look forward to synergies from the business integration with the Teijin Group's film department.

Through these factors, we anticipate net sales of ¥170 billion and operating profit of ¥20.3 billion (operating profit margin: 11.9%)\* for fiscal 2022.

\* Forecast for fiscal 2022 as of August 2021

**ESG** aspects

Procuring recycled raw materials from PET bottles (Films)

Mitigation of negative effects (reducing risk)



Related material issues

Product life cycle

management

Reducing greenhouse gas emissions

# Preventing climate change

• Installation of gas cogeneration facilities, conversion of fuel from coal to gas

## Resource circulation

Enhancement of positive

Resource circulation

- Re-use of recycled raw materials Crisper®, KAMISHINE®, SPACECLEAN®, CYCLE CLEAN®, RESHINE® (Films)
- Re-use of non-conforming products COSMOSHINE SRF® (Films)
- Re-use of HAGIPRO resin\* full-scale start of production scheduled for October 2021 (Films)
  - \* Impurity-free PET made by removing the surface treatment of films that would otherwise reduce recyclability

Product life cycle management

# Solutions for customer challenges and social issues

- · Saving resources and reducing GHG emissions by using recycled raw materials and developing thinner products Shrink film SPACECLEAN® Film of recycled PET resin CYCLE CLEAN® Film of plant-derived raw materials BIOPRANA®
- Enables long-term food storage, reducing food loss Transparent vapor-deposited film ECOSYAR®
- Enhances the performance of communications equipment Polarizer protective films for LCDs COSMOSHINE SRF® Mold releasing films for MLCC COSMOPEEL®
- Replaces metals, reducing weight Copolymerized polyester VYLON®
- Does not use solvents, reducing environmental impact Environmentally conscious printing plates Printight®, Cosmolight®



















Ability to provide solutions (contribution through our business)

Reducing greenhouse gas emissions

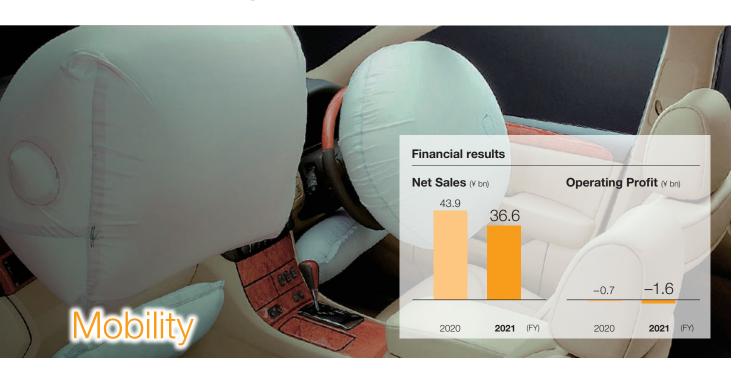
Reducing environmental impact

# Resource circulation

Collecting and recycling silicon-coated films (Films)

Product life cycle management

# **Overview by Solution**



### **Overview of fiscal 2021**

# Decrease in sales and profit due to lower global automobile production

In fiscal 2021, Toyobo's Mobility Solutions Division had net sales of ¥36.6 billion and an operating loss of ¥1.6 billion. Although sales recovered in the latter half of the fiscal year with the global recovery in automobile production, it could not sufficiently compensate for the impact of reduced automobile production due to the spread of COVID-19 to the second quarter, resulting in decreased sales and profit.

For the airbag business, we did not see an improvement in profit even though delivery volumes recovered during the fiscal year. This was mainly due to the continuing need to procure yarn at higher prices because of the fire at the Tsuruga Research and Production Center in September 2018, and also unstable supplies and price hikes in some raw materials from the middle of the fiscal year.

In the engineering plastics business, our sales volume recovered in the latter half of the fiscal year, particularly led by China; however, this did not fully make up for the sales decline in the first part of the year due to reduced automobile production.

Since October 2020, inappropriate conduct regarding certification by Underwriters Laboratories (UL), a third-party safety science organization in the U.S., has been discovered for several products in this field. We have already completed an investigation, and are reconfirming delivery specifications and discussing compensation costs with our customers. Products related to improper UL certification comprise about 10% of the approximately ¥30.0 billion of the field's sales.

Considering this an issue for the entire company, the Group established the Quality Assurance Division in April

2021 under the direct control of the President, and is working to prevent similar events from occurring in the future with the help of external experts.

## Forecast for fiscal 2022

# Recovery expected in second half after uncertain results in first part of year

Due to the spread of COVID-19 and the impact from shortages of various raw materials such as semiconductors, the circumstances surrounding automobile manufacturing in the first half of fiscal 2022 remain unclear. However, we believe that the economy will undoubtedly recover in the second half of the year. We are also working to respond to quality issues in engineering plastics, and aim to expand sales again in the latter half. In the airbag business, while the impact of the fire at the Tsuruga Research and Production Center and the global shortages of the raw material nylon 66 have caused issues in procuring yarn, the increasing capacity utilization rate at all bases leads us to expect further improvement. Moreover, we are constructing a yarn plant in Thailand, and plan to offer yarn for the evaluation of customers by the end of the fiscal year. (See page 89 for more details about yarn plant.)

We are continuing initiatives in line with major trends such as CASE,<sup>1</sup> MaaS<sup>2</sup> and sustainability, and will ultimately promote the provision of total solutions in the mobility field.

Based on this, we anticipate net sales of 440 billion and an operating loss of 11 billion (improvement of 40.6 billion from previous year) for fiscal 2022.

- 1 Abbreviation of "Connected, Autonomous, Shared & Service, Electric." Refers to the latest technological advances in automobiles
- 2 Abbreviation of "Mobility as a Service." Refers to the provision / use of various forms of transportation as a one-stop service, and the systems for that
- 3 Forecast for fiscal 2022 as of August 2021

Process

Enhancement of positive effects (increasing opportunities)

**ESG** aspects

Mitigation of negative effects (reducing risk)



Management base Related material issues

# Chemical substances management

Conducting reviews to ensure compliance with legal regulations and switching to alternative components

Reducing environmental impact

## Resource circulation

Promoting use of recycled resin

Product life cycle management

# Preventing climate change

 Establishing efficient production methods, promoting energy conservation

Reducing greenhouse gas emissions

# Developing human resources

- Hiring local workers in overseas plants
- Providing technology support to domestic and overseas Group companies

Human resource management

# Worker health & safety

• Raising awareness of preventive maintenance to prevent accidents

Safety, disaster prevention, quality

Ability to provide solutions (contribution through our business)

Reducing greenhouse gas

emissions

# Solutions for customer challenges and social issues

- Reducing GHG emissions, enhancing energy efficiency and improving safety in next-generation mobility
- · Helping to realize a pleasant vehicle interior space (safety and comfort)

Engineering plastics:

Polyester resin specially targeted for injection molding **VYLOPET®** 

Thermoplastic polyester elastomer PELPRENE®

High-performance polyamide resin GLAMIDE®

Biomass polyamide resin VYLOAMIDE®

Thermoplastic stampable sheet QuickForm®

Non-coated and coated fabrics for airbags















# Resource circulation

- Collecting and recycling airbag fabric offcuts, and recycled as engineering plastics resins
- Collecting and recycling packaging film offcuts, and recycle as engineering plastics resins

Product life cycle management

# **Overview by Solution**



#### Overview of fiscal 2021

### Uphill battle in super fibers and textiles

In fiscal 2021, demand decreased due to the spread of COVID-19, and the nonwoven fabrics, super fibers, and textiles businesses remained sluggish. As a result, net sales and operating profit fell to ¥109.1 billion and ¥4.4 billion (operating profit margin: 4.0%), respectively.

The textiles business saw a nearly 30% decline in sales largely due to poor over-the-counter sales caused by the spread of COVID-19.

In the nonwoven fabrics business, sales of the nonwoven filament fiber spunbond did not grow as much as expected for construction and civil engineering applications. Meanwhile, sales of functional filters for air purifiers and masks were strong, while sales for office equipment including copy machines and projectors were lackluster as more companies implemented telecommuting. Sales of Tsunooga®, a high strength polyethylene fiber used in factory gloves, decreased due to the drop in factory utilization rates through the world.

Forced to operate in a severe business environment from the decline in demand in the Chinese market and anti-dumping policies, the market environment for acrylic fibers deteriorated due to the warm winter and the spread of COVID-19.

On the other hand, in the environmental solutions business, although we struggled to obtain new deals for equipment for VOC emissions treatment, which recover solvents and contribute to the prevention of air pollution, due to the spread of COVID-19, we achieved solid results in the end thanks to a backlog of orders from the previous fiscal year. In addition, sales increased for seawater desalination RO membranes, which are used in large seawater desalination plants and contribute to resolving water

shortages.

The functional textiles business also produced strong results, with polyester staple fibers for sanitary materials and the three-dimensional cushion material BREATHAIR $_{\odot}$  used in bedding.

#### Forecast for fiscal 2022

# Strengthening the solutions business in the environmental field

In the environmental business, there is demand for equipment for VOC emissions treatment from the increase in lithium-ion batteries and semiconductor factories, and in the nonwoven fabric and super fiber businesses, orders are recovering with return of overseas production activities.

In the future, the need is expected to increase for our separation materials and filtration products with a variety of characteristics, such as greenhouse gas reduction and ZLD.1

We will strengthen our solutions business that combines materials and equipment to solve the issues of our customers. In addition, we are constructing the Multi-functional Nonwoven Production Center (provisional name) in the Iwakuni Production Center, and aim to start production in July 2022 (see page 89 for details).

We will also accelerate research, development and procurement for the conversion of raw materials to eco-materials, and aim to become a manufacturer of comprehensive functional nonwoven fabrics that provides raw materials, staple fibers, filament fibers and applied products.

Through these actions, we anticipate net sales of ¥113 billion and operating profit of ¥5.2 billion (operating profit margin: 4.6%)<sup>2</sup> for fiscal 2022.

- 1 Zero liquid discharge: Wastewate treatment that eliminates liquid waste from the perspective of wastewater reclamation and reuse
- 2 Forecast for fiscal 2022 as of August 2021

Sales / Use

## Process

K

Enhancement of positive

**ESG** aspects

Mitigation of negative effects (reducing risk)



Management baseRelated material issues

# Resource circulation

- Use of renewable plant-derived materials (Environment, Functional Textiles)
- Use of materials recycled from PET bottles (Nonwoven Fabrics, Functional Textiles)

Product life cycle management

# ■ Preventing climate change

- Energy conservation through systems improvement and greater production efficiency (Nonwoven Fabrics)
- Reduction of transport-related GHG emissions through local production (Nonwoven Fabrics, Environment, Functional Textiles)

Reducing greenhouse gas emissions

# Quality and customer health & safety

 Regular Quality Assurance meetings with customers to strengthen quality control (Nonwoven Fabrics, Functional Textiles) Safety, disaster prevention, quality

# Developing human resources

- Active employment of local workers by Saudi Arabian affiliated company (Environment)
- Chinese affiliated company has assigned local workers to managerial and sales positions (Nonwoven Fabrics, Functional Textiles)

Human resource management

# Solutions for customer challenges and social issues

- Supplying the world with safe water
   Seawater desalination and wastewater treatment systems (RO, BC, FO membranes)
- Harmful substances are adsorbed, reducing the impact on the environment

Activated carbon fiber K-Filter®, Equipment for VOC emissions treatment Functional nonwoven fabrics (electret air filter ELITOLON®, heavy metal ion adsorbent spunbond COSMOFRESH NANO™)

PPS fibers for bag filters PROCON®

- High functionality, recyclable, enhanced comfort Three-dimensional cushion material BREATHAIR®
- Reduces weight and conserves resources
   Super fibers IZANAS®, Tsunooga®, ZYLON®

Ability to provide solutions (contribution through our business)

Reducing greenhouse gas emissions













# Resource circulation

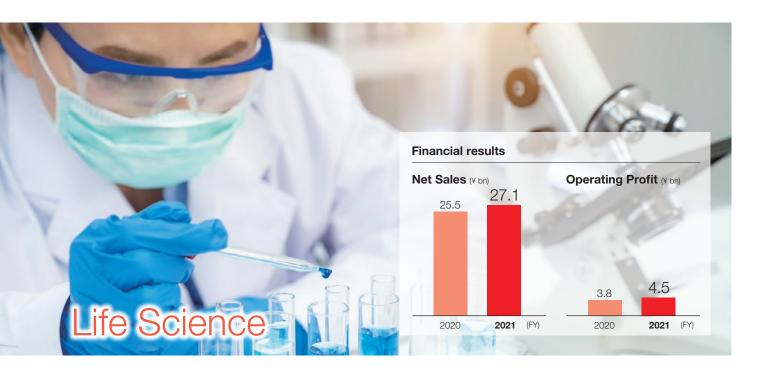
 Hollow fiber membrane materials are biodegradable after disposal (Environment) Reducing environmental impact

Product life cycle management

# ■ Health & safety of local residents

 Prevention of soil contamination, control of poisonous gases during combustion (Environment) Reducing environmental impact

# **Overview by Solution**



#### Overview of fiscal 2021

# Sales and profit increased from rapid growth in demand for PCR test reagents

While this segment is small in size, it is highly profitable. The contract manufacturing business of pharmaceuticals struggled in fiscal 2021; however, the biotechnology business saw a rapid increase in demand for PCR test reagents, resulting in net sales of ¥27.1 billion and operating profit of ¥4.5 billion (operating profit margin: 16.7%).

In the biotechnology business, although the demand for biochemical diagnostic reagent raw materials declined, PCR test reagents saw a significant increase in sales volume due to the spread of COVID-19. By doubling our test reagent production capacity from February 2021, our customers improved their systems to enable the testing of 1,000,000 specimens from 500,000 per month. As a result, our sales volume increased significantly from March 2021.

In the contract manufacturing business of pharmaceuticals, flaws were found in the manufacturing process environmental monitoring at the Otsu Pharmaceuticals Plant that is to ensure that the required level of cleanliness is maintained. As a result, we temporarily suspended operation, and revenue deteriorated due to relevant costs for GMP\* compliance. We recognize this as a major issue and have developed master plan for business normalization. We are enforcing reforms in both intangible and tangible elements, including fostering a quality culture, and remodeling facilities.

In the medical products business, shipments of various hollow fiber membranes used in the medical field remained strong. Due to the spread of COVID-19 in particular, demand for virus-removing membranes used when manufacturing antibody drugs and vaccines increased worldwide, and sales have also doubled. Meanwhile, sales of the medical equipment nerve regeneration conduit Nerbridge® and catheters decreased from the previous year due to postponements of nonessential surgeries caused by the spread of COVID-19.

\* Good Manufacturing Practice: manufacturing and quality control standards for pharmaceuticals and medicated products

## Forecast for fiscal 2022

## Anticipating demand for PCR and antigen testing

For SARS-CoV-2 PCR testing reagents, we expect shipments to continue at a pace similar to the previous fiscal year, but will gradually decrease as vaccinations progress more broadly. On the other hand, demand for private sector testing is expected to remain, such as testing to prove lack of infection with SARS-CoV-2 when traveling overseas. In addition, we anticipate that the antigen testing kit for COVID-19, first launched in June 2021, will contribute to our business performance in the future as we expect it to be used in rapid tests during hospitalization and before outpatient surgery, in addition to regular testing. We will also consider developing this technology to utilize in research reagents for simple screening at schools, companies and sporting events.

# Anticipating demand for components used in the medical field

We are planning to increase our production capacity in order to expand our business in hollow fiber membranes used in medical applications, including those for artificial kidneys. There is a particularly high demand for virus-removing membranes used when manufacturing antibody drugs, and we plan to double our production capacity. In addition, in response to customers' expectation for starting sales early, we are working on the overseas development of Nerbridge® and the creation of sales and production systems for the domestic release of new bone regeneration materials, which are expected to contribute to our business performance in the future.

Through these actions, we anticipate net sales of ¥30 billion and operating profit of ¥6 billion (operating profit margin: 20.0%)\* for fiscal 2022.

\* Forecast for fiscal 2022 as of August 2021

Sales / Use

Process

1

Enhancement of positive effects (increasing opportunities)

**ESG** aspects

Mitigation of negative effects (reducing risk)



Management baseRelated material issues

Safety, disaster prevention,

quality

# Quality and customer health & safety

- Acceptance testing based on GMP (Pharmaceuticals)
- Ensuring complete traceability of raw materials in products intended for implant

# Worker health & safety

 Conducting prior reviews concerning the safety of chemical substances Safety, disaster prevention, quality

# Quality and customer health & safety

Strict controls based on GMP (Pharmaceuticals)

Safety, disaster prevention, quality

# ■ Preventing climate change

 Promoting energy conservation by upgrading to highly efficient equipment (Medical Membranes) Reducing greenhouse gas emissions

# Resource circulation

Sterile injections, etc.

- Collecting offcuts, etc. and providing these to manufacturers that regenerate raw materials (Pharmaceutical Membranes)
- Reducing packaging material volumes by simplifying packaging (Medical Equipment)

Product life cycle management

# Solutions for customer and social issues

 Enhancing QOL through our contributions to medical settings Nerve regeneration conduit Nerbridge®
 Artificial kidney hollow fiber membranes
 Fully automated gene analysis system GENECUBE®



Ability to provide solutions (contribution through our business)

# Quality and customer health & safety

 Formation of scientific support group to prevent incorrect use of products (Medical Equipment) Safety, disaster prevention, quality

# Chemical substances management

 Selection of specified collection contractors for organic solvents, etc. (Medical Equipment) Reducing environmental impact

# ■ Worker health & safety

 Installation of exhaust ducts at sites where organic solvents are handled (Medical Equipment) Safety, disaster prevention, quality

# Health & safety of local residents

 Outsourcing of waste material processing to specialist operators (Medical Equipment) Safety, disaster prevention, quality

**Reducing environmental impact** 

# The Basis of Value Creation

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The Basis of Value Creation

# Message from the Sustainability Officer



**Nobuya Fujiwara**Executive Officer
Supervisor of Corporate
Sustainability Department

The Toyobo Group has been growing and expanding its business by responding to the demands of society and contributing solutions to of social issues since its founding in 1882, long before the concept of CSV was formed. In recent years, we have been broadening the concept of CSR to encompass initiatives for environmental conservation and contribution to local communities.

Sustainability is a natural extension of this for a company with such a history, and in fiscal 2021 we began full-fledged sustainability management activities.

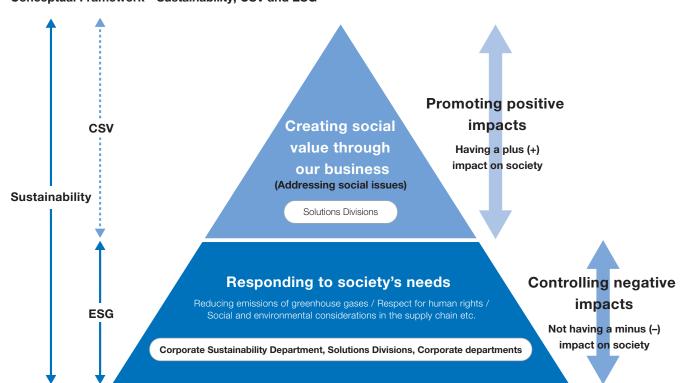
To be sustainable, the Toyobo Group must have both economic value and social value. The Corporate Sustainability Department was created in April 2020 with the

objective of building those two values by incorporating ESG elements into the Group's management and strategies and by improving the communication of information to stakeholders. Some of the main activities under way in 2021 include steps to achieve carbon neutrality and a circular economy as well as measures to apply risk management from an overall company perspective.

