

Nittobo Group Integrated Report **2019**

Nittobo

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Nittobo

Nittobo Group Integrated Report 2019

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Report Period

This report covers business activities in FY2018 (from April 1, 2018 through March 31, 2019).

Scope of Report

This report covers the business activities of Nitto Boseki Co., Ltd. and its consolidated subsidiaries in Japan and overseas.

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 included in this report do not represent promises or guarantees that the company will attain its forecasts or realize the business measures expressed herein.

Editorial Policy

The Corporate Report 2019 combines financial information and non-financial information including CSR to provide stakeholders with a greater understanding of the Nittobo Group's value-creating initiatives for the medium and long term.

Previously the Nittobo Group's corporate social responsibility (CSR) initiatives were disclosed on the corporate website under the “CSR” page.

Mission

Corporate Philosophy

Nittobo Group will, as a corporate group, enhance its significance by striving to create healthy and comfortable lifestyles, and thereby continue to contribute to the realization of prosperous communities.

Values

Nittobo Declaration

- Nittobo Group aims to become the “Best Partner” of your community. (Nittobo BP Declaration)
- We will relentlessly strive to identify our customers' needs and will find great satisfaction in steadfastly earning their Confidence and Trust. In addition, we will attach importance to sharing this satisfaction with all of our stakeholders (communities) through our products and services, including shareholders, investors, public administrations and regional communities.
- We are committed to becoming a corporate group in which the potential of our respective, independent employees is valued and thereby inspires our employees to freely and willingly share their own ideas, ultimately achieving greater results through teamwork.
- Our corporate group will provide its' employees with an opportunity for progress and self-realization based on the belief that their progress leads to everyone's success. We will encourage our employees to be good citizens, think deeply, observe widely, act courageously and to approach their jobs with resolve and determination.

