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Nitto Group  
Integrated Report  
2023

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# MISSION

# VALUES

# VISION

## Corporate Philosophy

The Nittobo Group will enhance its value to society as a corporate group by helping to create healthy and more comfortable lifestyles, and in so doing continue contributing to the realization of a more prosperous world.

## Nittobo Declaration

- The Nittobo Group aims to be the "Best Partner" for society. (Nittobo BP Declaration)
- We relentlessly strive to identify our customers' needs and find great satisfaction in steadfastly earning their confidence and trust. In addition, we attach great importance to sharing this satisfaction with all of our stakeholders and society as a whole, including shareholders, investors, local governments and regional communities, through the provision of our products and services.
- We are committed to being a corporate group that values the potential of all employees as individuals and inspires them to freely and willingly share and discuss their ideas, and ultimately achieving greater results through teamwork.
- Our corporate group provides employees with opportunities for progress and self-realization based on the belief that their progress leads to everyone's success. We encourage our employees to be good citizens, think deeply, observe widely, act courageously and approach their jobs with resolve and determination.



Deeply, Widely, Strongly  
and Hospitably  
Proud that  
customers trust Nittobo

## Big VISION 2030 Nittobo Group's Vision for 2030

As a corporate group that continues to create global No. 1 niche businesses, we aspire to contribute in the areas of Environment & Energy, Digital Society, and Health, Security & Safety with the goal of building a more sustainable society.

- Provide products and services that contribute to the environment and energy
- Provide products and services that contribute to the digital society
- Provide products and services that contribute to health, security and safety

We aspire to be a company that gains the trust of all stakeholders in the pursuit of client satisfaction.

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### Editorial Policy

The *Nittobo Group Integrated Report* is designed to enhance dialogue with stakeholders by presenting the Nittobo Group's framework for value creation and medium- to long-term strategies. It covers the core elements of value creation by bringing together financial and non-financial information in a single publication.

### Report Period

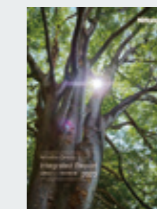
*Nittobo Group Integrated Report 2023* celebrates the Group's 100th anniversary by presenting how the Group has created value throughout its history. We have gone into greater depth regarding how the Nittobo Group helps resolve pressing social issues through its business activities. The addition of content discussing sustainability management as fundamental to value creation also marks a further stage of evolution for the report.

### Scope of Report Date of Publication Company References

This report covers business activities in FY2022 (April 1, 2022 through March 31, 2023).  
Note: Charts, graphs and tables may use the abbreviation "FY22."  
This report covers the business activities of Nitto Boseki Co., Ltd. and its consolidated subsidiaries and affiliates in Japan and overseas.  
September 30, 2023  
"Nittobo Group" and "the Group" refer to Nitto Boseki Co., Ltd. and its consolidated subsidiaries and affiliates in Japan and overseas.  
"Nittobo" and "the Company" refer to Nitto Boseki Co., Ltd. on a non-consolidated basis.

### Forward-looking Statements

The forecasts presented in this report are based on information available to the Company as of the publication date. Forward-looking statements do not represent promises or guarantees that the Company will attain its forecasts or realize the business measures expressed herein.



**On the Cover**  
Nittobo was established in Fukushima Prefecture, Japan. The cover photo shows a towering poplar tree on the site of the Fukuyama Enterprise Center in Koriyama City, Fukushima. This tree has watched over Nittobo throughout its history, but due to the aging of its trunk, this year will unfortunately be its last. However, in 2024, it will find new use and appreciation as a bench where employees can sit and relax.



# How Nittobo Contributes to Society

Close Up

**1** Products and services that contribute to the environment and energy  
**Materials that contribute to reducing environmental impact through energy conservation and fuel efficiency**

Lightweight and strong, glass fiber is used in automobile and aircraft parts to make them lighter. Glass wool is used for insulation in homes and other applications, and contributes to energy efficiency by keeping indoor temperatures steady.

Glass fiber Glass wool insulation

Close Up

**2** Products and services that contribute to the digital society  
**Helping bring about an advanced digital society that offers more comfortable and convenient lifestyles**

Our Special Glass used in glass fibers for electronic materials includes NE-glass, which has a low dielectric constant and low dielectric dissipation factor, and supports 5G high-speed, high-capacity communications and high-speed processing packages, and T-glass, which has high elasticity and low thermal expansion properties, and is essential for making high-density package substrates. We will continue development to satisfy demand for cutting-edge, high-performance glass fiber cloth, and contribute to the advancement of digital infrastructure.

Glass fiber Glass fiber cloth

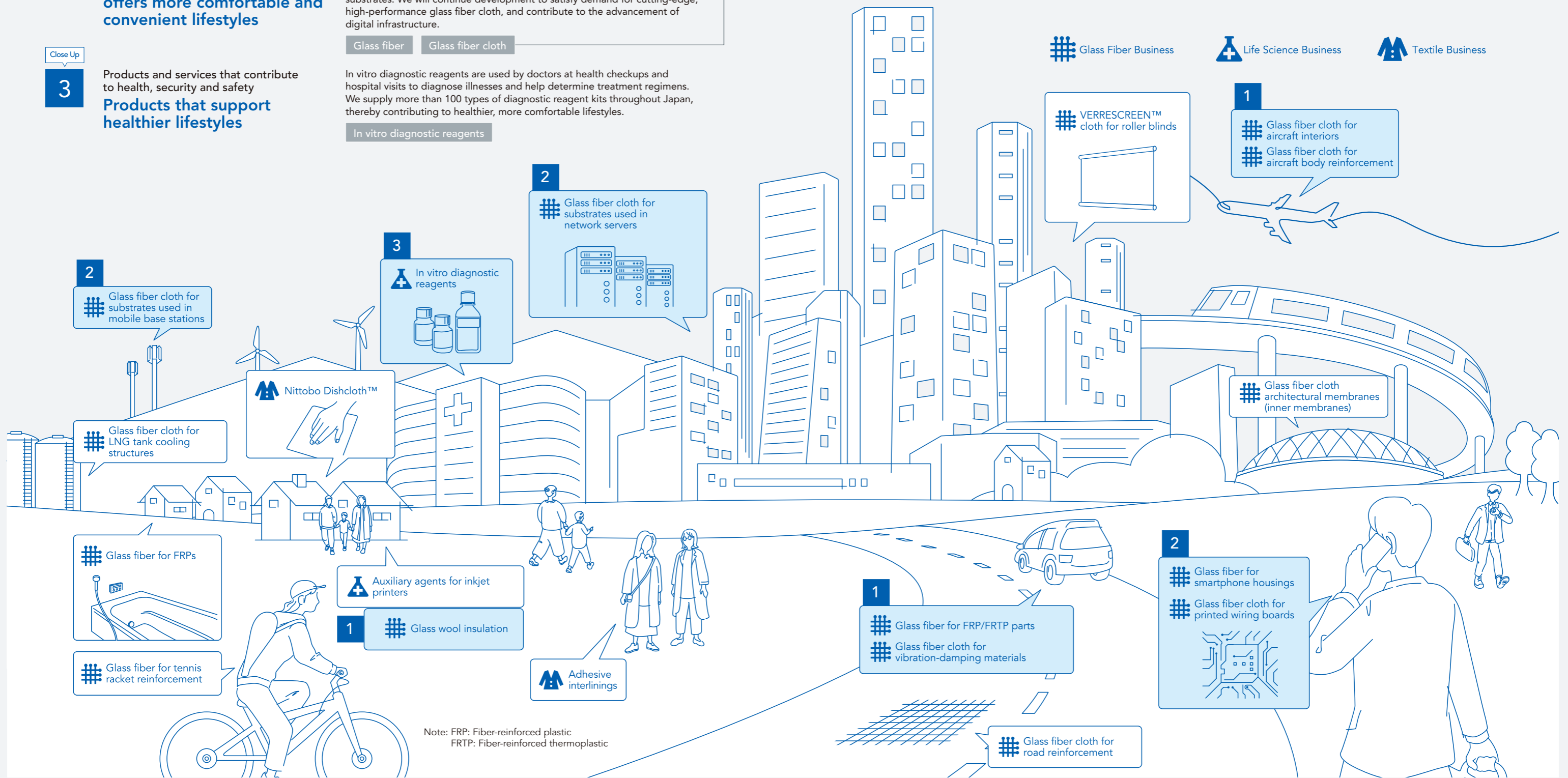
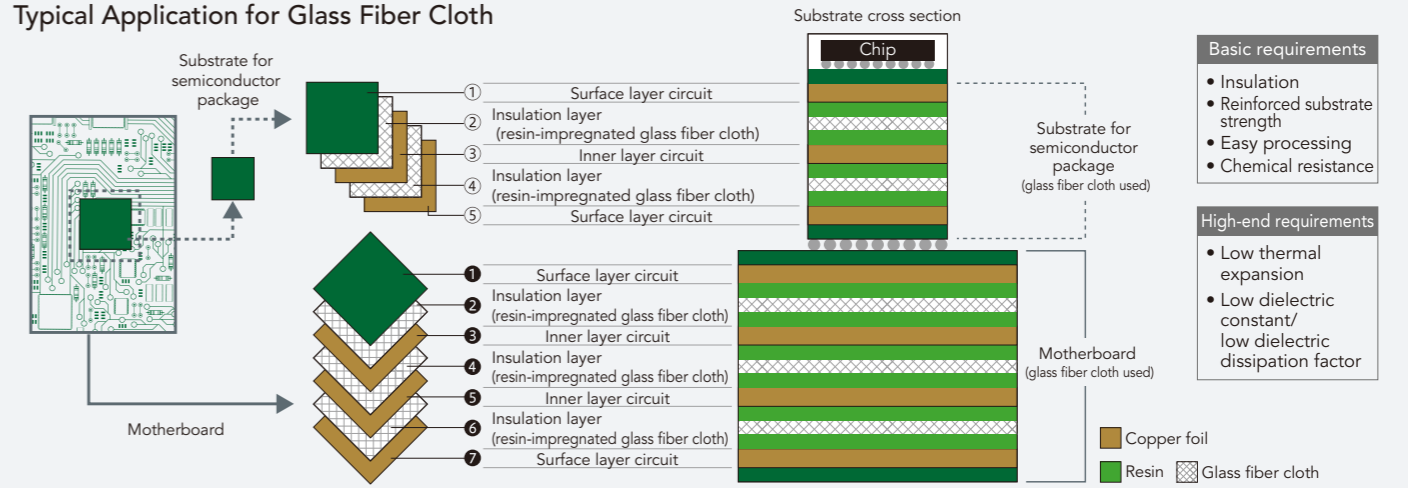
Close Up

**3** Products and services that contribute to health, security and safety  
**Products that support healthier lifestyles**

In vitro diagnostic reagents are used by doctors at health checkups and hospital visits to diagnose illnesses and help determine treatment regimens. We supply more than 100 types of diagnostic reagent kits throughout Japan, thereby contributing to healthier, more comfortable lifestyles.

In vitro diagnostic reagents

## Typical Application for Glass Fiber Cloth



Note: FRP: Fiber-reinforced plastic  
 F RTP: Fiber-reinforced thermoplastic

Glass Fiber Business

Life Science Business

Textile Business

## Message from the CEO



### Yuichi Tsuji

Director, Representative and  
Chief Executive Officer

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**Looking ahead to the next 100 years as we stand at the threshold of our “third founding,” we will further refine our strengths and promote reforms so that we can continue to create global No. 1 niche businesses.**

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### For the Past 100 Years and the Next 100 Years

The year 2023 marks Nittobo’s centennial anniversary. Nittobo’s 100-year history was only possible thanks to the tireless efforts of our predecessors and the support of our customers, shareholders and other stakeholders. I would like to take this opportunity to once again express my heartfelt gratitude to all involved. On the other hand, when thinking about the major changes in the internal and external environments that affected Nittobo in FY2022, I can imagine hearing our predecessors telling us that we should look back to the Company’s beginnings and take aim at the next 100 years from a new perspective.

To date, Nittobo’s history has been marked by two defining events. The first, of course, was the Company’s establishment in 1923. Half a century had passed since the Meiji Restoration, and the textiles industry had become a mainstay of the Japanese economy. Against that backdrop, we branched out from our original business of silk spinning and sought out new challenges under the motto, “Let’s turn anything into fibers.” This led to us being the first in the world to produce glass fiber on an industrial scale.

The second was the period of postwar reconstruction. We rebuilt our Koriyama Factory, which had been severely damaged in the war, and expanded the Glass Fiber Business in step with the period of rapid economic growth in Japan. Glass fiber was used in a wide range of industrial materials, including composite materials, electronic materials, and construction materials. Nittobo’s Medical Business was also established around this time, and it continues to this day.

In April 2023, we marked a century since the Company’s founding. I view 1923 as the first founding, and the postwar recovery as our second founding. Now, with a strong desire to jumpstart innovation in this 100th anniversary year, I would like to position this year as a new start—our “third founding.”

Over the past 100 years, Nittobo has grown considerably, but whether we can continue this growth trajectory will depend on our ability to reflect on how we got this far, assess where we are now, look ahead and make the next leap into the future.



## Nittobo's Strengths Continue to Create Global No. 1 Niche Businesses

I believe that our three greatest strengths, cultivated over a century in business, are as follows.

The first strength is our only-one, number-one technologies. In the Glass Fiber Business, we produce the world's finest glass fiber yarn and the world's thinnest glass fiber cloth. The technology we use to make our glass fiber for electronic materials, which we call "Special Glass" due to its unique composition, is a global No. 1 niche technology that supports the development of the information society. The second strength is the robust value chain we have built. In the Glass Fiber Business, we have structured a global value chain from glass fiber yarn to cloth, and for in vitro diagnostics reagents our business extends from the production of antisera raw materials to the manufacture and sale of reagents. The third strength is our ability to adapt to social change and customer needs. This ability has enabled us to respond quickly when society has transformed and to provide new technologies and products over the course of a century. We have cultivated these three strengths with the support of our stakeholders, and we believe that further refining these strengths will ensure our success over the next 100 years.

In April 2023, we established the New Business Development Center under my direct jurisdiction as CEO. At the center, people can freely propose new ideas and sow the seeds of future businesses

without being bound by conventional frameworks. It is inspired by the idea that every failure is an opportunity to learn and find the seeds of the next big business.

With the aim to be the "Best Partner" for society, our corporate philosophy states that we will help to create healthy and more comfortable lifestyles. To be a company that gains the trust of all stakeholders in the pursuit of client satisfaction, we will remain sensitive to changes in the times and resolutely pass on our founding DNA, which embraces the notions of challenge and fearlessness, as we continue to innovate.

## Sustainability Management

In addition to refining our strengths, when considering the next 100 years it is also vital that we continue contributing to the creation of a sustainable society. The continued growth of Nittobo is predicated on the preservation of the global environment and the creation of a sustainable society. In recent years, climate change has reached a level that increasingly threatens our everyday lives, and its impacts are becoming more severe. The Intergovernmental Panel on Climate Change's Sixth Assessment Report states that "it is unequivocal that human influence has warmed the atmosphere, ocean and land." As a global problem, and one of the most important issues facing the world, efforts to address climate change are now under way, led by governments, local bodies, various organizations, and companies everywhere.

Under Big VISION 2030, which is presented as an extension of the current Mid-Term Business Plan, Nittobo aims to bring about a sustainable society through its contributions in the areas of Environment & Energy, Digital Society, and Health, Security & Safety. With the vision of being a corporate group that continues to create global No. 1 niche businesses, we work every day to promote sustainability management. The Nittobo Group's products can be found in all facets of everyday life, such as in homes, automobiles, and smartphones. As such, our materials must have a low environmental impact during their product life cycle; in other words, they must be sustainable. To pass on the irreplaceable global environment to the next generation and contribute to sustainable development, the Nittobo Group will continue to pursue environmentally sustainable policies while practicing management that provides value to society. I will now briefly explain the activities of our internal task force and plans in this regard. For additional details, see pages 34–39 of this report.

Our first task is reducing CO<sub>2</sub> emissions.

The melting furnaces used in the manufacture of glass fiber yarn need to reach temperatures well over 1,000°C to melt glass, consuming large amounts of energy and emitting large amounts of CO<sub>2</sub>





## Message from the CEO

in the process. For this reason, we have been converting from gas furnaces to electric furnaces and introducing oxy-fuel combustion equipment. In FY2021, we introduced internal carbon pricing (internal carbon price: JPY 10,000/t-CO<sub>2</sub>), whereby we factor in the benefits of energy savings when making capital investments. This measure will accelerate the implementation of energy savings and CO<sub>2</sub> emissions reduction at all business sites.

We have promoted switching to renewable energy through the introduction of solar power generation systems and other means. In FY2022, we decided to install a 3 MW-class solar power generation system at our main domestic base, the Fukuyama Enterprise Center in Koriyama City, Fukushima, and it is scheduled to start operation in January 2024. Furthermore, we installed a solar panel system at NITTOBO ASIA Glass Fiber Co., Ltd., our yarn manufacturing base in Taiwan.

To achieve carbon neutrality by FY2050, we must convert our gas furnaces to use carbon-free fuel. There are multiple carbon-free fuel candidates, so we are conducting research and searching for the most suitable one, taking into consideration supply systems, costs and technical issues. When switching to an alternative fuel, the existence of established supply infrastructure is a major prerequisite, so we will ascertain progress on this matter and work to create partnerships for technical verification for the use of alternative fuels. In addition to switching to alternative fuels, we are considering how to absorb and utilize CO<sub>2</sub> from flue gas emitted by the melting furnace, although this initiative is still at an elementary stage.

Another issue is the reuse and recycling of resources.

In addition to using recycled glass in the production of glass wool for thermal insulation, which we have already been doing for some time, we are collaborating with recycling companies to reuse our in-house glass waste as material for glass fiber. We are currently working on obtaining ISCC PLUS certification\* for this manufacturing process.

\* International Sustainability and Carbon Certification (ISCC) PLUS certification: An international certification system mainly for companies and organizations that manufacture products using sustainable raw materials such as biomass and recycled raw materials



## Human Resource Development and Diversity and Inclusion

If we are to keep generating innovations over the next 100 years, we must develop human resources who have new viewpoints and ideas that are not bound by conventional wisdom and fixed ways of thinking, and who can put them into action. As mentioned above, it is our human resources who uphold and develop the Group's strengths. One of the four key measures in our current Mid-Term Business Plan is to "foster human resources that generate innovation," and we are implementing a variety of initiatives, including regular employee engagement surveys. We believe that a driving force behind innovation is employees' ability to mutually recognize each other's individual characteristics, abilities, and ways of thinking, and the creation of opportunities for different values and ideas to collide and harmonize. Furthermore, at the Research & Development Headquarters we are developing human resources capable of leading the Group's future R&D. We have made steady progress on the activities of the DX Strategy Office, established within the Research & Development Headquarters, as well as measures to improve digital transformation (DX) literacy, especially among young engineers. Going forward, we will continue fostering a corporate culture in which a wide variety of people can demonstrate their full potential.

To simply maintain the status quo would essentially be going backward. Instead, to become capable of growing for the next 100 years, we must continue to innovate with the spirit of our "third founding" in mind.



# History of Value Creation

The Nittobo Group was founded in Fukushima City, Fukushima Prefecture, in 1923 through the merger of Koriyama Kenshi Boseki Co., Ltd. and Fukushima Seiren Seishi Co., Ltd. We celebrated our centenary in 2023—marking a hundred years that saw many challenges as times changed, including wartime upheaval and transformations of our business model. We remain committed to the advancement of industry and society, and we will continue to stay ahead of the times and constantly seek out challenges in product and technology development so as to offer new products and services.

## 1923– First Founding

### “Let’s turn anything into fibers”

The Company’s original management, fearless of failure, relished the challenge of trying to make fiber out of all kinds of materials. Developing products to meet contemporary needs, they produced rock fiber, staple fiber, and much more.

## 1945– Second Founding

### New businesses to meet contemporary demand

In the post-war period, the Japanese textile industry enjoyed a short-lived boom but lost global competitiveness over time, necessitating that companies shift to other lines of business. We sought not only to strengthen our Glass Fiber Business, but also launched a Construction Materials Business and Medical Business to meet contemporary needs.

2023–

# Third Founding

## Toward the next 100 years

We reaffirm our commitment to our founding spirit, which embraces the notions of challenge and fearlessness that make up the Nittobo Group’s very DNA. We will continue to work to achieve sustainable growth over the next 100 years, meeting the needs of society, as we aspire to be a company that gains the trust of all stakeholders in the pursuit of client satisfaction.

### Net Sales (Consolidated)

- Life Science, others
- Glass Fiber (including construction materials until 2009)
- Textile



#### Textile Business

##### Helping to create more comfortable lifestyles

- 1898 Koriyama Kenshi Boseki Co., Ltd. established in Koriyama
- 1918 Fukushima Seiren Seishi Co., Ltd. established in Fukushima
- 1923 Merged the two companies to form Nitto Boseki Co., Ltd.
- 1933 Started staple fiber operations at the Fukushima Factory
- 1960 Launched Nittobo Dishcloth™
- 1965 Launched shirt interlining brand DANKEEP™; started production of dual-structure stretchable yarn C-S-Y™
- 1969 Launched ladies’ apparel interlining brand Dan Reine™
- 1976 Introduced single dot interlining machines
- 1988 Introduced double dot interlining machines
- 2004 Launched SDDC™ interlining suitable for use with low-adherence materials
- 2015 Nittobo Dishcloth™ won Good Design Long Life Design Award
- 2018 Launched Innovative Fabric™, which applies interlining processing technology
- 2021 Established Nittobo Advantex Co., Ltd.

#### Glass Fiber Business

##### Providing high-performance glass fiber tailored to the needs of the times, strengthening our leading position in the glass fiber industry

Under the motto, “Let’s turn anything into fibers,” Nittobo processes a variety of materials into fibers and has pioneered many technological firsts in Japan

- 1938 Produced glass fiber on an industrial scale (first in the world) and started rock wool production (first in Japan)
- 1949 Started glass wool production
- 1964 Glass fiber adopted for use in the nose cone for the Tokaido Shinkansen
- 1967 Established Fukushima glass fiber yarn factory; installed Direct Melt Furnace No. 1 to meet growing glass fiber demand
- 1969 Established Fukushima No. 2 Factory (specialized in production of glass fiber cloth for printed wiring boards); launched glass fiber cloth for printed wiring boards
- 1984 Launched T-glass (low thermal expansion)
- 1985 Launched fine count yarn
- 1988 Established yarn manufacturer Nittobo Norplex Oak Co., Ltd., the predecessor of NITTOBO ASIA Glass Fiber Co., Ltd. (Taiwan)
- 1998 Launched NE-glass (low dielectric)
- 2006 Launched Flat Fiber
- 2019 Made cloth manufacturer Baotek Industrial Materials Ltd. (Taiwan) a consolidated subsidiary
- 2021 Established Special Glass factory at NITTOBO ASIA Glass Fiber Co., Ltd. (Taiwan)

#### Life Science Business

##### In vitro diagnostic reagents become the Group’s second business pillar

Started development of biochemical in vitro diagnostic reagent kits based on the idea that biochemistry will be the defining chemistry of the next generation

- 1952 Opened Chemical Fiber Laboratory (origins of the Medical Business), which later became the Biochemical Laboratory
- 1978 Launched synthetic substrate for γ-GTP
- 1984 Launched specialty chemicals PAA™
- 1986 Acquired International Immunology Corporation, the predecessor of Nittobo America Inc.; started immunological in vitro diagnostic reagent business
- 1987 Established NITTOBO MEDICAL CO., LTD. and its own brand for in vitro diagnostic reagents; launched immunological in vitro diagnostic reagents
- 2015 Received the Minister of Agriculture, Forestry and Fisheries Prize for development of an in vitro diagnostic reagent using genetically modified silkworms
- 2018 Launched IgG4 measuring reagent kit for use with automated analyzers
- 2019 Acquired Kamiya Biomedical Company, LLC, including its sales network and expertise in regulatory approval procedures in the U.S.
- 2019 Acquired Capricorn Products, LLC, strengthening global procurement of raw materials for in vitro diagnostic reagents
- 2022 Expanded California site at Nittobo America Inc.



# First Founding 1923– "Let's turn anything into fibers"

- Glass Fiber Business
- Life Science Business
- Textile Business

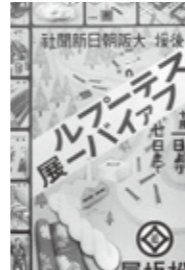
## 1933

### Using proprietary technologies, became the first in Japan to produce staple fiber on an industrial scale

We began development with the conviction that staple fiber, manufactured from pulp, was the ideal synthetic fiber for Japan given the country's scarcity of natural resources. We overcame numerous failures on the path to full-scale production; after many mechanical repairs and rebuilds, we became the first in Japan to mass produce staple fiber in 1933, using proprietary technologies at our Fukushima Factory.



Weaving demonstration at an exhibition for staple fibers



Advertising poster (1936)

## 1938

### Succeeded in the production of glass fiber (first in the world) and rock wool (first in Japan) on an industrial scale

In 1938, through innovative fiber development, we became the first in the world to mass produce glass fiber and the first in Japan to mass produce rock wool. As an effective insulation material essential for efficient heat management, there was high demand at the time, with rock wool commonly used in construction and military applications.



Advertising poster (1940)

# Second Founding 1945– New businesses to meet contemporary demand

## 1949

### Started glass wool production

The first in Japan, we started glass wool production using the "spraying method."



Koriyama Factory of Paramount Glass Manufacturing Co., Ltd. (1952)

## 1984

### Launched Special Glass T-glass

Initial applications for T-glass, characterized by its high strength and low thermal expansion, focused on composite materials. For example, it was used in the Shinkai 6500 deep-submergence vehicle. Today, T-glass is used in semiconductor package substrates that enable high-speed processing and high reliability in servers and smartphones.



Semiconductor package substrate

Only-One Technologies		
High strength, low thermal expansion		
	E-glass	T-glass
Thermal expansion coefficient ( $\times 10^{-6}/^{\circ}\text{C}$ )	5.6	2.8
Tensile elasticity (GPa)	75	86

## 1986

### Started immunological in vitro diagnostic reagent business

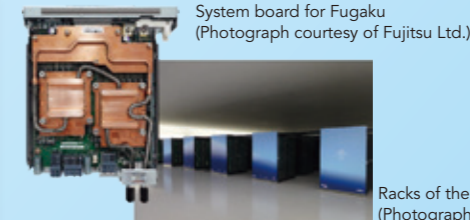
Immunological in vitro diagnostic reagents were seen as a means for enabling high-precision measurement. As their use began to become mainstream, we acquired International Immunology Corporation (IIC) of the U.S., an antiserum manufacturer and the predecessor of Nittobo America Inc. This move secured for us a supply of raw material antibodies, and its location in a hub of biotech companies and research institutes also enabled us to launch full-scale development of immunological in vitro diagnostic reagents.