I believe there are two main avenues to achieving sustainability. The first is to apply an ESG perspective to identifying opportunity and risk and strengthening the management base. The second is to apply a CSV perspective to using our business to address social issues and making that a driver for business growth that gives us a competitive advantage. Utilizing the Group's various technologies and services in solutions for social issues and to achieve the SDGs, such as by helping reduce environmental burden, will be directly connected to the company's purpose for its existence.

In addition, in the future society made up of people with different values, it will be essential that each employee feels pride and purpose in their work. We are instilling the concept of sustainability along with our corporate philosophy into our business approach and integrating sustainability into our management and business strategies as we seek to fulfill our long-term vision.

## Conceptual Framework-Sustainability, CSV and ESG



# **ESG Management**

## **Management system**

Toyobo Group regards sustainability as a key aspect of corporate management, which should be promoted throughout the Group. In April 2020, we established the Corporate Sustainability Department, which since April 2021 has reported directly to the President. The Corporate Sustainability Department puts forward proposals for incorporating a sustainability perspective into the company's growth strategy, and also enhances support for measures aimed at realizing these proposals, as well as strengthening the collation of sustainability and ESG-related internal information and the dissemination of such information both within and outside the company.

Toyobo has also established a Sustainability Committee, chaired by the President, to undertake the cross-departmental promotion of sustainability across the entire company. The Sustainability Committee meets on a quarterly basis to confirm the progress made in implementing sustainability activities throughout the company, and discusses new issues that need to be addressed, and company-wide risks. The content of the Committee's discussions is reported to the Board of Directors on a regular basis. The management of progress made in relation to materiality has also been conducted within this framework.

**Board of Corporate Auditors** 



<sup>\*</sup> Product Liability/Quality Assurance Committee

# **UN Global Compact (UNGC)**

In January 2020, Toyobo became a signatory to UNGC, and also joined Global Compact Network Japan, which comprises Japanese companies and organizations that are UNGC signatories. As a responsible corporate citizen, this reflects our endorsement of the goal to resolve global issues and realize sustainable growth. We also gather information through our participation in the subcommittees of Global Compact Network Japan, utilizing this in our day-to-day activities. From fiscal 2021, we are participating in subcommittees such as ESG, Supply Chain, Environmental Management, Kansai-based regional subcommittee, Reporting Research. Toyobo is strengthening measures to realize a sustainable society by following the ten principles of UNGC.



#### The Ten Principles of UNGC

**Board of Directors** 

Human	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and	▶p.21-24,	
Rights	Principle 2: make sure that they are not complicit in human rights abuses.	p.73,74	
	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;		
Labour	Principle 4: the elimination of all forms of forced and compulsory labour;	p.21-24, p.70-71, p.73,P.74	
	Principle 5: the effective abolition of child labour; and		
	Principle 6: the elimination of discrimination in respect of employment and occupation.		
	Principle 7: Businesses should support a precautionary approach to environmental challenges;	A = 21 24	
Environment	Principle 8: undertake initiatives to promote greater environmental responsibility; and	p.21-24, p.47-54, p.57,	
	Principle 9: encourage the development and diffusion of environmentally friendly technologies.	p.58-65	
Anti- Corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	p.21-24, p.85-86	

## Long-term vision and KPI

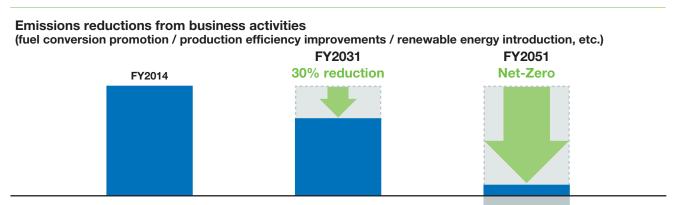
The Paris Agreement, an international framework on climate change, aims to limit global temperature rise to less than 2 degrees Celsius from pre-industrial levels, or less than 1.5 degrees if possible. In recent years, countries worldwide have been accelerating their initiatives to reduce greenhouse gas(GHG) emissions to virtually zero by 2050 in order to achieve the goal of the agreement.

Toyobo Group seriously considers this social environment, and recognizes the risks and opportunities posed by global warming and climate change on our business, which is why we have set the goal of achieving carbon neutrality or net-zero GHG emissions by fiscal 2051. We will promote the reduction of GHG emissions from our business activities by improving production efficiency, converting fuels in our production activities, and promoting

the introduction of renewable energy such as solar power to achieve net-zero emissions by fiscal 2051.

In addition, we will make efforts to reduce GHG emissions in the entire value chain through actions such as reducing product weight, reviewing raw materials and promoting green logistics. Also, we will expand contributed GHG reductions using solutions based on the Group's unique products and technologies. Specifically, we are developing a RO hollow fiber membrane that contributes to energy saving in seawater desalination plants, and reducing the weight of engineering plastics to contribute to improved fuel efficiency in automobiles, we also are providing films and FO membranes used in wind power generation and osmotic power generation, and developing organic film solar cells boasting the world's highest power generation efficiency under indoor lighting. Furthermore, we are developing carbon recycling technology that separates and captures

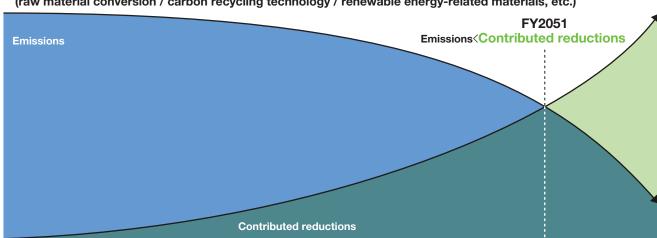
#### Targets for Scope 1 and Scope 2\*



\* Scope 1: Direct emissions from owned or controlled sources Scope 2: Indirect emissions from the use of purchased electricity, heat and steam

#### Targets for entire value chain

# Contribution through products and solutions (raw material conversion / carbon recycling technology / renewable energy-related materials, etc.)



CO<sub>2</sub>, in addition to other activities. We will calculate the contributed reductions as the amount of GHG emissions reduced through these efforts, and we aim to achieve carbon neutrality by making it higher than that of the entire value chain by fiscal 2051.

members from throughout the company and will study and implement substantive measures, such as encouraging innovation, promoting alliances, accelerating research and development, and creating solution businesses from a long-term perspective.

# Structure to achieve carbon neutrality

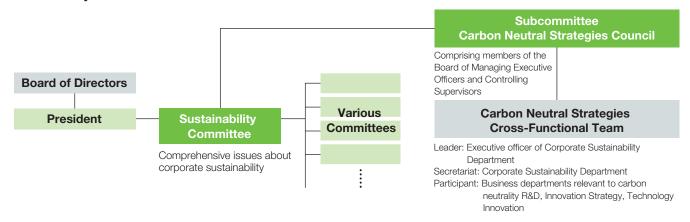
In April 2021, Toyobo established the Carbon Neutral Strategies Council and the Carbon Neutral Strategies Cross-Functional Team to formulate and promote strategies to achieve carbon neutrality.

The Council consists of Corporate Executive Officers and Controlling Supervisors, and will formulate strategies to pursue and milestones to reach based on three objectives in order to diligently make efforts to achieve carbon neutrality company wide. The Cross-Functional Team consists of

# Three objectives to achieve by formulating carbon neutral strategies

- Minimize greenhouse gas emissions generated from Toyobo Group's production activities
- 2. Contribute to reducing greenhouse gas emissions and ultimately achieving carbon neutrality through solutions provided by Toyobo Group
- 3. Place emphasis on developing technologies for capturing and separating greenhouse gases

#### **Promotion system**



# Examples of GHG emissions reduction contributions FO membrane for osmotic power generation

Osmotic power generation using high-salinity geothermal water, a source of renewable energy, has been receiving public attention. Toyobo has developed a forward osmosis (FO) membrane for the power plant core used in this method, and are running demonstration tests at a power plant in Europe.

Geothermal water osmosis power generation uses the high osmotic pressure of geothermal water with high salt concentrations pumped from underground. Compared with solar and wind power, the weather and time of day does not affect geothermal power generation, and a 1 MW geothermal osmotic power plant can reduce annual CO<sub>2</sub> emissions by 7,200 tonnes compared with coal power generation. In addition, it does not emit harmful substances such as nitrogen oxides and sulfur oxides normally emitted during combustion.

We are currently performing demonstration tests on the FO membrane using highly concentrated salt water at a salt manufacturing plant in Europe, in the hope of putting it to practical use as soon as possible.



Osmotic power plant employing FO membrane

## **Reducing GHG emissions**

In fiscal 2021, Toyobo is accelerating our reduction activities by raising our interim targets (fiscal 2031) from a 17% reduction (compared with fiscal 2014) to a 30% reduction (Scope 1 and Scope 2 combined, compared to fiscal 2014) and our short-term targets from an annual 1% reduction (compared with fiscal 2014) to an annual 1.8% reduction. We plan to revise the targets depending on our achievement.

In fiscal 2020 we constructed the Group's fourth gas cogeneration facility\* at the Tsuruga Research and Production Center, our largest R&D and production base. We will also consider the introduction of renewable energy and switching to  $CO_2$ -free fuels in the future.

\*An energy recycling system, harnessing waste heat (from clean natural gas-fired electric generation) to produce steam and hot water used in manufacturing processes, supplying hot water, air conditioning, etc.

#### **GHG** emissions

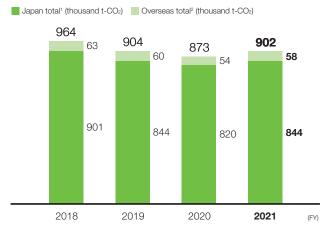
In fiscal 2021, the  $CO_2$  emissions for Scope 1 and Scope 2 totaled approximately 902 thousand tonnes, 25.7% lower than the reference fiscal year (fiscal 2014). The increase from the previous fiscal year is due to additional emissions from the Utsunomiya Plant, which joined the Toyobo Group. We have set greenhouse gas emissions as a KPI, and we will continue to work towards achieving this target through energy conservation, production efficiency improvements, the introduction of renewable energy, and fuel conversion.

#### KPI



30% reduction compared to FY2014 (FY2031 target)

### Scope 1, 2 greenhouse gas emissions (Japan, overseas)



1 Japan total: Total for TOYOBO CO., LTD. and domestic consolidated subsidiaries 2 Overseas total: Total for overseas consolidated subsidiaries

# Introduction of renewable energy

Malaysia is currently promoting the introduction of clean energy, and TOYOBO TEXTILE (MALAYSIA) SDN. BHD. has decided to install solar power generation facilities in its new factory.

After completion, solar power is expected to provide approximately 7% of all energy used by the whole factory. This will result in a yearly  $CO_2$  reduction of 915 tonnes, which is equivalent to a Group-wide 0.1% reduction in total energy consumption.

# **Support for the TCFD and participation** in the TCFD Consortium

In January 2020, Toyobo Group announced its support for the Task Force on Climate-related Financial Disclosures (TCFD) proposals, and joined the TCFD Consortium, a group of companies and financial institutions that agree with the recommendations.

The TCFD was established by the Financial Stability Board (FSB), whose members include representatives of central banks, financial supervisory authorities, and others from 25 major countries and regions, and its recommendations urge companies, organizations, and others to disclose information about climate-related risks and opportunities. In Japan as well, preparations are underway to respond to TCFD proposals, including the publication of the "Guidance on Disclosure of Climate-related Financial Information (TCFD Guidance)" by the Ministry of Economy, Trade and Industry.

With the announcement of our endorsement of the TCFD proposals and our participation in the consortium, we will continue to meet requirements for accountability to our stakeholders by further analyzing and responding to the risks and opportunities to our business posed by climate change, and by expanding our disclosure of relevant information.



# **Resource Circulation**

# Initiatives centered on plastic resource circulation

#### Basic approach

In recent years, there have been growing expectations in society for the creation of a circular economy; an economic system that recycles and reuses previously discarded products as new resources.

In Toyobo Group, we have been active in developing products and technologies aimed at reducing environmental impact. For our mainstay plastic products, we are working to increase the ratio of recycled resins and biomass (plant-derived) materials, and to commercialize biomass plastics that retain their high functionality.

To add to this, we have long been taking a broad view in searching for new technologies. One such example is a technology that creates polyester raw materials from wood. Anellotech Inc., a U.S. biochemical venture company is currently developing this technology.

#### Structure

To further accelerate these initiatives and contribute to creating a sustainable society, in April 2020 we launched the Renewable Resources Business Development Department.

By 2030, we hope to shift to using biomass for polyester resin, and establish technologies for material and chemical recycling.\* These technologies will contribute to reductions in greenhouse gases emitted from thermal recycling process of plastic waste, as well as reductions in the environmental impact from emissions of pollutant release.

Based on our slogan of "Catalyzing Circular Economy," we will continue to fulfill our responsibility toward the future and thus aim for sustainable growth.

\*Material recycling: conversion to flakes and pellets, and reuse as resin materials.

Chemical recycling: using chemical reactions to change the composition of materials, and reuse these as raw materials.

### Participation in various initiatives

Toyobo Group is working closely with a variety of companies and organizations, and is active in a number of initiatives aimed at contributing to the construction of a plastics value chain that is appropriate to the era of the circular economy.

In August 2019, Toyobo Group joined the European consortium Circular Economy for Flexible Packaging (CEFLEX)—this focuses on the development and supply of technologies and products while staying on top of information and trends concerning recovery systems and regulations.

We have also participated from the beginning in the Japan Clean Ocean Material Alliance (CLOMA), an organization established in 2019 in Japan to reduce marine plastic waste. Through collaboration with other CLOMA members, which includes manufacturers, processors and users of packaging and other materials, we will work to

develop and promote the use of alternative materials.

Toyobo Group is also a member of the Japan BioPlastics Association and Petcore Europe. 2

- \*1 The association was established in 1989 with the aim of promoting the use of bioplastics, and establishing a testing and evaluation system.
- \*2 A consortium of more than 80 companies and organizations spanning the entire value chain of European PET-related companies.

#### Strategy

A move to biomass as well as recycling are complementary when it comes to promoting plastic resource circulation. Transitioning to biomass helps us reduce our dependence on limited petrochemical materials, and recycling allows more efficient use of available resources. We are promoting a strategy to make all our film products renewable (recycling and biomass) by 2050.

### Strategy 1: Using biomass for polyester

#### 100% biomass plastic for food packaging film

Our focus is on furandicarboxylic acid (FDCA) as a biomass raw material. FDCA is polymerized using our proprietary technology to produce polyethylene furanoate (PEF), a high-performance polyester. PEF is a 100% biomass plastic with excellent gas barrier properties, and when formed into a film can help extend the shelf life of food contents, and thus reduce food losses. The world's first FDCA production plant is scheduled to be opened by Avantium in 2023. We plan to use this FDCA to produce PEF film.

We are also exploring other initiatives besides PEF in order that we can make all of our film products renewable (recycling and biomass) by 2050.

### Strategy 2: Material recycling

#### **Developing catalysts to increase PET recyclability**

TOYOBO GS Catalyst®, a polymerization catalyst developed by Toyobo, is the world's first aluminum catalyst that does not contain any heavy metals. PET degrades during repeated melting processes in recycling, but the PET obtained using this catalyst does not deteriorate when melted, making it well suited to recycling.

Toyobo has already licensed the technology to Thailand's Indorama Ventures Public Company Ltd., the world's largest PET resin manufacturer. With the excellent recyclability of the produced PET resin, we will develop this business worldwide in cooperation with Indorama.

#### Overview of Toyobo Group circular economy strategy

## Improvements in recycling technology

### Chemical recycling

Developing technologies to turn plastic waste into raw materials, and to produce recycled plastics.

Products that are in no way inferior to new products, with increasing applications.

- R Plus Japan, Ltd.\*
- Strategy 3

### Material recycling

Improving recyclability by preventing the deterioration of raw materials, even after repeated, bottle-to-bottle recycling.

• TOYOBO GS Catalyst®\*aluminum catalyst Strategy 2
Reuse of materials including:

- Collection and recycling of airbag fabric offcuts\*
- Packaging and industrial films\* using recycled materials

#### Reference initiatives

Japan Chemical Industry Association
 (Waste plastic and chemical recycling working group)

## **Expansion of biomass materials**

### Biomass plastics

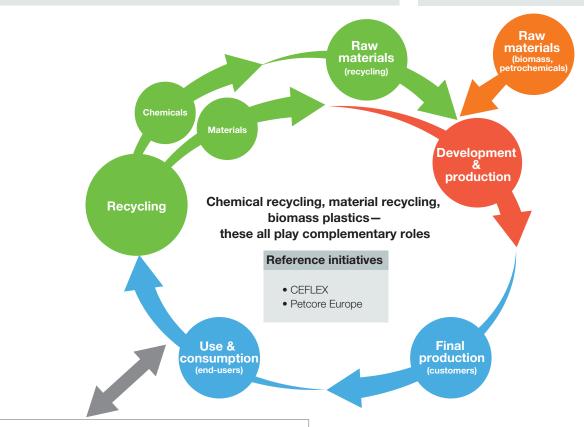
Biomass is made from plants which absorb CO<sub>2</sub> from the atmosphere, so it can be offset even when CO<sub>2</sub> is emitted during incineration.

- BIOPRANA®\*
- VYLOAMIDE®\*
- Polyethylene Furanoate (PEF)\*

Strategy 1

#### Reference initiatives

- Japan BioPlastics Association
- Japan Plastics Industry Federation (Bioplastic usage promotion working group)



## Handling marine plastic waste

#### Reference initiatives

- CLOMA
- Marine-Biodegradable Biomass Plastics Development platform

### \* Toyobo initiatives and products

#### **Environmentally conscious design**

#### Reduce

Reduce use of plastics by developing thinner and lighter materials

#### ■ Monomaterial solutions

Increased recyclability through single-plastic composition

### Strategy 3: Chemical Recycling

## R Plus Japan Initiatives

Anellotech's technological development has enabled a new technology to efficiently recycle a wide variety of used plastics. Following this, in June 2020 the joint venture company R Plus Japan, Ltd. was established by a group of 12 companies operating in Japan's plastics value chain, which includes Toyobo. As of July 2021, this number has grown to 29 companies, and together with Anellotech it is continuing with the development of new technologies.

So that we can contribute to solving the common worldwide problem of plastics, we aim to have this technology in practical use by 2027. To do this, we are collaborating with companies in a range of industries, including those in sorting and processing of collected plastics, distribution, and production of monomers, polymers, packaging and containers, and beverages.

#### **Waste reduction**

At Group manufacturing sites, we are working to minimize the amount of waste sent to landfill by reducing to the extent possible waste products produced by our production activities.

Given this, we are working to reduce, reuse, and recycle waste, aiming for an annual final disposal rate (landfill rate)\* of under 1%.

We achieved this target in fiscal 2021, with a final disposal rate of 0.2% continuing our success in achieving targets since fiscal 2015. We will continue making efforts to further reduce the final disposal rate by reducing waste quantities through reviews of our sorting and disposal methods as well as moving to resource recovery.

Toyobo takes a systematic approach to appropriate disposal of polychlorinated biphenyl (PCB) waste. The disposal rate up to end of fiscal 2021 was 94% (unit volume basis). With regard to electric facilities containing low-concentration PCBs, which we currently use, we are implementing updated plans so as to meet the statutory disposal deadlines.