Deeply, Widely, Strongly and Hospitably

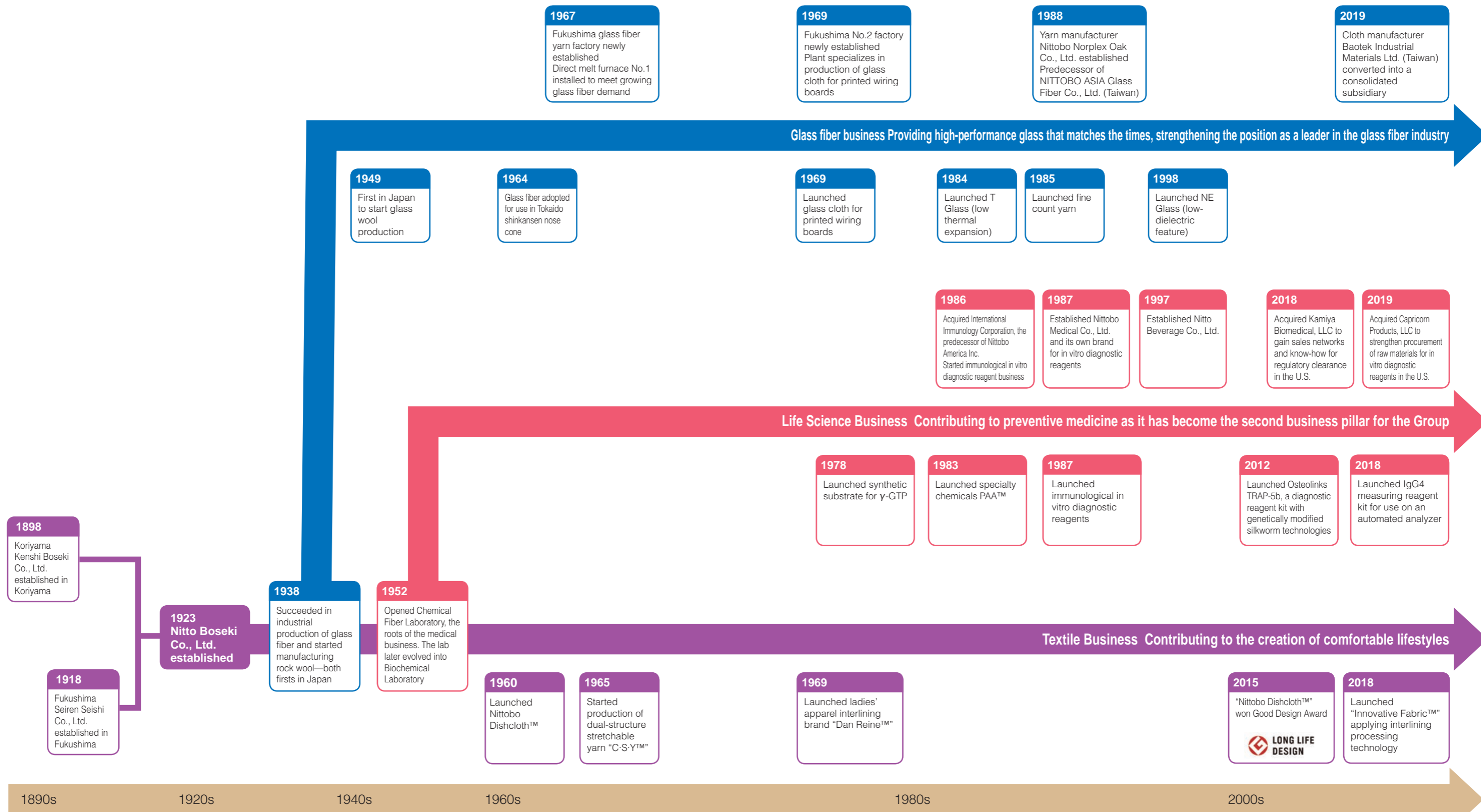
Vision

Corporate Vision

Nittobo delivers the unique products and innovations globally from Fukushima in Japan based on customer relations and technology.

History of Value Creation

The Nittobo Group was founded in 1923 in Fukushima Prefecture as a textiles manufacturer. Over the decades, we became the first Japanese company to industrially produce glass fiber (1938), became the first in Japan to manufacture glass wool (1949), and made inroads into medical business (1978). In each era, we have embraced change as opportunity and continually developed the Company by relishing the challenge to create new technologies and priding ourselves on our pioneer spirit.



The Nittobo Group will continue to deliver innovation from our origins in Fukushima, to gain the trust of all stakeholders in the pursuit of client satisfaction.



Yuichi Tsuji

Director,
Representative and Chief Executive Officer

Please tell us about the Nittobo Group.

▶ Please see pages 2-3 for the history of the Nittobo Group.

The roots of Nittobo go back to Koriyama Kenshi Boseki Co., Ltd., established in Koriyama City, Fukushima Prefecture in 1898. Koriyama Kenshi Boseki utilized the water of Asaka Canal, the development of which was facilitated by the Meiji Government, and engaged in both power generation business and textile business using its excess power. Koriyama Kenshi Boseki became Katakura Seishi Boseki Kabushiki Kaisha, which integrated with Fukushima Seiren Seishi, and then Nitto Boseki Co., Ltd. was founded in 1923. "Nittobo" will mark its 100th anniversary in 2023, but its roots actually date back more than 120 years.

Nittobo has been full of enterprising spirit since its inception. Sanpei Katakura, the second President, is the one who can be considered to have laid the foundation of the present Nittobo business. Sanpei Katakura had a very robust pioneering spirit, which is manifested in his motto of "Let's turn anything into fibers." Under this motto, which expresses his spirit of innovation, he made efforts to turn various substances into fibers and succeeded in inventing many technologies that were "Japan's first."

In 1933, Nittobo became the first company in Japan to develop synthetic staple fiber using pulp as raw materials with its own technology. Moreover, Nittobo succeeded in the first commercial production of glass fiber in Japan in 1938. In the same year, Nittobo also started manufacturing rock wool, which was Japan's first as well.

Nittobo has been constantly inventing new technologies and starting new businesses that meet the needs of society, always seizing opportunities presented in times of change. The foundation of Nittobo lies in its dedication to new technologies and brisk pioneering spirit, and we believe that technological capabilities are our biggest strength.

Please tell us about your approach to business management.

▶ Please see page 42 for more information about stakeholder dialogue.

▶ Please see page 29 for more information about research and development and technological development.

▶ Please see pages 38-42 for more information about corporate governance.

The Nittobo Group states in its Corporate Philosophy that the Group will enhance its social importance as a corporate group to "create healthy and comfortable lifestyles, and thereby continue to contribute to the realization of prosperous communities." Furthermore, the Nittobo Group declares in the "Nittobo Declaration," which sets out our shared values to gain the trust of society, that it is the Group's pleasure to constantly pursue what clients want and sincerely deliver "safety and trust."

Now, what is the essence of our declaration? It is that we would like to gain the trust of all stakeholders in the pursuit of client satisfaction. When we think about for whom a company exists, of course shareholders come to our mind first, but our stakeholders also include the clients who purchase our products, business partners who provide us with raw materials, local communities, and employees who work for the Nittobo Group and their families. We would like to become a company that gains trust from all of such stakeholders.