## 1998

### Launched Special Glass NE-glass

NE-glass has low-dielectric properties that reduce transmission loss. It has been adopted for use in switches and routers in data centers and base stations that process huge volumes of data at high speed, and in antenna-in-package modules for 5G smartphones. We expect high demand for NE-glass as AI and other high-performance servers are made to increasingly low-loss specifications.

Number-One Technologies		
Reducing transmission loss with low-dielectric properties		
	E-glass	NE-glass
Dielectric constant (1 GHz)	6.8	4.8
Dielectric dissipation factor (1 GHz)	0.0035	0.0015



Racks of the supercomputer Fugaku (Photograph courtesy of RIKEN)

## 2018

### Launched IgG4 measuring reagent kit for use with automated analyzers

Launched a kit for detecting IgG4-related disease (a nationally designated intractable disease) using an automated analyzer



## 2021

### Newly established Special Glass yarn factory at NITTOBO ASIA Glass Fiber Co., Ltd. (Taiwan)

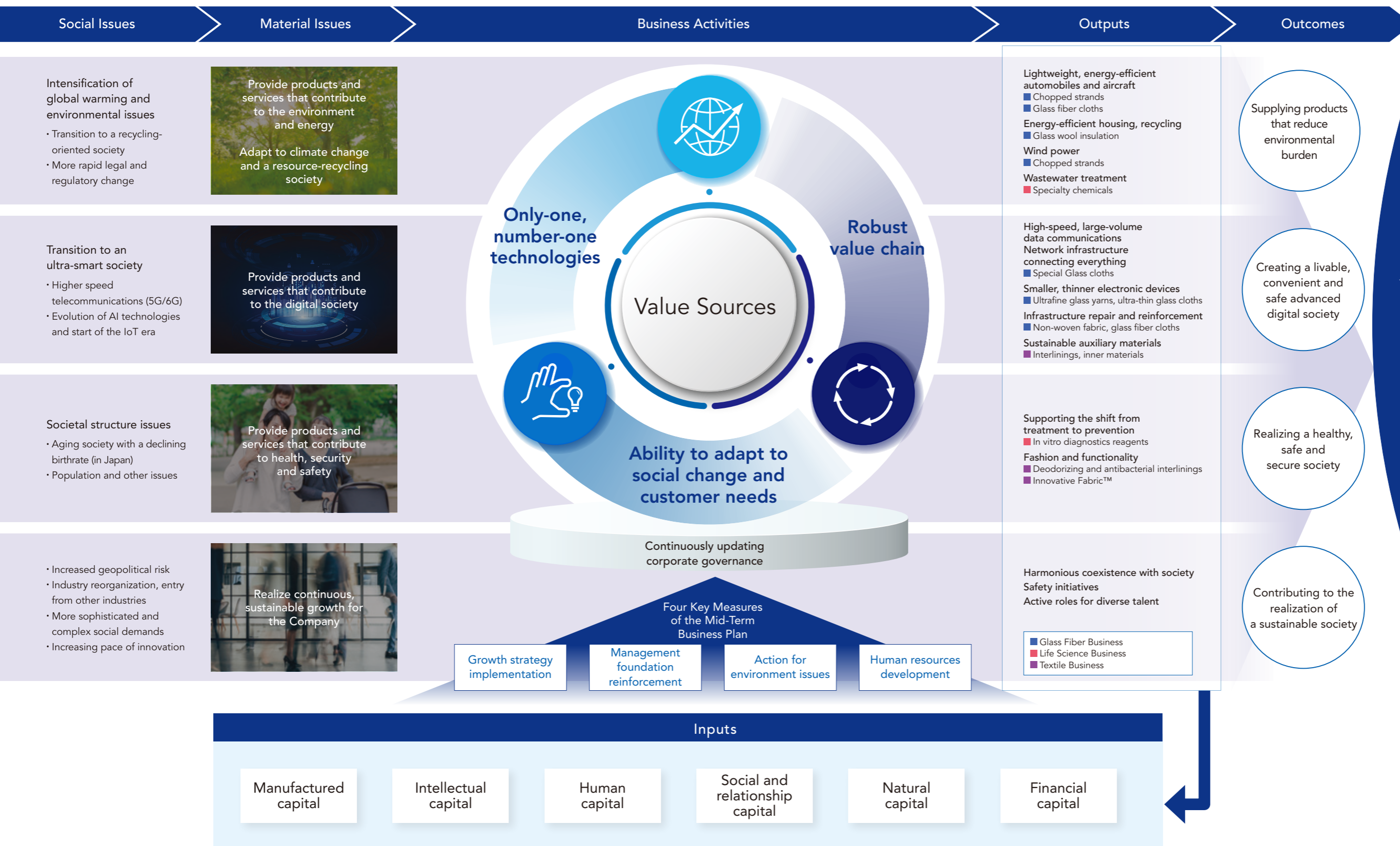
Established an integrated production system from Special Glass yarn to cloth on the main island of Taiwan



# Value Creation Process

## Corporate Philosophy

The Nittobo Group will enhance its value to society as a corporate group by helping to create healthy and more comfortable lifestyles, and in so doing continue contributing to the realization of a more prosperous world.



Nittobo Group's Vision for 2030  
Big VISION 2030

Global No.1 Niche Company



# Value Creation Drivers and Capital

The Nittobo Group's strengths, proven over its 100-year history, are the drivers of value creation that meets contemporary needs and stays abreast of environmental changes. As we continue to grow, we will create greater value by leveraging these strengths to resolve social issues.

## Value Sources

### Only-one, number-one technologies

Our consistent quality is supported by our ability to develop high-performance products, and the wealth of manufacturing technology and expertise we have amassed over many years.

- World-leading precision in glass fiber
- Special Glass made from proprietary compositions
- Adhesive interlinings that are among the world's thinnest

### Robust value chain

Through cooperation between development, manufacturing and sales departments, as well as an integrated production system incorporating upstream and downstream processes, we maintain a stable supply of high-performance, high-quality products.

- Glass fiber: Composition research ⇒ Spinning processes ⇒ Weaving processes ⇒ Interface treatment
- Life science: Antigens/Antibodies ⇒ Antisera ⇒ In vitro diagnostic reagents
- Textile: Dyeing process ⇒ Coating technology development ⇒ Adhesion processes

### Ability to adapt to social changes and customer needs

We are committed to providing products and services that contribute in the areas of Environment & Energy, Digital Society, and Health, Security & Safety. Paying close attention to feedback from the market, we harness our proprietary technological capabilities to provide products tailored to market needs.

## Forms of Capital at the Nittobo Group (FY2022)

### Manufactured Capital

A safe and secure production system for high-value-added products

Through bold capital investment we have established a supply system capable of meeting growing demand for Special Glass in the Glass Fiber Business and for in vitro diagnostic reagents in the Life Science Business. We held back on major capital investment projects in FY2022, but we will continue to keep a close eye on demand and make focused investments in strategic businesses.

Capital expenditure  
**JPY 5.9 billion**

### Intellectual Capital

Technical capabilities that create global No. 1 niche businesses

Ever eager for a challenge and inspired by our motto, "Let's turn anything into fibers," our high-level R&D consistently leads to numerous firsts, both in Japan and in the world. Based on our wealth of technologies, we have led the industry in the development and mass production of next-generation products.

R&D expenses **JPY 3.0 billion**  
Patents held **697**

### Human Capital

Human resources that innovate to meet new needs

We are committed to fostering a culture where the skills and approaches of individual employees are valued and that inspires them to freely share and discuss their ideas, ultimately achieving greater results through teamwork. We are working to enhance employee engagement, promote digital transformation, develop global human resources, and create an environment conducive to an appropriate work-life balance.

Employees **2,631**

### Social and Relationship Capital

Strong relationships rooted in the front lines

The Nittobo Group was founded in Fukushima. We maintain multiple factories there, as well as the Research & Development Headquarters, and have production sites throughout Japan. We cherish our ties with each local community as we go about supplying products and services. Furthermore, we are expanding our production system to better meet customers' needs, with a glass fiber facility in Taiwan and an in vitro diagnostic reagents facility in the U.S.

- Excellent relationships with customers and suppliers
- Strong sense of stakeholder trust

### Natural Capital

Reducing environmental impact to help create a sustainable society

Our production processes require substantial amounts of fuel and electricity. In keeping with our responsibility as a manufacturer, we not only strive to reduce CO<sub>2</sub> emissions as a means of reducing impact, such as by using renewable energy, but also leverage our products and technologies to help resolve the world's environmental issues.

Energy input  
**6,200,000 GJ**

### Financial Capital

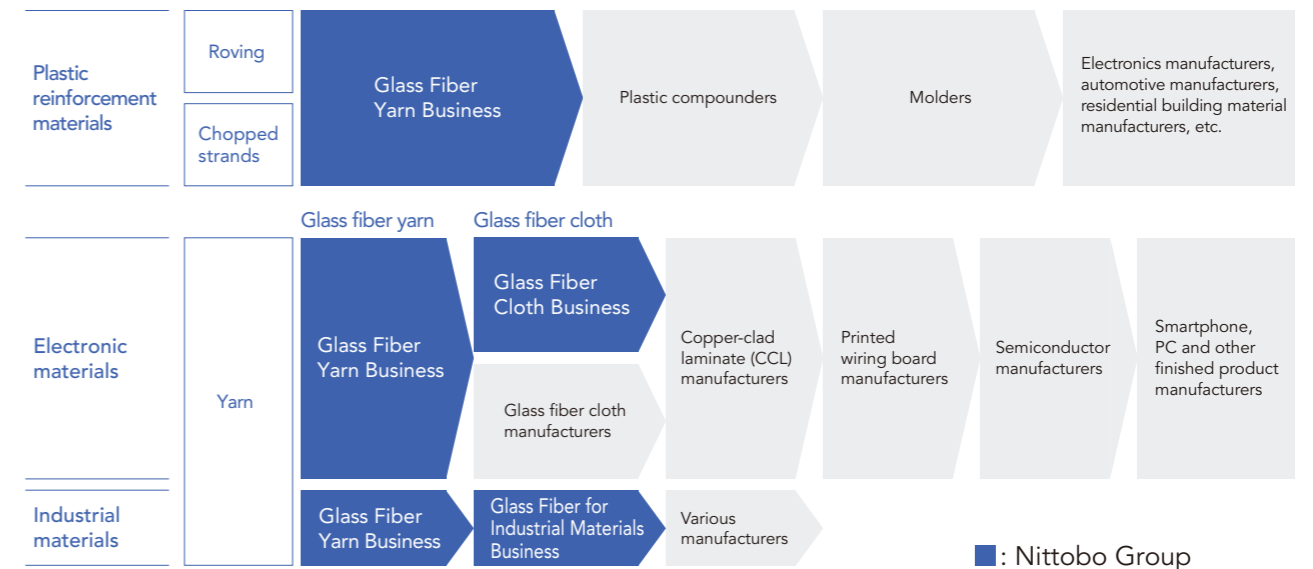
Finance management underpinning our growth strategy and healthy financial position

While pursuing growth-oriented strategies such as making the necessary investments for growth and next-generation product development, we are also undertaking structural reforms to reinforce our management foundation and downsizing non-core assets such as idle landholdings so as to maintain a healthy financial position, thereby ensuring our growth is sustainable.

Net interest-bearing debt **JPY 24.5 billion**  
Net assets **JPY 108.9 billion**

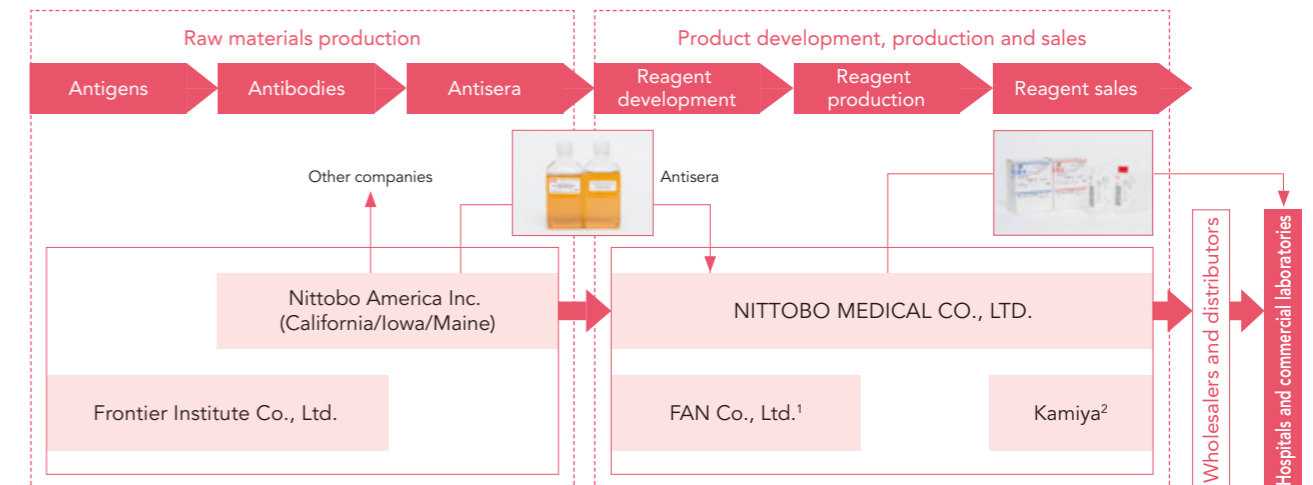
## Creating Value in the Supply Chain

### Glass Fiber Business



### Life Science Business

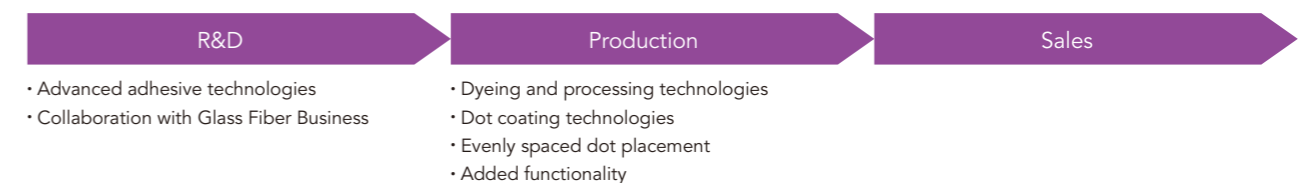
#### In Vitro Diagnostic Reagents



1. Joint venture with Fujikura Kasei Co., Ltd.  
2. Kamiya Biomedical Company, LLC

### Textile Business

#### Interlinings



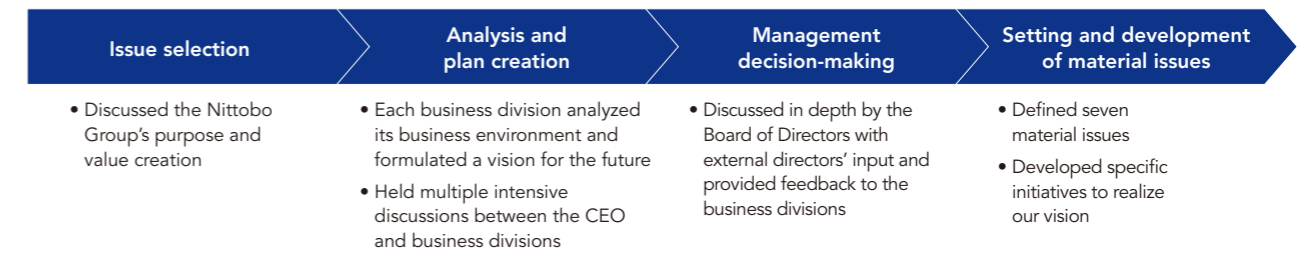


# Nittobo Group's Material Issues

In order for the Nittobo Group to enhance its social value and continue contributing to the realization of a more prosperous world, we have identified material issues as important management tasks that will contribute to resolving social issues.

We have defined seven material issues by applying the perspectives of strategic CSR, which leverages the strengths of the Nittobo Group, to contribute through business activities, and of basic CSR, which focuses on ESG matters to build a foundation for sustainable growth.

## Material Issues Identification Process



Social Issues	Nittobo Group's Material Issues	Risks	Opportunities	Key Measures	Relevant SDGs
<b>Intensification of global warming and environmental issues</b> <ul style="list-style-type: none"> <li>Transition to a recycling-oriented society</li> <li>More rapid legal and regulatory change</li> </ul>	<b>Provide products and services that contribute to the environment and energy</b>	<ul style="list-style-type: none"> <li>Increase in environmental costs</li> <li>Restrictions on business due to environmental regulations</li> </ul>	<ul style="list-style-type: none"> <li>Increasing demand for sustainable products</li> <li>Expanding demand for composite materials to meet the needs of lightweight automobiles and aircraft</li> </ul>	<ul style="list-style-type: none"> <li>Develop new environmentally responsible products</li> </ul>	
	<b>Adapt to climate change and a resource-recycling society</b>	<ul style="list-style-type: none"> <li>Exclusion of products and companies that are not environmentally responsible</li> </ul>	<ul style="list-style-type: none"> <li>Increasing demand for insulation materials due to stricter energy conservation regulations</li> </ul>	<ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions</li> <li>Implement recycling and reuse</li> </ul>	
<b>Transition to an ultra-smart society</b> <ul style="list-style-type: none"> <li>Higher speed telecommunications (5G/6G)</li> <li>Evolution of AI technologies and start of the IoT era</li> </ul>	<b>Provide products and services that contribute to the digital society</b>	<ul style="list-style-type: none"> <li>Decline in technological superiority</li> <li>Replacement by other materials</li> <li>Speed of technological development in the electronic materials industry</li> </ul>	<ul style="list-style-type: none"> <li>Increasing demand for devices that require high-speed, high-capacity processing</li> <li>Utilization of the production system in Japan and in Taiwan, where electronic materials are concentrated</li> <li>Opportunities to expand sales and develop next-generation products through first-mover advantage</li> </ul>	<ul style="list-style-type: none"> <li>Grow profits through Special Glass</li> <li>Strengthen development capabilities for new products</li> <li>Strengthen solution capabilities to increase value for customers</li> </ul>	
<b>Societal structure issues</b> <ul style="list-style-type: none"> <li>Aging society with a declining birthrate (in Japan)</li> <li>Population and other issues</li> </ul>	<b>Provide products and services that contribute to health, security and safety</b>	<ul style="list-style-type: none"> <li>Shrinking domestic market due to declining birthrate</li> <li>Business continuity risks specific to biologically derived materials</li> <li>Replacement by other diagnostic reagents</li> </ul>	<ul style="list-style-type: none"> <li>Global shift from treatment to prevention due to increased awareness</li> <li>Expanding demand for diagnostic reagents in Asia due to population growth and rising income levels</li> <li>Utilization of three raw material production bases in the U.S.</li> <li>Utilization of the value chain from upstream (antigens, antibodies, raw materials) to downstream (product manufacturing and sales)</li> </ul>	<ul style="list-style-type: none"> <li>Expand sales channels in the field of in vitro diagnostic reagents</li> <li>Strengthen development capabilities for new products</li> <li>Strengthen solution capabilities to increase value for customers</li> </ul>	
<ul style="list-style-type: none"> <li>Increased geopolitical risk</li> <li>Industry reorganization, entry from other industries</li> <li>More sophisticated and complex social demands</li> <li>Increasing pace of innovation</li> </ul>	<b>Realize continuous, sustainable growth for the Company</b>				
	<b>Management foundation reinforcement</b>	<ul style="list-style-type: none"> <li>Diversification of factors causing changes in the socioeconomic environment</li> <li>Price fluctuations of fuels, raw materials and other commodities</li> <li>Impact of geopolitics and human rights issues, etc. on the supply chain</li> </ul>	<ul style="list-style-type: none"> <li>Selection and concentration</li> <li>Capture growth opportunities through innovative technology development</li> </ul>	<ul style="list-style-type: none"> <li>Pursue lean management that is not substantially affected by economic fluctuations</li> <li>Optimize business portfolio and review unprofitable businesses</li> <li>Transform technology development and production technology through the introduction of IT and digital transformation</li> <li>Maintain sustainability in procurement and the supply chain</li> </ul>	
	<b>Human resources development</b>	<ul style="list-style-type: none"> <li>Decline in workforce due to low birthrate and aging population</li> <li>Intensifying competition to recruit young and specialized human resources</li> </ul>	<ul style="list-style-type: none"> <li>Increasing diversity</li> <li>Increasing mobility in the labor market</li> <li>Innovation expected through human resource development</li> </ul>	<ul style="list-style-type: none"> <li>Foster human resources that generate innovation</li> <li>Implement diversity and inclusion measures</li> <li>Conduct workstyle reform and business reform</li> <li>Improve employee engagement</li> </ul>	
<b>Continuously updating corporate governance</b>	<ul style="list-style-type: none"> <li>Expanding and refining CSR scope</li> <li>Compliance and security in a remote environment</li> </ul>	<ul style="list-style-type: none"> <li>Permeation of corporate philosophy</li> <li>Strengthening the corporate foundation by gaining trust from society</li> </ul>	<ul style="list-style-type: none"> <li>Continuously update corporate governance</li> <li>Thoroughly implement corporate ethics and compliance</li> </ul>		



# Big VISION 2030 and Mid-Term Business Plan Progress and Outcomes

Nittobo celebrated its 100th anniversary on April 1, 2023. In order for the Nitto Group to achieve steady growth in a rapidly changing environment and its aim for sustainable growth over the next 100 years, we need to consider the discrete three-year period of the Mid-Term Business Plan while also addressing social issues based on changes we foresee in the environment, society and economy over the next 10 years. Big VISION 2030 is the Nitto Group's roadmap to being the "Best Partner" for society in 2030.

We will help to realize a sustainable society through our contributions in the three areas of Environment & Energy, Digital Society, and Health, Security & Safety, where the Nitto Group can leverage its strengths as a global No. 1 niche company.

## Nitto Group's Vision Big VISION 2030

We aspire to be a company that gains the trust of all stakeholders  
in the pursuit of client satisfaction.

As a corporate group that continues to create global No. 1 niche businesses, we  
aspire to contribute in the areas of Environment & Energy, Digital Society, and  
Health, Security & Safety with the goal of building a more sustainable society.



Nittobo aims to be a global No. 1 niche company

World's number-one company  
with high sensitivity

Listen to, understand and flexibly  
serve markets

World's number-one company  
with high-value-added products

Refine proprietary technologies to provide  
products aligned with market needs

### Progress of Mid-Term Business Plan (FY2021–2023)

In order to realize Big VISION 2030, we formulated a three-year Mid-Term Business Plan that began in FY2021. Under the plan, we have been implementing four key measures.

#### Overview of Key Measures and Progress

Four Key Measures	Progress of Initiatives (FY2021–2022)
<b>Growth strategy implementation</b> Generate further business growth through high-value-added products	<ul style="list-style-type: none"> <li>Aggressive investment in growth areas               <ul style="list-style-type: none"> <li>Completed Special Glass factory in Taiwan</li> <li>Completed construction of a new plant for goat-derived antisera in California, U.S.A.</li> <li>Completed construction of a new plant for in vitro diagnostic reagents in Koriyama City, Fukushima Prefecture, Japan</li> </ul> </li> <li>Strengthened development of next-generation low-dielectric glass</li> <li>Established a new business promotion organization under the direct control of the CEO to nurture next-generation businesses</li> <li>Promoted customer solution activities and proposed products and services that meet customer needs</li> </ul>
<b>Management foundation reinforcement</b> Evolve into a lean business (ensure resilience)	<ul style="list-style-type: none"> <li>Reviewed business portfolio (sold beverage business)</li> <li>Structurally reformed Composite Materials Business and Textile Business</li> <li>Reduced assets (sold former golf driving range site)</li> <li>Strengthened cost competitiveness</li> <li>Established an organization to promote digital transformation (DX), and provide DX education for all junior engineers</li> </ul>
<b>Action for environment issues</b> Address environmental issues to help bring about a sustainable society	<ul style="list-style-type: none"> <li>Established the Sustainability Committee (to promote sustainability management; chaired by the CEO)</li> <li>30% reduction in CO<sub>2</sub> emissions in FY2030 (compared to FY2013)</li> <li>Set target of carbon neutrality by FY2050</li> <li>Endorsed recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)</li> <li>Examined and implemented specific measures to reduce CO<sub>2</sub> emissions               <ul style="list-style-type: none"> <li>Introduced internal carbon pricing</li> </ul> </li> <li>Promoted recycling and reuse and developed environmentally responsible products</li> </ul>
<b>Human resources development</b> Foster human resources, organizations and work environments that generate innovation	<ul style="list-style-type: none"> <li>Fostered human resources that generate innovation (next-generation leaders, global talent and professional talent)</li> <li>Implemented diversity and inclusion measures</li> <li>Conducted workstyle reform and business reform</li> <li>Improved employee engagement</li> </ul>

#### Financial Performance and Targets

	FY2021 (Actual)	FY2022 (Actual)	FY2023 (Mid-Term Business Plan Targets)
Net sales	JPY 84.1 billion	JPY 87.5 billion	JPY 100 billion
Operating profit	JPY 7.3 billion	JPY 4.9 billion	JPY 14 billion
EBITDA [EBITDA margin]	JPY 14.4 billion [17.1%]	JPY 13.1 billion [15.0%]	JPY 25 billion [25%]
ROE	6.4%	2.6%	10%
ROIC	3.3%	2.3%	6%
Equity ratio	56.5%	55.9%	55%
Debt-to-equity ratio	0.4	0.4	0.4

#### Future Initiatives

In FY2023, the final year of Mid-Term Business Plan (FY2021–2023), we will continue implementing the plan's four key measures in order to achieve our targets. At the same time, we will look ahead to Big VISION 2030 and the next 100 years in discussing the formulation of the next medium-term business plan.



# Message from the Executive Officer Responsible for the Corporate Management Division

**We will champion a corporate culture that is fearless in breaking the mold and taking on new challenges as we evolve into a lean business.**

## Hiroyuki Tada

Representative Senior Managing Executive Officer Responsible for the Corporate Management Division, General Manager of the Corporate Business Planning Division



## Passing On the Nittobo Culture to a New Generation

Much of my career at Nittobo has been in sales, and in my time I have also served as Manager of the Textile Division and Glass Fiber Division, and been responsible for branch offices and procurement departments. In my current role, I hope to use my experience to ensure the reality on the ground is reflected in the management of the Company.

To me, the defining trait of today's Nittobo Group is its earnest character backed by impressive frontline capabilities. Inspired by our slogan, "A company that always takes on new challenges," we hone those frontline capabilities as one of our foremost assets, and pass them on through each subsequent generation of employees. For Nittobo, 2023 is our centenary year. From the very start, we have always been pioneers, including being the first in Japan to produce staple fiber (synthetic fiber manufactured from pulp) on an industrial scale, and the first in the world to produce glass fiber on an industrial scale. However, amid changing times, we were forced to suspend new graduate hiring for a period, and stumbled in sufficiently passing on the pioneering culture of our forebears. Management must take responsibility for rectifying this,

and it is incumbent on upper and middle management to lead by example.