Toyobo Group has long taken a proactive approach to leveraging recycling to reduce waste, such as using recycled resin made from PET bottles as the raw material for chemical synthetic fiber and film products. Reuse of recycled raw materials in films is at 800 tonnes per annum, with recycling of non-conforming products also proceeding. For example, we collect the fabric offcuts that are produced during airbag manufacturing and recycle them into highly heat-resistant resin. We also reuse certain packaging film offcuts as the raw material for engineering plastics. (See page 48, 50 for details of solution overview)

\* Amount of landfill waste as percentage of total waste

#### **KPI: Waste Volume and Final Disposal Rate**

(FY)	2018	2019	2020	2021
Waste volume (thousand tonnes)	94.9	99.1	92.3	106.2
Landfill rate for industrial waste (%)	0.7	0.7	0.6	0.2

Aggregation scope: Japan total

# **Eco-Conscious Products**

# Mechanism for certification of eco-conscious products

As clearly stated in TOYOBO Group Charter of Corporate Behavior, Toyobo Group strives to save energy as well as reduce and re-use resources. We also develop products and technologies that help reduce impact on the environment.

These products and technologies are defined and evaluated under our Eco-Review system. This system evaluates the following aspects at every stage in the product life cycle: climate change prevention, reduction of chemical substances, resource conservation, waste reduction, and other environmental contributions. Products that meet these standards are certified as ECO-PARTNER SYSTEM® products. Since the Eco-Review is carried out at every product life cycle—from R&D to commercialization—issues that require improvement from an environmental protection perspective are identified and improved at an early R&D stage prior to the subsequent review. Consequently, we are contributing to the environment as we develop our products and technologies.

# Ratio of ECO-PARTNER SYSTEM® product sales for fiscal 2021 increases to 29.9%

We aimed to increase our sales ratio of ECO-PARTNER SYSTEM® products to 30% of total sales by fiscal 2031 (25% by fiscal 2016), and achieved this target with 30.4% (sales: ¥60.6 billion) in fiscal 2020. Accordingly, we have set new targets of 40% by fiscal 2031 and 60% by fiscal 2051. We will continue to create eco-conscious products.

In addition, we are considering expanding the applicable range of the certification system to Group companies, and have begun to identify issues in order to calculate the sales ratio of ECO-PARTNER SYSTEM® products for the entire Group.



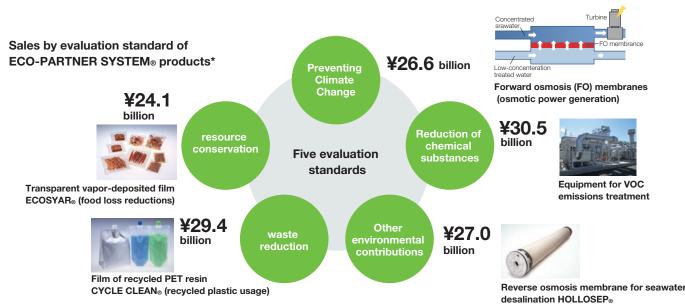
Overview of

#### **Eco-Review evaluation items**

Design and development	Designing eco-conscious products
Raw materials	Using recycled materials and alternative petroleum raw materials     Considering biodiversity
Production	Using energy-saving and clean energy     Reducing water use and effectively using raw materials     Reducing waste through distribution and packaging
Distribution and packaging	Reducing transportation energy     Reducing packaging waste
Use and consumption	Saving energy     Increasing lifespan
Recycling, disposal and incineration	Reducing hazardous chemical emissions     Biodegradability and recyclability

#### Review and certification process





# **Chemical Substances Management**

## **Basic approach**

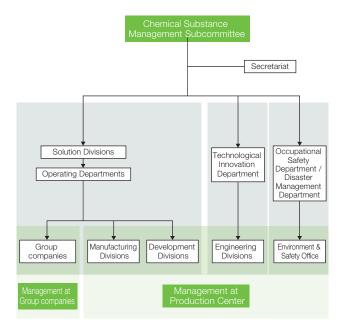
Toyobo Group endeavors to manage chemical substances appropriately throughout the product lifecycle (research, development, design, manufacturing, sales, use, and disposal), in order to help conserve the global environment, prevent accidents, ensure workers' health and safety, and guarantee product safety.

# Chemical substance management structure

In order to promote appropriate management of chemical substances, Toyobo Group has established a management system at each Production Center. Each Solutions Division supervises the activities of the production sites and group companies under their jurisdiction.

In addition, we have created a TOYOBO Chemical Substance Management Classification in compliance with laws and regulations—both international and domestic—as well as client requests. This classifies the chemical substances we handle into five levels, and the management procedures are specified for each level or "rank." Use of substances in rank A and B is permitted only when the risks are thoroughly assessed, mitigation measures are taken, and the risk is deemed tolerable. We are continuously making efforts to reduce the overall usage volume of rank A and B substances by optimizing and replacing these substances.

#### **Chemical Substance Management Structure**



### TOYOBO Chemical Substance Management Classification

Rank	Management Category	Notes (laws and regulations, etc.)
А	Substances requiring particularly strict management	Chemical Substances Control Act¹, Industrial Safety and Health Act, Poisonous and Deleterious Substances Control Act, Act on the Protection of the Ozone Layer, Act on the Prohibition of Chemical Weapons, POPs², PIC³, etc.
В	Substances requiring strict management	Chemical Substances Control Act, PRTR <sup>4</sup> , Industrial Safety and Health Act, Poisonous and Deleterious Substances Control Act, etc.
С	Substances requiring strict exposure prevention measures	Chemical Substances Control Act, PRTR, Industrial Safety and Health Act, Poisonous and Deleterious Substances Control Act, Fire Service Act, etc.
D	Substances requiring exposure prevention measures	PRTR, Industrial Safety and Health Act, etc.
Е	Others	Other than A–D

- 1 Chemical Substances Control Act: Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
- 2 POPs (treaty): Prevention and Reduction of Persistent Organic Pollutants
- 3 PIC (treaty): The Prior Informed Consent Regulation (trade)
- 4 PRTR: Pollutant Release and Transfer Register

# Chemical substance management activities

Recent years have seen requirements to manage chemical substances within the supply chain. These requirements also apply to Japan following the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Chemical Substances Control Act), as well as other regulations relating to the chemical substances management. Additionally, the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) has been adopted by the United Nations.

In view of this situation, Toyobo has introduced a chemical substance management system covering procurement to manufacturing and sales. This is to realize green procurement while providing accurate and prompt support to our customers. We employ this system to investigate the use of regulated substances and carry out surveys regarding content in products. The system also supports in creating safety data sheets (SDS) for chemical substances.

Given the global expansion of Toyobo Group's operations, we are creating a database of chemical substance-related laws and regulations in Asia, Europe, North and South America. Furthermore, in order to identify and mitigate chemical substance handling risk, we have established rules concerning matters including the replacement / reduction of hazardous chemical substances, proper maintenance of the workplace and environments, and the chemical substances management in products. In this way, we are striving to ensure proper management.

# Reduction of PRTR listed substance emissions

Please refer to our website.

https://www.toyobo-global.com/sustainability/environment/chemical/

# Safety, Disaster Prevention, Quality

# **Safety and Disaster Prevention**

#### Basic approach and policy

We recognize that ensuring health and safety is a major premise for corporate activities, and are striving to ensure employee safety and to improve the health environment under the TOYOBO Group Basic Policy on Health & Safety.

In order to prevent the memory and lessons learned from the fire and fatalities that occurred at our Inuyama Plant on September 27, 2020 from being forgotten, we will continue to observe TOYOBO Group Disaster Preparedness Day on September 6. Also, we are newly designating September as Disaster Preparedness Month to promote the awareness of disaster prevention, including fires.

We will review our safety and disaster prevention activities, and continuously promote "the creation of workplaces and personnel that are strongly equipped to deal with fires" at all Group sites to create resilient production bases. We will work together as a Group to make concerted efforts to regain the trust of society.

#### Structure

To further enhance safety and disaster management as the most important management issues, we established the Safety and Disaster Management Division on December 1, 2020 as a specialized organization with strong authority that reports directly to the President. The progress of initiatives related to safety and disaster management is regularly reported to the Board of Directors. We also reorganized the Global Environment and Safety Committee into the Safety and Disaster Management Committee and the Global

Environment Committee. The chair of the Safety and Disaster Management Committee is the Senior Managing Executive Officer, and its members consist of the Senior Managing Executive Officers, Managing Executive Officers and Executive Officers in charge of each Solutions Division. In addition, Corporate Auditors and those designated by Committee members can attend meetings as observers and express their opinions. Ordinary committee meetings are held once a year in principle, and extraordinary committee meetings are held when necessary to deliberate and determine policies regarding safety and disaster management activities. The committee met once in fiscal 2021.

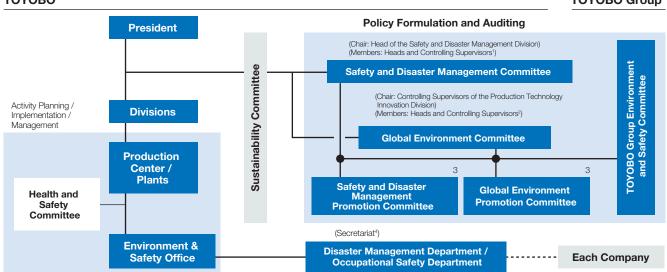
Furthermore, the subordinate Safety and Disaster Management Promotion Committee meets six times a year to manage the progress of activities. Promotion Committee members visit our production centers, plants, and Group companies to perform safety and environmental assessments and check the progress of local activities.

Each month, management and employees at the Health and Safety Committee, consisting of employee representatives, managers, and experts, jointly investigate and consider matters relating to safety, disaster prevention, and health at each production center and plant. The employee representatives then give feedback to employees regarding the decisions taken.

Labor union representatives also participate in discussions at the Safety and Disaster Management Promotion Committee and the Health and Safety Committee. Additionally, we hold regular management meetings with the labor union to discuss issues and the

# Toyobo Group Structure for Safety, Disaster Prevention, and Environment TOYOBO





- 1 Deliberates and decides policy on safety and disaster prevention 2 Deliberates and decides policy on the global environment
- 3 Deliberates and decides specific matters, and manages progress 4 Supports activities, provides information, and conducts interdepartmental coordination

progress of matters related to safety, disaster prevention, and health, and to share information.

All production centers use risk assessment methods to evaluate employee health and safety risks in workplaces, and carry out activities to mitigate elevated risks.

### Promotion of disaster prevention

In response to the large fire at Tsuruga Research and Production Center that occurred in 2018, we have conducted an overall inspection of Toyobo Group's main production sites using the Inspection Guidelines for Fire Risk. And we are promoting measures to reduce duct fire risks in addition to improving the functionality of fire-fighting equipment at our sites of production. Moreover, to respond to the fire and fatalities at the Inuyama Plant in 2020, we have launched the Disaster Prevention Audit Project to further reduce fire risks by adding the perspective of a third party. We are also revising the content of our training drills so that they are more practical and planning for all workers to participate in them in order for everyone to be able to protect their own workplaces in the event of fires.

As an important management issue, we will promote reliable measures to enhance disaster prevention at all sites with the aim of creating sites that do not allow fires to occur, and that prevent casualties and minimize other damage if they do occur.

For natural disasters, we will continue to implement disaster mitigation measures by reinforcing buildings against earthquakes, improving office and plant infrastructure, and conducting emergency response drills.

#### Making people, equipment, and processes safer

We identify major sources of potential danger and take steps to prevent major incidents from occurring. We carry out risk assessments and research procedures to understand the onsite risk and then make improvements to equipment and procedures. We then include this information in procedure manuals and carry out education to prevent incidents from occurring in advance. In cases when an incident does occur, we investigate it to prevent similar incidents from occurring in the future. Additionally, when incidents occur at other companies and workplaces, we check whether there is a similar risk at our own workplaces and take steps if necessary.

#### 3S activities and training

We will focus on 3S (sort, sweep, and standardize) activities from the perspective of safety and disaster management, and have adopted "Everything we do starts with heartfelt 3S activities" as our slogan for fiscal 2022. We are undertaking and promoting tangible 3S activities with all employees.

In addition, we have established a safety training system common to all companies, and conduct necessary

safety prevention training for each job level. We will create training spaces in all offices to experience the fear of disasters using simulation equipment, and for safety and disaster prevention knowledge training to reflect on past incidents and prevent them from being forgotten.

## **Target and KPI**

#### **Target**

 We will strive to prevent disasters and accidents by clarifying and thoroughly complying with basic safety throughout the entire Toyobo Group.

#### **KPI and Results**

Initiatives	KPI	Targets	Results (FY2020)
Build a culture of safety	No. of major incidents*	0 incidents per year	1 incident
Prevent workplace     accidents     (make human-operated equipment safer, promote security and	Frequency rate of workplace accidents resulting in lost workdays	0.25 or less	0.70
disaster prevention)	No. of fires or explosions	0 incidents per year	1 incident
	No. of environmental incidents	0 incidents per year	0 incidents

<sup>\*</sup> Major incidents: Defined according to internal standards based on the definition stipulated by the Ministry of Health, Labour and Welfare

## Quality

#### Basic approach and policy

Based on the awareness that ensuring the quality and safety of products and services is the foundation of our business activities, Toyobo Group has established the TOYOBO Group Basic Quality Assurance Policy. We have strived to construct an appropriate management system, conduct quality inspections following appropriate procedures, and handle data appropriately in order to ensure the quality and safety of the products and services we provide.

However, there were quality fraud incidents in our engineering plastics business. We will take these issues seriously, completely review our daily processes and management standards, and rebuild our manufacturing system to regain the trust of our customers and other stakeholders.

### **Quality assurance system**

Toyobo Group has established the PL / QA Committee as a permanent committee that oversees product liability (PL) and quality assurance (QA). The chair of the committee is the Controlling Supervisor Director of the Production Technology Innovation and Quality Assurance Division, which comprises persons in charge from each business and persons in charge

(executives) from the corporate staff. Ordinary committee meetings are held twice a year in principle, and the promotion committee comprising general managers is held six times a year. The committee met eight times in fiscal 2021.

We have established the new Quality Assurance Division on April 1, 2021 as one of the measures to prevent recurrences of this inappropriate conduct. We will ensure the independence of the Quality Assurance Division, which was previously in each business division (Solutions Division), and strengthen its control over the business divisions. In addition, the Quality Assurance Department will be given the authority to guide and suspend the businesses, development and production of the Company and affiliated companies regarding product safety and quality assurance of the Toyobo Group, and will continue to redouble its efforts to restore trust, such as by working to reconstruct an appropriate quality management system and strengthen governance.

#### **Quality assurance activities**

Employees have shared access to the Quality Assurance Manual, which describes the basic approach and code of conduct for all employees when implementing Toyobo Group's development, production and sales activities, and use it as the basic philosophy for TOYOBO Group manufacturing. In addition, the Quality Assurance Guidelines provide the basis for developing a system that guarantees quality. In January 2021, we reviewed our Quality Assurance Guidelines to enhance the effectiveness of our assurance and management systems.

Moreover, a QA system is established for each product and service so that quality and product safety can always be guaranteed at each stage. Additionally, checks are repeatedly carried out by business supervisors, related internal and external parties, and experts, to ensure that no incidents occur in the market.

#### **Product safety promotion activities**

For each department and group company, we conduct PL / QA assessments carried out by third parties or quality assurance personnel from different departments to verify and improve Product Safety (PS) activities. Moreover, we have established criteria for assessing PS and PL risk, and based on these criteria, we carry out inspections at each stage, from product development to sales. By addressing risk in advance, we work to mitigate risks pertaining to customers and employees.

All possible measures are taken to ensure product safety, and training drills are also conducted every year at all business divisions based on PL incident scenarios. Product safety remains a crucial theme throughout the whole of the Group, and we will continue to mitigate risk as much as possible to fulfill our social responsibility.

## **Target and KPI**

#### **Target**

 We will increase customer satisfaction by practicing quality management throughout our entire supply chain, including upstream areas, and ensuring quality that can be trusted.

#### **KPI and Results**

Initiatives	KPI	Targets	Results (FY2021)
Realize stable     supply, contribute     to solutions for	No. of incidents related to products*	0 incidents per year	0 incidents
customer issues, fulfill customer needs 2. Ensure product safety and quality	Implementation status of product safety and quality assurance training	100%	80%

<sup>\*</sup> Incidents related to products: Defined according to internal standards based on the definition stipulated by the Ministry of Economy, Trade and Industry

# **Human Resources Management**

## Policy and approach

In line with our own corporate growth strategy, the Toyobo Group aims to realize the TOYOBO PVVs corporate philosophy framework, which is centered around human resource management in which "each individual can work with a sense of growth, pride, and satisfaction." To achieve this, we respect employee individuality and support work practices that allow employees, to demonstrate their individual skills, and build environments where a diverse work force can thrive.

As an example, we have formulated and shared a Human Resources Development Plan and we are increasing the amount we invest in employee education. We prohibit inappropriate behavior, such as various forms of harassment, in our workplaces and ensure there is no discrimination in the way we employ, evaluate, and treat employees.

#### **Structure**

The individual responsible for the Group's human resources management is Masakatsu Shirai, Director, Executive Officer, Controlling Supervisor of HR and Corporate Communication Division. Human Resources Department creates regular opportunities for discussion and information sharing with the departments responsible for human resources at each business site and group company, which leads to the formulation and execution of human resources management plans. Regarding key issues in the annual management plan, reports are made to the relevant executive officer each quarter and the issues are also deliberated on by the Sustainability Committee. Important measures are also discussed by the Board of Managing Executive Officers and Controlling Supervisors and Board of Directors.

## **Target and KPI**

### **Target**

Toyobo Group will build an organizational structure for the entire Group that enables employees to work easily and feel satisfaction with their work, that ensures fairness and integrity, and that is considerate of diversity and human rights.

## **Developing Human Resources**

#### **Basic approach**

Toyobo Group considers human resources to be our most important asset. We support the growth of each and every one of our employees, while respecting their diversity. We believe that the continuation and development of the Group as a whole can be achieved by building an environment in which our employees can flourish both inside and outside the company and realize their own potential.

Toyobo carries out human resource development based on a training program categorized by job level, type and objective, from the newly employed to top management. Over our long history, we have fostered an approach of valuing "people"—our most important asset—and this is shared throughout the Group. In recent years we have been training human resources who can put CSV into practice, and are focusing on developing employees who can make our TOYOBO PVVs corporate philosophy framework and growth strategies a reality.

Specifically, in order to develop the next generation of management personnel, we are taking a company-wide perspective in actively rotating selected personnel, including to overseas, as well as sending them to business schools (for details of the Succession Plan, please refer to page 34). Additionally, Human Resource Meeting which comprises controlling supervisors regularly discusses and confirms this portfolio of human resources in order that it can be maintained in a time-responsive, appropriate manner.

At the same time, we are promoting diversity and inclusion in order to increase our medium- to long-term capabilities. Besides promoting the participation and advancement of women, we are actively taking on mid-career hires and staff from overseas so that we can bring in more knowledge and experience (refer to page 35 for promotion of women's participation and advancement).