When I was appointed as Chief Executive Officer in February 2016, the first thing I thought about was how I would run business operations to achieve sustainable growth while fulfilling our corporate responsibilities. I thought it was necessary to change the value systems of all the officers and employees of the Group including myself. Consequently, three basic policies were formulated for business operations.

The first basic principle was to be a truly open company internally and externally.

I thought I would like to cultivate a corporate culture in which employees keep respecting one another and can work comfortably. Employees' growth is essential for a company to grow. Therefore, I would like to create an environment where each and every one of our employees can work with a greater sense of satisfaction and grow through their work. In addition, I thought I would like to create an environment where free and open-minded, constructive opinions and ideas would turn up and a virtuous cycle that would actualize this.

In addition, I consider that a free and open atmosphere should be created externally, too. The Corporate Communication Department was established in April 2017 to put in place a structure to disseminate timely and appropriate information with transparency and fairness.

The second basic principle was returning to our roots as "Nittobo the Technology Innovator." Looking five years and 10 years ahead, we will further focus on research and development as well as technological development.

The Nittobo Group has experienced many crises in its history, the most recent being the financial crisis set off by the Lehman Brothers bankruptcy. After that crisis, we aimed to build a business culture in which the Company could generate earnings under any kind of environment. The management priority was strengthening the financial foundation. We emphasized bolstering the corporate foundation by eliminating irrationality, waste, and inconsistency. Put simply, we went on a diet. Research and development and human resources development do not qualify as wasted resources, but in the context of prioritizing financial soundness, it was inevitable that these areas were also targeted for reduction. We realized, however, that Nittobo cannot achieve growth without research and development and technological innovation. Not only do we imperil sustainable growth, but the company's very existence is put at risk. Since 2016, when I was appointed as Chief Executive Officer, we have been strengthening our research and technological development structure because we believe that it is essential to put an emphasis on research and technological development from a long-term perspective.

The third basic principle for management was the establishment and continual improvement of corporate governance. We have adopted the committees system of governance, which is one type of institutional design allowed by the Companies Act. In this system, a company's oversight and execution functions are separated. Three committees—Nomination Committee, Remuneration Committee, and Audit Committee—operate to enhance the oversight functions of the Board of Directors, with each of the committees consisting of a majority

of external directors, in accordance with the stipulations of the Companies Act. It's an advanced system, but it has to be more than just a shell to ensure true corporate governance. Governance must actually function, be put into practice and then continually improved. Since June 2015, when the implementation of the Corporate Governance Code started, more emphasis has been placed on how the Board of Directors supervises business execution. Enhancing the effectiveness of the supervisory function of the Board of Directors and ensuring a prompt and highly transparent business execution have become big issues. We have been taking the following initiatives.

We set up a "preliminary briefing" to deepen understanding of agenda items to be presented to the Board of Directors to further vitalize its deliberations. At the preliminary briefing, timely and appropriate explanations are made and opinions are exchanged on agenda items for the Board of Directors meeting and items that are deemed necessary for the supervision of business management, spending about two hours each time. The meeting contributes to deepening the essential understanding of the background of agenda items and deepening the discussion of the Board of Directors meeting. In addition, self-evaluation on the effectiveness of the composition, operation, supervision, and support system of the Board of Directors, as well as its dialogue with shareholders, is made every year using external lawyers. Based on the evaluation, directors discuss how the Board of Directors and Nittobo's governance should be. We established an Executive Committee as an organ to deliberate matters relating to business execution delegated by the Board of Directors.

A quick decision-making and an agile business operation are made by holding Executive Committee meetings twice a month.

Going forward, we will pursue governance suitable for the Company's business or organization by making it take root, instead of being a mere formality, and enhancing its effectiveness.

Please tell us about the Mid-to Long-term Business Plan "VISION 101."

▶ Please see pages 10-13 for more information about the Mid- to Long-term Business Plan "VISION 101."

In formulating the Mid-term Business Plan in 2016, we discussed internally what company we were to aim for. The Mid- to Long-term Business Plan "VISION 101" came out of the discussion.

Mid- to Long-term Business Plan "VISION 101"

Our Group has developed a mid- to long-term business plan called "VISION 101," whereby our goal is to be recognized as a company that delivers innovation from our origins in Fukushima and Japan throughout the globe, offering unique value added business and products based on client expectations and technology.