Nittobo employees tend to work diligently, steadily, and with unwavering focus on the job at hand. I believe that these characteristics are the driving force behind our ability to consistently produce high-quality products, and I urge our people to keep seeking out challenges in the quest for results.

Once, we had a motto that embodied our commitment to that founding spirit: "Let's turn anything into fibers." Now, top management is leading a return to that mindset and the "third founding" of the Company, with a corporate culture that is fearless in breaking the mold and taking on new challenges.

## Progress in Evolving into a Lean Business, and Future Outlook

Since FY2021, we have been working to reinforce our management foundation, which is one of the four key measures in the Mid-Term Business Plan targeting innovation and the creation of new value. In doing so, we are accelerating our evolution into a lean business (ensuring resilience). Key tasks include optimizing our business

portfolio and reviewing unprofitable operations. In the Textile Business, structural reforms such as transferring the interlinings business to Nittobo Advantex Co., Ltd. improved profitability in FY2022. Meanwhile, selling off a golf driving range in Shizuoka Prefecture and Nitto Beverage Co., Ltd., which produces and markets soft drinks, has enabled us to focus our energies on a more streamlined business portfolio.

Moving forward, a major challenge will be to better tap into areas of compatibility between our businesses. Indeed, generating synergies between our core Glass Fiber and Medical Businesses is our most immediate task. Specifically, we are searching for potential combinations across our various businesses, including glass fiber yarn, glass fiber cloth, and glass fiber for industrial materials—in the Glass Fiber Business; medical (in vitro diagnostics reagents) and specialty chemicals—in the Life Science Business; and the operations of the Textile Business. Generating such synergies at an increased pace will require a change in the way the Nittobo Group approaches existing customers. For instance, referring the clients of one division to other divisions could spark new businesses. Our future success depends on getting closer to customers, identifying their true, undiscovered needs, and tuning our production and development systems accordingly.

Another Mid-Term Business Plan key measure is "foster human resources that generate innovation." At the beginning of the fiscal year, I published a message in the in-house newsletter exhorting our personnel to adopt an entrepreneurial mindset. My hope is that each person will develop an eye for things that they, their departments, and the Group as a whole might nurture into a new core business. I believe that the more of those people we have,

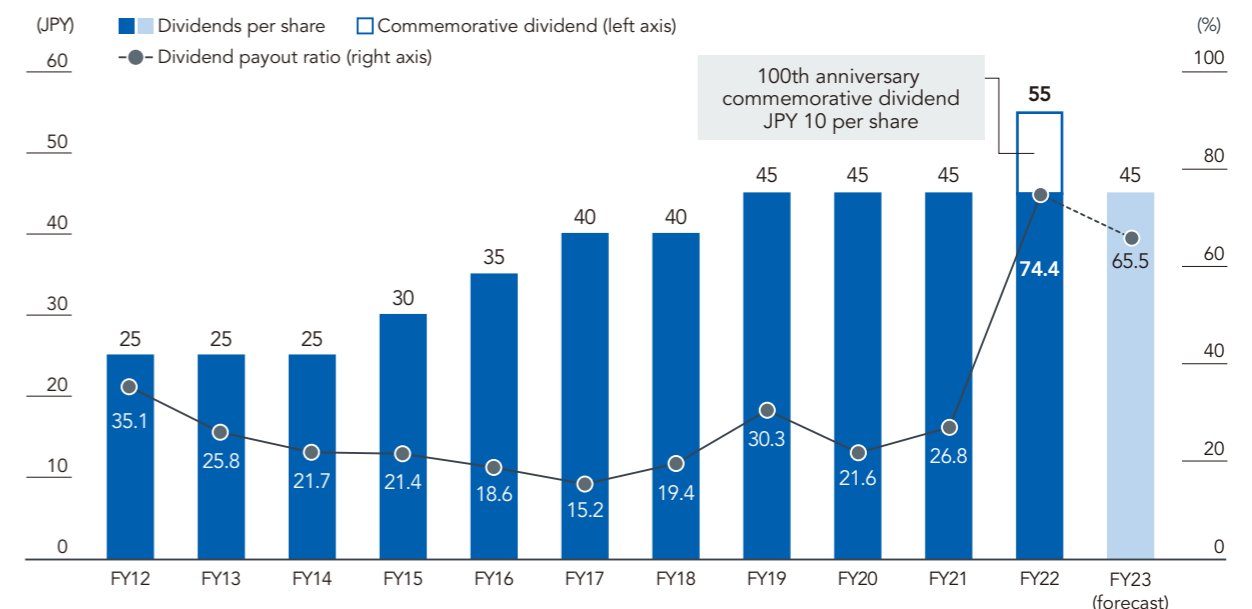
the more impressive will be our frontline capabilities. It is also vital that we strive to accommodate greater diversity. At a time when the difficulty of hiring and retaining talent makes strengthening our team extremely hard, empowering people to stay true to their unique values will better enable them to fulfill their potential.

## Financial Targets and Shareholder Return Policy

In terms of our finances, our primary aim is to steadily generate corporate value as we embark on a second century of business. Our assets have increased following capital investments in expanded production facilities to support future growth, but market growth has yet to catch up with us. Although this is to our near-term disadvantage, these investments are nonetheless strategically important. Moreover, due to factors including sudden changes in the business environment, other issues we face include profitability lagging behind the targets of the Mid-Term Business Plan ending FY2023 and a tight cash flow situation. Adopting ROIC as a management indicator is a task for the future; nevertheless, in the meantime we are focused on other means of improving capital efficiency, and the next medium-term business plan will emphasize effectiveness in that regard.

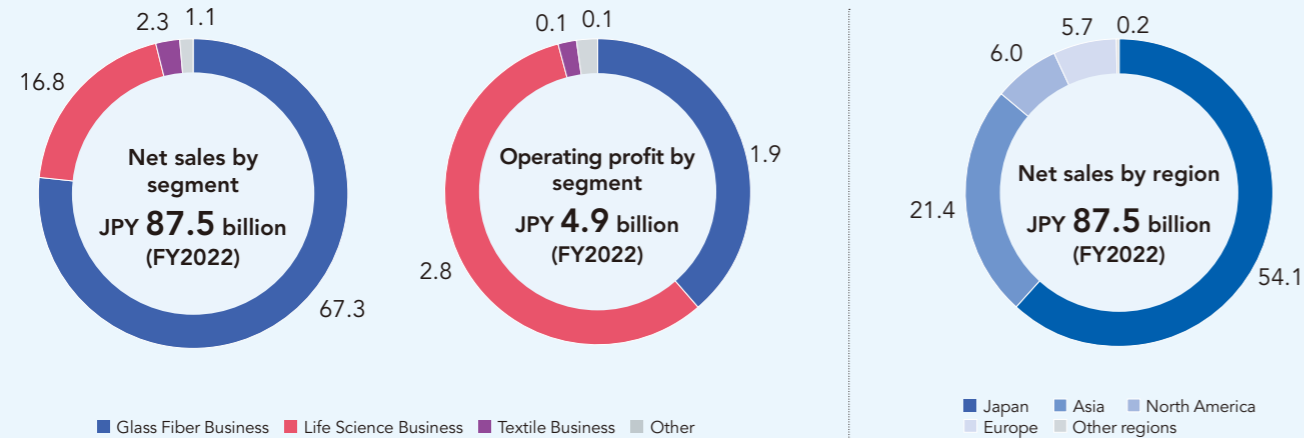
For shareholder returns, maintaining the dividend policy is a top management priority, and our basic policy is to ensure stable dividend growth over the medium to long term. At the end of FY2022, we issued a 100th anniversary commemorative dividend, resulting in a total dividend for the year of JPY 55.0 per share.

### ▼ Shareholder Returns





# Business Overview

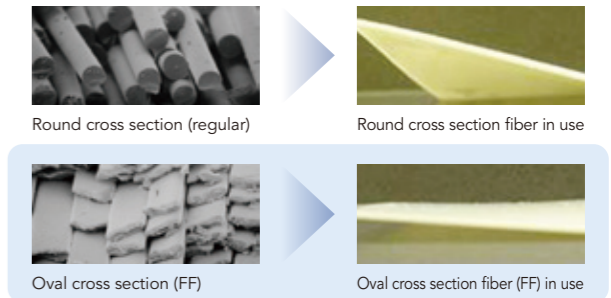


## Glass Fiber Yarn Business Modified Cross Section Chopped Strands: Flat Fiber (FF)

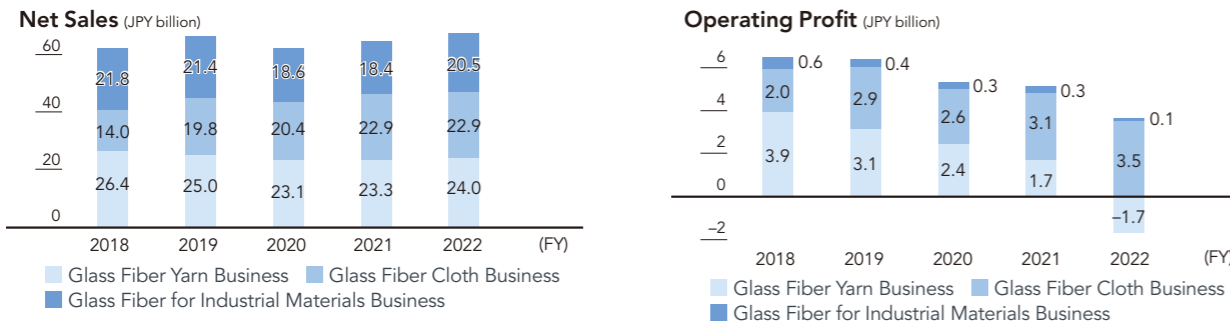
Nittobo's proprietary high-performance Flat Fiber (FF) has an oval cross section, and offers high strength and dimensional stability. Its applications include smartphone housings and automotive components.

Flat Fiber Characteristics	High flowability
High strength	Surface smoothness
Impact resistance	Dimensional stability

Warp Level Comparison for Composite Panels Made with Flat Fiber



## Glass Fiber Business See pages 28-29



Business	Main products	Characteristics	Product photograph	Main applications
Glass Fiber Yarn	Roving	Products consisting of strands of untwisted glass fiber		Plastic reinforcement materials Bathtubs
	Chopped strands	Products made by chopping glass fiber into fine pieces		Plastic reinforcement materials Smartphone bodies, automotive components
	Yarn	Products made of twisted glass fiber		Substrates for electrical insulation Reinforcement materials for industrial applications Glass fiber cloth Printed wiring boards
Glass Fiber Cloth	Glass fiber cloth	Products made by turning yarn into cloth		Substrates for electrical insulation Printed wiring boards, base stations, data centers, smartphones
Glass Fiber for Industrial Materials	Glass cloth	Products made by turning yarn into cloth		Reinforcement materials for industrial applications Anti-vibration materials, tent film, road reinforcement materials
	Glass wool	Products made by turning short glass fiber wool		Thermal insulation materials Residential buildings, non-residential buildings

## Glass Fiber Cloth Business Growing Utility of Special Glass for Semiconductors

Made using proprietary technology, Nittobo's Special Glass products such as low-dielectric NE-glass and low thermal expansion T-glass help meet the needs of high-speed telecommunications.

Steadily Expanding Applications, from Telecoms and Information Infrastructure, to Cutting-edge Devices and Automotive Applications, Centering on **Logic** and **Memory** Semiconductors

Application	Equipment/Parts	Substrate types	Material requirements	Glass fiber type		
				High-end	Mid-range	
Telecoms and information infrastructure	Processors Controllers	Semiconductor package substrates	CPU/GPUs	Low CTE	T	E
			NAND memory	Low CTE	T	E
			DDR memory	Low dielectric dissipation factor	NE	E
	Motherboards	Motherboard substrates	Low dielectric dissipation factor	NE / NE-R	E	
Edge computing	Processors	Semiconductor package substrates	APs/CPU	Low CTE	Ultra-thin T, T	Ultra-thin E
			Non-volatile memory	Low CTE	Ultra-thin T	Super ultra-thin E
			Volatile memory	Low CTE	Ultra-thin T (smartphones)	
			DDR memory	Low dielectric dissipation factor	NE (PC)	
	Motherboards	Motherboard substrates	Low dielectric dissipation factor	Ultra-thin NE	Ultra-thin E	
			Low dielectric dissipation factor	Ultra-thin NE	Ultra-thin E	
Desktop/Laptop PCs	Semiconductor package substrates	CPU/GPUs	Low CTE	T	E	
		DDR memory	Low dielectric dissipation factor	NE (PC)	E	
AR/VR Drones	Advanced system-on-chip ICs	Semiconductor package substrates	Low CTE	T	Super ultra-thin E	
		Semiconductor package substrates	Low CTE	T	E	
Automobiles	Electric vehicles, ADAS	Millimeter wave radar	Low dielectric dissipation factor	Ultra-thin NE	E	
		Module boards	Low dielectric dissipation factor	Ultra-thin NE	E	

## Glass Fiber for Industrial Materials Business Main Product Groups and Applications

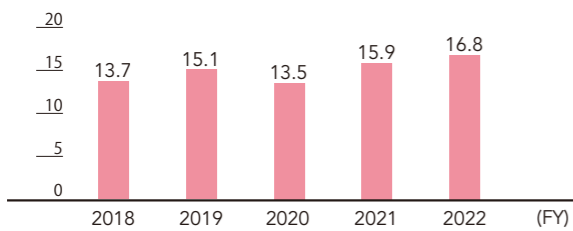
<b>Interior Furnishings</b>  Roll-up blinds • Light shades • Surface cloths • Insect screens • Roll-up blinds	<b>Exterior Furnishings</b>  Tent membranes • Tent membranes • Backlit signboards	<b>Automobiles and Aircraft</b>  Vibration-damping materials • Automobiles • Aircraft	<b>Construction</b>  Coating film waterproofing • Concrete corrosion-proofing • Reinforcement • External wall reinforcement • Coating film waterproofing	<b>Architectural Membranes</b>  Transcosmos Stadium Nagasaki The translucence of the material allows for streamlined designs that are difficult to achieve with molded products.
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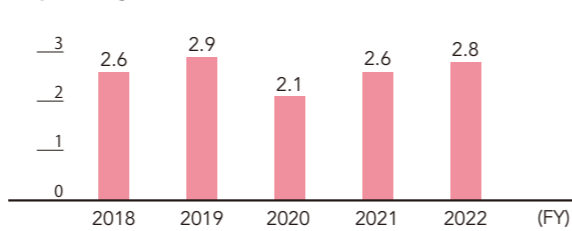
## Business Overview

### Life Science Business See pages 30-31

Net Sales (JPY billion)



Operating Profit (JPY billion)



#### In Vitro Diagnostic Reagents

Our in vitro diagnostic reagents are used in health checkups and at hospitals to test blood and urine and determine state of health. Establishing an integrated production system from raw materials to completed product has enabled us to offer a stable supply of high-quality in vitro diagnostic reagents.



In vitro diagnostic reagents

#### Main Products

Main test target	Test item	Main test target	Test item
Inflammation	CRP	Allergies	IgE
	IgG/IgA/IgM	Rheumatism	MMP-3
	C3/C4		RF
Diabetic renal disease	Urinary albumin	Streptococcal infection	ASO
Glomerular filtration rate	Cystatin C	Iron metabolism	Ferritin
Renal tubular disorder	$\beta$ 2 microglobulin	Osteoporosis	TRAP-5b
Nutritional status	PreALB/RBP/Tf	Breast cancer	CSLEX

#### Specialty Chemicals

In the Specialty Chemicals Business, the Group engages in the development and sale of proprietary functional polymers such as Poly-allylamine and the Polyamine Series. We research, develop, manufacture and sell proprietary products in categories with high barriers to entry and across a wide range of industry sectors, including toiletries, papermaking, metals, electronic materials and generic drugs.

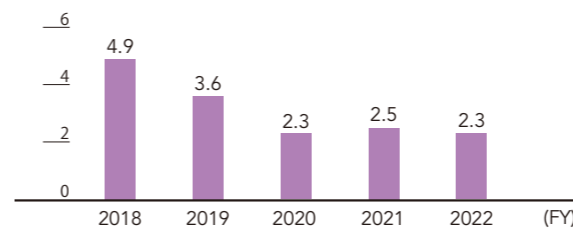


#### Major Product Groups and Applications

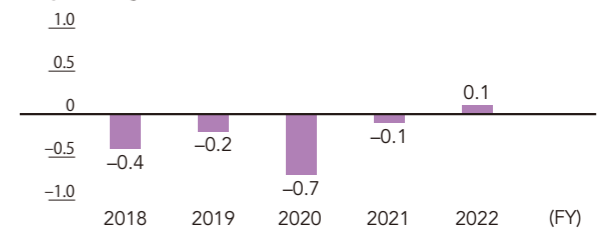
Auxiliary agents for metal processing	Surface-protective agent SSG™	Water treatment agents	Auxiliary agents for textile processing
<ul style="list-style-type: none"> <li>Electrolytic plating</li> <li>Acid corrosion inhibitors</li> <li>Metal processing cutting oil additives</li> </ul>	<ul style="list-style-type: none"> <li>Anti-fouling</li> <li>Anti-corrosion coating</li> <li>Solid natural wood protection</li> </ul>	<ul style="list-style-type: none"> <li>Wastewater treatment</li> <li>Metal scavengers</li> <li>Decoloring</li> </ul>	<ul style="list-style-type: none"> <li>Dye-fixing</li> <li>Friction fastness improvers</li> <li>Deep-coloring</li> </ul>

### Textile Business

Net Sales (JPY billion)



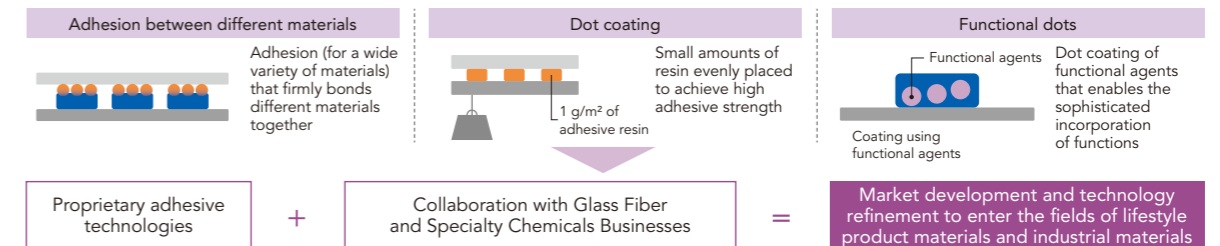
Operating Profit (JPY billion)



#### Interlinings

Interlinings are an auxiliary material used between the inner and outer fabrics of, for instance, shirts and blouses to help them retain and adjust shape. We have a large share of the Japanese market for interlinings for high-end ladieswear.

#### Features of Our Adhesive Technologies



#### Adhesive Interlinings



#### Innovative Fabric™



#### Nittobo Dishcloth™

Created through joint research with Kurashi-no-techo Co., Ltd., Nittobo Dishcloth™ is a long-selling product whose popularity stretches back to its launch more than 60 years ago.

LONG LIFE DESIGN





# Glass Fiber Business and Strategy



**We will create innovative solutions that meet customers' needs by enhancing our own strengths.**

**Hisanobu Hayashi**  
Managing Executive Officer  
General Manager of the Glass Fiber Division

<b>Strengths</b>	<ul style="list-style-type: none"> <li>Manufacturing technologies for producing the finest and thinnest glass fiber in the world</li> <li>Extensive lineup of glass fiber products suited for a wide range of usages, such as construction materials, fiber-reinforced plastics, and electrical insulating cloth for printed circuit boards, based on our own glass-composition technologies</li> <li>Developing new products constantly based on our own technology/product roadmap</li> </ul>
<b>Risks</b>	<ul style="list-style-type: none"> <li>Increasing competition in the global market</li> <li>Increasing diversification and complexity of customer needs</li> <li>Possibility of increased production costs due to external factors such as increasing raw material and fuel prices</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>Expanding demand for our Special Glass, which can support infrastructure for high-speed, high-capacity communications</li> <li>Increasing demand for our products that can be used in the AI-related market due to market expansion of AI-related businesses</li> </ul>

## Competitive Advantages of the Glass Fiber Business That Contribute to Creating "Global No. 1 Niche Businesses"

In order to create "global No. 1 niche businesses" consistently under its long-term vision, the Nittobo Group aspires to be the company which has "the highest sensitivity to customers' needs" and can supply "the highest value-added products in the world." The Glass Fiber Business is making a major contribution to achieving this vision. Outlined below are the strengths of each of our businesses.

### Glass Fiber for Electronic Materials

We believe that we have three major strengths in glass fiber for electronic materials: our competitive advantage in product quality, our ability to engage in technical discussions with customers based on our development roadmap, and steadily expanding our manufacturing capacity to ensure the stable supply of our products. In terms of the product quality of both the glass yarn and glass cloth provided by Nittobo, we are able to differentiate ourselves from other companies through our advanced technological capabilities.

In particular, our products for high-speed and high-capacity communications, which we call Special Glass, are essential

materials that have a strong competitive advantage, such as low dielectric constant (Dk)/dissipation factor (Df) and low coefficient of thermal expansion (CTE) characteristics.

Another strength is that, because we have both yarn and cloth operations, we can engage in technology discussions with our customers based on our own R&D roadmap and product plan, and when they offer us their feedback, we can steadily incorporate it into our development.

Lastly, in anticipation of increasing product demand due to the ongoing evolution of high-speed, high-capacity communications, we have been steadily expanding our manufacturing capacity. For instance, we made a Taiwanese cloth manufacturer a consolidated subsidiary in 2019, and also established our first-ever overseas production line for Special Glass yarn, in Taiwan in 2021.

### Glass Fiber for Industrial and Composite Materials

We also supply glass fiber products in a variety of other forms, not only for electronic materials but also for fiber-reinforced plastics and industrial materials.

Our strength in these two applications is our ability to provide a broad range of products suited to the usage of each customer, such as in smartphones, automobiles, aircraft, housing materials, and construction materials.

We have extensive knowledge regarding glass fibers

accumulated over many years, and furthermore we will continue to work closely with our customers to thoroughly understand their needs and provide "industrial solutions" to their problems. We seek to expand our business by proposing a more thorough lineup of glass fiber products than ever before.

## Achievements in FY2022 and Outlook for FY2023

Business was relatively robust in the first half of FY2022, especially in the glass fiber for electronic materials field, but the situation changed drastically around summer and demand started to stagnate. Increasing costs of raw materials and fuels also weighed heavily on the bottom line.

In the fourth quarter in particular, business conditions worsened for both electronic materials and automotive applications. Despite these difficulties, we have prepared extensively to expand our business when the market recovers with the cooperation of several of our customers.

In FY2023, we started out under difficult conditions. Although we initially hoped that the market would recover in the second half of the year, the current outlook for such a recovery is dim.

On a more positive note, in early spring there were signs of recovery in low-DK glass cloth (NE-glass) for certain models of data server. We have hope that this recovery trend will spread throughout the glass fiber business as a whole, especially in relation to our high-value-added products.

Our future strategy for electronic materials is to steadily develop new products in accordance with our development roadmap, and also to establish a sufficient supply system for making high-value-added glass. We intend to retain our position as world leader in the niche field of glass yarn and cloth for electronic materials.

We will refine our ability to make proposals and respond, thereby redoubling our efforts to provide industrial solutions for each customer through our glass fiber products. On the other hand, with regard to glass fiber for industrial and composite materials, we will respond more sensitively to customer needs and make suitable proposals. We will continue to provide "industrial solutions" for each customer with glass fiber products.

We also seek to generate more opportunities to reach new customers with whom we have not done business before, by participating in various exhibitions.

Communicating with new customers will enable us to discover

further possibilities and take on challenges with a view to the future as we seek to resolve customers' increasingly sophisticated and complex issues by using our technology and know-how. In addition, we have been receiving many inquiries about environmentally friendly products, and we recognize that their supply is an important issue to be resolved in the medium- to long-term. To that end, we will work more closely with the Research & Development Headquarters.

## Strengthening Internal Collaboration for Medium- to Long-term Growth; An Organization that Encourages Individual Challenges

In order to provide our customers with attractive products and solutions, we believe that it is important for sales, technology, and manufacturing to work together and continue to offer a variety of proposals to our customers. In April 2023, we adopted a new organizational structure to enable close collaboration between sales, technology, and manufacturing for each business.

By strengthening these collaborations, we hope to further deepen dialogue with our customers and speed up our business activities.

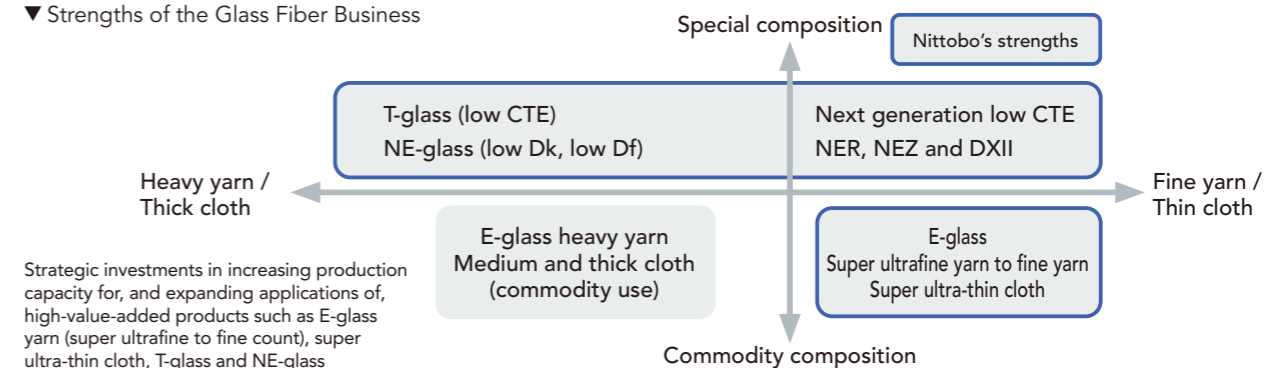
In addition, in order to achieve medium- to long-term growth, we believe it is important for each and every employee—particularly the younger generation—to grow significantly as individuals through various challenges.

We seek to understand as best we can the desires of individual employees to take on new challenges, and as a company as a whole, we have already started systematically implementing personnel rotation so that employees can gain various experiences while they are still young.

We will strive to create mechanisms and foster a culture that supports challenges, for instance by purposefully bringing together a diverse range of employees beyond the typical boundaries of occupational functions.

In addition, in order to foster such a culture, it is important for those of us at the management level to take the initiative and set an example as we take on challenges ourselves. I believe that if more employees are willing to take on challenges and strive to achieve goals, a new culture will be created and we will steadily move closer to being a global No. 1 niche company.

### ▼ Strengths of the Glass Fiber Business





# Life Science Business and Strategy



## We will ramp up the creation of customer value to become a global No. 1 niche company.

### Tatsuo Sakae

Managing Executive Officer  
General Manager of the Medical Business Division  
President and Representative Director of  
NITTOBO MEDICAL CO., LTD.  
Chairman and CEO of Nittobo America Inc.