### **Developing global human resources**

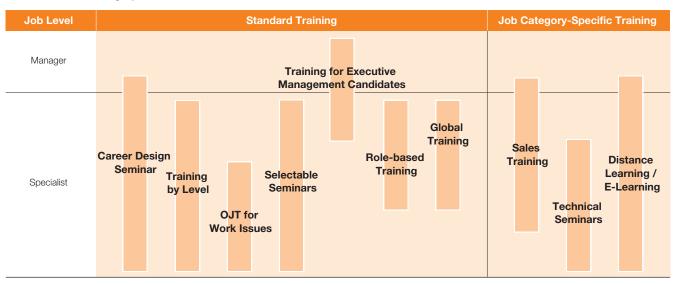
Toyobo Group implements "Short-term Overseas Business Training" in which around 10 employees in two separate groups from Japan are sent overseas for training each year

## **KPI and Results**

Initiatives	KPI	Targets	Results (FY2021)
Develop human resources (build careers, develop capabilities)	Formulation and disclosure of a Human Resources Development Plan	Complete and share on the Company website	Completed Website posting
Promote work-life balance  Ensure equality in recruitment and treatment of employees  Realize diversity and inclusion  Maintain people-friendly work environments (promote health)	Training core overseas personnel in Japan	15 employees per year*	Canceled because of COVID-19
	Training investment per employee	¥50,000 per year*	¥24,000 per year
	Achievement of female ratio in manager ratio target	5.0% or above	3.1%
	Ratio of annual paid leave taken	75%*	64%
	Reduction in overtime work exceeding annual statutory permitted overtime hours (no. of employees working more than 360 hours of overtime / total no. of employees)	Reduction of 20% (2.0%)*	3.0%
	Ratio of male employees taking childcare leave	Total number of days of absence leave taken increased by at least 20% for at least 80% of those eligible for absence leave*	80% of those eligible for absence leave12 days absence leave taken

<sup>\*</sup> Targets for FY2026

#### **Education & training system**



(first and second half of the year). This motivates younger and mid-career employees to participate in Toyobo's global business, and also represents a major opportunity for them to further their careers.

In addition, local candidates for management from overseas offices are selected to undergo training in Japan twice each year. This aims to enhance their understanding of Toyobo and deepen interaction with employees who work in Japan.

## **Employee engagement**

We need to align the vectors of organizational goals and personal growth, given that we position companies and employees as being equal. To this end, we started surveys on organizational climate and job satisfaction targeting all employees in 2021.

These surveys will keep us periodically appraised of employee engagement, and create an environment in which they can proactively work with a sense of pride and fulfillment.

## **Diversity and inclusion**

### **Basic approach**

Toyobo Group believes that personal and organizational growth is achieved through a process of mutual respect among our employees, with their differing work styles, careers, gender, nationality, race, and beliefs, and through cooperation to achieve our shared objectives. We respect different opinions and a wide range of values, and cooperate to achieve ambitious goals together.





The spread of COVID-19 in fiscal 2021 means that most training was conducted online. This photo shows training in fiscal 2020.

#### Main initiatives

In addition to activities to promote the participation and advancement of women, we are also working to ensure that the assessment and treatment of employees focuses on ability and is not influenced by differences such as gender and nationality and we are cultivating a corporate culture in which diverse employees can participate actively and find job satisfaction. We also engage senior employees who have been rehired after the set retirement age of 60 to train younger employees and pass on skills.(See pages 33–36.)

# Increasing employment of people with disabilities

In regard to raising the ratio of employees with disabilities, it is crucial that initiatives are carried out at a companywide level, at meetings of the managers of General Administration Departments at each business site held four times a year, we share information and actively encourage the recruitment of people with disabilities.

#### **KPI** and Result

KPI	Target (FY2026)	Result (FY2021)
Employment ratio of people with disabilities	2.3%	2.2%

### Work-life balance

#### **Basic approach**

We are engaged in work style reform so that our employees can work with renewed efficiency and achieve a good balance between work and personal life and we also provide support such as the Childcare Shortened Work Hour Program, Nursing Care and Flextime system, and Teleworking scheme. Building an environment that enables more flexible work styles tailored to each employee's life stage provides an opportunity to enhance creativity. Letting each individual do their best with confidence, pride, peace of mind, and a forward-looking mindset helps to build a stronger foundation for the company.

The TOYOBO Group Charter of Corporate Behavior declares, "We will respect employee diversity and support work practices that allow employees to demonstrate their individual skills. Also, we will provide workplaces that are conducive to productive work while taking health and safety into consideration."

#### Main initiatives

Toyobo has introduced schemes that go above and beyond the legal requirements, including the Childcare Shortened Work Hour Program and Nursing Care Leave, and we also

provide a Flextime system. Since fiscal 2020, Childcare Leave has offered five days of paid leave. In conjunction with this change in the system, we are encouraging men to take Childcare Leave. Male employees who have a child are notified of the system individually and are recommended to take this leave by their immediate supervisor. We will continue these promotion efforts until it becomes normal for male employees to take childcare leave. Furthermore, we introduced a 15-Minute Shortened Work Hour Program at head and branch offices in fiscal 2018, and at the Research Center in fiscal 2019.

We are also increasing the number of days of leave at other offices and we are creating opportunities for employees to spend quality personal time together with family and friends, such as holding a Family Day (No Overtime Day) at least once a month. In fiscal 2020, we introduced a Teleworking scheme at head and branch offices, and have expanded to also include other offices in fiscal 2021.

## Maintenance and promotion of health

#### **Basic approaches**

Toyobo Group is engaged in initiatives for maintaining and improving employees' physical and mental wellbeing in order to create comfortable workplaces that are conscious of employee health.

In fiscal 2020, we embarked on the strategic implementation of health and productivity management, considering health care from a management perspective, and formulated the TOYOBO Health & Productivity Management Declaration.

# Key measures under the TOYOBO Health & Productivity Management Declaration

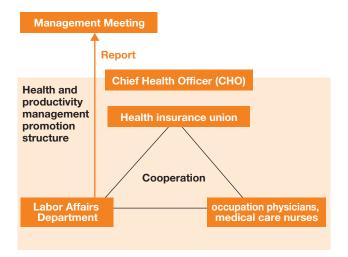
- 1. Initiatives for raising employees' health awareness: education and training
- 2. Initiatives for improving employees' lifestyle habits: exercise, diet, support for quitting smoking, etc.
- 3. Initiatives for strengthening mental health, including improvement measures for high-stress employees and workplaces

#### Structure

In March 2020, Toyobo Group formulated a Health & Productivity Management Declaration in order to proactively and systematically address health and productivity management, and we also established a structure to promote this.

Under the Chief Health Officer (CHO), Masakatsu Shirai, Director, Executive Officer, Controlling Supervisor of HR and Corporate Communication Division, the Labor Affairs Department, the occupational physician and nursing professionals and the health insurance association work in close coordination to enhance healthcare consciousness of employees, improve their lifestyle habits, and strengthen mental health-care measures as part of priority programs. These initiatives were evaluated, and in fiscal 2021 the company received recognition in the large enterprise category of the Certified Health & Productivity Management Outstanding Organization Recognition Program, a project conducted jointly by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi (Japan Health Council). We will further strengthen and promote health management through measures such as continuing to actively work to maintain and improve employee health, and through this increase our corporate value. In fiscal 2022, we plan to work towards being awarded White 500 - certification awarded to companies that have outstanding records in health management.





#### **Health checkups**

Toyobo aims to have a 100% rate of health checkups by industrial health staff at each business site. Our examinations for lifestyle-related diseases and cancer are more comprehensive than as required by law.

In cooperation with the health insurance society we have in place cancer screenings for any staff (employees and their dependents) who want these, and we are working to ensure early detection and treatment of diseases including in family members.

Our occupation physicians check the results of health checkups for all employees, and in the event of any abnormal findings, meet with and provide health guidance in cooperation with nursing staff. If necessary, they also provide examinations and treatment at clinics, and referrals to specialized medical institutions. Furthermore, the health insurance association actively provides specific health guidance on approaches to reduce risks faced by high-risk patients.

We continue to improve structures and environments for health examinations and consultations, to support the maintenance and improvement of employee health.

#### **Restricting long working hours**

At Toyobo, if long working hours exceed a certain standard\* within a three-month period, including for management staff, then measures to prevent recurrence will be discussed in management meetings. Management and employees at each business site have set a specific cutoff point, and keep tabs on work that leads to excessive hours. We have also set the number of employees eligible for work exceeding annual statutory permitted overtime hours as a KPI, and have set a reduction of 20% as a target.

Management and employees at each business site have put in place Family Day (No Overtime Day), and we have established a campaign that encourages employees to go home on time so they can enjoy personal and family time.

Furthermore, in order to prevent mental health issues caused by long working hours, we have put in place stricter standards than as legally mandated, and we hold interviews with industrial physicians.

\* Over 80 hours overtime in two consecutive months + 45 hours in the third

#### Mental healthcare initiatives

Toyobo invites mental health specialists as guest lecturers to provide annual training for managers, to increase their awareness and understanding of mental healthcare. Individual consultations are also given by industrial health staff (one to five) in place at each business site. We also provide personalized support to employees suffering from high levels of stress, based on the results of a stress checkup. We are planning to identify and resolve issues in high-stress workplaces based on the results of group analysis shortly.

With regard to mental healthcare in the rapid increase in working-from-home situations, adopted also as a measure to tackle the spread of COVID-19, we have addressed the importance of self-care and so-called "line care," care provided by managers for the wellbeing of the employees and measures to improve the workplace, issuing information so as to maintain and support our employees' physical and mental wellbeing.

## **Supply Chain Management**

#### Policy and approach

Toyobo Group is contributing to achieve the SDGs, which support the development of a sustainable society, throughout our entire supply chain by establishing an appropriate trading policy and conducting procurement and logistics responsibly. To realize this, we have formulated CSR Procurement Guidelines¹ that deal with matters such as legal compliance, fair trade, consideration for the environment, and respect for human rights (including the prohibition of child labor or forced labor and discrimination based on gender identity including LGBT), and Green Procurement Guidelines² that are considerate of the environment. In October 2020, we revised our CSR Procurement Guidelines based on various recent global issues.

Additionally, based on the principle of "2. Fair business practices" in the TOYOBO Group Charter of Corporate Behavior, we practice fair competition and dealings and responsible procurements, with a focus on healthy relationships.

- 1 CSR Procurement Guidelines
- https://www.toyobo-global.com/sustainability/guideline/
- 2 Green Procurement Guidelines
- https://www.toyobo-global.com/sustainability/guideline/green/

#### **Procurement structure**

We have in place a collaboration system with divisions that deal with manufacturing, sales, and development, as well as the Procurement and Logistics Department with its company-wide functionality, and this is paired with outstanding suppliers. Through continuous development of these systems, we are working to ensure mutual prosperity with our suppliers.

#### **Targets and KPI**

#### Targets

 Throughout its supply chain, Toyobo Group aims to realize procurement and logistics that involve fair and sincere transactions, respect human rights, and consider impact on both society and the environment.

#### **KPI** and Results

Initiatives	KPI	Targets	Results (FY2021)
Realize sustainable, responsible procurement and logistics	Ratio of CSR procurement surveys returned (every two years)	90% or above (In years when a survey is not implemented, we carry out dialogue	Putting in place of questionnaire survey implementation system
Carry out transactions that are fair and respect human rights		with business partners that past surveys had issues)	
Build a low-carbon society	Ratio of reduction	Year on year	Year on year
Society	in CO <sub>2</sub> emissions related to sales and logistics	reduction of 0.5%	reduction of 0.6%

• We reduce CO<sub>2</sub> emissions by promoting green logistics, such as implementing a modal shift to rail and sea transportation and improving loading efficiency.

#### **CSR** procurement

We have formulated our CSR Procurement Guidelines and Green Procurement Guidelines with the aim of fulfilling our social responsibilities, such as ensuring legal compliance, product quality and safety and respect for human rights, and enhancing value throughout our entire supply chain through initiatives such as contributing to regional communities and environmental conservation.

In addition to sharing these guidelines through our website, we carry out CSR procurement survey for business partners requesting their understanding and cooperation in actively advancing initiatives.

#### **CSR Procurement Survey**

We conduct a survey among our key business partners, based on the CSR Procurement Guidelines. This allows us to verify the status of their CSR activities, while facilitating them to deepen their understanding of CSR activities. We ask that new business partners cooperate in these surveys when we start working with them, and existing business partners do so on a periodic basis.

We plan to conduct this survey in fiscal 2022, and seek improvements for any issues that it uncovers.

#### Resolving social issues in logistics

To resolve social issues in logistics, Toyobo Group is pushing forward with initiatives to reduce environmental impact and reform the work style in logistics.

In reducing environmental impact, we are shortening the transportation distance by using the ports closest to our production sites, implementing a modal shift such as using sea and rail transport, and improving loading efficiency. We are also sharing logistics and storage with other companies (including joint shipment, making use of returning trucks, securing joint storage space), and are encouraging the introduction of systems that enable visualization of the logistics situation.

Additionally, we formulated a voluntary action declaration in support of the White Logistics Movement\* advocated by Japan's Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Economy, Trade and Industry and Ministry of Agriculture, Forestry and Fisheries. Corresponding to the declaration, we disclose our various initiatives, including logistics improvement proposals and cooperation, utilization of pallets, etc., modal shift to sea and rail transport, consideration of compliance with applicable legislation when selecting logistics operators, and safety measures for freight handling.

<sup>\*</sup> A movement in which all the parties involved in logistics cooperate to propose and implement mutually beneficial improvements.

## **Human Rights**

#### Policy and approach

Respecting human rights is essential for Toyobo Group to fulfill its responsibilities as a member of society and continue as a trusted company. Within this, respecting the rights of employees and trading partners, who are important stakeholders for the Group, is crucial to enabling them to demonstrate their abilities, and to work with vigor and energy. In recognition of this, we have included "4. Respect for Human Rights" and "6. Active Employee Participation" within our Charter of Corporate Behavior. We have also positioned relevant items as Management Base (Basic preconditions to materiality) and are advancing initiatives accordingly.

As a way to openly express our position on this both inside and outside the company, the Group became a signatory to UNGC in January 2020. In light of these 10 principles and of internationally required norms, in October 2020 we revised our TOYOBO Group Charter of Corporate Behavior and formulated the TOYOBO Group Human Rights Policy\*.

The Group complies with the laws and regulations that stipulate minimum wages in the countries and regions in which it operates and pays salaries.

With regard to respect for human rights in the supply chain, our CSR Procurement Guidelines clearly stipulate items to respect for human rights (including the prohibition of child labor and forced labor and discrimination based on gender identity including LGBT), when selecting trading partners.

\* TOYOBO Group Human Rights Policy https://www.toyobo-global.com/sustainability/society/human\_rights/

#### **Targets and KPI**

#### **Targets**

- Toyobo Group will carry out initiatives to ensure respectfor basic human rights and diversity throughout the entire Group, including providing training to foster such respect among employees.
- Through these initiatives, we will aim to be a fair company that is trusted by society.

## Complaint handling and internal reporting systems

The Complaint Handling Committee and the compliance consultation centers within the internal reporting system provide consultations and handle reports regarding human rights. In order to ensure that employees can use these systems without any concern, the name and other details of employees making reports or receiving consultations are kept private and we guarantee that these individuals will not be negatively affected by their action.

Overview of

We also strive to detect and solve human rights issues at an early stage through compliance surveys.

#### Internal education initiatives

Toyobo Group has created English and Chinese versions of the TOYOBO Group Charter of Corporate Behavior in order to implement internal education that enables employees around the world to share the same vision. We inform employees of rules and examples regarding respect for human rights, the prohibition of discrimination, the prohibition of child and forced labor, and the protection of personal information through the TOYOBO Group Compliance Manual.

Furthermore, we hold training and seminars on respect for human rights alongside other initiatives aimed at improving awareness of human rights among employees. In fiscal 2020, we provided training for Group company employees concerning the human rights of overseas workers, and confirmed to promote our trading partners to implement the effort as well. In fiscal 2021, we provided training for new hires, 145 of whom participated, along with holding a training session of Human Rights Promotion Committee, attended by 26 participants. In addition, we provide education and clarity on human rights in a variety of other settings, such as at compliance study meetings.

#### **KPI and Result**

Initiatives	KPI	Target (FY2026)	Result (FY2021)
Avoid human rights violations     Eliminate forced and child labor     Respond to human rights laws and regulations (Modern Slavery Act, etc.)     Ensure equality in recruitment and treatment of employees	Implementation status of human rights education and training	Once a year for 20% of non-consolidated* employees	24.1%

<sup>\*</sup> TOYOBO CO., LTD., TOYOBO STC CO., LTD., and TOYOBO INFORMATION SYSTEM CREATE CO., LTD.

#### Directors



Seiji Narahara Chairman & Director

Joined the Company Apr. 2010 Executive Officer 2011 Director and Executive Officer 2014 President & CEO, Apr. Representative Director Chairman & Director Apr. 2021 (current position)



Ikuo Takeuchi President & CEO, Representative Director

Controlling Supervisor of Internal Audit Department. KAERU Project and Corporate Sustainability Department

Apr.	1985	Joined the Company
Oct.	2015	General Manager of Corporate Planning
Apr.	2018	Executive Officer
Apr.	2020	Managing Executive Officer
June	2020	Director and Managing Executive Officer
Apr.	2021	President & CEO, Representative Director
		(current position)



#### Chikao Morishige

Representative Director & Senior Managing Executive Officer

Executive Assistant to Chairman & Director

Head of Safety and Disaster

Head of Films and Functional Materials Solutions

Joined the Company General Manager of Packaging Apr. 2006 Development General Manager of Films Oct. 2009 Development General Manager of Films Apr. 2014 Development June 2014 Senior General Manager of Plastics Production Technology 2017 Executive Officer 2019 Managing Executive Officer Senior Managing Executive Officer
Representative Director and Senior Managing Apr. 2020

Executive Officers (current position)



#### Yutaka Ouchi

Director and Managing Executive Officer

Head of Life Science Solutions

Joined Kyowa Hakko Kogyo Co., Ltd. (currently Kyowa Kirin Co., Ltd.) Director of Kyowa Hakko Bio Co., Ltd. Managing Executive Officer of Mar. 2012 Kyowa Hakko Kirin Co., Ltd. (currently Kyowa Kirin Co., Ltd.) 2019 Joined the Company
2020 Managing Executive Officer
2021 Director and Managing
Executive Officer (current position) Apr.



#### Hiroshi Otsuki

Director and Managing Executive Officer

Controlling Supervisor of Management and Administration

Supervisor of KAERU Project

Joined the Company Nov. 1987 General Manager of Finance Department and June 2010 Senior Coordinator of Corporate Planning General Manager of Plastics Planning, and Manager of Film Business Management Deputy Director, General Manager of Plastics Planning, and Manager of Film Business Executive Officer 2017 Apr.

(current position)

Director and Managing Executive Officer



Apr. 2021

#### Yoshio Araki

Director and Executive Officer Head of Quality Assurance Controlling Supervisor of Production Technology Innovation

Joined the Company General Manager of Polymer Production 2008 Jan. Technology and Manager of Corporate Research Project Oct. Deputy Director, General Manager of Plastics Production Technology 2018 Executive Officer
2020 Director and Executive Officer June 2020 (current position)



#### Masakatsu Shirai

Director and Executive Officer Controlling Supervisor of HR and Corporate Communication

Supervisor of Internal Audit

Joined the Company General Manager of HR Labor 2012 Administration Oct. Deputy Director, General Manager of

Human Resources Deputy Director, seconded to TOYOBO May 2017 INFORMATION SYSTEM CREATE CO., LTD.