As the important first step in realizing our Long-term Vision 101, we established the Mid-term Business Plan "Go for Next 100" covering the four-year period fiscal 2017 through fiscal 2020. This plan emphasizes the solidification of a foundation for sustainable high earnings while capturing growth chances for the future. As a preparation step for the future, we are crafting a lean, muscular structure which eliminates irrationality, waste, and inconsistency and shows the world we are striving for sustainable growth. Even if we have to sacrifice short-term profit, we will prioritize active growth investments into human resources development, research and development, and facilities over these four years as a way to thoroughly strengthen the development of unique, value-added products, which is the Nittobo Group's core strength. The Mid-term Business Plan "Go for Next 100" embodies our shared vision and the unified will of the business divisions.

In the process of formulating the Mid-term Management Plan "Go for Next 100," we made predictions on how society and markets will change, and amid those changes, how we could best contribute to society. Japan as a whole is confronting many difficult challenges, including environmental protection, population aging, and surging social welfare costs. At the same time, the housing, automotive, home appliance, clothing and other industries are digitalizing and becoming "smarter." Within the dynamically changing business environment, there are many areas in which Nittobo can contribute

▶ Please see pages 18-19 for more information on special glasses.

▶ Please see pages 20-21 for more information on in vitro diagnostic reagents.

Please tell us why you decided to set specific targets.

▶ Please see page 11 for numerical targets.

to the global environment conservation and societal development. From the viewpoint of reducing greenhouse gas, it is necessary to reduce the weight of automobiles and aircraft in the pursuit of low fuel consumption. Use of glass fiber can be considered in place of metal in this respect. Glass wool is indispensable as a heat insulating material for energy savings in the home. The raw material of glass wool is recycled glass, and the product is environmentally friendly because it is reusable.

Data traffic volume has been increasing daily. With the practical application of the "5G" next-generation communication standard just around the corner, network infrastructure such as base stations and data centers is becoming increasingly sophisticated. Glass fiber cloth used in these electronics materials is a product in the field we are best at. Especially, glass fabric of a particular composition called special glass is an indispensable substrate for the 5G's advancement required for high-speed, high-volume data processing. It can be said that it is a product that contributes to the progress toward a "smart society."

Looking at the Life Science (Medical) business, there is a worldwide shift from treatment to the prevention of disease and illness. It is a growing trend to get a medical examination before succumbing to a disease from the perspective of preventive medical care, and globally there is rising demand for in vitro diagnostic reagents. In addition, in Asian countries that have a huge population, medical-check opportunities have been increasing dramatically thanks to enhancements of social insurance systems and living standards. The Nittobo Group possesses an integrated value chain for in vitro diagnostic reagents, from raw materials to finished products, making it possible for us to support better health around the world through our supply chain.

There is an ever-growing expansion of opportunities for the Nittobo Group to leverage its strengths for the benefit of society. We will thoroughly bolster our strengths to ensure we can fulfill our Corporate Philosophy, "striving to create healthy and comfortable lifestyles, and thereby continue to contribute to the realization of prosperous communities."

As I mentioned earlier, we have been giving top priority to reinforcing the fundamental strength of the company since the Lehman Brothers failure. Consequently, it might have been that employees didn't have a forward-looking approach. Therefore, I thought I would like to set challenging targets to change our employees' mindset for a new growth of the Nittobo Group.

The net sales target for 2023 is 150.0 billion yen, which would mark the highest level since 2000. We wanted each and every employee to think about their individual targets in support of achieving the Group's target.

Our two highest priorities are growing operating profit and increasing ROE to 10% or higher. The main thrust of our Mid-term Business Plan is the strengthening of value-added products such as our mainstay special glass, ultrafine yarns, ultrathin glass cloth, and in vitro diagnostic reagents, aimed at increasing our operating profit and achieving medium- to long-term growth in ROE. We are also striving to increase the ratio of sales outside Japan and expand our medical business into a second pillar in order to establish a stable and robust business portfolio.

Please tell us about the progress of the Mid-term Business Plan.

▶ Please see pages 12-13 for the progress of the Mid-term Business Plan.

The four years under the current Mid-term Business Plan will serve as a period to sow the seeds for future growth and lay a foundation for the future. Our capital expenditure plan covering the four-year period is 55.0 billion yen, drawing on our cash flows and asset utilization. By the end of fiscal 2018, we had made decisions on the allocation of about 50.0 billion yen, including M&As. The focus of the investment is raising the production capacity of our mainstay value-added products. From the second half of this fiscal year business activities, we have begun to see the fruits of this investment.

In the Glass Fiber business, this fiscal year we started operation of new furnaces for special glass as demand surges with the rollout of 5G telecommunications. We expect demand to remain robust, and we are now considering the construction of new facilities in Taiwan and Fukushima in fiscal 2020 and beyond.