#### Strengths

- A global value chain, from raw material production to marketing of reagents
- Solid presence in the market for in vitro diagnostic reagents for immunological plasma proteins

#### Risks

- Unforeseeable issues may hinder our ability to maintain stable quality
- Impact of global economic trends, trade and tax policies, and geopolitical factors

#### Opportunities

- Increased demand from overseas markets for in vitro diagnostic reagents
- Earning suppliers' trust creates opportunities for solution proposals

## A Global Value Chain Ensuring Stable Supply

The Nittobo Group's Life Science Business consists of the Medical Business, which handles in vitro diagnostic reagents, and the Specialty Chemicals Business, which develops and sells proprietary functional polymer compounds.

In the Medical Business, we have forged a solid presence and established a reputation as specialists in immunology for our reliable immunological in vitro diagnostic reagents. Our broad involvement in the value chain starting with upstream processes is a source of Nittobo's competitive advantage. We boast antigen and antibody R&D functions, and the raw materials (antisera) we produce in the U.S. are used to make reagents in Japan for sale to domestic and global markets. Hospitals and other medical service providers require supply stability above all else. Our reliable supply chain, spanning from raw material production to marketing, and our ability to stably provide high-quality products that overcome the high variance intrinsic to animal-derived raw materials, are therefore invaluable to

customers. Perhaps our greatest strength, however, is our robust sales network, which directs feedback from end users to the production and development departments.

Furthermore, we are focusing on the development of a global value chain that can meet growing customer needs. Specifically, we have expanded production facilities at NITTOBO MEDICAL CO., LTD. in Japan, where we develop, manufacture and market in vitro diagnostic reagents, and at Nittobo America Inc., where we develop, manufacture and market goat-derived antisera that are the raw materials for such reagents. The launch of Nittobo Medical's new plant in Koriyama City, Fukushima, in December 2021, and the completion of Nittobo America's new plant in California in October 2022 have significantly strengthened our global integrated production system.

In the Specialty Chemicals Business, we provide proprietary functional polymer compounds that are tailored to customers' needs and cater to a wide range of applications. We are proactively developing products that can contribute in the area of the environment and energy, such as thermal barrier coatings.

## Achievements in FY2022 and Medium- to Long-term Outlook

We have made solid progress toward the establishment of a global value chain that will enable us to be a global No. 1 niche company—one of the goals of Big VISION 2030. Not only has the new plant in California strengthened our production system, but the design of its working environment has helped increase employee motivation. The expansion of our production facilities will propel us to a new stage. In specific terms we will enhance global marketing, such as by leveraging our high share of the Japanese in vitro diagnostic reagents market into stronger sales overseas through Nittobo America. Moving forward, we will continue to hone our strengths and further cement our foothold in global markets and grow the business by strengthening partnerships with major global players, and by leveraging our presence in the Japanese in vitro diagnostic reagent market to expand into overseas markets.

## Medium- to Long-term Initiatives Aimed at Creating Customer Value

The global expansion of our business will require talent capable of communicating the strengths and features of our products to global markets, convincing customers that our products meet their needs, and demonstrating our cost competitiveness. There are of course cultural barriers to overcome, but gaining a foothold requires the mental fortitude to close challenging negotiations. Finding, retaining and developing the right people is no simple matter; moreover, the necessary skills are often only acquired through steady effort and experience. For the development of a globally capable workforce, we launched an overseas trainee dispatch program in FY2023, whereby employees based in

Japan can opt to spend a year working at our U.S. base.

Building a robust global production and sales structure will require more than just acquiring and training a globally capable workforce; it will also be imperative to improve communication among the Group's various business sites. To that end, we launched Weekly Global Meetings in 2023. In addition to dialogue among the top management of Group companies in Japan and the U.S., function-specific global meetings, including meetings devoted to sales, manufacturing, quality control, R&D, and administration, enable members to keep up to date with each other and discuss action plans. Communication between business locations on either side of the Pacific can be challenging, but we believe that cross-regional cohesion within each function is the first step toward stronger global management.

Another measure to foster new talent is "Proposals for the Future," an event in which younger employees form teams to come up with ideas that may become future businesses that the Group may explore. In FY2023, we will formulate our next medium-term business plan. We are considering incorporating the best ideas that emerge from Proposals for the Future as part of the new plan.

As we pursue medium- to long-term growth through these and other initiatives, it is vital that we keep the creation of customer value in mind. In doing so, we need to take both a product-based approach (i.e., focusing on creating new forms of value to satisfy future customer needs) and, just as importantly, a market-oriented approach (i.e., focusing on satisfying current customer needs). Frank discussion among management and frontline personnel to identify what value to offer, as well as how to enhance value for customers over the medium to long term, will open the path to further value creation.

### ▼ Establishing a Global Integrated Production System

Far upstream	Upstream	Midstream	Downstream
<b>Strengthening of R&amp;D functions for antigens and antibodies</b>  Frontier Institute Co., Ltd. Ishikari City, Hokkaido (acquired in March 2019)  FAN Co., Ltd. Chiyoda-ku, Tokyo (joint venture established in April 2019)	<b>Expansion of antisera production as raw materials</b>  Capricorn Products, LLC* Maine, U.S.A. (acquired in June 2019)  Nittobo America Inc. California, U.S.A. (new plant completed in October 2022)  * Merged with Nittobo America Inc. in 2020	<b>Expansion of in vitro diagnostic reagent production sites</b>  NITTOBO MEDICAL CO., LTD. Koriyama City, Fukushima (new plant completed in December 2021)	<b>Access to global pharmaceutical regulatory clearance expertise and acquisition of sales networks</b>  Kamiya Biomedical Company, LLC Washington, U.S.A. (acquired in January 2019)

## Research & Development Headquarters



**At the core of the Nittobo Group's R&D, the Research & Development Headquarters will lead the quest for ongoing innovation.**

### Kazuhiko Igarashi

Director, Managing Executive Officer  
President of Research & Development Headquarters  
Head of Digital Transformation Strategy Office and Environment Technology Strategy Office  
Head of Fukuyama Enterprise Center

### Harnessing Our Technical Capabilities to Seed Future Innovation

Established in 2017 through the integration of the R&D departments of various organizations, the Research & Development Headquarters is at the core of the Nittobo Group's R&D. We strive to enhance technical and R&D capabilities in the Glass Fiber, Medical, and Textile Businesses. We also work to generate new forms of added value that increase the profitability of existing businesses and explore themes for development that will result in new businesses. In 2020, we unveiled our new NI-CoLabo facility, where researchers working in different business fields can pursue new possibilities together.

I was involved over many years in process development for glass fiber in the manufacturing division. Today glass fiber is a flagship product that embodies the Nittobo Group's aim to be a global No. 1 niche company, but this did not happen overnight. Our researchers discovered the potential of glass fiber with excellent electrical properties more than 20 years ago, but it has taken constant research over the years and the arrival of high-speed, high-capacity telecommunications for that potential to be fully realized. In terms of the overall glass fiber market, our market share may be modest, nevertheless we continue to leverage our only-one, number-one technological capabilities to develop high-quality products that satisfy customer requirements. Indeed, working closely with customers has enabled us to accumulate a truly diverse range of technological capabilities in fields other than glass fiber as well.

NI-CoLabo has only just begun cross-departmental R&D

in search of synergies between our businesses. A primary role of the Research & Development Headquarters is to combine a diverse range of existing technologies. Moreover, our junior researchers will be key to our future success. As such, my role as President of Research & Development Headquarters is to respect their desire to seek out and overcome challenges and to create an environment where they can apply their various skills to best effect.

### Sparking New Innovation in the Run-up to Big VISION 2030

Under Big VISION 2030, the Nittobo Group aspires to contribute in the areas of Environment & Energy, Digital Society, and Health, Safety & Security with the goal of building a more sustainable society. We will actively pursue R&D with a focus on these three themes.

#### Environment & Energy

Increased demand from society for environmental solutions has prompted us to make dramatic changes in our approach to manufacturing. In Special Glass, for instance, it is no longer enough to develop glass with the necessary electrical and mechanical properties; it is now increasingly important to enhance value for customers by reducing the carbon footprint and other forms of environmental impact in the development, production and sales processes. We have therefore formed a cross-organizational team, consisting of members from R&D, business planning, sales, customer solutions, and other departments, to discuss manufacturing issues with full consideration for environmental performance and energy consumption. In the supply chain, post-consumer

recycling is another important theme. We are looking into forming a consortium with waste collectors and local governments to promote recycling, but for the time being, we have begun manufacturing products using recyclable materials that we can collect ourselves.

#### Digital Society

Digitalization is another vital part of our R&D strategy. Our Special Glass products address the increasing need for materials that enable high-frequency, high-speed transmission, and we are committed to researching and developing next-generation glass materials, such as NE-glass with low dielectric properties and T-glass with low thermal expansion, that add new functions to complement those that customers demand. Moreover, the establishment of a Digital Transformation Strategy Office in the Research & Development Headquarters in April 2021 has added momentum to our efforts regarding process innovation. And in R&D, we have started incorporating materials informatics\* into our materials development processes, thus harnessing the power of digital technology for more efficient materials development.

\* Materials informatics is the application of the principles of informatics to materials science to improve the efficiency of materials development.

#### Health, Safety & Security

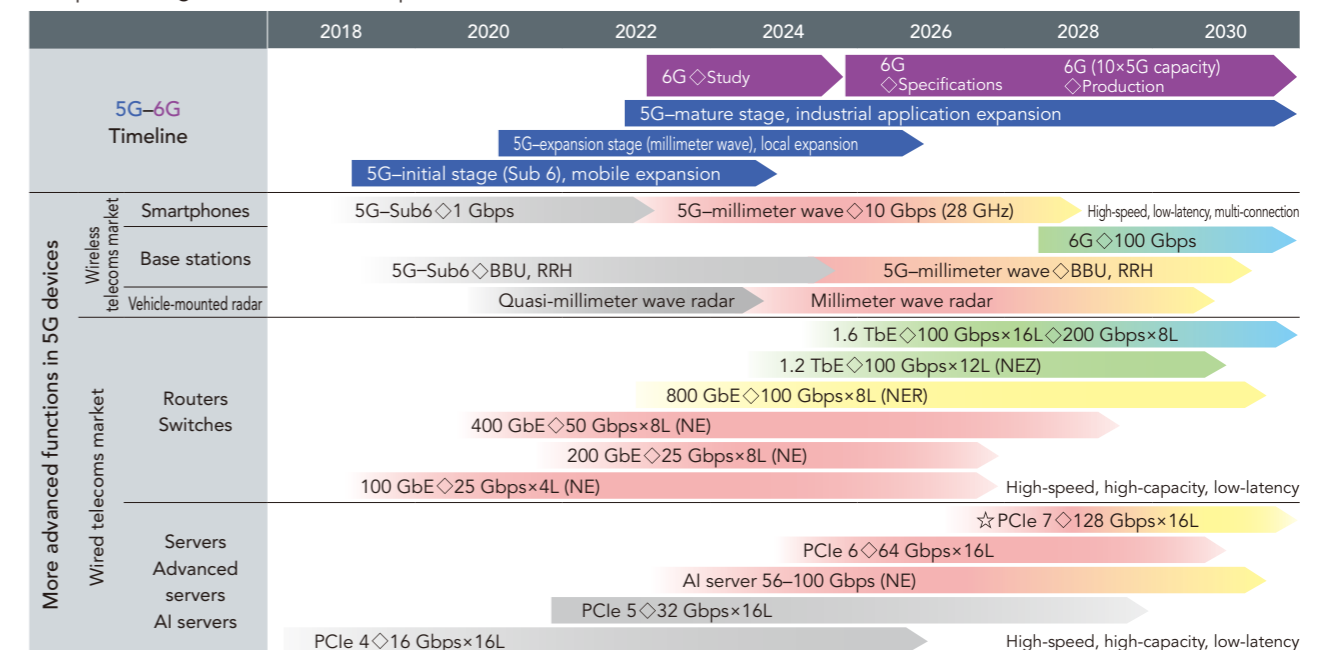
As well as development to enhance in vitro diagnostic reagents for immunological plasma proteins, we are conducting R&D in Japan and overseas to launch new high-value-added products, including through joint research with external research organizations. In Japan, for instance, we are enhancing

R&D functions and improving our development system for in vitro diagnostic reagents to ensure a stable supply of high-quality in vitro diagnostic reagents. Outside Japan, in 2022 we completed a new plant for goat-derived antisera at our California site, which increased our total production capacity.

### Identifying the Seeds of New Solutions to Customer Needs

A vital role of the Research & Development Headquarters is to apply our wealth of technical capabilities in the creation of new value. We do so by combining core technologies honed by our predecessors to generate synergies that become the seeds of new solutions to emerging customer needs. We aim to generate more such seeds through our ongoing R&D efforts. To that end, we are committed to the ongoing development of our research talent. In addition to providing researchers with more opportunities for direct dialogue with customers, we will also foster creativity, for instance with the 20% Rule, whereby researchers can allocate 20% of their capacity to discretionary research topics that interest them, separate from their assigned themes. Additional measures will include increasing contact with external academic and research institutions, talks by guest lecturers, and opportunities for overseas study. Through these measures, we hope to spark and sustain innovation at the Research & Development Headquarters.

#### ▼ Implementing the 5G-6G Roadmap



Development of low-dielectric, low-loss glass fiber by Nittobo

Low-loss NE Ultra-low-loss NER Next-generation super-low-loss I NEZ Next-generation super-low-loss II DXII

Note: Arrow color corresponds to Nittobo low-loss glass fiber materials that have been adopted or are expected to be adopted.

Source: Compiled by the Company with reference to Ministry of Internal Affairs and Communications materials

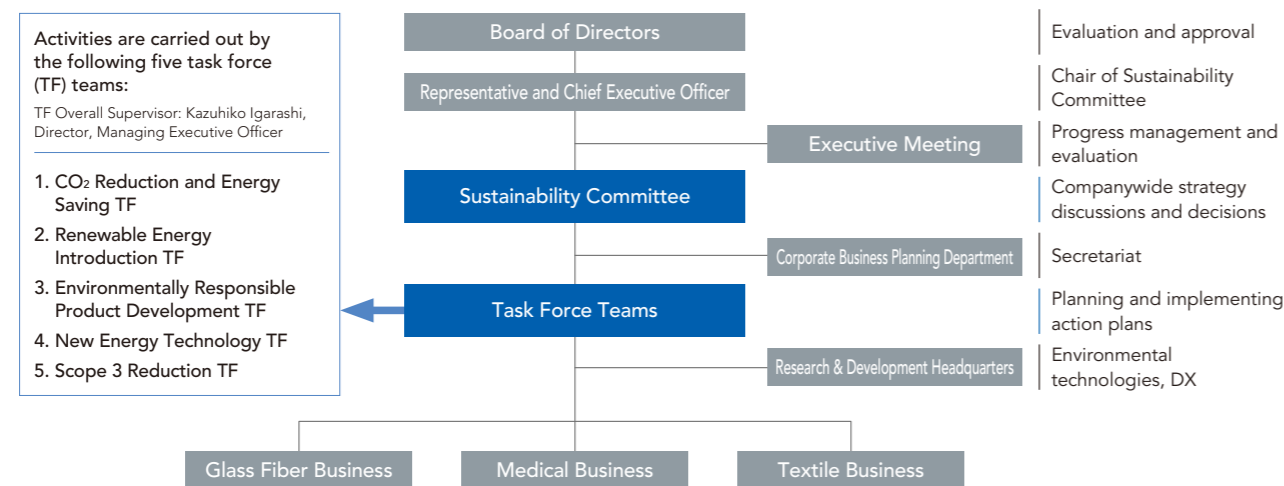


# Nittobo's Sustainability Management

The Nittobo Group is aware of its responsibilities as a corporate citizen, and addresses environmental, social, and governance (ESG) issues with the aim of "contributing to the realization of a more prosperous world," as set forth in its corporate philosophy. We contribute to society by creating value through our business activities, and we will continue to work on improvements that enhance corporate value and lead to sustainable growth.

## Sustainability Management Structure

The Sustainability Committee, established in April 2021, is chaired by the Representative and Chief Executive Officer and comprises the heads of business units, the President of the Research & Development Headquarters, the Executive Officer in charge of the Risk Management Department, the Executive Officer in charge of the Accounting & Finance Department, and the heads of major business locations. The Sustainability Committee meets quarterly, and important matters discussed and decided are reported to the Board of Directors for discussion and resolution.



## Sustainability Committee Agenda for FY2022

5th Meeting	6th Meeting	7th Meeting	8th Meeting
<ul style="list-style-type: none"> <li>Explanation of FY2022 TF initiatives and progress report</li> <li>Final confirmation and decision on risks and opportunities posed by climate change for disclosure at the time of endorsement of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)</li> </ul>	<ul style="list-style-type: none"> <li>Decision on policy for introduction of internal carbon pricing</li> <li>Decision on introduction of power purchase agreement (PPA) at Fukuyama Enterprise Center</li> </ul>	<ul style="list-style-type: none"> <li>Progress report on carbon-free (hydrogen) verification test</li> <li>Decision on signing up to Fukushima Prefecture Carbon Neutral Declaration (advanced edition)</li> </ul>	<ul style="list-style-type: none"> <li>Current state of sustainability and ESG activities and areas for improvement through collaboration with external consultancy company</li> <li>Decision on conducting supplier surveys</li> </ul>

### Items Discussed and Decisions Made at 1st through 4th Meetings of Sustainability Committee

- The Sustainability Committee was newly established in April 2021 to share the vision and issues that the Nittobo Group should aim for and to start specific actions.
- We revised our CO<sub>2</sub> emission reduction targets for FY2030, identified issues at our glass fiber production sites, and developed specific activities to reduce CO<sub>2</sub> emissions.
- We have endorsed the TCFD recommendations and examined the risks and opportunities posed by climate change in all of the Group's operations.

## Key Initiatives for FY2022 and Beyond

At the fourth meeting of the Sustainability Committee in FY2021, we discussed activity policies and key initiatives on the road to FY2030 and decided on specific actions, which we are now promoting.

- Energy efficiency**
  - Promotion of thorough energy-saving measures
    - Improve yield and productivity, strengthen technologies, consider introduction of high-efficiency combustion equipment, etc.
    - Expand measures pursued in the Glass Fiber Business to the entire Company as an all-employee initiative
- Electrification and switching to alternative fuels**
  - Electrification of gas furnaces and consideration of next-generation furnaces
    - Implement electrification and hybridization of gas furnaces
    - Conduct technical studies of new furnaces with a view to switching to alternative fuels
- Introduction of renewable energy**
  - Installation of solar power systems
    - Sign a PPA to install solar power generation system at Fukuyama Enterprise Center (the Nittobo factory with the largest site area)
    - Expand use of renewable energy
- Product development**
  - Development of environmentally responsible products
    - Further strengthen and digitalize product planning and development
    - Strengthen collaboration with customers to verify product performance

**Mindset reform**

- Foster understanding and awareness of sustainability activities
- Increase sensitivity for identifying business opportunities

**System creation**

- Promote energy-saving capital investment by introducing internal carbon pricing
- Engage in active external communication to enhance corporate value

**Collaboration and cooperation**

- Promote collaboration with local governments and other companies

## Basic Stance on Human Rights

The Nittobo Group recognizes the importance of international agreements such as the Universal Declaration of Human Rights, the United Nations Global Compact and the United Nations Guiding Principles on Business and Human Rights, endorses their principles, and works to ensure respect for human rights. We recognize our responsibility to respect human rights in all our business activities.

To this end, we require officers and employees to comply with international norms, local laws and regulations regarding respect for human rights in the countries and regions where we do business. They must also refrain

from any kind of harassment that violates rights, unfairly discriminates against any person in regard to gender, age, nationality, ethnicity, race, origin, religion, creed, social status, physical disability, sexual orientation or any other reason; or that gives offense to personal dignity.

In addition, we do not engage in child labor of children who are not of working age as defined by the laws and regulations of the countries and regions in which we operate, or forced labor. We provide appropriate training to all employees in order to ensure understanding of the above concepts.

### Respect for Human Rights

- Prohibition of discrimination and respect for diversity
- Prohibition of harassment
- Prohibition of child labor and forced labor
- Consideration for youth, seniors, and expectant mothers, and work-life balance

- Human resource development
- Wages and working hours
- Protection of the right to organize

See below for details.  
<https://www.nittobo.co.jp/eng/sustainability/pdf/SustainableProcurementPolicy.pdf>

# Environmental Initiatives

The Nittobo Group has set proactively addressing environmental issues as a provision in the Nittobo Behavior Program, which in conjunction with the Nittobo Environmental Charter and the Companywide Environmental Policy, provide the framework under which the Group strives for ongoing improvement. Furthermore, in accordance with Big VISION 2030, we are working to realize a sustainable society by developing products that reduce environmental impact and contribute in the areas of the environment and energy.

## Nittobo Environmental Charter

### Guiding Principle

In all our corporate activities and business development efforts, we, the Nittobo Group, will contribute to handing down the irreplaceable global environment to the next generation and ensuring sustainable development by providing eco-conscious products and services and taking the needs of the environment into consideration in our activities.

### Action Guidelines

#### ① Environmental protection

Aim at improving the environment continuously and coexisting with the local community by striving to reduce environmental impacts in a systematic way.

#### ② Environmentally conscious corporate activities

Take action in response to climate change, effectively use resources, reduce harmful substances, preserve biodiversity, and carry out other environmental conservation initiatives in all business domains in Japan and abroad.

#### ③ Compliance with environmental policy and voluntary management

Comply with laws, regulations, other requirements, and principles, stipulate voluntary environmental policies, management standards, and action plans, and work toward achieving them.

#### ④ Periodic audits

Conduct periodic environmental audits to verify the appropriateness of management standards and improve environmental and safety management to raise such standards.

#### ⑤ Training and education

Provide all employees with thorough environmental and safety training, maintain their environmental and safety awareness at high levels, and strive to hand down the global environment to posterity.

Established on October 1, 1998. Revised on April 1, 2023.

## Companywide Environmental Policy

### Contribution to the future of humankind and the global environment

We aim to reduce CO<sub>2</sub> emissions by rationalizing energy use and switching to low-carbon fuels.

### Ensuring people's health and the safety of local communities

We manage hazardous substances appropriately and strive to reduce their discharge into the environment.

### Toward a recycling-oriented society

We aim to achieve zero emissions through emission control and proactive adoption of recycled raw materials.

### Compliance with laws and regulations

We comply with environment-related laws and regulations and regional agreements, and work to totally eliminate environmental risk.

## Initiatives to Reduce CO<sub>2</sub> Emissions

When the Nittobo Group formulated Big VISION 2030 and the Mid-Term Business Plan (FY2021–2023), we set a total CO<sub>2</sub> emission reduction target of 8% (compared with FY2013). Since then, we decided to raise the target to 30% in light of the outcomes of COP26 (held in November 2021) and the Japanese government's new reduction target for

FY2030. The decision was based on discussions by the Sustainability Committee. In addition, we have set the new target of achieving carbon neutrality by FY2050, and are implementing initiatives to contribute to decarbonization throughout our supply chain.

## Installation of Solar Power System at Taiwan Factory

NITTOBO ASIA Glass Fiber Co., Ltd. (NAG), our production base in Taiwan, operates a Special Glass yarn factory that targets the growing demand for low-dielectric glass, which is used in data centers and other applications. As part of the Nittobo Group's introduction of renewable energy to reduce environmental impact, NAG is the second

Group company to install a solar power system (following the Naganuma Factory of Paramount Glass Manufacturing Co., Ltd., which manufactures thermal insulation materials).



## Setting and Operation of Internal Carbon Pricing System

In August 2022, we introduced our own internal carbon pricing (ICP) system.

We aim to accelerate measures to reduce CO<sub>2</sub> emissions by factoring in ICP when evaluating the benefits of capital investments.

Taking into account cost of renewable energy currently applied by electric power companies and the Company's current CO<sub>2</sub> emissions, etc., we have set the ICP at JPY

10,000 per ton of CO<sub>2</sub> emissions. This figure will be periodically reviewed when formulating medium-term business plans.

Examples of expenses to which ICP is applied are:

- Energy-saving measures for existing equipment
- Introduction or renewal of equipment to improve energy efficiency
- Introduction of renewable energy equipment
- Conversion of equipment to use low-carbon fuels

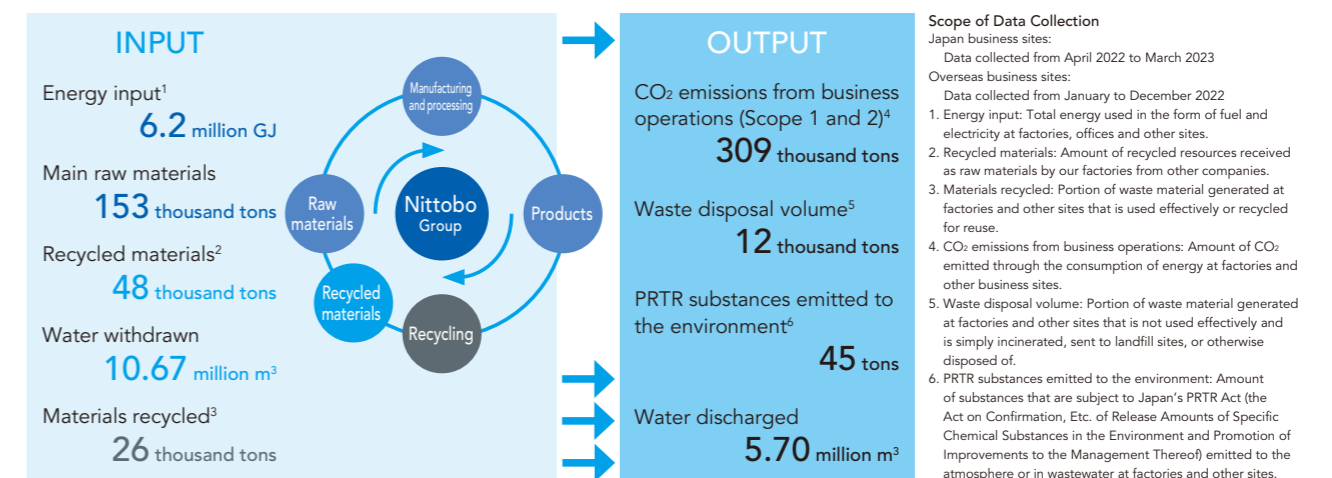
## Reducing the Nittobo Group's Environmental Impact

The Nittobo Group uses fuel and electricity in the manufacture of a wide range of products made from natural resources and chemical substances. As a result, the main environmental burdens include CO<sub>2</sub> from energy consumption, chemical materials that are emitted into

the environment as unrecoverable, and waste materials. The Nittobo Group takes responsibility for conserving the environment and strives to reduce its environmental impact through the rational use of resources.

### Results for FY2022

The Nittobo Group conducts an environmental conservation survey once a year among its global consolidated subsidiaries. At our glass fiber manufacturing sites, which account for the majority of the Group's CO<sub>2</sub> emissions, we conduct a monthly energy survey. The material balances shown in the diagram below are compiled from environmental impact data for the Nittobo Group's global consolidated companies.