Executive Officer Director and Executive Officer June 2020 (current position)

Value Creation



Masaru Nakamura

Outside Director

Joined Sumitomo Corporation

Corporate Officer of Sumitomo Corporation Apr. 2006

Executive Officer of Sumitomo Corporation
Managing Executive Officer of Sumitomo Corporation 2008

2010 Apr.

Apr. Apr. 2012 2016 Senior Managing Executive Officer of Sumitomo Corporation Adviser of Sumitomo Corporation

Director of the Company

(current position)



Takafumi Isogai

Outside Director

.lan 1987 Assistant Professor of Faculty of Liberal Arts, Osaka University Assistant Professor of Graduate School of Engineering 1996 Apr.

Science, Osaka University Professor of Faculty of Mercantile Marine,

Apr. 2002

Kobe University of Mercantile Marine Professor of Faculty of Maritime Sciences, Kobe University Oct. 2003

Professor of School of Commerce, University of Marketing and Distribution Sciences Apr. 2013

Apr. 2018 Part Time Lecturer at University of Marketing and Distribution Sciences

2018 Director of the Company (current position)



Kimie Sakuragi

Outside Director

Mar. 1981 Joined Fukutake Publishing Co., Ltd. (current Benesse Holdings, Inc.) Apr.

Supervisor of Book Businesses in Publishing Division of 1995

Benesse Holdings, Inc.

Chief of Business Ethics and Compliance Office of Benesse Holdings, Inc. Nov. 1998 2003 Manager of Business Ethics and Compliance Office of

Benesse Holdings, Inc.

June 2003 Audit and Supervisory Board Member of Benesse Holdings, Inc.

(retired in June 2019)

Adjunct Professor of the University of Aizu Graduate School (current position) Director of the Company (current position) 2007

June 2019



Masaaki Harima

Outside Director

Assistant Judge at Osaka District Court

May 1981 Registered as an attorney at law (Osaka Bar Association)

Sep. 1987

Founded Harima Law Office (current Fushimimachi Lawyer's Office) (current position)

Chairman of Osaka City Fair Work Committee June 2011 Outside Corporate Auditor of Ishihara

Sangyo Kaisha, Ltd. (current position)
Independence Committee of the Company June 2014

Director of the Company (current position) Chairperson of Osaka Prefecture Pollution Apr. 2021 Examination Committee (current position)

Corporate Auditors



Yasuhiro lizuka



Takayuki Tabo



Hiroyuki Sugimoto (Outside)



Akihiko Irie (Outside)

CEO

#### Ikuo Takeuchi

Senior Managing Executive Officers

Chikao Morishige Shigeo Nishiyama

Managing Executive Officers

Shigeo Takenaka Yasuo Ota Yutaka Ouchi Hiroshi Otsuki Ichiro Takai

**Executive Officers** 

Takeo Kashima Masakatsu Shirai Kazuhiko Katayama Atsuhiko Otsuka Taichi Sakai Eiichi Shimizu

Yoshio Araki Nobuya Fujiwara Seiji Yamazoe Yoshihiro Nomi Naoki Fujii **Takahito Sagara** 

#### Attendance record at Board of Directors and Corporate Auditors, skills (as of June 2021)

						Nomination or d		Attendand	ce record (attenda	ance percentage)	FY2021
		Outside	Independent	Age	Gender	Nomination and Compensation Advisory Committee	Chair of Each Committee	Board of Directors	Board of Corporate Auditors	Nomination Committee	Advisory Board on Compensation
	Seiji Narahara			64	Male	0	Board of Directors	18/18 (100%)	_	5/5(100%)	5/5(100%)
	Ikuo Takeuchi			58	Male		Board of Managing Executive Officers and Controlling Supervisors	14/14(100%)	_	_	_
	Chikao Morishige (Newly appointed)			61	Male			_	_	_	_
	Yutaka Ouchi (Newly appointed)			64	Male			_	_	_	_
	Hiroshi Otsuki			60	Male			14/14 (100%)	_	_	_
Director	Yoshio Araki			61	Male			14/14(100%)	_	_	_
	Masakatsu Shirai			58	Male			14/14(100%)	_	_	_
	Masaru Nakamura	0	0	67	Male	O (Chair)		18/18(100%)	_	5/5(100%)	3/3(100%)
	Takafumi Isogai	0	0	72	Male			18/18(100%)	_	5/5(100%)	3/3(100%)
	Kimie Sakuragi	0	0	62	Female	0		18/18(100%)	_	5/5(100%)	3/3(100%)
	Masaaki Harima	0	0	70	Male			14/14(100%)	_	4/4(100%)	2/2(100%)
	Yasuhiro lizuka			62	Male			18/18(100%)	15/15(100%)	_	_
Corporate Auditor	Takayuki Tabo (Newly appointed)			60	Male			_	_	_	_
Corporat	Hiroyuki Sugimoto	0	0	68	Male	Observer		18/18(100%)	15/15(100%)	5/5(100%)	_
	Akihiko Irie (Newly appointed)	0	0	64	Male			_	_	_	_

 $<sup>^{\</sup>star}$  Change to integrated management from April 2021

Within the expe	rience and background i	required by the Compar	ny, skills that are particul	larly beneficial (two for in	nside officers and one for	r outside officers)
Corporate Management / Strategy	Production Technology / Quality / Safety	R&D / Intellectual Property	Sales / Marketing	Legal Affairs / Ethics	Talent Development / Labor affair management	Accounting Finance
0						0
0			0			
	0	0				
			0		0	
0						0
	0	0				
				0	0	
0						
	0					
				0		
				0		
		0	0			
				0		0
						0
0						

## **Corporate Governance**

#### Basic approach and system overview

To respond to the changing times and continuously enhance corporate value, Toyobo Group has established the following three policies: (1) ensuring timeliness and accuracy in decision-making, (2) ensuring transparency in management, and (3) emphasizing fairness. Based on these principles, we are working to strengthen group governance structure, as well as bolster risk management and compliance structures.

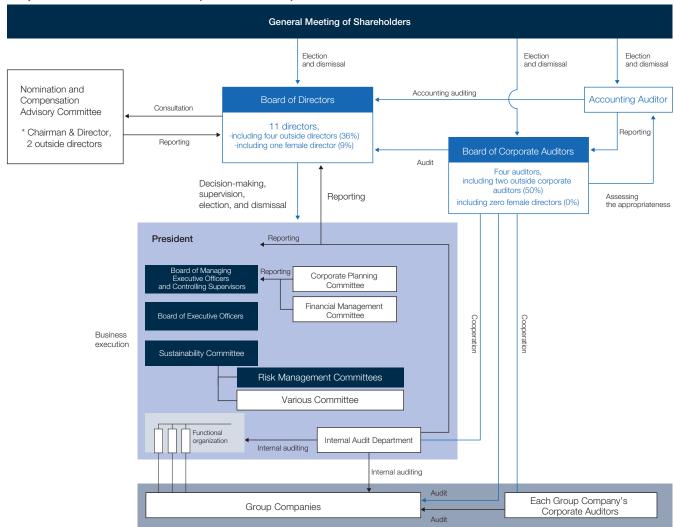
Toyobo is a company with Board of Corporate Auditors and, under this governance system, has adopted the executive officer system. In the executive officer system, which is defined in our management regulations, the Board of Directors oversees the business execution of executive officers. Under Toyobo's governance framework, a clear separation is made between the role of the Board of Directors—which oversees decision-making and performs management oversight—and the executive officers who are in charge of business execution. This system enables rapid decision-making and efficient business execution.

#### **Board of Directors**

At the Annual General Meeting of Shareholders held in June 2021, one director was added to the Board of Directors to make a total of 11, including four outside directors. A director's term of office is set at one year to ensure a swift response to changes in the business environment and to clarify the responsibilities, and this is led by the Chairman & Director.

In order to separate decision-making and supervision from business execution, we have built a system in which the Board is elected from outside directors and executive officers who oversee departments that are engaged in operations with a company-wide scope. This system makes it easier for executive officers, who are responsible for specific businesses, to concentrate on their respective businesses and fields, however so that directors can supervise the execution of business appropriately and smoothly, we increased the number of executive officers in charge of specific offices by one to a total of two.

#### Corporate Governance Structure (as of June 2021)



Value Creation

Board of Directors meetings are in principle held monthly, and otherwise as needed. In fiscal 2021, they made decisions on matters stipulated in laws and the Articles of Incorporation, and on important investment deals including acquisitions. In addition, the Board received reports on each business and conducted appropriate supervision.

#### Main issues (FY2021)

- (1) Important investment deals
- (2) Fire accidents, quality deficiency-related incidents
- (3) Risk management-related
- (4) Revision of the Charter of Corporate Behavior, formulation of Human Rights Policy, etc.
- (5) Sustainability related (identifying materiality, handling carbon neutrality, etc.)
- (6) Reports on the Nomination Committee and Advisory Board on Compensation
- (7) Evaluation of Board of Directors' effectiveness
- (8) Cross-shareholdings (policies, verification)
- (9) Reports on the Emergency Safety Meeting, etc.

#### **Board of Corporate Auditors**

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 when necessary, and auditing each department's operation in order to audit directors' execution performance.

KPMG AZSA LLC has been appointed to conduct Toyobo Group's Accounting audits required under Japan's Companies Act. The Board of Corporate Auditors receives auditing plans and reports from the accounting auditor and meets with the accounting auditor periodically to exchange information. This also exchanges information with the Internal Audit Department, which monitors the effectiveness of internal control.

## **Board of Managing Executive Officers and Controlling Supervisors**

There are 20 executive officers, including some who serve concurrently as directors. The Board of Managing Executive Officers and Controlling Supervisors deliberates in advance on matters to be resolved by the Board of Directors, and determines matters related to business execution, which has been entrusted by the Board of Directors.

The Corporate Planning Committee and the Financial Control Committee are established under the Board of Managing Executive Officers and Controlling Supervisors. They deliberate on important investments and new projects, important borrowing, etc. from their respective realms of expertise, thereby managing business risk.

A working group comprised of executive officers was also established to discuss issues including the future vision of Toyobo Group.

#### Nomination and Compensation Advisory Committee

Up until now, the Nomination Committee and Advisory Board on Compensation have been formed for deliberating and reporting to the Board of Directors from the perspective of ensuring transparency and fairness in the determination of nomination and compensation of directors and other officers. However, in order that bodies consulting on nominations and compensation could operate in an integrated manner as well as further increase functionality and transparency, on April 1, 2021, these two committees were reorganized into the Nomination and Compensation Advisory Committee.

This committee comprises the two outside directors and the Chairman & Director, and an outside corporate auditor as an observer, and is led by an outside director.

#### **Meetings Convened in FY2021**

Number of meetings held	
Board of Directors	18
Board of Corporate Auditors	15
Nomination Committee	5
Advisory Board on Compensation	3
Board of Managing Executive Officers and Controlling Supervisors	31
Sustainability Committee	4
Corporate Planning Committee	8
Financial Control Committee	19

## Policies and procedures for the appointment of officers

For the appointment of top management and nomination of candidates for directors, the Nomination and Compensation Advisory Committee, comprising a majority of outside directors as members and chaired by an outside director, has been established as an advisory body to the Board of Directors, and decisions are made by the Board of Directors based on the deliberations and reports of the Committee. In the nomination of candidates for inside directors, we recommend individuals who have knowledge, experience, and a track record in their areas of responsibility, and who possess a company-wide perspective and qualifications suitable for the post. In the nomination of candidates for outside directors, we recommend individuals who can objectively provide supervision of management, and who have the abundant experience and well-developed insight to increase corporate value. In the nomination of corporate auditors, candidates are outstanding individuals in terms of their insight and capabilities, and these are determined by the Board of Directors with the agreement of the Board of Corporate Auditors.

Furthermore, for the dismissal of a senior management member, in the event of an act of misconduct, impropriety, or actions suggesting a breach of trust, or of other reasons that make the member unsuitable to serve as an officer, then based on the report from the Nomination and Compensation Advisory Committee, the Board of Directors deliberates and decides on the dismissal of a senior management member.

#### **Training programs for officers**

As well as giving explanations to newly appointed directors and corporate auditors concerning their roles and responsibilities, the Company bears the cost to send executive officers and directors to an external training program upon their appointment, in order to acquire the necessary knowledge. In addition, newly appointed outside directors and outside corporate auditors are given explanations concerning the Company's operations, finances, and organization, etc. and provided visits to each business site. They are continuously provided with opportunities after assuming office to acquire the necessary knowledge in order to sufficiently fulfill their roles and responsibilities.

#### Officer compensation system

#### 1 Basic Policy

Toyobo's system of officer compensation is designed as follows, in line with basic policy, within the monetary amount resolved at the Annual General Meeting of Shareholders.

- Provide incentives that lead to Toyobo Group's sustained growth and enhance corporate value over the longer term
- 2) Secure highly talented management personnel
- 3) Set determination procedures that are objective and highly transparent

Compensation structure and levels are reviewed based upon the company's business environment, levels of employee salaries, and other companies' levels based upon surveys conducted by specialized external organizations.

## 2 Monetary compensation (including performance-based amounts)

- (1) Composition of monetary compensation

  Monetary compensation for directors (exclusive for directors)
  - Monetary compensation for directors (excluding outside directors) is a fixed monthly compensation, comprising the following two components:
  - 1) Compensation by position for directors (representative director, director)
  - 2) Compensation by position for directors also serving as executive officers
- (2) Compensation by position for directors who also serve as

executive officers

- 1) Comprises set amount by position and the short-term incentive reflecting the previous fiscal year company-wide evaluation and performance evaluation of the overseen department.
- 2) The performance indicator (KPI) for the company-wide performance evaluation is the consolidated operating income, given that this is a major management indicator. The specific amount shall be determined in accordance with this by the Board of Directors based upon advice from the Advisory Board on Compensation.
- 3) Performance evaluations of overseen departments will be determined by a comprehensive overview of its performance taking into account improvements in operating profit and ROA.
- 4) Compensation is calculated individually using formulas determined by the Advisory Board on Compensation, and based upon company-wide performance evaluations and the performance evaluation of the overseen department, and decided upon by the Board of Directors.
- 5) Compensation for the Chairman & Director is the same as the President, taking into account their duties.

#### 3 Stock compensation

In order to increase incentives to sustainably enhance corporate value and to promote more value sharing with shareholders, a certain percentage of compensation is granted annually as non-monetary compensation for granting restricted shares (non-performance-based, provided in advance).

#### 4 Ratios of compensation

Compensation for directors also serving as executive officers is designed to appropriately increase incentives to increase corporate value, and the ratio of the fixed portion, short-term incentive portion, and the non-monetary compensation is 7:2:1 (when 100% of KPI acheived).

#### 5 Other

- (1) Compensation for outside directors is to be fixed monetary compensation in view of their role and independence.
- (2) Compensation for corporate auditors is to be fixed monetary compensation in accordance with their duties and responsibilities, and is to be decided by discussions

#### **Details of Officer Compensation (FY2021)**

\*Including mid-period appointments and resignations

		-,		including mid-period appointments a	and resignations
	Total	compensation, etc. Basic Performance-based Non-monetary compensation		ion by type	Number of
Position	compensation, etc.			Non-monetary compensation (Compensation for granting restricted shares)	officers*
	(¥ mn)	(¥ mn)	(¥ mn)	(¥ mn)	Name
Directors	325	251	50	23	15
(including outside directors)	(41)	(41)	(-)	(-)	(5)
Corporate Auditors	66	66	_	_	4
(including outside corporate auditors)	(15)	(15)	(-)	(-)	(2)
Total	391	318	50	23	19
(including outside officers)	(57)	(57)	(-)	(-)	(7)

- with the corporate auditors in view of their duties and responsibilities.
- (3) The Advisory Board on Compensation, comprising a majority of outside directors as members, has been established as an advisory body to the Board of Directors to ensure the transparency and objectivity of decisions regarding compensation. The Advisory Board on Compensation receives advice from the Board of Directors and deliberates on the system, level, and calculation method of officer compensation, in addition to the targets set for the company-wide performance evaluations forming part of the compensation by position. The Board of Directors makes the final decision on the amount of individual compensation based upon the report from the Advisory Board on Compensation'.

\*On April 1, 2021, the Advisory Board on Compensation merged with the Nomination Committee to form the new Nomination and Compensation Advisory Committee.

## Evaluating the effectiveness of the Board of Directors

From January to April 2021, in order to further enhance the functions of the Board of Directors, the Company carried out an overall analysis and evaluation of the effectiveness of the Board of Directors in fiscal 2021 with the support of an external organization. An outline of this evaluation is as follows.

#### Method of analysis and evaluation of effectiveness

We have conducted a survey with 40 questions for our directors and corporate auditors, and the responses to this survey are continuously provided directly to the external organization.

Analyses and evaluations after the survey was conducted were carried out by the Board of Directors based on the aggregated survey reported by the external organization.

#### Summary of evaluation results

#### 1 Analysis and Evaluation

- (1) Member numbers for the Board of Directors, the ratio of internal and external members, and the Chair's management of meetings procedures were evaluated as generally appropriate.
- (2) Efforts are underway to further separate decision-making / supervision from execution, but there is insufficient discussion on solutions to medium- to long-term management issues such as digital transformation (DX), human resources strategies, and business portfolios.
- (3) Fire accidents and quality deficiency-related incidents need to be taken seriously, and further efforts should be made to improve the effectiveness of the risk management system by strengthening this and confirming how it is progressing.

#### 2 Issues and Future Initiatives

In order to improve the effectiveness of the Board of Directors, we have identified the following issues and initiatives for future attention.

- (1) Strengthened risk management including of safety and disaster prevention, and quality assurance
  - → Establish the Risk Management Committee, and monitor its activities to further enhance the Group-wide risk management system.
- (2) Strengthen the Group-wide internal audit functionality → In order to strengthen the internal audit functionality, have a mechanism by which to periodically report directly to the Board of Directors the status of internal audits.
- (3) Initiatives including ESG, DX, and business portfolios for continuously increasing corporate value → We will set up a venue separate from the Board of Directors as necessary to discuss medium- to long-term themes such as ESG, DX, and business portfolios that require ongoing discussions.
- (4) Further initiatives towards succession planning and appointment procedures for Chief Executive Officers →In order to achieve transparency, fairness, and effectiveness of the decision-making procedures regarding the nomination of officers and their compensation, review the operations of the advisory body to the Board of Directors.
- (5) Further streamlining of Board of Directors' management of meetings procedures
  - →We will review the operation of the Board of Directors as follows in order to further improve the efficiency of management of meetings procedures, and to ensure sufficient time for deliberation on important management issues.
    - 1) Narrow down the number of individual cases by reviewing the criteria for selecting items on the agenda
    - 2) Earlier advance distribution of materials
    - 3) More thoroughly organize issues, and shorten explanations
    - 4) Establish an annual agenda plan (incorporating important themes)

Through these initiatives, the Board of Directors is working to increase its own effectiveness.