## Development of New Environmentally Responsible Products

We will contribute to the reduction of environmental impact through our businesses by making full use of the Nittobo Group's technological capabilities and product knowledge.

### High-Performance Insulation

Paramount Glass Manufacturing Co., Ltd., a Nittobo Group company, manufactures and sells glass wool insulation used in homes and other buildings. Insulation is a material that contributes to energy saving by preventing outdoor heat and cold from flowing into rooms and by improving the effectiveness of indoor heating and cooling.

Japan's Act on the Improvement of Energy Consumption Performance of Buildings (Building Energy Efficiency Act) was enacted in 2015 to strengthen global warming countermeasures. It has since been revised with expanded and additional provisions. As of 2022, all new residential construction must conform to the highest conventional

insulation grade by 2025. Thus, there is an increasing need for insulation with improved performance, and even higher thermal insulation ratings are being established. In response, we have been developing high-performance insulation. While maintaining the inherent properties of glass wool insulation, namely fireproofing, high-durability, and low CO<sub>2</sub> emissions throughout the product lifecycle, we develop products with insulation performance superior to that of other materials that will meet the newly established high thermal insulation ratings. High-performance insulation can be expected to improve insulation performance by approximately 30% compared with conventional glass wool insulation.



## Environmental Initiatives

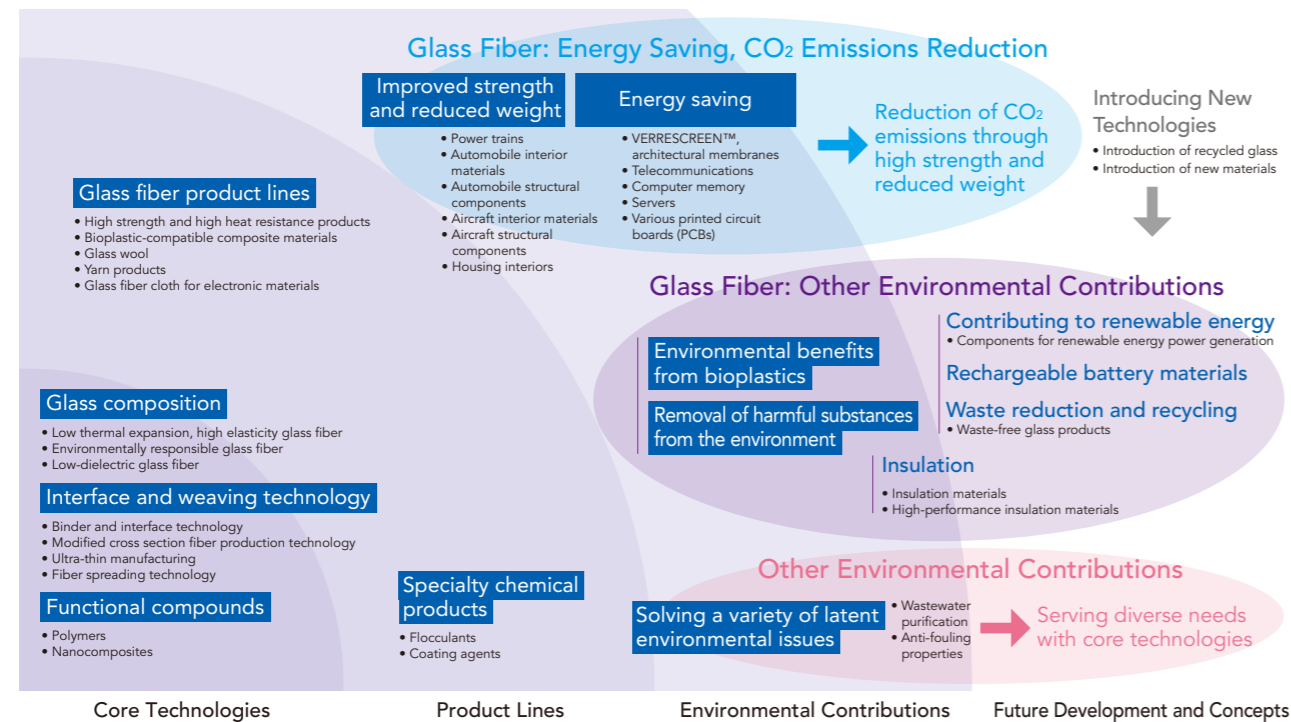
### Recycled Products in the Textile Business

As demand for recycled products increases in the textile industry, customers are increasingly calling for transparency and proof of safety in supply chains.

In August 2021, Nittobo Advantex Co., Ltd. (NAT) acquired the Recycled Claim Standard (RCS) certification from Control Union Certifications, an international certification body.

RCS is an international certification established to promote and inform the public about environmentally responsible textile materials. It is granted based on objective verification of traceability in the supply chain, from raw materials to finished products. With the acquisition of this certification, NAT has established a system to provide certified products and at the same time issue commercial transaction certificates on request from customers.

### Direction for Environmentally Responsible Product Development



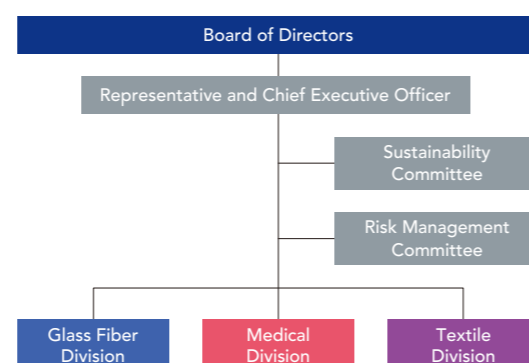
## Initiatives in Support of the TCFD Recommendations

In May 2022, the Nittobo Group endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). In line with the recommendations, the Nittobo Group will disclose material information on climate change as follows.



### Governance

The Sustainability Committee, chaired by the Representative and Chief Executive Officer, was established in April 2021 as a body to implement the Nittobo Group's initiatives to address climate change. The Sustainability Committee meets every quarter to plan and manage the progress of activities, such as gathering information on climate change issues, identifying possible risks, formulating countermeasures, and promoting internal training and awareness programs. Important matters discussed and decided by the Sustainability Committee are reported to the Board of Directors for deliberation as necessary.



### Strategy (Opportunities and Risks)

With regard to the impact of all of the Group operations on climate change, we conducted an analysis looking at 2030 and 2050 with reference to scenarios drawn up by specialized organizations such as the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA).

The risks posed by climate change can be divided into those associated with transitioning to a low-carbon society

(transition risks) and physical impacts (physical risks). For the two scenarios where the average global temperature rises either 1.5°C or 4°C above preindustrial levels, we identified items that are likely to have a high impact in terms of opportunities and risks. We will continue to review action plans as appropriate in response to changes in the external environment, and reflect such changes in our plans.

### Social Changes

1.5°C Scenario	
Policies and regulations	<ul style="list-style-type: none"> <li>Promotion and expansion of renewable energy</li> <li>Implementation of carbon taxes</li> <li>Stronger environmental regulations</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Switch to new energy sources</li> <li>Promotion and expansion of high-speed, high-capacity telecommunications</li> <li>Increased use of electric vehicles</li> </ul>
Market	<ul style="list-style-type: none"> <li>Transition to a decarbonized, recycling-oriented society</li> </ul>
Reputation	<ul style="list-style-type: none"> <li>Increased demand for environmental measures from customers and investors</li> </ul>

4°C Scenario	
	<ul style="list-style-type: none"> <li>Further rises in temperature</li> <li>Increased severity of disasters</li> </ul>

### Opportunities

2050	
1.5°C	<ul style="list-style-type: none"> <li>Market expansion (electric vehicles, telecommunications, renewable energy, etc.)</li> <li>Increased opportunities for existing products (thermal insulation, heat shielding, etc.)</li> <li>Increased demand for environmentally responsible products</li> </ul>
4°C	<ul style="list-style-type: none"> <li>Increased sales of products related to thermal insulation, heat shielding and national resilience</li> </ul>

### Risks

1.5°C	<ul style="list-style-type: none"> <li>Increased costs (energy, taxes, raw materials, equipment, etc.)</li> <li>Restricted sales activities due to tighter regulations</li> <li>Decreased sales due to alternative technologies and products</li> </ul>
4°C	<ul style="list-style-type: none"> <li>Increased procurement and operational risks, and restoration costs</li> </ul>

### Nittobo's Response

1.5°C	<ul style="list-style-type: none"> <li>Promote energy conservation, innovate processes and introduce new technologies</li> <li>Develop environmentally responsible products and raw materials</li> <li>Implement recycling</li> </ul>
4°C	<ul style="list-style-type: none"> <li>Strengthen BCP and supply chain</li> </ul>

See below for details of scenario analysis.  
[https://www.nittobo.co.jp/eng/sustainability/environment/climate\\_change.html](https://www.nittobo.co.jp/eng/sustainability/environment/climate_change.html)

### Risk Management

The Nittobo Group's Sustainability Committee and Risk Management Committee are responsible for the planning and progress management of CO<sub>2</sub> emission reduction across the Group.

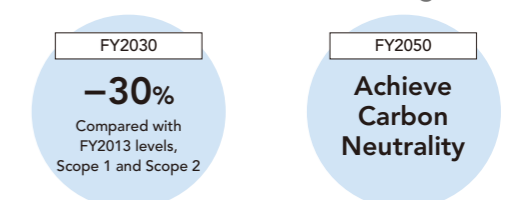
In order to identify and assess the impact of climate change on the Group's operations, we identify and analyze climate change opportunities and risks, discuss them in the Sustainability Committee, and consider countermeasures.

### Metrics and Targets

The Nittobo Group has identified "providing products and services that contribute to the environment and energy" and "adapting to climate change and a resource-recycling society" as material issues to address in the course of its business activities. We are working to reduce climate change-related environmental impact and prevent global warming by improving productivity, promoting energy-saving activities, efficiently using energy through recycling, and utilizing solar power generation. To achieve carbon neutrality by FY2050, we are promoting initiatives that

use various means to advance the decarbonization of our supply chain and, in turn, broader society.

### CO<sub>2</sub> Emission Reduction Targets



## Active Roles for Diverse Talent

To ensure the Nittobo Group remains the “Best Partner” for all stakeholders and continues to contribute to the realization of a more prosperous world, we believe it is important to value and harness the capabilities, thinking, and views of every employee in the Group. In line with that approach, the whole Nittobo Group strives to motivate all employees based on respect for different people, regardless of gender, age, SOGI,\* nationality, disabilities, or other individual identities. Bringing about such an environment and organizational culture will create diverse value and transform our business.

Based on the Nittobo Declaration, the Nittobo Behavior Program, and the Nittobo Code of Conduct, management and the Human Resources Department work together to actively identify and resolve any issues through direct dialogue with frontline sites and employee awareness surveys. As an indicator of progress in this regard, one of the targets of the Mid-Term Business Plan is to raise the employee engagement score.

\* SOGI: Sexual orientation and gender identity

### Diversity and Inclusion

Discussion by employees with different perspectives and personalities can lead to success in meeting diverse customer needs and providing peace of mind and confidence. Employees are the driving force that supports the Nittobo Group's sustained growth, and each member of our diverse workforce is a valuable asset. Nittobo considers it important to create an organization accepting of diversity—an organization in which all individuals can fully demonstrate their capabilities. One way of laying the foundation for such a diverse organization is to respect and promote diversity and inclusion.

#### Initiatives for Women's Advancement

Maintaining and promoting a workplace environment in which women play active roles is an important issue for the growth of all employees, regardless of gender. We actively promote the hiring of women, as shown by the ratio of women among new graduates we hire, which has recently been around 50% for office staff and 33% for technical staff. In addition, the ratio of female managers has been steadily increasing, reaching 5.0% in FY2022. We have set a target of 10% for the future, and we are systematically training and promoting the next generation of executives.

#### Initiatives to Support Balancing Childcare and Nursing Care

It is important to create an environment where employees can balance work with childcare and nursing care responsibilities, and continue to fulfill their potential. We are implementing measures to support this balance among diverse talent.

Specifically, we have a maternity/paternity leave system, childcare leave system, shorter working hours system, and nursing care leave systems. All eligible female employees take maternity leave and childcare leave, and many male employees take advantage of the paternity leave system when their partner gives birth. In addition, for employees working in the Tokyo metropolitan area, we offer the use of a nanny service to counter the problem of daycare waiting lists. We have also introduced a flexible working system for childcare, which can be combined with the shorter working hours system.

Most recently, in July 2021 we introduced a system that allows employees to take up to two weeks as paid

childcare leave of absence, as well as a system that allows childcare leave to be split across two periods. These efforts resulted in 47.1% of male employees taking paternity leave in FY2022. We will continue to enhance the system and further encourage male employees to take advantage of it.

#### Employment of People with Disabilities

It is increasingly important for companies to employ people with disabilities. The Company already meets the legally mandated employment rate of 2.3%. (As of June 1, 2023, the rate was 2.35%.)

As part of our efforts to employ more people with disabilities, we strive to ensure safe working environments at our factories. In 2018, we established a work support office at the Tokyo Headquarters, and we are promoting stable employment under the supervision and support of permanent employees.

#### Work after the Age of 60

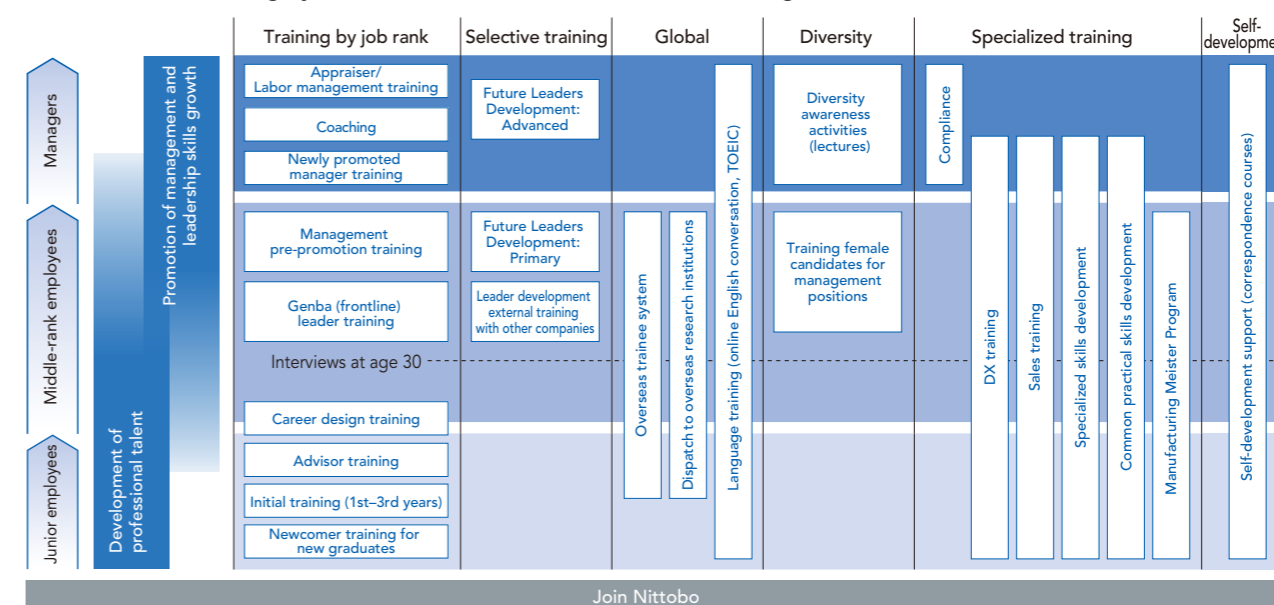
The decline of the working-age population is a major social issue in Japan, where the birthrate is declining and the population aging, and competition to secure talent is likely to become more intense. Against that backdrop, we will enhance programs and mechanisms that encourage employees to continue their careers at Nittobo for as long as possible. We are focusing particularly on enhancing HR programs and benefits, and developing a working environment to enable employees to continue working with high levels of motivation after the standard retirement age of 60. We will also implement initiatives so that throughout their careers employees can be glad they chose Nittobo.

### Human Resource Development

To utilize the maximum potential of the Company's diverse talent, we have been carefully implementing talent management tailored to each individual, including measures such as continuously improving both the personnel system to increase individual motivation and the training system to foster growth.

Under Big VISION 2030, we will develop next-generation leaders, global talent and professional talent. We will actively expand management measures to promote individual motivation, self-driven learning, and career development under the theme of fostering human resources that generate innovation, which is the foundation for business growth and driving reform. Moreover, to develop digitally capable personnel, we are conducting online digital transformation (DX) training for a broad range of participants, not just employees in technical roles.

#### Education and Training System: Investment in Education and Training Increased 1.5 Times from FY2020



#### Development of the Next Generation of Leaders

Conventional stratified training for personnel is provided for new graduate entrants, junior employees, and newly promoted management personnel, through to department and division managers. To complement this standard training, Nittobo launched its Successor Development Programs in FY2018. These programs are designed to match the growth stage of each employee, focusing on junior employees and middle-rank employees, in order to develop future leaders. The programs consist of intensive training for business skills and action learning based on practical issues that we need to resolve. The training in these programs promotes the development of employees' understanding of the role of senior managers and skills. In today's unprecedented management environment, developing talent who can transform business paradigms is indispensable to our business strategies. As such, Nittobo will systematically develop the leaders to drive our operations.

#### Development of Global Talent

To prepare for further globalization of the Company's business, it is essential that Nittobo fosters talent and creates a corporate culture that enables diverse individuals to fulfill their potential. We are enhancing mechanisms that support the self-directed efforts of individuals to become who they want to be, such as providing opportunities and systems

for employees to engage in online English classes, and to travel overseas to study foreign languages, participate in internships, work at international research institutes, or take MBA courses abroad. We are also launching an overseas trainee system that utilizes our overseas bases and will begin operation in FY2023.

#### Development of Professional Talent

On the path to becoming a manager, Nittobo employees pursue development as specialists (professionals) in areas of their choice and work to establish their core skills. We introduced the Meister Program in FY2018 at manufacturing sites and are systematically promoting skills transfer. For sales representatives and diagnostics medical representatives (DMRs), who have frequent contact with customers, we provide solutions-based training in solving problems facing customers and link this training to improvement of professional skills that enable these employees to further enhance customer satisfaction. We have significantly expanded our subsidy system for employees seeking to obtain nationally recognized qualifications necessary for work (including a congratulatory gift of up to JPY 500,000 upon successful acquisition), and provide subsidies for distance learning, including e-learning. We foster a culture of self-driven learning and provide a wide range of support for improving individual skills.

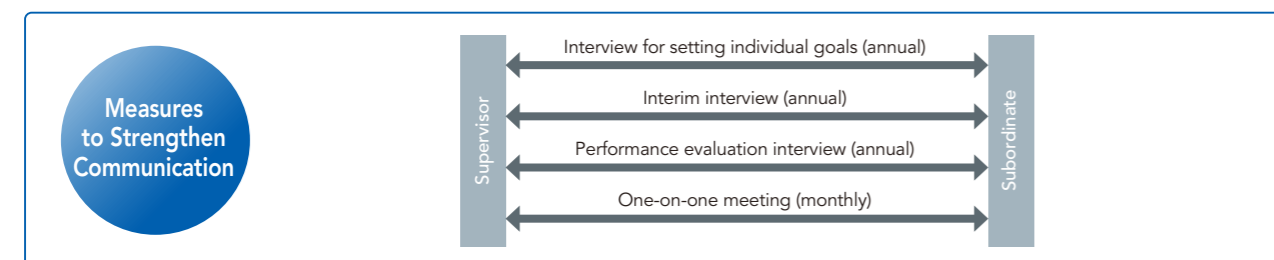
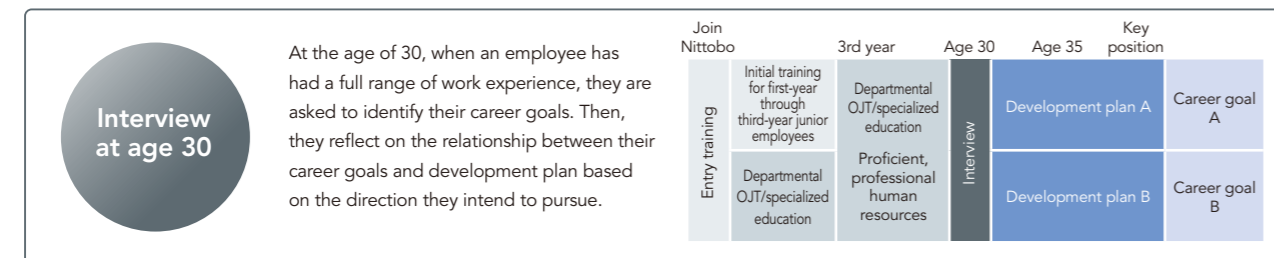


## Active Roles for Diverse Talent

### Expansion of Management Measures to Develop Human Resources

In addition to providing training courses, an important part of any human resources development policy is to encourage individuals to be motivated to learn, to carefully consider their career aspirations, and to implement development measures that align with their ideas and expectations. To this end, we have systematically implemented one-on-one meetings between superiors and subordinates as an important communication tool. In addition, we are implementing management measures to promote growth, such as by establishing the Human Resource Development

Committee, which includes supervisors, management, and representatives from the Human Resources Department. The committee discusses future training measures and career development for employees. We have also instituted interviews with employees at age 30, after they have experienced a range of assignments, to reflect on their careers and discuss future career development. In addition, we are in the process of expanding our management training (coaching, etc.) for managers who will be responsible for these activities.



Financial analysis training for third-year employees



In-house workshops

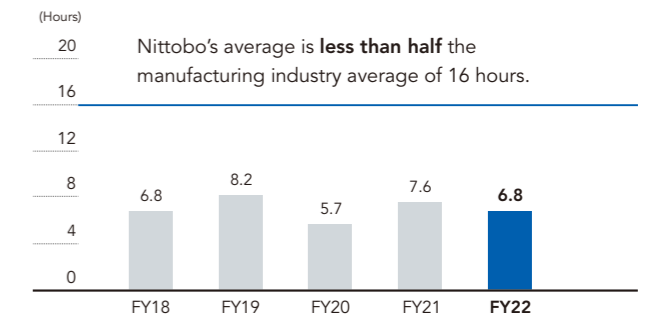
## Workstyle Reform and Health Management

### Promotion of Work-Life Balance

The average monthly overtime per employee at Nittobo in FY2022 was 6.8 hours, much lower than the manufacturing industry average. Furthermore, no employees exceeded the statutory limit on overtime hours. To provide employees with job satisfaction and enable them to demonstrate their best performance, while maintaining an appropriate work-life balance, we will continue to ensure a good working environment. Also, in Japan, which has a declining birthrate and aging population, it is important to provide a worker-friendly environment for employees who have childcare or nursing care responsibilities. We are enhancing programs that enable employees to flexibly accommodate these and other life events, such as an annual paid leave system and a flextime system that eliminates mandatory core hours. With work practices in general expected to undergo far-reaching changes, we aim to achieve a high level of both work-life balance and productivity improvements by reviewing regulations and systems, automating processes, formalizing

workflows, shifting to paperless operations and simplifying document approval processes. These innovations will promote the efficiency of back-office operations. Through these and other efforts, we will establish and improve new work styles.

Average Monthly Overtime Hours



### Health Management

Health in mind and body is the cornerstone of employee job satisfaction. In cooperation with the Nittobo Health Insurance Association, we strive to promote employee health by providing opportunities for physical and mental refreshment, such as free-of-charge use of a sports gym,

health checkups administered by post, and support for family recreation activities. We have also taken out comprehensive medical expense insurance to alleviate the expense burden on employees in the event of injury or sickness.

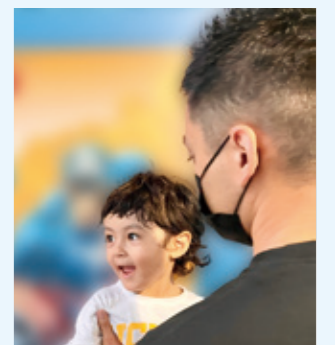
## Focus: Comment from an Employee

I joined Nittobo because I felt it was a company that understood my desire to take on multifaceted challenges beyond my graduate school research. As a new employee, I remember receiving a welcome message from the Company and being deeply impressed by the corporate culture of actively taking on the responsibility for fostering each individual.

My current workplace is a department with a relatively small number of people, where team members can count on the full support of their manager. It is a homey environment where we respect each other and it is easy to balance work life and private life. The atmosphere also makes it is easy to take paid leave, and in the future I would like to use the childcare support system to spend valuable time with my family.

Regarding diversity, I feel that the environment is increasingly inclusive and steadily changing toward being accepting of a wider range of diversity. I believe that being surrounded by people with various fields of expertise increases diversity and expands the scope of discussions. I myself strive every day to be a positive influence on other employees.

Recently, I have begun studying for the future, including relevant economic topics, so I can consider matters from a greater variety of viewpoints. Aside from research tasks, I find the daily experience of interacting with customers to be stimulating. By studying economics fundamentals, trends, and market movements, I will be better able to help customers and broaden my knowledge, which I hope will in turn lead to future career and personal growth.



**Yikelamu Alifu**

Scientific & Technical Affairs Department  
NITTOBO MEDICAL CO., LTD.

# Safety Initiatives

The Nittobo Group established Action Guidelines for safety and health in 2017, and is enhancing measures to ensure a safe and comfortable working environment that protects the physical and mental health of its employees, who are the driving force for the Group's business activities.

## Action Guidelines

### 1 Establishment of a Safe Working Environment

Perform risk assessments to minimize or eliminate hazardous and harmful factors and invest the necessary management resources to maintain and improve safe and healthy working environments.

### 2 Promotion of Health Maintenance

Proactively assist in the maintenance and promotion of the health of employees both mentally and physically by establishing a pleasant workplace in which they can freely and willingly share and discuss their opinions, and by preventing harassment and the assignment of excessive workloads.

### 3 Compliance with and Management of Labor Policies

Comply with laws, regulations and other standards regarding safety and health, and set and implement internal safety policies and standards.

### 4 Implementation of Regular Assessments

Verify, implement and enhance safety and health management systems through regular safety and health assessments.