#### Tax policy

Toyobo Group conducts business in a number of countries and regions. In order that we can comply with tax laws and international regulations applicable in each country, we created a tax policy in July 2021. This tax policy can be viewed on our website.

https://www.toyobo-global.com/sustainability/governance/tax affairs/

### **Progress in system enhancement**

#### Initiatives to Strengthen Corporate Governance

(Year)	Initiative & Objective
1998	► Established the Ethics Committee (the current Sustainability Committee)  To promote companywide compliance activities as a key elemen
	of management
	► Appointed one outside director, shortened the term of office for directors to one year
2004	To clarify management accountability by strengthening the supervisory function and shortening the term of office
	► Established an Advisory Board on Officer Provisions, etc. (the current Nomination and Compensation Advisory Committee) To ensure transparency and fairness in procedures for determining officer compensation
<u></u>	
2005	▶ Introduced an executive officer system, reduced the number of directors
	To split the decision-making / supervisory and executive functions
	▶ Increased number of outside directors to two
	To strengthen the supervisory function by multiple appointments
2015	➤ Established an outside officer liaison meeting  To hold regular information exchange meetings to optimize the functions of outside officers
	► Established the Nomination Committee (the current Nomination and Compensation Advisory Committee)
	To ensure transparency and fairness in procedures for nominating / dismissing directors
2212	► Made an analysis / evaluation of the overall effectiveness of
2016	the Board of Directors  Will annually identify issues and make improvements
2018	► Increased number of outside directors to three, raising their ratio to one third of all directors
2016	To ensure diversity among members of the Board of Directors as well as strengthen governance
~	<ul> <li>Increased number of outside directors to four (adding a female director)</li> </ul>
2019	To further promote diversity among members of the Board of Directors
2010	▶ Revised the officer compensation system (introduced compensation in the form of restricted stock units)
. /	To offer longer term incentives and realize greater sharing of value with shareholders
2020	▶ Implemented further separation between decision-making / supervision and business execution in regard to election of directors
	► Established the Nomination and Compensation Advisory Committee
2021	Integrated advisory and compensation advisory bodies, and improved their functionality

## Message from an Outside Director



## Return to the origins of manufacturing

#### My approach as an outside director

I have been involved investigations related to whistleblowing incidents and providing recommendations for the public interest as a member of corporate and academic third-party investigation committees examining the causes of misconduct, proposing measures to prevent recurrence, and serving on community compliance committees. I have also participated in corporate auditing of the business execution of directors as an outside corporate auditor, and in accounting and public sector auditing as a local government auditor.

As a member of an independent committee related to anti-takeover measures, over the past six years I have learned a great deal about the Company's business from the perspective of protecting the common interests of shareholders. Now that I have been appointed as an outside director, I look forward to deepening my understanding of the Company.

As an outside director representing the common interests of all shareholders, I will endeavor to provide corporate governance oversight from a standpoint that is independent from the executive officers.

## Reflections after a year as an outside director

Toyobo's efforts to engage in fair business and profit-making activities following the corporate philosophy of *Jun-Ri-Soku-Yu* (adhering to reason leads to prosperity) has garnered praise for the Company as an earnest, high-quality company. Nevertheless, the Company's reputation has suffered in the past year from incidents that went against the core philosophy. The Company has already begun implementing corrective measures, but it will take a full and concerted effort to regain the trust that has been lost as a

manufacturer. I believe that to regain that trust we must once again identify, fully comprehend, and take steps against all risk.

The perspective I will take when providing counsel for the Company's execution of business will be to follow the philosophy and strictly ensure that the profit it generates does not include any inappropriate activities.

#### **Board of Directors effectiveness**

The purpose of evaluating the effectiveness of the Board of Directors is to improve the Board's ability to promote the sustainable growth of the Company and enhance corporate value over the medium to long term.

Measures under way to ensure the Board's effectiveness include improving management procedures, determining policy for medium- and long-term issues, and implementing more extensive risk management, and I will be encouraging greater effort in these areas. I will also advise management to ensure full compliance with revised Corporate Governance Code of the Tokyo Stock Exchange, to be fully dedicated to addressing Company issues, and to continue to improve its effectiveness.

#### **Addressing issues**

Toyobo has various issues that it must confront, and I have been impressed with the speed and flexibility of its responses. I also think the Board of Directors has been fully open to accepting the advice of its outside directors. I believe the Company will soon begin seeing tangible results from the organic connections that are developing among the various projects and committees created at the advice of the outside directors to address the Company's issues.

I am committed to doing my very best to ensure the Board of Directors acts in full conformity with the fundamental philosophy and to create organically-linked actions and initiatives to reestablish the trust in Toyobo as a manufacturer as quickly as possible.

## **Compliance**

#### **Basic approach**

Based upon our corporate philosophy of *Jun-Ri-Soku-Yu* (adhering to reason leads to prosperity), at the core of Toyobo Group's compliance activities is the idea of "Do what must be done" and "Don't do what must not be done."

#### **Structure**

A Compliance Committee is comprised of members from the Board of Managing Executive Officers and Controlling Supervisors. The goal is to promote Group-wide compliance from a management perspective. A Compliance Promotion Committee has also been established as a sub-committee, which considers specific initiatives, and the Legal and Compliance Department promotes compliance throughout the Group as a whole.

In fiscal 2021, the Compliance Committee convened twice, and the Compliance Promotion Committee convened four times. Working with the theme of "considering compliance together with the people and the workplace," this worked toward enhancing the effectiveness of education, training, and preventive measures.

#### **Compliance consultation desks**

Toyobo provides an internal reporting service and internal / external compliance consultation desks for all Group employees. This receives reports and gives consultations regarding workplace violations of laws and regulations or fraudulent acts, acts that violate anticompetition laws, corruption including bribery and embezzlement, and bullying or harassment, and works toward early detection of these problems together with rectifying these and preventing their recurrence. So that employees can use the consultation desks with peace of mind, we guarantee protection of privacy, including the names of people who seek

consultations, and that there will be no disadvantage for employees who consult or report.

In fiscal 2021, 37 incidents were brought to their attention. Of these, there were 21 requests for investigation or approaches to the workplace, and 16 with consultations or questions, with no specific action requested. Many of these matters were related to suspicions of abuse of authority or to do with COVID-19. Depending on the details of these consultations, in the event problems are identified we recommend corrective measures or disciplinary action, and we also provide the complainant with advice and answers to questions.

## Number of consultations for compliance consultation desks (including internal reporting service)

FY2017	FY2018	FY2019	FY2020	FY2021
20	15	32	35	37

#### **Details of consultations**

Details of consultations	Incidents
Abuse of authority (including perceived or actual)	10
Related to COVID-19	8
Violations of internal rules	6
Confirming internal rules, etc.	4
Personal relationships & communication	4
Sexual harassment	1
Others	4

#### **KPI and Results**

Initiatives	Targets	Results (FY2021)
1. Increase in awareness of compliance	Improvement in compliance questionnaire responses	
	Whether company emphasizes compliance	• I feel that way, or I somewhat feel that way 88% (down 5%)
	Awareness of "Compliance Mini Study"	• down 8%
	Compliance study sessions (Managers)	11 times (1,209 participants) + video delivered to all employees
	Various other trainings held	13 times
2. Awareness and use of compliance	Improvement in compliance questionnaire responses	
consultation desks	Awareness of compliance consultation desks	• 92%
	Ease of use of compliance consultation desks	Want to use it 62%
	Consultation desks support	37x
3. No. of serious legal violations	0 violations per year	2 violations

<sup>\*&</sup>quot;Partial Deficiency in Environmental Monitoring in Contract Manufacturing Business of Pharmaceuticals" and "Misconduct Involving Toyobo's PBT Resin PLANAC®"

#### **TOYOBO Group Compliance Manual**

Based upon the principles declared in the TOYOBO Group Charter of Corporate Behavior, we have summarized in a concrete and easy-to-understand manner the rules to which employees are subject in the TOYOBO Group Compliance Manual. We are working to promote its understanding amongst all Group employees and to ensure that these rules are fully publicized.

This manual has been translated into other languages such as English and Chinese, so that we can distribute this to countries and regions in which there are Toyobo and Group company. During Compliance Enforcement Month every year in November, we revise the manual and distribute this to Group employees, and have employees read through the texts together in each workplace.



TOYOBO Group Compliance Manual

#### **Anti-corruption initiatives**

Toyobo Group positions the prevention of corruption in all forms such as bribery as a priority issue for compliance. In particular with regard to bribery, in addition to Toyobo policies and regulations, we have also decided upon guidelines that detail specific rules such as judgments and monetary standards when giving gifts and entertainment. We ensure that these are well understood by outlining details in the compliance manual and providing explanations in meetings and trainings. Additionally, in order to build fair and healthy relationships with business partners, we have put in place rules for when accepting gifts and entertainment. These include declining to accept money or its equivalent, or gifts and entertainment that exceed socially accepted norms, and the introduction of a reporting system for when these are received.

In fiscal 2021, there were no violations regarding corrupt activities, nor any administrative discipline carried out.

\*Toyobo Group Anti-Bribery policy https://www.toyobo-qlobal.com/company/compliance/anti-bribery/

#### **Compliance education**

We use a variety of measures such as study sessions and issuing reports in order to increase overall awareness of compliance, and carry out compliance education by job level and occupations as a part of training for new employees, sales staff and expats. In fiscal 2021, we started study sessions by headquarters as a part of considering compliance together with the workplace.

#### Holding compliance study sessions

In fiscal 2021, we held 11 study sessions targeting management-level personnel from all Toyobo business sites including headquarters, branches, production centers, and at 38 affiliated companies. We also held this remotely as a COVID-19 measure.

With members of the Compliance Department and IT Department acting as lecturers, 1,209 employees participated, and covered topics such as management's role in preventing misconduct, preventing harassment, and cyber security. We have also created a video of the study sessions edited for general employees, and distributed this to Group companies.

#### Issuing case study reports

A "Compliance Mini Study," which educates employees about cases of violation in a case study format, is issued monthly, and heads-up reports are issued occasionally based on cases that occurred within Toyobo Group.

#### **Holding of questionnaire**

During Compliance Enforcement Month held in November every year, we hold an anonymous questionnaire. This includes a survey on employee awareness of compliance including of ethics, safety, quality, confidential corporate information, harassment, the organizational culture, and use of the consultation desks. Through this, we confirm the status of compliance risks in the workplace.

In fiscal 2021, we received 5,094 responses from employees, and results of the questionnaire are disclosed to all employees. Details on individual problems and issues are shared with related departments in a form that does not identify the respondent—this proves useful in improving the situation and preventing problems.

## **Risk Management**

#### **Basic approach**

As well as establishing a "Risk Management Basic Policy" that outlines our fundamental stance on risk management activities, Toyobo Group is identifying various types of risk that could pose a threat across the entire range of our business activities, and are managing risk appropriately according to the characteristics of each risk. In an emergency situation, we immediately set up a task force under the instruction of the relevant executive officer, and bring the crisis under control through a swift response. By putting these systems in place and conducting the aforementioned initiatives, we work hard to earn the trust of our customers, the local community, and our shareholders and other stakeholders.

#### **Structure**

On April 1, 2021, Toyobo Group established a Risk Management Committee headed by the President for centralized management of risks throughout the Group. The committee comprises members of the Board of Managing Executive Officers and Controlling Supervisors as well as members nominated by the chairman, and in its first year since establishment in fiscal 2022, is scheduled to convene four times.

There are two main reasons for the establishment of this committee. The first of these is to work towards a management policy that switches from survival thinking to sustainable thinking, and to aim to be a company capable of sustainable growth. The second of these is because of the fire that broke out at our Inuyama Plant last year and the incidents concerning our response to engineering plastics quality issues. As management, we have built a company-wide system to identify risks throughout the company, prevent these and ensure early detection, and are putting in place preventative measures.

This Risk Management Committee brings together risk management activities (identification, analysis, evaluation, and response), as well as formulates risk management policies for the Group as a whole. It is working to strengthen our risk management structure by aiming to build effective and sustainable organizations and approaches.

In fiscal 2021, we developed an infrastructure (processes, committees, regulations) upon which to pursue our risk management activities. In fiscal 2022, we will operate our designed system and promote activities aimed at reducing risks. We also plan to achieve Group-level risk management as well as develop reduction activities targeting specific risks.

#### Management structures and processes



#### **Business risks**

The main risks recognized that could have a material impact on Toyobo Group's operating results and financial position are as listed below. The list does not include all the risks related to Toyobo Group.

Forward-looking statements were determined by the Group as of fiscal 2021-end.

#### Recognized risks

#### **Financial risks**

- Large forex movement
- Large rise in interest rates
- Sharp drop in share prices
- Impairment loss of fixed assets

#### Incurred or highly probable risks

- Occurrence of disasters, accidents, and infections
- Further worsening of political and economic situations
- Inappropriate behavior or similar in details of third-party certification registration

#### Medium- to long-term risks

- Purchase of raw materials (p.73)
- Product defects (p.67)
- Securing of human resources (p.69)
- Climate change(p.58)
- Environmental burden (p.63,65)
- Information security (p.88)
- Laws, regulations and compliance (p.85)
- Overseas business activities
- Litigation

## **Data Security and Privacy**

#### Basic approaches and policies

Amid the accelerating digitalization of society and increasingly important significance of the value of information, the key to corporate survival will lie in continuing to create value that contributes to society and the environment by leveraging the necessary information to promote development of products and technologies. On the other hand, inappropriate handling of information causes significant damage and impact. This includes loss of sales opportunities due to leakage of confidential information and information system outages, and legal and social sanctions as well as loss of corporate brand prestige due to leakage of personal and customer information.

Toyobo Group drew up the "Information Security Policy" to ensure the Group's correct and safe handling of information and sustainable growth as well as its continuation as a trusted company and strives to appropriately manage and utilize all information assets. In fiscal 2021, we created individual regulations to make this policy a reality. We have also created videos explaining the policy together with guidelines and education materials for management and users, and are working to promote awareness of these basic rules.

#### **Education and Awareness-raising Activities**

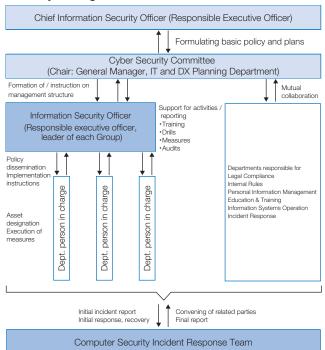
As a part of our education and awareness-raising activities, we conduct biannual targeted email attack drills with differing levels of difficulty and subjects for all employees at TOYOBO CO., LTD., TOYOBO STC CO., LTD., and Toyobo Information System Create Co., Ltd.

As a new initiative, we also carried out security comprehension testing in order that employees can self-check

and reflect on their understanding of our education and awareness-raising activities.

So that customer information as well as internal corporate information including confidential is kept secure, we take all appropriate measures such as keeping appraised of the latest threats, strengthening monitoring of office automation and factory automation, fixing vulnerabilities, and preventing unauthorized access.

## **TOYOBO Group Information Security Management Structure**



A virtual team convened according to the severity of the information security incident

## Key Events in Fiscal 2021

#### **Establishing a new operating location**

#### Toyobo established a joint venture with Indorama Ventures to build a new plant for automobile airbag yarns

In November 2020, Toyobo established a joint venture company, Toyobo Indorama Advanced Fibers (TIAF), in Thailand together with Indorama Polyester Industries PCL (IPI), a subsidiary of the world's largest polyethylene terephthalate (PET) producer, Indorama Ventures PCL.

TIAF is scheduled to start operation in spring 2022, producing yarns for automobile airbags. Toyobo Group aims to enhance its competitiveness in the airbags market, which is expected to see demand grow by 3% to 4% per year. We are also striving to meet the needs of customers globally going forward as the only manufacturer capable of streamlined production and supply of airbag yarns and fabrics at five locations around the world.



Overview of the joint venture company

- · Name: Toyobo Indorama Advanced Fibers Co., Ltd. (TIAF)
- · Address: Bangkok, Thailand (same as IPI headquarters)
- · Representatives: Ashok Mathur (IPI)
- Hidekazu Takahashi (Toyobo)
  •Investment ratio: Toyobo 50% and IPI 50%

#### Overview of the new production factory

- · Address: Rayong Province, Thailand (inside IPI factory)
- · Start of operation: Spring 2022 (scheduled)
- Production capacity: Maximum output of 11,000 tonnes ner year.

#### Base for the development and manufacturing of high-performance nonwoven fabric



The importance of a stable supply of nonwoven fabric used for making masks and personal protective equipment has been noted since the spread of COVID-19. To meet these needs, Toyobo has established a new development and production base for high-performance polypropylene nonwoven fabric at the Iwakuni Production Center, investing approximately ¥1.6 billion. Manufacturing is scheduled to begin in July 2022.

Looking ahead to the post-COVID-19 world, we are also focused on the development of high-performance nonwoven fabrics that are durable and efficient at dust collection, as well as ones made from eco-friendly materials. With the Functional Materials Plant of Iwakuni Production Center as the model plant, we aim to collaborate with other plants and expand the nonwoven fabric market globally.

#### **Developing the next generation**

## Next-generation cultivation program for the local community and junior high and high school students

Toyobo Group is promoting science and technology by providing research grants to cultivate future leaders. We also implement the following programs targeting communities where we operate and local junior high and high school students.

We are a partner business in the Shiga Tech Planter program, which supports next generation technology, researchers, technicians and entrepreneurs, as well as the business plan contest, Shiga Tech Plan Grand Prix, both hosted by the Shiga-based Growth Business Identification and Cultivation Consortium, whose mission is to promote industries and revitalize communities within Shiga Prefecture.

In fiscal 2021, we organized a lecture for approximately 30 students from Senzoku Gakuen Junior and Senior High School as part of the Social Discovery! Science Lecture sponsored by science journal, Nikkei Science, on December 16th, 2020. In the lecture, we discussed our company's initiatives, research technology, plant-derived plastic, and biodegradable plastic. On December 18th, we participated in an online business interview with four students from Toshimagaoka Joshigakuen Junior High School as part of the Nikkei STOCK League program, a contest that promotes learning about stocks, where we introduced our environmental initiatives.

#### **Open Innovation**

#### Partnership agreement with Plug and Play Japan

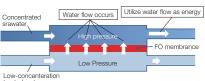
On November 1st, 2020, Toyobo signed a smart city\* partnership agreement with major startup assistance firm, Plug and Play Japan. Plug and Play Japan is the Japanese subsidiary of world-leading venture capital / accelerator, Plug and Play, which supports startup companies in Japan and abroad.

Through this partnership with Plug and Play Japan, we aim to create new businesses that will contribute to achieving the concept of a smart city while working together with startup companies that share synergies within our company's business domains: films and functional materials, mobility, lifestyle and environment, and life science. \*A next-generation urban area that utilizes advanced digital technology to address local issues and achieves a comfortable and safety living environment.



#### Patent application for realizing an environmentally conscious water treatment system





treated water

Diagram of water treatment system using an FO membrane

In February 2021, Toyobo jointly developed an eco-friendly hollow fiber forward osmosis membrane (FO membrane) water treatment system with Sustainable Water Power Consultants FZ LLC, a seawater desalination consulting company, and Toyobo's consolidated subsidiary, Arabian Japanese Membrane Company, LLC, and submitted a provisional patent application in the United States.

This system effectively utilizes concentrated seawater discharged from seawater desalination through reverse osmosis membrane (RO membrane), and reduces discharge of concentrated seawater, generate usable energy within the plant, and reduce costs. As it can be easily integrated into the existing seawater desalination process, there is no major equipment investment, while making an eco-friendly water treatment system possible. Toyobo is conducting a series of real life testing aimed at early commercialization to resolve worldwide water shortage issues.