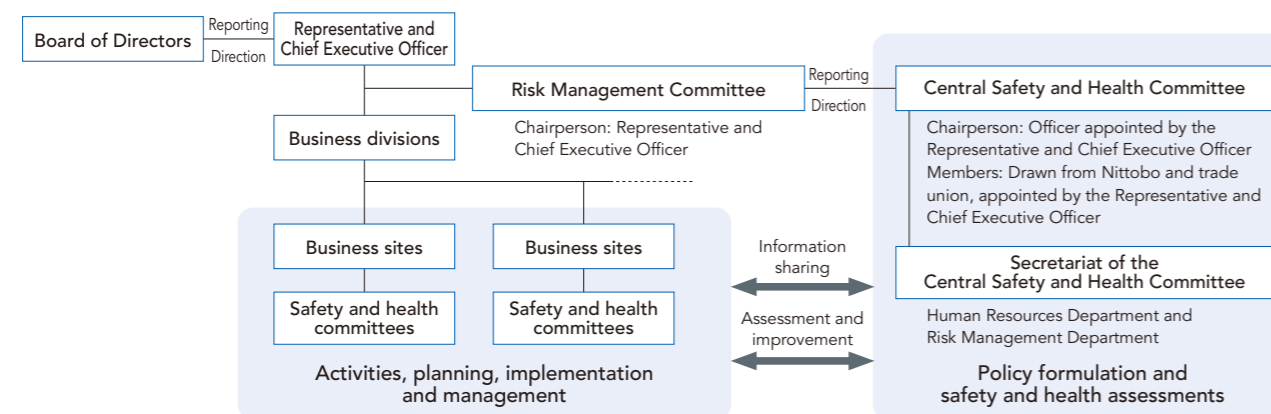
### 5 Training and Raising Awareness

Create safe and healthy working environments across the organization by thoroughly providing all employees with safety and health training and ensuring that safety and health guidelines are understood.

Established on July 1, 2017.

## Management System

We established the Central Safety and Health Committee, whose members comprise representatives of Nittobo and the labor union, to discuss and formulate action policies based on the Action Guidelines, and to confirm and summarize the status of activities at business sites. The committee also submits reports to the Board of Directors and the Risk Management Committee (chaired by the Representative and Chief Executive Officer).



## Major Initiatives in FY2022

Initiative	Description
Workplace Safety and Health Assessments	Business divisions and headquarters departments objectively assess safety and health activities in terms of status, behavior and awareness. Business sites work to improve items highlighted in the assessments, which helps to standardize and enhance safety management across the Group.
Safety Improvement Month	We have designated July as Safety Improvement Month, during which we implement various initiatives throughout the Group to reaffirm the importance of occupational safety. These activities include communications regarding safety from senior management, safety awards, and safety activities in which all employees participate.
Enhanced Risk Assessments	We have launched initiatives to reflect examples of intentional rule violations and human error in risk assessments in order to identify potential hazards associated with employee behavior. We are assessing risks at existing facilities and implementing measures to reduce risks, starting with the highest priority facilities.
Workplace Fire Risk Assessments	Based on the third-party perspective provided by outside experts, we work to prevent fires by having fire risks evaluated and receiving advice on risk reduction with regard to management systems and facilities, identify issues and make improvements.
Groupwide Information Sharing	We share information including the results of safety and health assessments and fire risk assessments, safety and health best practices, and reports on disaster countermeasures in a standard Groupwide format. Doing so enables us to reflect the experience and knowledge of the Group in the activities of each business site.

# Sustainable Procurement

The Nittobo Group is contributing to a sustainable society by collaborating with suppliers to implement sustainable procurement in the supply chain.

## Formulation and Implementation of a Sustainable Procurement Policy

Implementing sustainable management requires strong cooperation with suppliers of raw materials, production equipment, energy, and other commodities. We have formulated the Nittobo Group Sustainable Procurement Policy, which is our policy for sustainable supply chain management. We will continue to promote mutual development with our suppliers while raising awareness so that we can share our ideas and challenges regarding our mission of contributing to a sustainable society.

We also conduct surveys to identify circumstances that pose risks to sustainable procurement in the supply chain and make proposals for resolving issues. Based on survey results, we provide feedback to survey recipients, including comments and improvement requests, and work to further enhance sustainable business activities.

For the Nittobo Group Sustainable Procurement Policy: <https://www.nittobo.co.jp/eng/sustainability/pdf/SustainableProcurementPolicy.pdf>

## Examples of Sustainable Procurement Initiatives

We are working to establish an internal standard that mandates green procurement whenever possible. This involves selecting and purchasing environmentally responsible and sustainable products designated by the Eco Mark label. In addition, we promote green procurement by ensuring Groupwide awareness of the main environmental labels attached to goods and services that contribute to reduced environmental impact, which are a yardstick of whether a product is environmentally responsible.

The Purchasing Department is responsible for managing the Nittobo Group's procurement risk. Department personnel visit all Group business sites to communicate and monitor procurement risks, including those related to sustainable procurement. The department also works to raise awareness of supply chain management among purchasing managers at all sites and supports activities for further improvement.

# Harmonious Coexistence with Society

The Nittobo Group's corporate philosophy calls upon us to create healthy and more comfortable lifestyles. This involves developing together with all of our stakeholders and society as a whole, including shareholders, investors, local governments and regional communities, and implementing various initiatives to realize a more prosperous world.

## Community Contribution

The Nittobo Ground was used as a temporary storage site for decontamination waste in support of post-disaster reconstruction in Fukushima Prefecture. The site underwent restoration work in 2021 and is once again available for Company and general use. In addition to use by employees, the sports ground also hosts a wide variety of local sports competitions, including youth baseball and soccer events.



Nittobo Fukushima Factory Ground (Fukushima City, Fukushima Prefecture)

## Support for Education

Staff members of the Fukuyama Enterprise Center in Fukushima Prefecture conduct classes at local elementary schools, and also conduct science classes for children as part of community engagement through science. We also offer factory tours for students and other visitors.



Elementary school class (Koriyama City, Fukushima Prefecture)



Children's science class (Koriyama City, Fukushima Prefecture)



# Directors and Executive Officers

## Directors (As of June 28, 2023)



Director

### Sadayoshi Fujishige 1

Career Summary

- Mar. 1969 Joined Lion Fat & Oil Co., Ltd. (currently Lion Corporation)
- Mar. 1996 Director, Executive General Manager of International Division of Lion Corporation
- Mar. 2000 Executive Director, Executive General Manager of Home Products Sales Headquarters of Lion Corporation
- Mar. 2002 Representative Director, Senior Executive Director, Responsible for Home Products Business, Executive General Manager of Home Products Sales Headquarters of Lion Corporation
- Mar. 2004 Representative Director, President and CEO of Lion Corporation
- Mar. 2006 Representative Director, President and CEO, Chairman of the Board of Directors, Responsible for Home Products Business of Lion Corporation
- Jan. 2012 Representative Director, Chairman and CEO, Chairman of the Board of Directors of Lion Corporation
- Jan. 2014 Representative Director, Chairman, Chairman of the Board of Directors of Lion Corporation
- Mar. 2016 Advisor of Lion Corporation
- Jun. 2020 External Director of SATO HOLDINGS CORPORATION (current)
- Jun. 2020 External Director of the Company (current)
- Mar. 2021 Special Consultant of Lion Corporation (current)
- Jun. 2021 Outside Member of the Board (Member of the Audit and Supervisory Committee) of TV Asahi Holdings Corporation (current)

Director

### Hiroshi Kagechika 2

Career Summary

- Apr. 1972 Joined NKK Corporation (currently JFE Holdings, Inc.)
- Feb. 2002 Vice President of NKK Corporation
- Apr. 2003 Vice President of JFE Steel Corporation
- Apr. 2005 Senior Vice President (Director of Steel Research Laboratory) of JFE Steel Corporation
- Apr. 2009 President and Representative Director of JFE Techno-Research Corporation
- Apr. 2015 Advisor of JFE Techno-Research Corporation
- Jun. 2020 External Director of the Company (current)

Director

### Agasa Naito 3

Career Summary

- Oct. 2001 Registered as an attorney
- Joined Nagashima Ohno & Tsunematsu
- May 2008 Registered as an attorney at New York State Bar Association
- Jun. 2011 Joined TANABE & PARTNERS
- Apr. 2013 Partner of TANABE & PARTNERS (current)
- Jun. 2015 Outside Audit & Supervisory Board Member of BOOKOFF CORPORATION LIMITED
- Oct. 2018 Outside Audit & Supervisory Board Member of BOOKOFF GROUP HOLDINGS LIMITED
- Jun. 2020 External Director of the Company (current)
- Aug. 2021 Outside Director (Audit & Supervisory Board Member) of BOOKOFF GROUP HOLDINGS LIMITED (current)
- Jun. 2022 Supervisory Director of GLP J-REIT (current)

Director

### Yasuharu Nakajima 4

Career Summary

- Oct. 1983 Joined Tetsuzo Ota & Co. (currently Ernst & Young ShinNihon LLC)
- Apr. 1987 Registered as a certified public accountant
- May 1998 Partner of Showa Ota & Co. (currently Ernst & Young ShinNihon LLC)
- May 2004 Senior Partner of ShinNihon & Co. (currently Ernst & Young ShinNihon LLC)
- Sep. 2008 General Manager of 6th Audit Department of Ernst & Young ShinNihon LLC
- Sep. 2010 Managing Director, General Manager of 2nd Audit Business Division, and General Manager of Knowledge Headquarters of Ernst & Young ShinNihon LLC
- Jul. 2021 Partner of Ernst & Young ShinNihon LLC
- Jun. 2022 External Director of the Company (current)
- Jul. 2022 Outside Director (Audit and Supervisory Committee Member) of Business Brain Showa-Ota Inc. (current)

Director, Representative and Chief Executive Officer

### Yuichi Tsuji 5

Career Summary

- Oct. 2013 Joined the Company
- General Manager of Accounting and Finance Department
- Apr. 2014 Operating Officer and General Manager of Accounting and Finance Department
- Jun. 2014 Executive Officer, General Manager of Corporate Business Planning Department and Responsible for Corporate Risk Management
- Nov. 2014 Executive Officer, General Manager of Corporate Business Planning Department, Responsible for Corporate Risk Management, Human Resources Department, Information System Department, Compliance Management Department, Purchasing Department, Osaka Branch and Nagoya Branch
- Jun. 2015 Director and Executive Officer (current)
- Feb. 2016 Representative Executive Officer
- Jun. 2016 Representative and Chief Executive Officer (current)

Director

### Toyoshi Nishizaka 6

Career Summary

- Apr. 1981 Joined the Company
- Jun. 2003 General Manager of Planning & Administration Department, Glass Fiber Division
- Feb. 2007 General Manager of Human Resources Department
- Jun. 2008 Director and General Manager of Human Resources Department
- Oct. 2008 Operating Officer and President of Building Materials Division
- Apr. 2010 Managing Operating Officer and President of Environmental Division
- Jan. 2011 Managing Operating Officer and stationed at Main Branch (Fukushima)
- May 2012 President, Representative Director of Nittobo Allied Service Co., Ltd.
- Apr. 2013 Advisor and Head of Fukuyama Enterprise Center
- Jun. 2014 Director (current)

Director

### Kazuhiko Igarashi 7

Career Summary

- Apr. 1990 Joined the Company
- Mar. 2007 General Manager of the Glass Fiber Yarn Production Department
- Apr. 2011 General Manager of the Glass Fiber Division Manufacturing Control Department
- Apr. 2013 General Manager of the Glass Fiber Division Technology and Production Headquarters
- Apr. 2014 General Manager of the Glass Fiber Division Production Headquarters and Deputy General Manager of Fukushima Factory
- Apr. 2015 Executive Officer, General Manager of the Glass Fiber Division Production Headquarters and Deputy, General Manager of Fukushima Factory
- Feb. 2016 Executive Officer, General Manager of the Glass Fiber Division Production Headquarters and General Manager of Fukushima Factory
- Apr. 2020 Managing Executive Officer, President of Glass Fiber Division
- Apr. 2021 Managing Executive Officer, President of Glass Fiber Division and General Manager of Technology Headquarters
- Apr. 2022 Managing Executive Officer, President of Research and Development Headquarters, Head of DX Strategy Office and Environment Technology Strategy Office (current)
- Jun. 2022 Director (current)
- Jul. 2023 Head of the Fukuyama Enterprise Center (current)

External Director

Directors who meet the Company's criteria for independence and for whom the Company has submitted an "Independent Directors/Auditors Notification" to the Tokyo Stock Exchange

Director not concurrently serving as an Executive Officer

Member of Nomination Committee

Member of Remuneration Committee

Member of Audit Committee

## Executive Officers (As of July 1, 2023)

Representative and Chief Executive Officer	Yuichi Tsuji*	CEO
Representative Senior Managing Executive Officer	Hiroyuki Tada	Responsible for the Corporate Management Division, General Manager of the Textile Division and the Corporate Business Planning Division
Managing Executive Officers	Kazuhiko Igarashi*	President of Research & Development Headquarters, Head of Digital Transformation Strategy Office and Environment Technology Strategy Office, and Head of the Fukuyama Enterprise Center
	Tatsuo Sakae	General Manager of the Medical Division, President and Representative Director of NITTOBO MEDICAL CO., LTD., and Chairman and CEO of Nittobo America Inc.
Senior Executive Officers	Hisanobu Hayashi	General Manager of the Glass Fiber Division
	Takanobu Matsunaga	Deputy General Manager of the Glass Fiber Division and General Manager of the Composite Materials Division and the Product Planning and Development Division
Executive Officers	Yasushi Okahisa	Responsible for the Corporate Business Planning Department, the General Affairs Department, the Risk Management Department, the Legal Department, the Osaka Branch, and the Nagoya Branch
	Yuji Sugama	Vice President of Research & Development Headquarters, Responsible for Medical Research & Development of the Medical Division
	Akimasa Kajita	General Manager of the Glass Fiber Division Production Headquarters, and President and Representative Director of Nitto Glass Fiber Manufacturing Co., Ltd.
	Hiroki Kajikawa	Responsible for the Human Resources Department, the Corporate Communication Department, the Accounting and Finance Department, and the Information Systems Department
	Katsuya Hatanaka	General Manager Aide of the Medical Division and Global Consolidated Management
	Masaki Ito	Deputy General Manager of the Glass Fiber Division Production Headquarters, General Manager of the Yarn Division, and President of NITTOBO ASIA Glass Fiber Co., Ltd.
	Koichi Nakamura	Vice President of Research & Development Headquarters and Head of Fiber R&D Center

\* Concurrently serving as Director

## Comments from an External Director

**By providing appropriate advice, I will help Nittobo lay the groundwork for systems and an organizational culture where diverse talent can play active roles, which will foster innovation and raise employee engagement.**

### Agasa Naito

External Director



#### Q. How would you evaluate Nittobo's governance system and what is your role in it?

**The composition of the Board of Directors is balanced and members can give their opinions freely and openly. I myself strive to provide advice from an independent and objective standpoint based on my knowledge and experience as an attorney.**

Nittobo has adopted a governance system that emphasizes monitoring functions, and as a company with a nomination committee, etc. it works to improve the flexibility of business execution, ensure management transparency, and strengthen supervisory functions. A majority of the directors (four of seven) are independent external directors, and the Board has a balanced composition that includes experts in the fields of management, R&D, finance and accounting, and legal affairs. All four independent external directors also serve on the Nomination Committee, Remuneration Committee and Audit Committee. At Board and committee meetings, members engage in frank discussions that leverage their unique career perspectives, specialized knowledge and experience. In my case, I express my opinion from an independent and objective standpoint based on my knowledge and experience as an attorney. At the same time, I try

to reflect diverse values and consider whether the Company's approach to business execution can be rationally justified to shareholders and other stakeholders. In that respect, this year I have once again made statements and engaged in discussions about the Nittobo Group's governance structure.

Before each Board of Directors meeting, briefings are provided to explain the agenda in advance and serve as a forum for informal discussion. For example in such discussions in FY2022, based on my belief that a lack of progress on issues of diversity and inclusion will hamper a company's efforts to hire talented people, I raised the point that increasing the ratio of women in management positions should be seen as more than just a target, rather that it is an essential part of creating an organization in which diverse individuals can play an active role, which will in turn lead to greater innovation.

#### Q. How would you evaluate the progress of Nittobo's efforts to strengthen human resources in pursuit of creating global No. 1 niche businesses?

**To further strengthen human resources, Nittobo must create systems and foster an organizational culture where employees can develop their careers and play active roles.**

In the 100 years since Nittobo was founded as a silk spinning company, it has taken on challenges under the motto, "Let's turn anything into fibers," and achieved world-first production of glass fiber on an industrial scale. The Company has grown by innovating in response to the demands of the times, from researching chemical fibers to boldly trying new technologies, which laid the foundation for the Medical Business. To continue creating global No. 1 niche businesses in the future, Nittobo must maintain the spirit of taking on new challenges, listen to the market on a global level, capture niche needs, refine its technologies, and provide products that meet the demands of the times—all of which are part of its DNA. Generating innovation

will require globally adept talent, professionals who can develop new technologies, and leaders who will be the driving force. As Japan's working-age population rapidly declines, Nittobo is working to hire and retain diverse talent and to create systems and an organizational culture that help employees develop their careers and play an active role regardless of gender or nationality. Improving the quality of management is also an important issue. Nittobo has been working to promote diversity and inclusion, including through women's advancement in the workplace. To go a step further, I believe that creating an organization where diverse talent can play an active role will generate innovation and naturally improve employee engagement.

#### Q. In closing, what message would you like to convey to stakeholders?

**Amid a difficult business environment, the Nittobo Group aims to quickly respond to the demands of the times and continuously create and provide new value, and thereby earn the trust of all stakeholders.**

As the roadmap to 2030, Big VISION 2030 calls on Nittobo to continue creating global No. 1 niche businesses that contribute in the areas of Environment & Energy, Digital Society, and Health, Security & Safety with the goal of building a more sustainable society. To make this vision a reality, the Mid-Term Business Plan lays out a basic strategy of four key measures: implement growth strategies, reinforce our management foundation, take action for environment issues, and develop human resources that generate innovation. To date, the Nittobo Group has steadily executed this basic strategy, proceeding with structural reforms of composite materials operations in the Glass Fiber Business and of the Textile Business, transfer of its beverage business, and the sale of land and other fixed assets. The foundation for growth has been steadily laid. Having had the opportunity

to visit offices, factories, and R&D centers, I have seen the high level of technological capabilities and the depth of knowledge that Nittobo has accumulated and passed down, as well as the Company's enthusiasm for rising to the challenge of new technologies that will drive sustainable growth. Today, we are faced with environmental disruptions on a global scale, and the Company's operating environment continues to be difficult. The future remains uncertain due to soaring prices for raw materials, fuels, and other resources, as well as sluggish demand in the electronic materials field. In these changing times, Nittobo will continue to create and provide new value in response to the demands of the times as it aspires to be a company that gains the trust of all stakeholders in the pursuit of client satisfaction. I hope that stakeholders will continue to support the Company moving forward.



# Corporate Governance

The Nittobo Group constantly updates its corporate governance system with the aim of creating a fair and highly transparent management organization in order to conduct business activities with emphasis on trust from our shareholders, investors and other stakeholders.

## Timeline of Corporate Governance Enhancements

(Year)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Corporate governance system	Company with a board of directors			Company with a nomination committee, etc. (from June 2014)									
Committees	—			Nomination Committee (Chair: External director) Remuneration Committee (Chair: External director) Audit Committee (Chair: External director)									
Directors	7	6	8	7	6	7							
Of which, external directors	1	1	2	3	4 (half)	4 (more than half)	3 (half)	4 (more than half)					
Of which, women				1									
Operation of Board of Directors				Briefings before Board of Directors meetings Board of Directors evaluation of effectiveness									
Revisions to systems, regulations				Formulation of Executive Meeting regulations Introduction of performance-linked stock remuneration plan									

## Overview of Corporate Governance System and Reasons for Employing the System

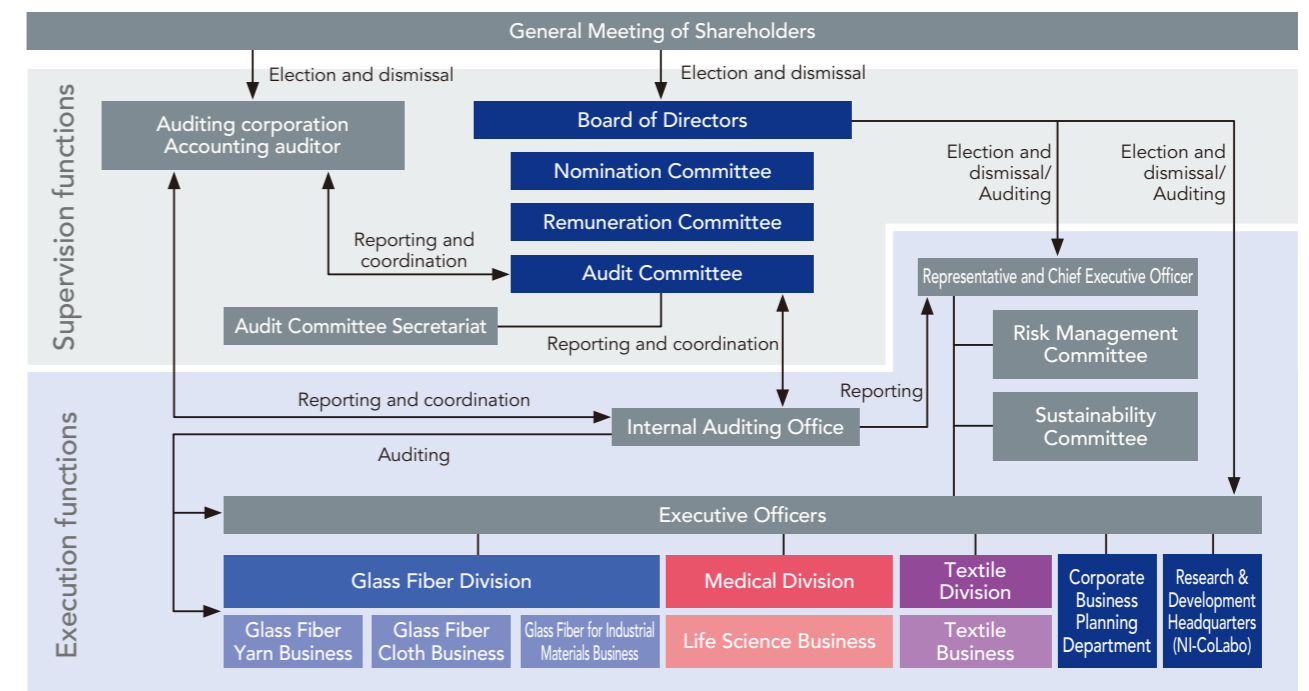
The Company introduced an executive officer system in June 2003 and other systemic measures to maximize the effectiveness of consolidated management by invigorating the Board of Directors and speeding up decision making. Since June 2008, management has been conducted with an emphasis on the clarification of the functions and roles of management and business execution.

In addition, with the approval of the Ordinary General Meeting of Shareholders on June 26, 2014, Nittobo adopted the structure of a company with a nomination

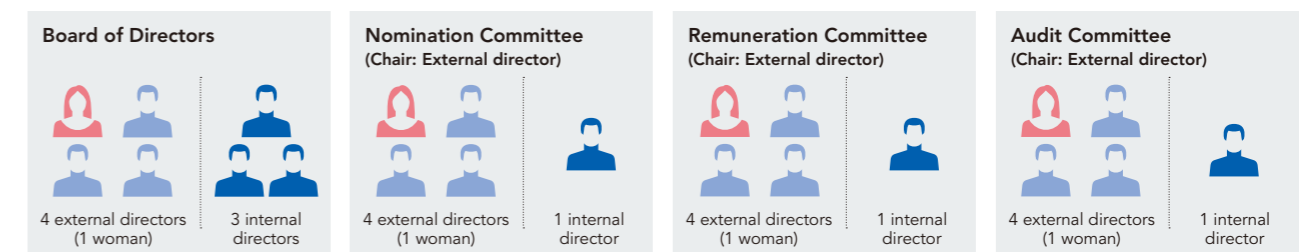
committee, etc. By doing so, the Company further clarified the separation of supervision from execution and aims to strengthen supervisory functions, ensure highly transparent management, execute business swiftly, and increase the flexibility of management. Furthermore, the establishment of a system that enables it to more precisely meet the expectations of stakeholders, such as customers, shareholders, suppliers, and employees, will enable the Company to further enhance its corporate value.

## Corporate Governance System

### Diagram of Corporate Governance System



### Composition of Board of Directors and Three Committees



### Board of Directors

Regarding the Board of Directors, the Company's basic policy is that it shall comprise internal directors, who are appointed from within the Company and have capabilities and knowledge of each business and management in general, and at least the same number of external directors, who are able to express opinions that can enhance governance from the perspectives of diverse stakeholders and society. This balance enables appropriate supervision of the Company's business execution by the Board of Directors as a whole. Furthermore, the Board of Directors shall have no more than 12 members, as specified in its Articles of Incorporation. At the time of publication of this report, the Board of Directors comprises seven members, of whom four are external directors.

The Board of Directors is responsible for supervision of business execution—it selects the directors that make

up the Nomination, Remuneration and Audit Committees; elects and dismisses executive officers and delegates business to them; approves matters related to operations that have an impact on basic management policy such as medium-term business plans and annual budgets; and approves matters that could have a significant impact on group management such as investments exceeding a certain amount. The term of office of directors is one year, and subject to approval at the Ordinary General Meeting of Shareholders held annually. The Company's executive officers are determined by the Board of Directors. People suitable for the execution of the Company's business are elected from the perspective of enhancement of business execution and corporate value based on the principle of assigning the right people to the right positions.

## Corporate Governance

### Nomination, Remuneration and Audit Committees

Under the structure of a company with a nomination committee, etc., the Company has established a Nomination Committee, a Remuneration Committee, and an Audit Committee. The roles of each committee and an overview of committee members as of the date of the publication of this report are as follows.

#### Nomination Committee

The Nomination Committee determines the content of proposals (regarding the election and dismissal of directors) to be submitted to the General Meeting of Shareholders. The committee comprises five directors (four of whom are external directors) and is chaired by External Director Sadayoshi Fujishige. Meetings of the Nomination Committee are held as needed. The Nomination Committee selects the Company's director candidates who are believed to be the most suitable based on factors such as their character and insight.

#### Remuneration Committee

The Remuneration Committee determines the content of individual remuneration, etc., of directors and executive officers. It comprises five directors (four of whom are external directors) and is chaired by External Director Hiroshi Kagechika. Meetings of the Remuneration Committee are held as needed.

#### Audit Committee

The Audit Committee's responsibilities include auditing the state of execution of duties of directors and executive officers, and the preparation of audit reports. Working with the accounting auditors and the Audit Office, audits, etc., are conducted based on audit plans approved by the Audit Committee. The committee comprises five directors (four of whom are external directors) and is chaired by External Director Yasuharu Nakajima. The Audit Committee Secretariat has been established as an organization for assisting with the duties of the Audit Committee. In principle, the Audit Committee holds meetings at least once every month.

#### Execution of Business

As of the date of the publication of this report, the Company has 13 executive officers, of whom one has been selected as the representative and chief executive officer. An Executive Meeting has been established as an organ to deliberate matters related to the execution of business delegated by the Board of Directors, and it endeavors to ensure efficient business execution by holding meetings twice a month in principle.

### Self-Evaluation of the Effectiveness of the Board of Directors

The Board of Directors analyzes and evaluates its composition, operation, supervision, support system, and dialogue with shareholders, etc., based on a survey

conducted by outside attorneys and the self-evaluation of each director.

#### Process for Evaluating Effectiveness



The evaluation of the effectiveness of the Board of Directors in FY2021 included the opinion that the COVID-19 pandemic prevented directors from having sufficient opportunities to visit business sites and factories to understand the situation on the ground, and the opinion that ongoing review of Group governance is desirable. The following initiatives were therefore implemented in FY2022.

In the survey covering FY2022, the average evaluation score for all items was 4 or higher (maximum of 5), and both internal and external directors highly evaluated the effectiveness of the Board of Directors. We will continue to make ongoing improvements so that the Board of Directors can fulfill its supervisory functions even more effectively.

#### Initiatives in FY2022

- After implementing effective measures to prevent the spread of COVID-19, we increased opportunities for directors to visit business sites and factories and exchange opinions with local employees. In addition, several lectures by outside experts were organized to deepen directors' understanding of the Group's businesses.
- Briefings prior to Board of Directors meetings included discussion of Group governance.

### Director Skill Matrix and Meeting Attendance (FY2022)

The knowledge, experience, and abilities of directors that are considered important to the Company from the perspective of corporate management are defined as business management, technology, research and development, sales, marketing, global business,

finance, accounting, legal affairs, risk management, human resources, labor relations, and human resources development. We ensure that the Board of Directors is composed of people with appropriate knowledge and abundant experience in each field.

Name		Attendance/Number of meetings				Business Management	Technology/R&D	Sales/Marketing	Global Business	Finance/Accounting	Legal/Risk Management	Human Resources/Labor Relations/Human Resource Development
		Board of Directors Meetings	Nomination Committee Meetings	Remuneration Committee Meetings	Audit Committee Meetings							
Yuichi Tsuji		13/13	7/7	7/7		●			●	●	●	
Toyoshi Nishizaka		13/13			14/14	●		●	●		●	●
Kazuhiko Igarashi		10/10				●	●		●			
Sadayoshi Fujishige	External Director	13/13	7/7	7/7	10/10	●		●	●			
Hiroshi Kagechika	External Director	13/13	7/7	7/7	14/14	●	●		●			
Agasa Naito	External Director	13/13	7/7	7/7	14/14				●		●	
Yasuharu Nakajima	External Director	10/10	5/5	4/4	10/10					●	●	

(Note 1) The table below does not represent all knowledge, experience, etc. possessed by each person.

(Note 2) 1) Attendance data for Sadayoshi Fujishige is for meetings of the Board of Directors, Nomination Committee and Remuneration Committee from April 1, 2022 through March 31, 2023. His attendance data for Audit Committee meetings is from June 28, 2022, the date of his appointment to that committee, through March 31, 2023.  
2) Attendance data for Hiroshi Kagechika and Agasa Naito is for meetings of the Board of Directors and the three committees from April 1, 2022 through March 31, 2023.  
3) Attendance data for Yasuharu Nakajima is for meetings of the Board of Directors and the three committees from June 28, 2022, the date of his appointment, through March 31, 2023.



## Corporate Governance

## Officer Remuneration

## Officer Remuneration

Matters pertaining to the policy for determining the amount of officer remuneration, etc., and the method of calculation thereof

## (a) Method for deciding policy

In accordance with the provisions of the Companies Act relating to a company with a nomination committee, etc. and with reference to objective data, etc., from external consultants, the Company's policy for determining the individual remuneration of directors and executive officers is decided by the Remuneration Committee, of which external directors comprise the majority and which is chaired by an external director.

Furthermore, the policy is designed to strongly incentivize officers to achieve performance targets while ensuring transparency and rationality, to foster awareness of management from a medium- to long-term perspective, and to align interests with those of stakeholders including shareholders and investors. The performance indicators selected for calculating remuneration also reflect this approach.

## (b) Outline of policy

The Company's officer remuneration (excluding external directors) is structured with basic remuneration (fixed remuneration) determined by position and variable remuneration (performance-linked remuneration) that varies within a range of 0% to 150% according to the level of achievement of company performance targets for the previous fiscal year and individual performance targets based on the operating profit of the division(s) under the officer's charge and individual evaluation. In addition, executive officers receive stock remuneration (performance-linked remuneration), the level of which is linked to achievement of the performance targets of the Company's Mid-Term Business Plan.

In view of their role in supervising management from an independent and objective perspective, external directors do not receive variable remuneration or stock remuneration.

## Remuneration Weighting by Position

Position	Composition of officer remuneration (assuming performance-linked remuneration at 100%)				
	Basic remuneration	Performance-linked remuneration			Stock remuneration
		Company performance	Individual performance		
			Division performance	Individual evaluation	
Director, representative and chief executive officer and other representative executive officers	60.0%	25.0%	—	—	15.0%
Senior and other managing executive officers	60.0%	17.5%	5.0%	2.5%	15.0%
Senior and other executive officers	65.0%	12.5%	5.0%	7.5%	10.0%
Directors not concurrently serving as executive officers (excluding external directors)	71.0%	14.5%	14.5%		—
External directors	100%	—	—	—	—

## Performance Indicators and Percentage Reflection in Performance-linked Remuneration

Company performance	Operating profit (JPY 10 billion baseline)	Operating profit (year on year)	ROE (year on year)	
		40.0%	30.0%	30.0%
Individual performance	Operating profit of division(s) under the officer's charge (compared to target)		Individual evaluation	
	Senior and other managing executive officers	67.0%	Senior and other managing executive officers	33.0%
	Senior and other executive officers	40.0%	Senior and other executive officers	60.0%

## Indicator Selection

## ① Company performance

The selected indicators are operating profit as a measure of earning power and enhanced growth potential, and ROE as a measure of improvement in capital efficiency.

## ② Individual performance

The selected indicators are the operating profit of the division(s) under the officer's charge and the individual

evaluation rating, which helps to clarify the responsibility for performance of each officer (excluding external directors). These indicators also provide a basis for evaluation based on perspectives and factors other than company performance. Ratings for individual evaluations are based on the outcomes of activities and their contribution to business performance.

## Process for Determining Remuneration

## • Basic remuneration and variable remuneration

Basic remuneration and variable remuneration for each officer are determined by resolution of the Remuneration Committee in accordance with the aforementioned basic policy.

Basic remuneration is determined according to a table

that defines the fixed amount for each position. Variable remuneration is calculated based on the level of achievement of targets for each fiscal year. If an officer (excluding directors) retires before the end of a fiscal year, amounts are prorated according to the time in office.

## Rules for Calculating Variable Remuneration

Company performance component = Basic remuneration for the preceding fiscal year × Company performance coefficient for each position × Level of achievement of company performance for the preceding fiscal year

Individual performance component = Basic remuneration for the preceding fiscal year × Individual performance coefficient for each position × Level of achievement of individual performance for the preceding fiscal year and the result of the individual evaluation

Variable remuneration is determined by combining the company performance and individual performance components calculated as shown above.

Note however that although the current officer remuneration system was introduced at the beginning of FY2022, during the transitional period between systems, variable remuneration shall be determined based on the calculation rules before the system transition.

Those calculation rules and the performance indicator results are as follows.

## Calculation rules before the system transition

(a) Variable remuneration = Basic remuneration for the preceding fiscal year × Performance-linked remuneration coefficient for each position × Level of achievement of performance targets for the preceding fiscal year

(b) Performance-linked remuneration coefficient for each position

Representative and chief executive officer: 50% of basic remuneration; Senior managing executive officers: 45% of basic remuneration; Other officers (excluding external directors): 40% of basic remuneration

(c) Indicators used in the calculation of variable remuneration for FY2022 and actual results

[Operating profit (amount)] Target: JPY 10,000 million / Actual: JPY 7,268 million

[Operating profit (year on year)] Target: JPY 5,964 million / Actual: JPY 7,268 million

[ROE (year on year)] Target: 4.5% (after adjustment) / Actual: 5.5%

[Dividends (year on year)] Target: JPY 45 per share / Actual: JPY 45 per share

Note: Targets for individual performance indicators are set as quantitative and qualitative targets, and the level of achievement for each varies within a range of 75% to 125%.

## • Stock remuneration

## (1) Eligibility for the performance-linked stock remuneration plan (hereinafter "the Plan")

Persons eligible for the Plan are the executive officers (including those concurrently serving as directors).

## (2) Structure of the Plan and granting of points

## (i) Structure of the Plan

Remuneration under the Plan will consist of the following:

• Fixed component

The fixed component is granted according to the position held during the tenure.

• Performance-linked component

The performance-linked component is granted according to the level of achievement of the performance targets of the Mid-Term Business Plan.

The level of achievement of the performance targets is evaluated each fiscal year and reflected in the remuneration for the tenure.

In the current Mid-Term Business Plan, the Company has set the amount of consolidated operating profit as a performance indicator. Operating profit was chosen because it is a representative measure of medium- to long-term improvement in business performance. The Company is targeting JPY 10.8 billion for FY2022 and JPY 14.0 billion for FY2023.

## (ii) Point calculation method

• Points corresponding to the fixed component and the performance-linked component are calculated and granted for the tenure of executive officers.

• Points granted for the respective tenure will accumulate until retirement, and the number of accumulated points will be used as "1 point = 1 share" to calculate the number of the Company's shares to be granted.

(Point formula)

Base points corresponding to the position during the tenure for which points are granted<sup>(Note 1)</sup> × (1 + Performance-linked coefficient<sup>(Note 2)</sup>)

(Note 1) Base points

Position	Points
Representative and chief executive officer	2,360
Senior managing executive officer	1,219
Managing executive officer	903
Senior executive officer	452
Executive officer	409

(Note 2) Performance-linked coefficient

(The indicator for calculating the performance-linked coefficient shall be operating profit)

Performance-linked coefficient = Actual amount for the relevant period ÷ Target amount for the relevant period as specified in the Mid-Term Business Plan (rounded down to the second decimal place). The upper limit of the coefficient is 1.5, and if it is less than 0.5, it is set to 0.

## Corporate Governance

### (iii) Calculation method in case of position change during the tenure

If there is a change in position during the tenure, points will be prorated based on the number of months, according to the respective position.

### (iv) Calculation method in case of resignation of an officer during the tenure

If an officer resigns during the tenure, points will be calculated based on his/her term of office.

(Formula)

**Points calculated according to (ii) above × Tenure as an officer ÷ 12**

### (v) Point granting date

The points for the tenure are granted on the date of the first meeting of the Remuneration Committee after the conclusion of the Ordinary General Meeting of Shareholders for the fiscal year under review.

### (3) Number of shares and amount of cash to be granted or paid

#### (i) In the case of the resignation of an officer due to reasons other than personal reasons

· Shares

The number of shares is calculated as “1 point = 1 share” using the following formula.

(Formula)

**Number of shares = Number of points accumulated until the vesting date** (including the points granted on the vesting date. Hereinafter referred to as “Number of Points Held”) × **70%** (any fraction less than one unit of shares shall be rounded down)

· Cash

The cash amount is calculated using the following formula.

(Formula)

**Cash amount = (Number of Points Held – Number of shares calculated according to the formula for “Shares” above) × Market value of the shares as of the vesting date**

#### (ii) In the case of the resignation of an officer due to personal reasons

Shares are granted based on the Number of Points Held, where “1 point = 1 share.”

#### (iii) In the case of the death of an officer for whom remuneration is to be paid

In the case of the death of an officer for whom remuneration is to be paid, the right to receive a monetary payment as a survivor’s benefit will be acquired by the surviving family members of such officer if they meet the requirements set forth in the Regulations of Directors’ Stock Benefits established by the Remuneration Committee. The survivor benefit amount shall be the monetary amount calculated using the following formula.

(Formula)

**Survivor benefit amount = Number of Points Held by a deceased officer for whom remuneration is to be paid × Market value of the shares as of the date of death**

(Note) The market price of the shares used in the plan shall be the closing price of the shares on the principal stock exchange on which the shares are listed on the date when the market price of the shares needs to be calculated. If the closing price is not published on such date, the market price of the shares shall be calculated retroactively to the most recent date for which a closing price is available.

#### (4) Important note

The maximum number of shares corresponding to the points awarded for each position as stipulated in Article 34, paragraph 1, item (iii)-(a)1 of the Corporation Tax Act is: 5,900 points for the representative and chief executive officer, 3,047 points for senior managing executive officers, 2,257 points for managing executive officers, 1,130 points for senior executive officers and 1,022 points for executive officers.

## Reason for Appointment of External Directors

Name	Principal activities and overview of the duties carried out in the expected roles as an external director
Sadayoshi Fujishige	Mr. Sadayoshi Fujishige has a wealth of experience and a high level of insight as a top manager of a listed company. Based on this, he actively makes statements at meetings of the Board of Directors, the Nomination Committee, the Remuneration Committee, and the Audit Committee. In this way, he plays a role expected as an external director, including providing accurate advice to management, contributing to decision making by the Board of Directors, and supervising business execution.
Hiroshi Kagechika	Mr. Hiroshi Kagechika has specialist insight and a wealth of experience in corporate business and the field of research and development in the manufacturing sector. Based on this, he actively makes statements at meetings of the Board of Directors, the Nomination Committee, the Remuneration Committee, and the Audit Committee. In this way, he plays a role expected as an external director, including providing accurate advice to management, contributing to decision making by the Board of Directors, and supervising business execution.
Agasa Naito	Ms. Agasa Naito has a wealth of experience and a high level of insight as an expert in law and as an outside officer of another company. Based on this, she actively makes statements at meetings of the Board of Directors, the Nomination Committee, the Remuneration Committee, and the Audit Committee. In this way, she plays a role expected as an external director, including providing accurate advice to management, contributing to decision making by the Board of Directors, and supervising business execution.
Yasuharu Nakajima	Mr. Yasuharu Nakajima has a wealth of experience and a high level of insight as an expert in accounting and as an outside officer of another company. Based on this, he actively makes statements at meetings of the Board of Directors, the Nomination Committee, the Remuneration Committee, and the Audit Committee. In this way, he plays a role expected as an external director, including providing accurate advice to management, contributing to decision making by the Board of Directors, and supervising business execution.

## Cross-Shareholdings

### Policy Regarding Cross-Shareholdings

The Company holds shares of listed companies under its policy on cross-shareholding in cases where it deems such shareholding to be beneficial for building favorable trading relationships with important trading partners of the Nittobo Group in fields including sales, fuel and raw material procurement, and finance, smoothly advancing business activities of the Nittobo Group, and maintaining and enhancing corporate value in the Nittobo Group. However, from the perspective of improving the Group’s corporate value, the Company will sell shares that are deemed to be of little holding significance, while paying attention to the effect on the market, and so forth.

### Method for Assessing Rationale for Holding Shares

The Company reviews the holding policy for listed shares individually at a meeting of the Board of Directors on a periodic basis, comprehensively considering qualitative factors such as sales and procurement, the existence of

any technological cooperation or joint capital investment, whether there are any joint ventures under way, financing, the maintenance and establishment of good business relationships, and a quantitative evaluation that compares the total return on investment, calculated by considering dividend yield and business profit, against the cost of capital, as well as the comprehensively considered policy on cross-shareholdings.

### Exercise of Voting Rights Associated with Cross-Shareholdings

The Company will appropriately exercise its voting rights associated with cross-shareholdings after consideration of whether such issuing company has established an effective governance structure and is making appropriate decisions to improve its corporate value over the medium to long term, as well as whether such shareholdings will contribute to enhancing the Group’s corporate value.

### Changes in Cross-Shareholdings

		FY2018	FY2019	FY2020	FY2021	FY2022
Sold during the period	Unlisted stocks	—	2	1	1	—
	Number of stocks	—	32	24	0	—
	Amount (JPY million)	—	32	24	0	—
Listed stocks	Number of stocks	13	3	4	—	1
	Amount (JPY million)	2,050	783	8,665	—	2,516
	Total	13	5	5	1	1
Capitalization at end of period (including unlisted stocks)	Number of stocks	2,050	815	8,689	0	2,516
	Amount (JPY million)	53	51	49	47	47
		20,604	20,694	16,625	15,243	13,643

## Dialogue with Stakeholders

The Corporate Communication Officer is responsible for general dialogue with shareholders, and the Corporate Communication Department is the internal department responsible for providing assistance thereto. The Company endeavors to create opportunities for dialogue with shareholders that contribute to the sustained growth and enhancement of medium- to long-term corporate value of the Company centered on executive officers. Furthermore, departments involved in IR activities centered on the Corporate Communication Department work to coordinate

among departments on a daily basis.

We will continue to endeavor to disclose information in a timely and appropriate manner to enable the Nittobo Group’s customers, shareholders and investors to accurately recognize and judge the actual state of the Nittobo Group. In order to achieve this, we comply with laws, regulations and securities exchange rules on disclosure, and are engaged in the creation and operation of an appropriate disclosure system.

- ① We publish items specified for disclosure in Japanese and foreign laws, regulations and securities exchange rules in business reports, annual securities reports and communications to shareholders, and announce them in securities exchange communication systems and press releases.
- ② In principle, we publish information being disclosed on the Nittobo Group’s website, and also endeavor to provide fairer and broader disclosure.
- ③ We conduct briefings for analysts and institutional investors promptly after the announcement of quarterly financial results.
- ④ We publish an integrated report that incorporates financial and non-financial information, including CSR, in order to provide a better understanding of the Group’s medium- to long-term value creation framework.

Opinions and concerns, etc., about the Company that are learned through dialogue with shareholders and investors are collated by the Corporate Communication Department, reported to the Corporate Communication Officer, the Executive Meeting, and the Board of Directors on a quarterly basis, and appropriately provided as feedback to

management executives. Adequate care is given regarding insider information in individual inquiries and dialogue with the Nittobo Group, and explanations are limited to information that has already been published and facts that are well known.



# Compliance System

The Nittobo Group places utmost priority on compliance with domestic and foreign laws, regulations and social norms, as well as on appropriate management and prevention of risks in areas related to its business.

## Compliance

The Nittobo Group is aware that it is a public instrument that operates for the benefit of society. It naturally complies with laws and regulations as well as with social norms, and strives to remain a company that is trusted by society. This is the starting point for the Company's existence, a position that must be unconditionally observed so long as this Company is a member of society.

All officers and employees understand the necessity of practicing compliance, and the Company will always conduct fair and just business activities with a spirit of complying with the law and a firm sense of ethics.

### The Nittobo Behavior Program and the Nittobo Code of Conduct

The Nittobo Behavior Program and the Nittobo Code of Conduct have been enacted as standards for all officers and employees of the Nittobo Group, to ensure that the Nittobo Group will always be a company that is trusted by society.

To ensure that these standards are firmly established as the basis for the Company's daily business activities, and that they are imbued in the core being of all officers and employees, all officers including senior management will strive to lead by example as they continuously and proactively promote awareness through education and training programs.

### Internal Whistleblowing Contact

The Nittobo Group has established a whistleblowing program, the Corporate Ethics Helpline, to prevent and detect violations of laws and regulations at an early stage and to take appropriate corrective actions.

In cases where a violation of laws, regulations or internal rules, improper conduct, or other such problem occurs at

work but resolution at the business site is unlikely or an employee is unable to consult with workplace colleagues or superiors, any Nittobo Group employee can make reports to and consult with the helpline with peace of mind.

The reporting and consultation office is available not only as an in-company hotline but also externally through an outside law firm, which enables anonymous reporting and consultation. The privacy and confidentiality of whistleblowers is protected, and measures are taken to prevent prejudicial treatment as a result of making a report. The reporting and consultation office also ensures independence from the executive side by handling reports and consultations that may involve directors and officers under the Audit Committee's supervision. The Company is committed to creating a system that whistleblowers can use with greater peace of mind by, for example, responding to reports and consultations in good faith, confirming the facts and taking corrective measures, and reporting the results of the investigation to the whistleblower.

For details about compliance initiatives:  
<https://www.nittobo.co.jp/eng/sustainability/governance/compliance.html>

## Risk Management

The Nittobo Group endeavors to appropriately manage the risks to which its businesses are exposed in order to improve its corporate value and fulfill its social responsibilities. We have established a system to identify, evaluate and take countermeasures against risks, which have become more diverse and complex as globalization has progressed, and are working to prevent them from materializing and to reduce losses in the event of a crisis.

### Risk Management System

The Nittobo Group's Risk Management Committee is chaired by the Representative and Chief Executive Officer. It draws on the basic risk management policy and risk management system stipulated in the Group's Rules for Risk Management to appropriately manage the risk exposure of the Group's businesses and prevent problems from materializing. Furthermore, the Company has also strengthened its legal risk management system by establishing a system that enables it to receive various kinds of guidance as the occasion demands, such as opinions and advice from corporate attorneys and specialist lawyers regarding corporate management and daily operations.

### Information Management

The Nittobo Group discloses information on its business activities in a timely and appropriate manner to enhance corporate transparency. In addition, we have established rules for the management of trade secrets, document

management, personal information handling and information system management, and manage such information after specifying management methods and managers to ensure we appropriately manage the information in our possession. We also conduct regular self-inspections, monitoring and workplace training.

### Information Security

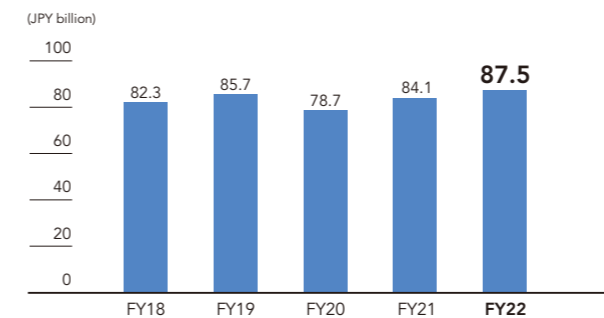
With developments in information networking, the danger of information leaking outside the Company and the threat of cyberattacks are increasing. For this reason, the Nittobo Group undertakes preventive measures against potential risks, along with countermeasures for computer viruses, led by the head of IT, with the aim of securing and achieving further improvements in information security.

For an overview of information management education:  
[https://www.nittobo.co.jp/eng/sustainability/governance/risk\\_management.html](https://www.nittobo.co.jp/eng/sustainability/governance/risk_management.html)

# Financial and Non-Financial Highlights

## Financial Value

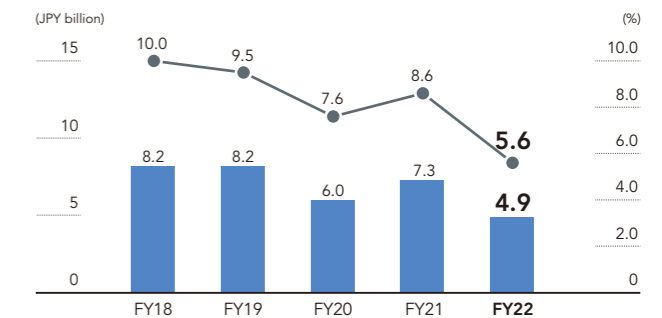
### Net Sales



■ Net Sales

Net sales increased, with main factors including a first-half increase in sales of products for electronic materials in the Glass Fiber Business and medical business sales in the Life Science Business. In addition, the depreciation of the Japanese yen had a positive effect.

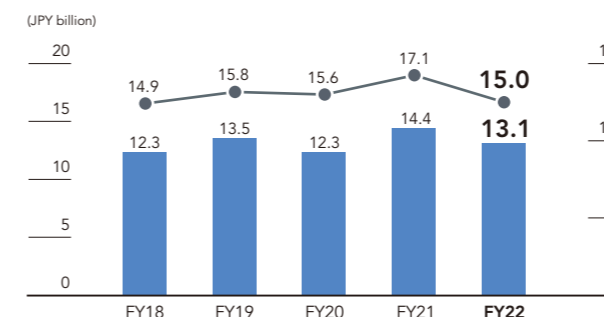
### Operating Profit / Operating Profit Ratio



■ Operating profit (left axis) ● Operating profit ratio (right axis)

Cost reductions and price revisions partially offset the decrease in profit due to the significant negative impact of rising raw material and fuel costs.

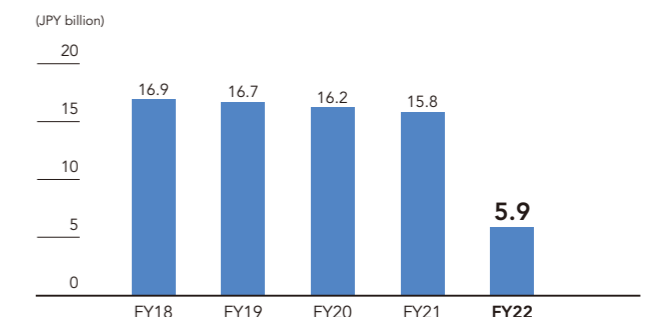
### EBITDA / EBITDA Margin



■ EBITDA (left axis) ● EBITDA margin (right axis)

Despite ongoing business structural reforms and other initiatives to improve profitability, both EBITDA and the EBITDA margin decreased year on year due to lower operating profit resulting from factors including the impact of increases in prices of raw materials and fuel.

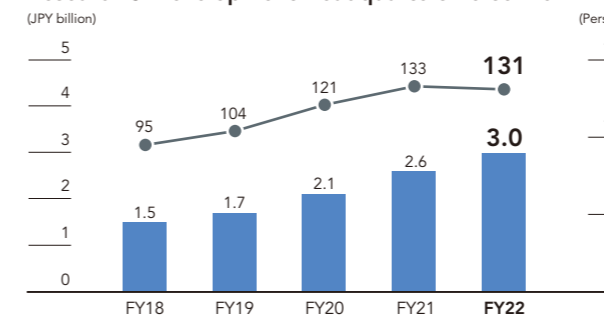
### Capital Expenditure (Including M&A)



■ Capital expenditure (including M&A)

Nittobo made capital investments to increase production capacity for glass fiber yarn and glass fiber cloth in the Glass Fiber Business, and to increase production capacity for raw materials for in vitro diagnostic reagents in the Life Science Business.

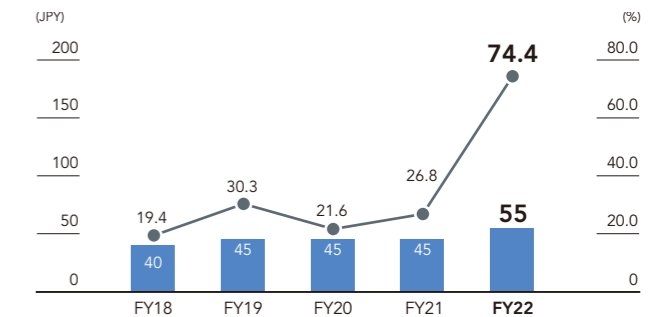
### R&D Expenses / Research & Development Headquarters Personnel



■ R&D expenses (left axis) ● Research & Development Headquarters personnel (right axis)

We enhanced the development of high-performance glass fiber for next-generation communication systems, for which demand is expected to grow with the implementation of 5G, and new high-value-added products in the Life Science Business.