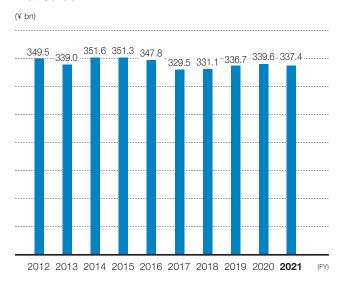
Final selection for the Shiga Tech Plan Grand Prix held on July 4, 2020



Special lecture for Senzoku Gakuen Junior and Senior High School

## Financial Highlights

#### **Net Sales**



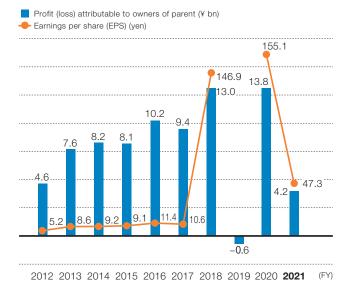
During fiscal 2021, sales in the films and life science businesses were robust. However, sales in the mobility and lifestyle and environment businesses slumped due to the impact of the COVID-19 pandemic. As a result, net sales fell by 0.6% year on year to ¥337.4 billion.

#### **Operating Profit and Operating Profit Margin** Operating profit (¥ bn) Operating profit margin (%) 7.2 7.1 6.5 6.0 59 5.2 26.7 5.0 23.3 23.9 21.7 22.8 21.0 20.6 18.3 17 1

During fiscal 2021, the film business, including COSMOSHINE SRF $_{\rm e}$ , continued its strong performance. In addition, production volume of PCR test reagents increased to meet strong social demand to combat the COVID-19 pandemic. As a result, operating profit rose by 16.9% year on year to  $$\pm 26.7$$  billion

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

#### Profit (Loss) Attributable to Owners of Parent / EPS

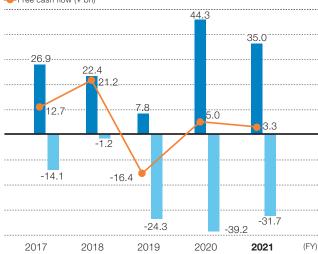


In fiscal 2021, although operating profit increased, we recorded impairment losses of ¥7.8 billion in the acrylic fiber business as a result of further deterioration in the market environment due to the COVID-19 pandemic while the business was already being forced to operate in challenging conditions due to declining demand and anti-dumping measures in the Chinese market. As a result, profit attributable to owners of parent was ¥4.2 billion, and EPS was ¥47.3.

\*The 2017 increase in EPS was caused by a 10-for-1 reverse stock split of common stock on October 1, 2017.

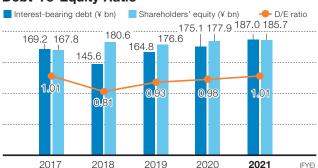
#### **Cash Flow**

Cash flows from operating activities (¥ bn)
Cash flows from investing activities (¥ bn)
Free cash flow (¥ bn)



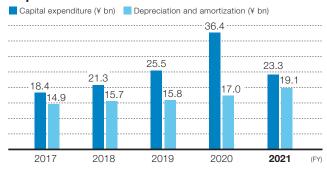
In fiscal 2021, cash flows from operating activities recorded an inflow of  $\pm$ 35.0 billion, including factors such as a  $\pm$ 19.1 billion increase in depreciation and amortization and impairment losses in the acrylic fiber business of  $\pm$ 8.9 billion. Cash flows from investing activities recorded an outflow of  $\pm$ 31.7 billion, wowing to factors including the purchase of property, plant and equipment and intangible assets. As a result, free cash flow recorded an inflow of  $\pm$ 3.3 billion, a decrease of  $\pm$ 1.6 billion from the previous fiscal year.

#### Interest-Bearing Debt / Shareholders' Equity / **Debt-To-Equity Ratio**



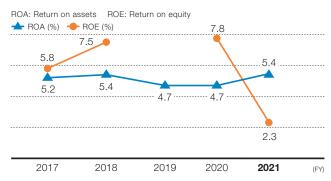
Interest-bearing debt rose by ¥11.8 billion year on year to ¥187.0 billion at the close of fiscal 2021, due to procurement of funds through borrowing to increase liquidity on hand in light of the impact of COVID-19. Meanwhile, shareholders' equity rose by ¥7.8 billion year on year to ¥185.7 billion, mainly due to an increase in accumulated other comprehensive income, including remeasurements of defined benefit plans. This resulted in a D/E ratio of 1.01.

#### Capital Expenditure / **Depreciation and Amortization**



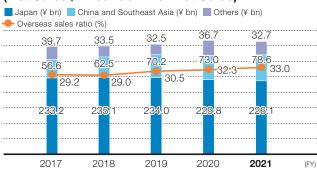
In fiscal 2021, capital expenditure was limited to ¥23.3 billion compared to the initial plan of ¥26.5 billion as a result of careful examination of the details of capital expenditures and review of the timing of non-urgent projects in response to the COVID-19 pandemic. Depreciation and amortization was ¥19.1 billion.

#### ROA / ROE



ROE was 2.3%, due to a decrease in profit attributable to owners of parent, mainly owing to the impact of impairment loss recorded as a result of declining profitability in the acrylic fiber business. ROA was 5.4% due to the increase in operating profit.

#### Overview by Region (Net Sales / Breakdown of Net Sales)



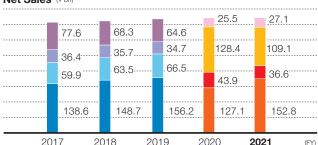
During fiscal 2021, the overseas sales ratio increased to 33.0% as sales of industrial film and other products increased in China and southeast asia.

#### Net Sales / Operating Profit / **Operating Profit Margin by Segment**

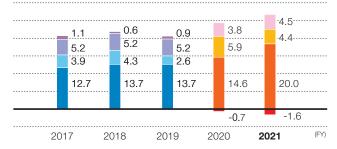
The Company revised its business segments in fiscal 2021. Figures for fiscal 2020 have been reclassified for the purpose of comparison.



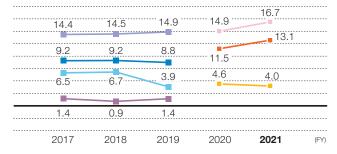
#### Net Sales (¥ bn)



#### Operating Profit (¥ bn)



#### Operating Profit Margin (%)

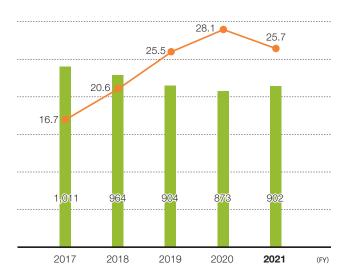


## Non-Financial Highlights



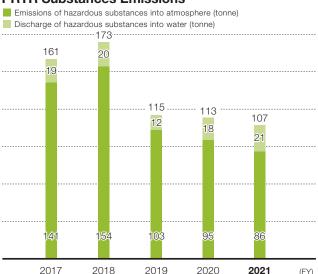
We have operated the ECO-PARTNER SYSTEM® since fiscal 1999 as a unified brand of products and technologies that contribute to reducing the Group's environmental impact. To achieve certification under the ECO-PARTNER SYSTEM® brand, assessments are made for every stage of a product, from raw material through to disposal, and the product is evaluated in terms of its contribution to reducing the Group's environmental impact from five perspectives including prevention of climate change. Sales in fiscal 2021 totaled ¥59.0 billion, and the ratio to net sales was 29.9%. We are working to create eco-conscious products with targets of reaching a ratio to net sales of 40% by fiscal 2031 and 60% by fiscal 2051. (For Toyobo Co., Ltd.)

## GHG Emissions / Reduction Rate vs. FY2014 (%) Global (thousand t-CO<sub>2</sub>) - Reduction rate vs. FY2014 (%)



We have set a target of becoming carbon neutral, meaning net-zero greenhouse gas (GHG) emissions, by fiscal 2051. We have set an interim target of reducing GHG emissions from our own business activities by 30% by fiscal 2031 compared with fiscal 2014. We have been implementing reductions in GHG emissions in production and distribution, and we reduced GHG emissions in fiscal 2021 by 25.7% compared with fiscal 2014.

#### **PRTR Substances Emissions**

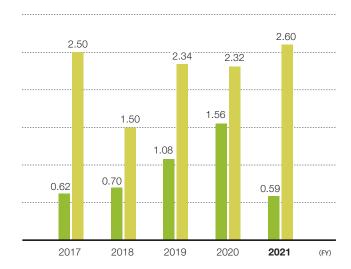


Toyobo Group is actively engaged in managing chemical substances appropriately and reducing environmental emissions, as part of the material issues. The Group has set targets to reduce hazardous substance emissions into the atmosphere by 60% from 159 tonnes in fiscal 2015 and emissions of hazardous substances into water by 80% from 49 tonnes in fiscal 2015, and is working to achieve the targets by fiscal 2031.

\* Figures are rounded to the nearest whole number. Therefore, the total of the figures listed in the breakdown may not match the actual total.

#### **Environmental Protection Costs**





As a means of quantitatively evaluating our environmental protection activities, Toyobo Group implements environmental accounting with reference to the Ministry of the Environment's "Environmental Accounting Guidelines 2005." In fiscal 2021, capital expenditure with the objective of environmental protection totaled ¥0.59 billion. In addition, maintenance costs totaled ¥2.6 billion. This primarily includes the costs of statutory environmental impact measurements, industrial waste disposal, various inspections, and associated personnel expenses.

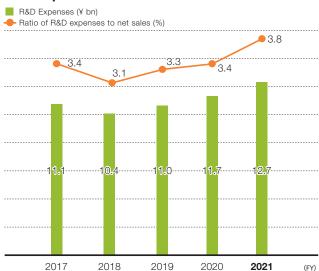
#### **Frequency Rate of Lost Workday Injuries**



Toyobo Group is striving to achieve zero accidents in accordance with the Toyobo Group Basic Policy on Health & Safety. However, in 2020, two employees lost their lives in a fire that occurred at our Inuyama Plant. The frequency rate of lost workday injuries was 0.70, inclusive of affiliated businesses at the same business site.

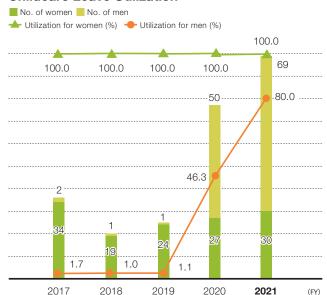
\* Frequency rate of lost workday injuries refers to the rate of accidents resulting in lost workday injuries per one million hours worked.

#### **R&D Expenses**



We are strengthening our R&D activities in order to generate new value and achieve sustainable growth, and the medium-term management plan incorporates strategic investment in R&D. R&D expenses amounted to ¥12.7 billion in fiscal 2021, and the ratio of R&D expenses to net sales was 3.8%.

#### **Childcare Leave Utilization**



In fiscal 2020, we adopted a new system, offering paid childcare leave for the first five days. In addition, men who had previously taken little childcare leave were encouraged to do so by their managers, and we also provided information about childcare leave to increase uptake. As a result of these efforts, the number of men who took childcare leave increased significantly from fiscal 2020. In fiscal 2021, utilization of childcare leave among male employees grew to 69 employees with uptake of 80%, achieving the childcare leave uptake target of 80% by fiscal 2026.

#### **Ratio of Female Managers**



Number of female managers (manager-class)



Led by the Women Empowerment Promotion Group, which was established in fiscal 2016, we have been promoting various initiatives from the three perspective of recruitment, cultivation, and support for employment contination. As a result, there were 19 women in managerial positions in fiscal 2021, and the female manager job group consisted of 13 people, a three-fold increase from fiscal 2016. We have set achieving a ratio of female managers of at least 5.0% in fiscal 2026 as a KPI for the Group, and the entire company is working together to reach this target.

## Key Financial Data (FY2011-FY2021)

		FY2011	FY2012	FY2013	FY2014	FY2015
Figor Voor (V	<u> </u>					
Fiscal year (¥ mr	1)	¥ 340,573	¥ 349,505	¥ 339,009	¥ 351,577	¥ 351,279
Operating pro	nfit	20,890	18,305	17.081	21.006	20.580
Ordinary profi		17,043	15,730	15,522	18,426	16,257
Extraordinary		427	364	2,673	595	1,160
Extraordinary		12,479	5,231	5,420	5,151	5,101
		12,419	0,201	0,420	0,101	3,101
Profit (loss) at owners of par	rent	4,155	4,587	7,639	8,154	8,117
Comprehensi		5,416	9,065	11,097	12,988	18,182
	s and equity (¥ mn)¹					
Current asset		¥ 172,001	¥ 177,735	¥ 184,739	¥ 184,630	¥ 196,607
Non-current a		271,515	260,105	262,707	271,625	269,202
Current liabilit		163,444	162,850	164,831	160,582	146,250
Non-current li	iabilities	130,299	127,267	127,093	150,558	158,472
Net assets		149,773	147,724	155,522	145,115	161,087
Shareholders	' equity	125,770	130,572	138,024	142,310	157,988
Total assets		443,516	437,841	447,445	456,256	465,809
Interest-beari	ng debt	151,804	154,888	159,430	170,721	177,085
Cash flow (¥ mn)						
	om operating activities	¥ 33,714	¥ 14,192	¥ 30,354	¥ 23,927	¥ 20,107
	om investing activities	(11,579)	(15,061)	(11,294)	(22,218)	(20,089)
	om financing activities	( 9,915)	(11,531)	(2,636)	(10,839)	797
Free cash flow		22,136	(869)	19,060	1,709	17
	sh equivalents at end of period	21,927	9,481	26,467	19,177	20,389
	ure, depreciation and amortization,	-				
Capital expen		¥ 13,931	¥ 16,517	¥ 18,041	¥ 20,074	¥ 17,491
	and amortization	19,113	19,473	13,246	14,038	14,916
R&D expense		10,634	10,820	9,966	10,474	10,819
Per share inform		)/ 111 OF	\/ 117.00	\/ 155.05	V 100.00	V 477.05
Net assets pe		¥ 141.85	¥ 147.26	¥ 155.35	¥ 160.28	¥ 177.95
Earnings per		5.49	5.17	8.61	9.18	9.14
Dividends per		3.50	3.50	3.50	3.50	3.50
Financial indicat						
	ofit margin (%)	6.1	5.2	5.0	6.0	5.9
Return on equ	- 7 (/	3.6	3.6	5.7	5.8	5.4
Return on ass		4.7	4.2	3.8	4.6	4.4
Price earnings		21.88	22.81	18.58	17.65	17.72
Dividend on e		2.5	2.4	2.3	2.2	2.1
Equity ratio (%		28.4	29.8	30.8	31.2	33.9
EBITDA⁴ (¥ m	in)	¥ 40,003	¥ 37,778	¥ 30,327	¥ 35,044	¥ 35,496
D/E ratio		1.21	1.19	1.16	1.20	1.12
	ess segment (¥ mn) <sup>56</sup>	V 100 000	V 400 407	V 107.004	V 140,000	V 440,000
Net sales	Films and Functional Polymers	¥ 126,960	¥ 138,437	¥ 137,394	¥ 148,000	¥ 146,029
	Industrial Materials	71,462	71,221	71,891	71,704	71,520
	Healthcare	31,386	26,580	24,839	27,344	28,777
	Textiles and Trading	86,832	87,999	79,211	79,089	85,093
On a ratio = = = f!	Real Estate and Other Business	23,933	25,267	25,673	25,440	19,860
Operating profit	Films and Functional Polymers	12,528	8,574	7,634	7,794	6,988
	Industrial Materials	4,911	5,342	5,453	5,501	6,601
	Healthcare	3,724	4,133	4,170	5,140	5,042
	Textiles and Trading	624	1,058	213	2,952	2,334
	Real Estate and Other Business	2,322	2,478	2,740	2,732	2,630
	Adjustment	(3,219)	(3,280)	(3,128)	(3,113)	(3,016)

- 1. The company applied Partial Amendments to Accounting Standard for Tax Effects Accounting in the fiscal year ended March 31, 2019.
- 2. By resolution of the 159th Annual General Meeting of Shareholders held on June 28, 2017, the company carried out a 10:1 consolidation of shares, effective October 1, 2017. On the same date, the company changed the number of shares constituting a trading unit from 1,000 shares to 100 shares.
- 3. ROA: Operating profit  $\div$  Total assets
- 4. EBITDA: Operating profit + Depreciation and amortization (including goodwill)
- 5. From the fiscal year ended March 31, 2015, the AP (acrylate fiber) business was moved from Films and Functional Polymers to Industrial Materials. From the fiscal year ended March 31, 2017, the AC (activated carbon fiber) business was moved from Industrial Materials to Healthcare, and the AP business was moved from Industrial Materials to Textiles and Trading.
- 6. Starting from fiscal 2021, the company revised its business segments. The figures for fiscal 2020 have been reclassified for the purpose of comparison.