### Dividends / Dividend Payout Ratio



■ Dividends per share (left axis) ● Dividend payout ratio (right axis)

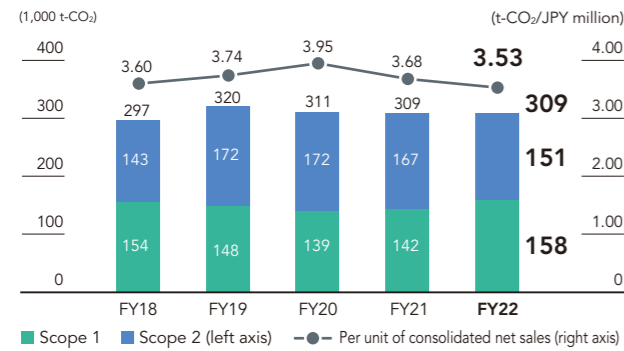
Dividends per share totaled JPY 55.00, consisting of an interim dividend of JPY 22.50, a year-end dividend of JPY 22.50, and a 100th anniversary commemorative dividend of JPY 10.00. The Company's policy is to flexibly return profits to shareholders based on stable dividend growth.

# Financial and Non-Financial Highlights

## Non-Financial Value

### CO<sub>2</sub> Emissions from Business Operations

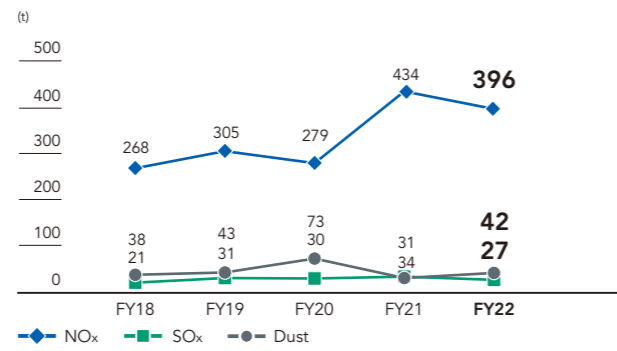
CO<sub>2</sub> emissions | **11.5% reduction** in total amount (vs. FY2013)\*



\* FY2013 CO<sub>2</sub> emissions: 349,000 t-CO<sub>2</sub>; Per unit of consolidated net sales: 4.10 t-CO<sub>2</sub>/JPY million

### Air Pollutant Emissions

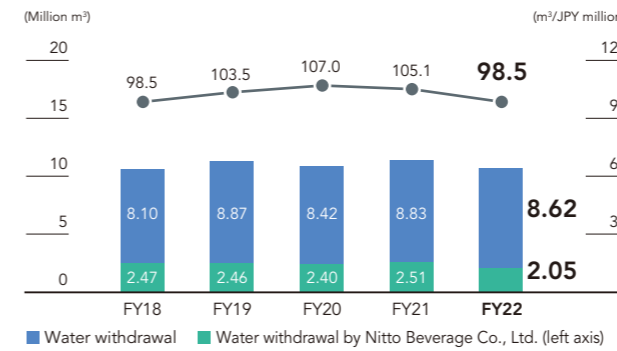
Air pollutant emissions | **53.0% reduction** in total amount (vs. FY2013)\*



\* FY2013 NO<sub>x</sub> emissions: 852 tons; SO<sub>x</sub> emissions: 43 tons; Dust emissions: 95 tons

### Water Withdrawal

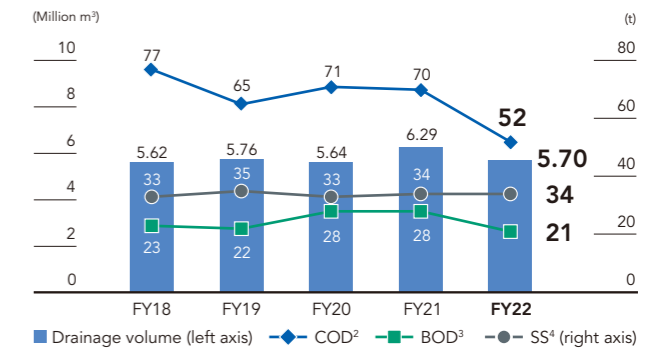
Water withdrawal | **5.0% decrease** per unit of sales (vs. FY2013)\*



\* FY2013 water withdrawal: 8.83 million m<sup>3</sup>; Water withdrawal by Nitto Beverage Co., Ltd.: 2.27 million m<sup>3</sup>; Per unit of consolidated net sales: 103.7 m<sup>3</sup>/JPY million

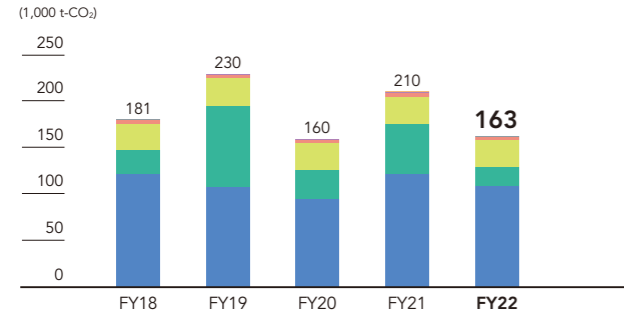
### Water Drainage Volume / Water Pollutants

Water pollutants | **46.2% reduction** in total amount (vs. FY2013)<sup>1</sup>



1. FY2013 COD: 116 t; BOD: 35 t; SS: 48 t; drainage volume: 5.31 million m<sup>3</sup>  
 2. COD (chemical oxygen demand): Amount of oxygen required to chemically oxidize organic matter in water with an oxidant  
 3. BOD (biochemical oxygen demand): Amount of oxygen required for organisms to decompose organic matter in water  
 4. SS (suspended solids): Amount of insoluble substances in water

### Greenhouse Gas Emissions in the Value Chain (Scope 3\*)



Category 1: Purchased goods and services  
 Category 2: Capital goods  
 Category 3: Fuel- and energy-related activities not included in Scope 1 or Scope 2  
 Category 4: Upstream transportation and distribution  
 Category 5: Waste generated in operations  
 Category 6: Business travel  
 Category 7: Employee commuting

\* Scope 3: Indirect emissions outside of Scope 1 and Scope 2 (emissions of other companies related to business operations)

#### FY2022 Scope 3 Category Details (t-CO<sub>2</sub>)

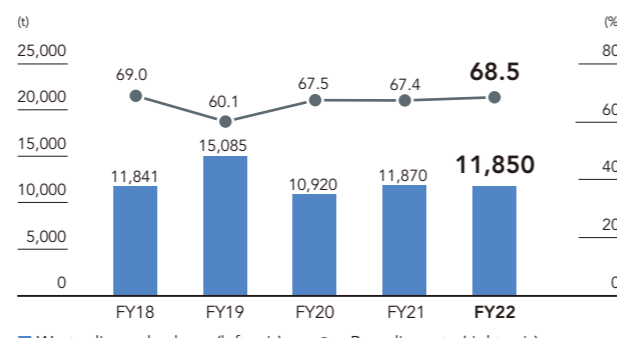
- 1: Purchased goods and services ..... 108,682
- 2: Capital goods ..... 20,717
- 3: Fuel- and energy-related activities not included in Scope 1 or Scope 2 ..... 28,612
- 4: Upstream transportation and distribution ..... 3,232
- 5: Waste generated in operations ..... 662
- 6: Business travel ..... 342
- 7: Employee commuting ..... 291

#### Scope 3 Reduction Initiatives

- Improve transportation efficiency in cooperation with suppliers and transporters
- Reduce CO<sub>2</sub> emissions through glass waste recycling

### Waste Disposal Volume / Recycling Rate

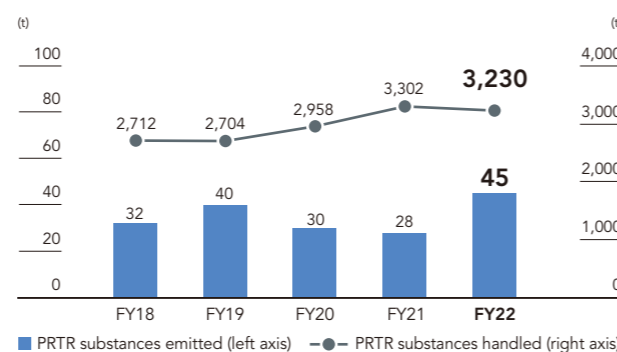
Recycling rate\* | **68.5%** (FY2022)



\* Recycling rate = Materials recycled ÷ (Waste disposal volume + Materials recycled)

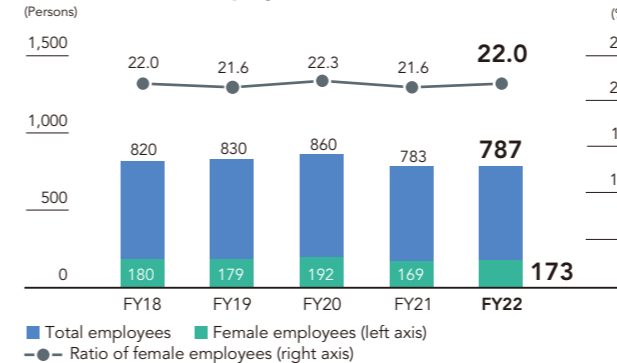
### PRTR Substances Emitted and Handled

PRTR substance emissions | **64.8% reduction** (vs. FY2013)\*

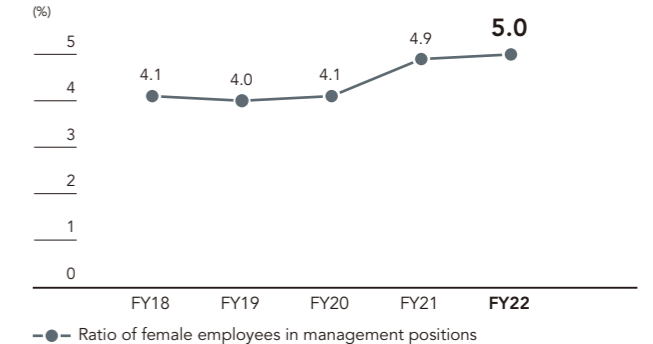


\* FY2013 PRTR substances emitted: 128 tons; PRTR substances handled: 2,881 tons

### Total Employees (Non-Consolidated) / Ratio of Female Employees

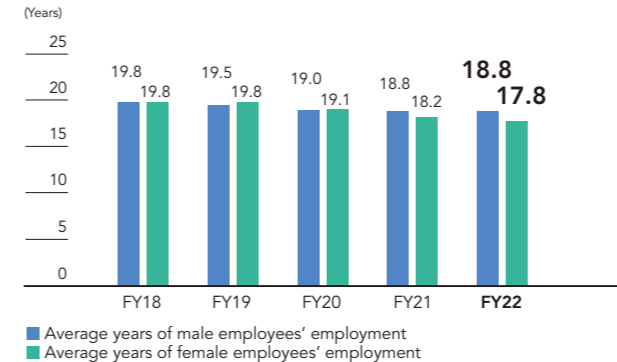


### Ratio of Female Employees in Management Positions (Non-Consolidated)

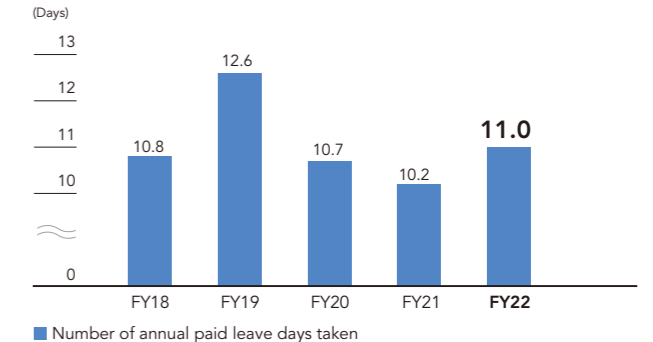


For details of third-party assurance: <https://www.nitto.co.jp/eng/sustainability/pdf/IndependentAssuranceStatement.pdf>

### Average Years of Employment by Gender (Non-Consolidated)



### Number of Annual Paid Leave Days Taken (Non-Consolidated)



For details of third-party assurance: <https://www.nitto.co.jp/eng/sustainability/pdf/IndependentAssuranceStatement.pdf>



## 11-Year Financial Data

(JPY million)

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
<b>Operating results</b>											
Net sales	82,103	85,104	90,223	86,199	83,324	84,526	82,292	85,722	78,727	84,051	<b>87,529</b>
Operating profit	6,619	6,476	8,885	10,893	11,148	10,837	8,198	8,160	5,964	7,268	<b>4,880</b>
Ordinary profit	6,413	6,511	8,658	10,974	11,396	11,071	8,934	8,202	6,274	8,065	<b>6,067</b>
Profit attributable to owners of parent	2,840	3,858	4,588	5,598	7,479	10,253	7,984	5,771	8,100	6,519	<b>2,772</b>
EBITDA <sup>1</sup>	11,974	11,190	13,578	15,497	15,278	15,001	12,279	13,548	12,296	14,351	<b>13,088</b>
Depreciation	5,354	4,713	4,692	4,603	4,130	4,164	4,080	5,388	6,332	7,082	<b>8,208</b>
Capital expenditure	5,903	5,104	4,814	4,422	2,043	7,024	11,949	16,717	14,709	15,820	<b>5,919</b>
R&D expenses	1,626	1,495	1,290	1,255	1,429	1,590	1,477	1,698	2,097	2,577	<b>2,950</b>
<b>Cash flows</b>											
Net cash provided by (used in) operating activities	6,223	12,152	14,745	16,677	11,034	7,791	5,317	10,614	7,815	6,965	<b>7,643</b>
Net cash provided by (used in) investing activities	-7,006	-4,267	-5,318	-12,294	-2,271	2,524	-11,389	-16,917	-1,867	-17,305	<b>1,979</b>
Net cash provided by (used in) financing activities	-1,432	-4,351	-4,388	-2,276	-8,826	-9,467	3,948	12,628	1,862	-1,530	<b>-7,249</b>
Free cash flows	-783	7,884	9,426	4,382	8,762	10,316	-6,071	-6,302	5,948	-10,339	<b>9,622</b>
<b>Financial position (At end of fiscal year)</b>											
Total assets <sup>2</sup>	132,555	136,294	145,956	142,719	140,064	147,160	151,000	172,824	184,652	187,289	<b>185,585</b>
Net assets	60,135	63,371	73,228	75,455	78,281	87,548	90,740	98,704	104,389	110,638	<b>108,948</b>
Interest-bearing debt	35,976	35,408	34,016	32,673	27,358	20,225	25,589	40,315	44,162	46,211	<b>46,061</b>
<b>Stock information<sup>3</sup></b>											
Number of shares issued (Thousand shares)	247,677	247,677	247,677	247,677	199,677	39,935	39,935	39,935	39,935	39,935	<b>37,723</b>
Earnings per share (EPS) (JPY) <sup>4</sup>	14.25	19.36	23.03	28.10	37.71	263.97	205.76	148.73	208.77	168.04	<b>73.94</b>
Book-value per share (BPS) (JPY) <sup>4</sup>	297.69	313.91	363.32	374.50	396.00	2,232.43	2,312.06	2,413.82	2,555.06	2,727.58	<b>2,850.72</b>
Dividends per share (JPY) <sup>5</sup>	5.00	5.00	5.00	6.00	7.00	26.00	40.00	45.00	45.00	45.00	<b>55.00</b>
Dividend payout ratio (%) <sup>6</sup>	35.1	25.8	21.7	21.4	18.6	15.2	19.4	30.3	21.6	26.8	<b>74.4</b>
<b>Management indicators</b>											
Operating profit ratio (%)	8.1	7.6	9.8	12.6	13.4	12.8	10.0	9.5	7.6	8.6	<b>5.6</b>
EBITDA margin (%)	14.6	13.1	15.0	18.0	18.3	17.7	14.9	15.8	15.6	17.1	<b>15.0</b>
Return on equity (ROE) (%) <sup>7</sup>	5.0	6.3	6.8	7.6	9.8	12.5	9.1	6.3	8.4	6.4	<b>2.6</b>
Equity ratio (%) <sup>8</sup>	44.8	45.9	49.6	52.3	55.3	58.9	59.4	54.2	53.7	56.5	<b>55.9</b>
Debt-to-equity ratio (Times) <sup>9</sup>	0.61	0.57	0.47	0.44	0.35	0.23	0.29	0.43	0.45	0.44	<b>0.44</b>

1. EBITDA: Operating profit + Depreciation

2. Partial Amendments to Accounting Standard for Tax Effect Accounting (ASBJ Guidance No. 28, February 16, 2018) and other accounting standards have been applied from the beginning of fiscal 2018, and the figures for fiscal years 2014 through 2017 are shown after retroactive application of such accounting standards.

3. On October 1, 2017, a reverse stock split was implemented at a ratio of 1 share for every 5 shares of common stock.

4. Earnings per share is calculated based on the average number of issued shares during the period excluding treasury stock, and book value per share is calculated based on the number of shares issued at the end of the period excluding treasury stock.

5. The fiscal 2017 dividend of JPY 26 per share is the sum of the interim dividend of JPY 3.5 before the reverse stock split and the year-end dividend of JPY 22.5 after the reverse stock split. The dividend per share for fiscal 2017, converted on a post-reverse stock split basis, would be JPY 40.

6. The consolidated dividend payout ratio is calculated based on the average number of issued shares outstanding during the period excluding treasury stock.

7. Return on equity (ROE): Profit attributable to owners of the parent ÷ (Net assets [average of beginning and ending amounts] - Non-controlling interests [average of beginning and ending amounts])

8. Equity ratio: (Net assets - Non-controlling interests) ÷ Total assets

9. Debt-to-equity ratio: Interest-bearing debt ÷ (Net assets - Non-controlling interests)

## Company Profile

<b>Dates of establishment</b>	February 1898 Koriyama Kenshi Boseki Co., Ltd. (Koriyama)	<b>Employees</b>	2,631 (consolidated), 787 (non-consolidated) (As of March 31, 2023)
	April 1918 Fukushima Seiren Seishi Co., Ltd. (Fukushima)	<b>Business operations</b>	<ul style="list-style-type: none"> <li>• Manufacture, processing, and sale of textile products</li> <li>• Manufacture, processing, and sale of glass fiber products</li> <li>• Manufacture, processing, and sale of chemical products and pharmaceutical products</li> <li>• Planning, supervision, and contracting for construction</li> <li>• Design, manufacture, and sale of machinery and equipment, etc.</li> </ul>
	April 1923 Nitto Boseki Co., Ltd.		
<b>Head office</b>	1, Aza Higashi, Gonome, Fukushima-shi, Fukushima, 960-8161, Japan		
<b>Headquarters</b>	2-4-1, Kojimachi, Chiyoda-ku, Tokyo, 102-8489, Japan		
<b>Paid-in capital</b>	JPY 19.6 billion		
<b>Representative and Chief Executive Officer</b>	Yuichi Tsuji		

### Business Locations (As of August 31, 2023)

<b>Tokyo Headquarters</b>	2-4-1, Kojimachi, Chiyoda-ku, Tokyo, 102-8489, Japan	Administration Division Glass Fiber Division Medical Division Textile Division	Tel. +81-3-4582-5111 Tel. +81-3-4582-5170 Tel. +81-3-4582-5450 Tel. +81-3-4582-5160
<b>Osaka Branch</b>	4-3-10, Kouribashi, Chuo-ku, Osaka-shi, Osaka, 541-0043, Japan (Nissei Fushimicho Building New Building) Note: Scheduled to relocate on November 13, 2023 4-2-3, Hiranomachi, Chuo-ku, Osaka-shi, 541-0046, Japan (OBIC Midouji Building)		Tel. +81-6-6208-5015
<b>Nagoya Branch</b>	2-14-21, Nishiki, Naka-ku, Nagoya-shi, Aichi, 460-0003, Japan (Maruyama Nissei Building)		Tel. +81-52-231-5131
<b>Fukushima Factory</b>	1, Aza Higashi, Gonome, Fukushima-shi, Fukushima, 960-8581, Japan	Fiber R&D Center	Tel. +81-24-546-3131 Tel. +81-24-546-3138
<b>Fukushima No. 2 Factory</b>	20, Ipponsugi, Sakurashimo, Fukushima-shi, Fukushima, 960-2154, Japan		Tel. +81-24-593-1231
<b>Fukuyama Enterprise Center</b>	1, Aza Shiojima, Fukuhara, Fukuyama-cho, Koriyama-shi, Fukushima, 963-8061, Japan	Research & Development Headquarters Medical R&D Center	Tel. +81-24-932-6011 Tel. +81-24-932-6110 Tel. +81-24-932-6261
<b>Itami Enterprise Center</b>	1-6-1, Kuwazu, Itami-shi, Hyogo, 664-8501, Japan		Tel. +81-72-782-2621

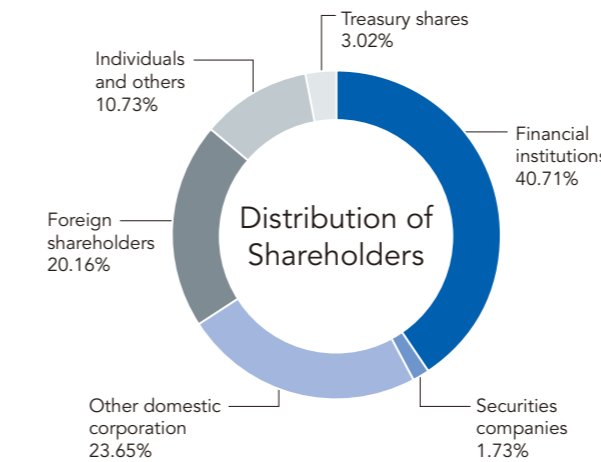
### Consolidated Subsidiaries (As of June 30, 2023)

<b>■ Glass Fiber Yarn</b>		
Nitto Glass Fiber Manufacturing Co., Ltd.	Koriyama-shi, Fukushima	Production and sale of glass fiber products
Fuji Fiber Glass Co., Ltd.	Moka-shi, Tochigi	Production and sale of glass fiber products
NITTOBO ASIA Glass Fiber Co., Ltd.	Chiayi County, Taiwan	Production and sale of glass fiber products
<b>■ Glass Fiber Cloth</b>		
Soyo Co., Ltd.	Chiyoda-ku, Tokyo	Sale of glass fiber products, etc.
Shinwa Denzai Co., Ltd.	Chiyoda-ku, Tokyo	Sale of electronic materials, etc.
Baotek Industrial Materials Ltd.	Taoyuan, Taiwan	Production and sale of glass fiber products
Nittobo Taiwan Co., Ltd.	Taoyuan, Taiwan	Sale of glass fiber products
<b>■ Glass Fiber for Industrial Materials</b>		
Nitto Glasstex Co., Ltd.	Oizumi-machi, Oura-gun, Gunma	Production and sale of glass fiber products
Paramount Glass Manufacturing Co., Ltd.	Sukagawa-shi, Fukushima; Ebetsu-shi, Hokkaido; Suzuka-shi, Mie	Production and sale of glass wool products
Nittobo FRP Laboratory Co., Ltd.	Koriyama-shi, Fukushima	Production and sale of glass fiber products, etc.
<b>■ Life Science</b>		
NITTOBO MEDICAL CO., LTD.	Chiyoda-ku, Tokyo; Koriyama-shi, Fukushima	Development, production, and sale of in vitro diagnostic reagents and specialty chemicals
Frontier Institute Co., Ltd.	Ishikari-shi, Hokkaido	Development, manufacturing and sale of bioassay kits and consignment of antibody production
Nittobo America Inc.	California, Iowa and Maine, U.S.A.	Production and sale of antisera used for in vitro diagnostic reagents
Kamiya Biomedical Company, LLC	Washington, U.S.A.	Production and sale of in vitro diagnostic reagents
<b>■ Textiles</b>		
Nittobo Advantex Co., Ltd.	Itami-shi, Hyogo	Production and sale of interlining and adhesive materials
Bunkyo Seiren Co., Ltd.	Fukui-shi, Fukui	Processing of textile products
<b>■ Other</b>		
Nittobo Allied Service Co., Ltd.	Fukushima-shi, Fukushima	Various contracted services and insurance agency
Nittobo Ecology Co., Ltd.	Chiyoda-ku, Tokyo	Various contracted services
Nittobo Techno Co., Ltd.	Koriyama-shi, Fukushima	Design, manufacture, and sale of mechanical facilities; design and construction of civil engineering work and buildings

## Stock Information (As of March 31, 2023)

### Stock Status

Authorized number of shares	120,000,000 shares
Number of shares issued	37,723,012 shares
Number of shareholders	9,939



### Major Shareholders

Name	Number of shares held (Thousand)	Percentage of shares held (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	4,194	11.47
Custody Bank of Japan, Ltd. (Trust account)	2,542	6.95
Sumitomo Realty & Development Co., Ltd.	2,383	6.51
Nippon Life Insurance Company	1,614	4.41
The Dai-ichi Life Insurance Company, Limited	1,316	3.60
Sumitomo Life Insurance Company	1,082	2.96
AIR WATER INC.	997	2.73
The Toho Bank, Ltd.	905	2.47
Aioi Nissay Dowa Insurance Co., Ltd.	890	2.43
Mizuho Bank, Ltd.	800	2.19

Notes:  
1. Shares held are rounded down to the nearest 1,000 shares.  
2. Shareholding ratio is rounded to the nearest third decimal place.  
3. The percentage of shares held excludes treasury shares.

### Stock-related Administration

Fiscal year	April 1 to March 31
Ordinary general meeting of shareholders	Late June
Record dates	Voting rights for Ordinary General Meeting of Shareholders: March 31 Year-end dividend: March 31 Interim dividend: September 30 Other record dates are established as necessary with prior public notice.
Method of public notice	Public notices are available on the Company's website below: <a href="https://www.nittobo.co.jp/koukoku/index.htm">https://www.nittobo.co.jp/koukoku/index.htm</a> (Japanese only) However, if an electronic public notice cannot be posted due to an accident or other unavoidable reason, the public notice will be printed in the Nihon Keizai Shimbun.
Stock listing	Prime Market of the Tokyo Stock Exchange (Securities code: 3110)
Shareholder registry administrator and special account administrator	Mizuho Trust & Banking Co., Ltd. 1-3-3 Marunouchi, Chiyoda-ku, Tokyo, Japan

#### IR Information Website

The Nittobo Group's detailed IR information is available on the official website.

<https://www.nittobo.co.jp/eng/ir/index.htm>

- Management policy
- Corporate governance
- Financial results-related materials (financial statements, etc.)
- News releases
- IR calendar
- Performance and financial information and more



### Message from the Corporate Communication Department

Thank you for reading *Nittobo Group Integrated Report 2023*.

The Nittobo Group is celebrating its 100th anniversary in 2023. We want to express our gratitude to all stakeholders by providing a clear presentation of how we have created value over our 100-year history and the challenges we will take on during the next 100 years. We hope this report helps readers to better understand the Nittobo Group's initiatives for resolving social issues and achieving a sustainable society.

Through dialogue with stakeholders and timely disclosure, we will continue to emphasize communication that helps us to generate sustainable growth in corporate value.