FY2020 FY2021  # 339,607					
22,794         26,657           18,035         20,706           11,206         629           9,525         15,753           13,774         4,202           4,437         9,471           4,202         24,437           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,202         4,437           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           1,444         183,916         171,109           182,636         188,635         177,890         185,729           488,874         491,188         175,139         186,958           4,42,55         \$35,028         (31,678)         (1,805)         5,340           5,040         3,350         25,084         34,526           4,445         \$23,253         17,005         19,095           11,690         12,656           2,003.01	FY2020	FY2019	FY2018	FY2017	FY2016
22,794         26,657           18,035         20,706           11,206         629           9,525         15,753           13,774         4,202           4,437         9,471           4,202         4,437           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,437         9,471           4,202         4,437           4,437         9,471           4,437         9,471           4,202         4,4437           4,4437         9,471           18,425         23,253           17,890         185,729           488,874         491,188           175,139         186,958           444,255         \$35,028           (39,216)         (31,678)           (1,805)         5,340           5,040         3,350           25,084         34,526           4,36,445         \$23,253           17,005         19,095           11,690         12,656 </td <td>¥ 339 607</td> <td>¥ 336,698</td> <td>¥ 331,148</td> <td>¥ 329,487</td> <td>¥ 347,763</td>	¥ 339 607	¥ 336,698	¥ 331,148	¥ 329,487	¥ 347,763
18,035       20,706         11,206       629         9,525       15,753         13,774       4,202         4,437       9,471         206,416       ¥ 212,963         282,458       278,225         122,321       131,444         183,916       171,109         182,636       188,635         177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         ¥ 39,799       ¥ 45,752		21,727	23,923	23,332	23.123
11,206       629         9,525       15,753         13,774       4,202         4,437       9,471         4 206,416       ¥ 212,963         282,458       278,225         122,321       131,444         183,916       171,109         182,636       188,635         177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         ¥ 39,799       ¥ 45,752		17,788	20,925	20,650	20,123
9,525 15,753  13,774 4,202  4,437 9,471  206,416 ¥ 212,963  282,458 278,225  122,321 131,444  183,916 171,109  182,636 188,635  177,890 185,729  488,874 491,188  175,139 186,958  ¥ 44,255 ¥ 35,028  (39,216) (31,678)  (1,805) 5,340  5,040 3,350  25,084 34,526  ¥ 36,445 ¥ 23,253  17,005 19,095  11,690 12,656  2,003.01 ¥ 2,090.47  155.12 47.30  40.00 40.00  6.7 7.9  7.8 2.3  4.7 5.4  7.37 30.11  2.0 2.0  36.4 37.8  ¥ 39,799 ¥ 45,752		1,519	11,492	20,030	20,393 702
13,774       4,202         4,437       9,471         4 206,416       ¥ 212,963         282,458       278,225         122,321       131,444         183,916       171,109         182,636       188,635         177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         ¥ 39,799       ¥ 45,752		19,204	13,683	7,179	4,871
4,437       9,471         # 206,416       ¥ 212,963         282,458       278,225         122,321       131,444         183,916       171,109         182,636       188,635         177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         ¥ 39,799       ¥ 45,752		19,204	13,063	7,179	
# 206,416	13,774	(603)	13,044	9,444	10,150
282,458         278,225           122,321         131,444           183,916         171,109           182,636         188,635           177,890         185,729           488,874         491,188           175,139         186,958           ¥ 44,255         ¥ 35,028           (39,216)         (31,678)           (1,805)         5,340           5,040         3,350           25,084         34,526           ¥ 36,445         ¥ 23,253           17,005         19,095           11,690         12,656           2,003.01         ¥ 2,090.47           155.12         47.30           40.00         40.00           6.7         7.9           7.8         2.3           4.7         5.4           7.37         30.11           2.0         36.4           ¥ 39,799         ¥ 45,752	4,437	(467)	15,611	13,519	2,147
282,458         278,225           122,321         131,444           183,916         171,109           182,636         188,635           177,890         185,729           488,874         491,188           175,139         186,958           ¥ 44,255         ¥ 35,028           (39,216)         (31,678)           (1,805)         5,340           5,040         3,350           25,084         34,526           ¥ 36,445         ¥ 23,253           17,005         19,095           11,690         12,656           2,003.01         ¥ 2,090.47           155.12         47.30           40.00         40.00           6.7         7.9           7.8         2.3           4.7         5.4           7.37         30.11           2.0         36.4           ¥ 39,799         ¥ 45,752	V 000 410	V 100 105	V 100 F71	V 100 000	V 400 000
122,321       131,444         183,916       171,109         182,636       188,635         177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         37.8       ¥ 39,799         ¥ 45,752		¥ 193,125	¥ 186,571	¥ 196,293	¥ 186,633
183,916       171,109         182,636       188,635         177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         ¥ 39,799       ¥ 45,752		267,922	258,924	254,497	257,954
182,636       188,635         177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         ¥ 39,799       ¥ 45,752		131,768	125,110	136,865	130,690
177,890       185,729         488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         37.8       ¥ 39,799         ¥ 45,752		148,053	135,870	143,016	153,795
488,874       491,188         175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         37.8       ¥ 39,799         ¥ 45,752	182,636	181,226	184,515	170,910	160,101
175,139       186,958         ¥ 44,255       ¥ 35,028         (39,216)       (31,678)         (1,805)       5,340         5,040       3,350         25,084       34,526         ¥ 36,445       ¥ 23,253         17,005       19,095         11,690       12,656         2,003.01       ¥ 2,090.47         155.12       47.30         40.00       40.00         6.7       7.9         7.8       2.3         4.7       5.4         7.37       30.11         2.0       36.4         ¥ 39,799       ¥ 45,752	177,890	176,585	180,561	167,773	156,915
¥ 44,255	488,874	461,047	445,495	450,790	444,587
¥ 44,255	175,139	164,769	145,594	169,230	165,358
(39,216) (31,678) (1,805) 5,340 5,040 3,350 25,084 34,526 ¥ 36,445 ¥ 23,253 17,005 19,095 11,690 12,656 2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00 6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752				·	
(1,805) 5,340 5,040 3,350 25,084 34,526  ¥ 36,445 ¥ 23,253 17,005 19,095 11,690 12,656  2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00  6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8  ¥ 39,799 ¥ 45,752	¥ 44,255	¥ 7,838	¥ 22,353	¥ 26,872	¥ 32,337
(1,805) 5,340 5,040 3,350 25,084 34,526  ¥ 36,445 ¥ 23,253 17,005 19,095 11,690 12,656  2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00  6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8  ¥ 39,799 ¥ 45,752	(39,216)	(24,286)	(1,174)	(14,132)	(10,636)
5,040 3,350 25,084 34,526  ¥ 36,445 ¥ 23,253 17,005 19,095 11,690 12,656  2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00  6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752		12,608	(27,831)	(324)	(21,384)
25,084 34,526  ¥ 36,445 ¥ 23,253 17,005 19,095 11,690 12,656  2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00  6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8  ¥ 39,799 ¥ 45,752		(16,448)	21,178	12,740	21,701
¥ 36,445		22,167	25,857	32,179	20,101
17,005 19,095 11,690 12,656  2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00  6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752	20,001	22,107	20,007	02,170	20,101
11,690 12,656  2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00  6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752	¥ 36,445	¥ 25,512	¥ 21,259	¥ 18,360	¥ 17,336
2,003.01 ¥ 2,090.47 155.12 47.30 40.00 40.00 6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752	17,005	15,823	15,666	14,939	14,434
155.12     47.30       40.00     40.00       6.7     7.9       7.8     2.3       4.7     5.4       7.37     30.11       2.0     2.0       36.4     37.8       ¥ 39,799     ¥ 45,752	11,690	11,022	10,402	11,114	11,266
155.12     47.30       40.00     40.00       6.7     7.9       7.8     2.3       4.7     5.4       7.37     30.11       2.0     2.0       36.4     37.8       ¥ 39,799     ¥ 45,752					
40.00 40.00  6.7 7.9  7.8 2.3  4.7 5.4  7.37 30.11  2.0 2.0  36.4 37.8  ¥ 39,799 ¥ 45,752		¥ 1,989.29	¥ 2,034.04	¥ 188.98	¥ 176.75
6.7 7.9 7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752		(6.80)	146.93	10.64	11.43
7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752	40.00	40.00	40.00	3.50	3.50
7.8 2.3 4.7 5.4 7.37 30.11 2.0 2.0 36.4 37.8 ¥ 39,799 ¥ 45,752	6.7	6.5	7.2	7.1	6.6
4.7       5.4         7.37       30.11         2.0       2.0         36.4       37.8         ¥ 39,799       ¥ 45,752		(0.3)	7.5	5.8	6.4
7.37 <b>30.11</b> 2.0 <b>2.0</b> 36.4 <b>37.8</b> ¥ 39,799 <b>¥ 45,752</b>		(0.5)		5.2	
2.0 <b>2.0</b> 36.4 <b>37.8</b> ¥ 39,799 <b>¥ 45,752</b>		4.7	5.4		5.2
36.4 <b>37.8</b> ¥ 39,799 <b>¥ 45,752</b>		_	14.29	18.14	14.78
¥ 39,799 <b>¥ 45,752</b>		2.0	2.0	1.9	2.0
•••••		38.3	40.5	37.2	35.3
0.98 1.01		¥ 37,550	¥ 39,589	¥ 38,271	¥ 37,557
	0.98	0.93	0.81	1.01	1.05
¥ 127,127 <b>¥ 152,842</b>	Films and Functional Materials ¥ 127,127	¥ 156,241	¥ 148,667	¥ 138,574	¥ 143,398
43,905 <b>36,573</b>		66,540	63,454	59,925	70,522
		34,675	35,723	36,423	27,723
25,538 <b>27,087</b>		64,585	68,317	77,552	85,486
14,629 <b>11,757</b>		14,657	14,987	17,013	20,634
14,582 <b>20,028</b>		13,727	13,713	12,747	9,920
(701) <b>(1,572)</b>		2,620	4,262	3,875	6,288
5,936 <b>4,376</b>		5,170	5,179	5,242	4,726
3,798 <b>4,517</b>	Life Science 3,798	914	645	1,066	2,500
0.000					
2,623 <b>2,302</b>	Real Estate and Other Business 2,623	2,233	2,820	3,344	2,841

## Consolidated Balance Sheets

	(¥	
	FY2020 (As of March 31, 2020)	<b>FY2021</b> (As of March 31, 2021)
sets		
Current assets		
Cash and deposits	25,247	34,695
Notes and accounts receivable - trade	85,345	85,182
Electronically recorded monetary claims - operating	8,208	8,709
Merchandise and finished goods	49,150	45,785
Work in process	12,750	11,480
Raw materials and supplies	18,728	19,045
Other	7,141	8,203
Allowance for doubtful accounts	(154)	(136)
Total current assets	206,416	212,963
Ion-current assets		
Property, plant and equipment		
Buildings and structures, net	52,746	54,227
Machinery, equipment and vehicles, net	43,343	56,053
Land	97,055	93,169
Construction in progress	29,876	12,454
Other, net	8,459	8,738
Total property, plant and equipment	231,478	224,640
Intangible assets		
Other	4,641	4,674
Total intangible assets	4,641	4,674
Investments and other assets		
Investment securities	20,916	26,503
Deferred tax assets	17,977	15,066
Other	8,203	8,191
Allowance for doubtful accounts	(757)	(849)
Total investments and other assets	46,339	48,911
Total non-current assets	282,458	278,225
tal assets	488,874	491,188

		(¥ mn)		
	FY2020 (As of March 31, 2020)	<b>FY2021</b> (As of March 31, 2021)		
iabilities				
Current liabilities				
Notes and accounts payable - trade	41,659	40,879		
Electronically recorded obligations - operating	8,357	4,881		
Short-term borrowings	32,027	40,767		
Current portion of bonds payable	_	10,000		
Current portion of long-term borrowings	8,510	10,107		
Provision for bonuses	4,366	4,691		
Other	27,403	20,118		
Total current liabilities	122,321	131,444		
Non-current liabilities				
Bonds payable	55,000	45,000		
Long-term borrowings	75,851	77,046		
Deferred tax liabilities for land revaluation	21,277	20,156		
Provision for retirement benefits for directors (and other officers)	247	241		
Provision for environmental measures	331	31		
Retirement benefit liability	21,613	18,288		
Other	9,598	10,347		
Total non-current liabilities	183,916	171,109		
Total liabilities	306,238	302,553		
et assets				
Shareholders' equity				
Share capital	51,730	51,730		
Capital surplus	32,200	32,202		
Retained earnings	61,929	64,351		
Treasury shares	(350)	(294)		
Total shareholders' equity	145,509	147,989		
Accumulated other comprehensive income				
Valuation difference on available-for-sale securities	4,013	7,038		
Deferred gains or losses on hedges	(8)	11		
Revaluation reserve for land	44,457	42,708		
Foreign currency translation adjustment	(11,954)	(11,052)		
Remeasurements of defined benefit plans	(4,128)	(965)		
Total accumulated other comprehensive income	32,381	37,740		
Non-controlling interests	4,746	2,906		
Total net assets	182,636	188,635		
otal liabilities and net assets	488,874	491,188		

## Consolidated Statements of Income

	FY2020 ( From April 1, 2019 to March 31, 2020 )	<b>FY2021</b> ( From April 1, 2020 to March 31, 2021 )
Net sales	339,607	337,406
Cost of sales	255,140	247,032
Gross profit	84,467	90,375
Selling, general and administrative expenses	61,673	63,718
Operating profit	22,794	26,657
Non-operating income		
Dividend income	650	555
Share of profit of entities accounted for using equity method	469	_
Insurance claim income	598	368
Subsidy income	38	1,041
Other	1,575	1,167
Total non-operating income	3,329	3,131
Non-operating expenses		
Interest expenses	1,369	1,283
Salaries paid to dispatched employees	859	753
Loss on suspension of production	947	1,854
Other	4,914	5,192
Total non-operating expenses	8,089	9,082
Ordinary profit	18,035	20,706
Extraordinary income		
Gain on extinguishment of tie-in shares	_	387
Gain on sale of non-current assets	16	85
Gain on sale of investment securities	448	_
Gain on bargain purchase	65	_
Gain on liquidation of subsidiaries and associates	30	157
Insurance claim income	10,647	_
Total extraordinary income	11,206	629
Extraordinary losses		
Impairment losses	2,397	8,923
Loss due to fire	3,112	1,906
Loss on disposal of non-current assets	3,979	3,558
Other	37	1,366
Total extraordinary losses	9,525	15,753
Profit before income taxes	19,716	5,582
Income taxes - current	5,587	3,541
Income taxes - deferred	819	(271)
Total income taxes	6,406	3,270
Profit	13,310	2,313
Loss attributable to non controlling interests	(464)	(1,889)
Profit attributable to owners of parent	13,774	4,202

(538)

(1,838)

# Consolidate Statements of Comprehensive Income

Comprehensive income attributable to non controlling interests

	(¥ mn)		
	FY2020 ( From April 1, 2019 ) to March 31, 2020 )	<b>FY2021</b> ( From April 1, 2020 ) to March 31, 2021 )	
Profit	13,310	2,313	
Other comprehensive income			
Valuation difference on available for sale securities	(5,052)	3,015	
Deferred gains or losses on hedges	25	19	
Foreign currency translation adjustment	(1,705)	1,069	
Remeasurements of defined benefit plans, net of tax	(2,089)	3,162	
Share of other comprehensive income of entities accounted for using equity method	(52)	(107)	
Total other comprehensive income	(8,873)	7,158	
Comprehensive income	4,437	9,471	
Comprehensive income attributable to	·		
Comprehensive income attributable to owners of parent	4,974	11,309	

## Consolidated Statements of Cash Flows

_	(¥ mn)		
	FY2020 ( From April 1, 2019 ) to March 31, 2020 )	<b>FY2021</b> ( From April 1, 2020 to March 31, 2021 )	
Cash flows from operating activities			
Profit before income taxes	19,716	5,582	
Depreciation and amortization	17,005	19,095	
Increase (decrease) in allowance for doubtful accounts	48	68	
Increase (decrease) in retirement benefit liability	230	1,189	
Interest and dividend income	(791)	(619)	
Interest expenses	1,369	1,283	
Share of loss (profit) of entities accounted for using equity method	(469)	338	
Impairment losses	2,397	8,923	
Loss (gain) on sale and disposal of non-current assets, net	3,963	3,658	
Loss (gain) on sale and valuation of investment securities	(448)	78	
Loss (gain) on sale of shares of subsidiaries	_	4	
Insurance claim income	(10,647)	_	
Loss due to fire	3,112	1,906	
Decrease (increase) in trade receivables	(2,005)	306	
Decrease (increase) in inventories	1,678	5,067	
Increase (decrease) in trade payables	3,367	(4,664)	
Decrease (increase) in retirement benefit asset	142	(420)	
Other, net	552	467	
Subtotal	39,219	42,261	
Payments for loss due to fire	(4,147)	(952)	
Income taxes refund (paid)	(1,464)	(6,281)	
Proceeds from insurance income	10,647	_	
Net cash provided by (used in) operating activities	44,255	35,028	
Cash flows from investing activities			
Purchase of property, plant and equipment and intangible assets	(30,858)	(27,495)	
Proceeds from sale of property, plant and equipment and intangible assets	1,344	473	
Purchase of shares of subsidiaries resulting from change in scope of consolidation	(8,797)	_	
Proceeds from collection of long-term loans receivable	903	29	
Long-term loan advances	(117)	(73)	
Interest and dividends received	810	619	
Other, net	(2,500)	(5,230)	
Net cash provided by (used in) investing activities	(39,216)	(31,678)	

		(¥ mr
	FY2020 ( From April 1, 2019 to March 31, 2020	<b>FY2021</b> ( From April 1, 2020 to March 31, 2021 )
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings	(13,498)	8,466
Proceeds from long-term borrowings	14,595	12,004
Repayments of long-term borrowings	(12,460)	(9,471)
Proceeds from issuance of bonds payable	25,000	_
Redemption of bonds payable	(10,000)	_
Purchase of treasury shares	(3)	(2)
Interest paid	(1,376)	(1,249)
Dividends paid	(3,551)	(3,550)
Dividends paid to non-controlling interests	(25)	(2)
Other, net	(487)	(856)
Net cash provided by (used in) financing activities	(1,805)	5,340
Effect of exchange rate change on cash and cash equivalents	(621)	461
Net increase (decrease) in cash and cash equivalents	2,613	9,151
Cash and cash equivalents at beginning of period	22,167	25,084
Increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation	303	20
Increase in cash and cash equivalents resulting from merger with unconsolidated subsidiaries	_	270
Cash and cash equivalents at end of period	25,084	34,526

**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: 200,000,000 shares

Issued: 89,048,792 shares

Paid-in Capital ¥51,730 million

Number of

**Shareholders** 57,447

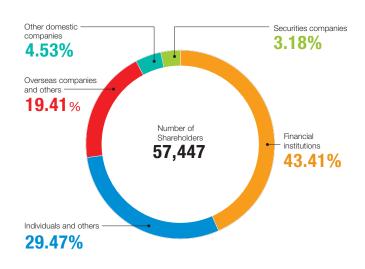
**General Shareholders'** 

Held in June every year Meeting

**Number of Shares** 

**Constituting One Unit** 100

#### **Composition of Shareholders**



#### **Major Shareholders**

	Number of shares held (thousands)	Percentage of voting rights (%)
The Master Trust Bank of Japan, Ltd.	8,303	9.35
Custody Bank of Japan, Ltd.	5,431	6.11
National Mutual Insurance Federation of Agricultural Cooperatives	3,558	4.00
Custody Bank of Japan, Ltd, (Trust Account 9)	2,091	2.35
JAPAN POST INSURANCE Co., Ltd.	2,015	2.27
Toyobo Employees Stockholders' Association	1,832	2.06
Toyukai (Contractor Share Holding)	1,801	2.03
Nippon Life Insurance Company	1,750	1.97
Meiji Yasuda Life Insurance Company	1,402	1.58
DFA INTL SMALL CAP VALUE PORTFOLIO	1,258	1.42

#### **Stock Prices**

Highest / lowest stock prices for the past five years

FY	2017	2018	2019	2020	2021
Highest (¥)	211	2,249(218)	2,164	1,684	1,687
Lowest (¥)	155	1,900(184)	1,386	903	1,033

<sup>1.</sup> Stock price quotations are from the Tokyo Stock Exchange (First Section).

<sup>2.</sup> The highest and lowest stock prices shown for fiscal 2018 are figures following the share consolidation. Figures in parentheses show pre-share consolidation amounts.

**Head Office** 2-8, Dojima Hama 2-chome, Kita-ku, Osaka 530-8230, Japan

Telephone: +81-6-6348-3111

**Established** May 3, 1882

**Number of Employees** 3,365 (Nonconsolidated) / 10,149 (Consolidated)

Tokyo Branch **Branches** 

Toyama Production Cente Nagoya Branch Utsunomiya Plant Tsuruga Research and Production Center Inuyama Plant

Tsuruga Research and Production Center Tokyo Branch

Iwakuni Production Center

Takasago Plant

Nagoya Branch

Research Center

Head Office

Iwakuni Production Center

Toyama Production Center

Research Center Utsunomiya Plant Takasago Plant Inuyama Plant

TOYOBO (SHANGHAI) CO., LTD. **Overseas** 

TOYOBO U.S.A., INC.

TOYOBO (THAILAND) CO., LTD.

TOYOBO CHEMICALS EUROPE GmbH

TOYOBO DO BRASIL PARTICIPACOES LTDA.

## **Countries and Regions with Overseas Toyobo Group Bases**



**External Recognition** TOYOBO is listed on the following ESG indices, as of June 2021.

- FTSE Blossom Japan Index
- MSCI Japan Empowering Women Index (WIN)



#### 2021 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)

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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.

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