In the Life Science business, we are building new facilities at manufacturing sites in Japan and the United States in order to double production capacity. In the United States, which is currently the largest in vitro diagnostic reagent market, we have solidified our presence by completing M&As. Specifically, we acquired Capricorn Products, LLC (State of Maine) to increase the supply of raw materials for in vitro diagnostic reagents, and Kamiya Biomedical Company, LLC (State of Washington) in order to strengthen our manufacturing and sales capabilities in the United States.

Please tell us about your initiative for CSR and about ESG management.

▶ Please see pages 34-37 for initiatives for Environment.

Environment

The Nittobo Group's corporate philosophy states that the Nittobo Group will, as a corporate group, enhance its significance by striving to create healthy and comfortable lifestyles, and thereby continue to contribute to the realization of prosperous communities. This means we will have an awareness of responsibility as a corporate citizen and contribute to the realization of prosperous communities while caring for the environment. There are many things the Nittobo Group can contribute to the global environment through the supply of our products.

As I mentioned earlier, glass wool insulation materials or glass fibers that contribute to low fuel consumption of automobiles and aircraft enable significant savings in terms of energy consumption. Other than these, glass fibers are used in the field to address environmental issues such as blades for wind power generation or dust-collecting filters at factories and incineration plants. Furthermore, we are, of course, striving to reduce CO₂ emissions in the manufacturing process. A new technology was introduced to glass melting furnaces and we are implementing improvement measures for energy savings and energy efficiency.

Social

The Nittobo Declaration states that the Nittobo Group aims to become the "Best Partner" of your community. We believe that a company is a member of a community and coexistence and co-prosperity with communities are critical for business continuity.

From the perspectives of contribution to and coexistence with communities, we regularly conduct cleaning activities around our factories and hold a science class for children and students every year. The Company, which is headquartered in Fukushima Prefecture, cohosts "Fukushima Marche" with the prefecture to introduce Fukushima's specialties including peaches and Japanese sake at the Tokyo headquarters every year. I myself take this opportunity to explain the status of recovery in Fukushima. When I make a presentation or talk business overseas, I make it a rule to talk about the status of recovery. I also set up an opportunity for people in various countries to deepen their understanding of Fukushima.

Employees are also important stakeholders. It's essential to combine the strengths of employees who have diverse value systems to cope with changes in the global management environment. I believe that "employees' growth is the company's growth." We also consider that each one of our employees should seek personal growth through their work and the Company should provide employees with an opportunity to display their skills, and that will eventually lead to the maintenance and enhancement of the Company's competitive edge. We will enhance our systems and environment going forward, too.

Especially, it is critical to put in place an environment where employees will be able to work long and play an active role while avoiding involuntary retirement—and loss of talent for the Company—due to a life event. Overtime work at the Company is relatively less than the average company. Going forward, we will facilitate work styles that are not bound by one's sex, nationality, age, or disability. In particular, we feel that promotion of women's active role and their advancement are not sufficient. We will continue to work on it.

▶ Please see pages 30-31 for initiatives for Social.

▶ Please see pages 32-33 for more information on active roles by diverse talents.



▶ Please see pages 38-42 for more information on corporate governance.

Governance

The basic policy of our business operations is constant enhancement of governance. I consider that nothing is more important than creating an open organization internally and externally, and an open and transparent corporate culture in terms of corporate governance.

The Nittobo Group had been striving to enhance corporate governance before 2015, when the Corporate Governance Code was established. An executive officer system was installed in June 2003 to accelerate decision-making in business execution. In June 2014, the Company made a transition to a Company with Nomination Committee, etc. system, and we aim for further reinforcement of the supervisory function, highly transparent management and prompt execution of business and enhancement of management agility.

Meanwhile, when it comes to corporate governance, just launching a format is not enough. If it is not effective, it does not mean anything. Even after the transition to a Company with Nomination Committee, etc. system, we have been making various improvements with the aim of further reinforcing governance, that is, ensuring open and highly transparent organizational operations. The majority of the members of the Nomination Committee, Remuneration Committee, and Audit Committee are external directors, and the Committees are chaired by external directors. Moreover, from the viewpoint of enhancing management transparency, the system of advisors and special consultants was abolished in February 2017.

A Message to Our Valued Stakeholders.

FY2019 marks the third year of our four-year Mid-term Business Plan. We've made great progress in achieving our "Long-term Vision 101" by executing our strategy to develop and strengthen value-added products. We will continue striving to execute and realize the many promising initiatives we've begun. In the second-half of FY2019, we'll begin to see the fruits of our investments, and this period will be a key driver in accomplishing our Mid-term Business Plan targets. Looking beyond the current plan, we will accelerate initiatives to ensure that we can generate ongoing benefits. In this way, the executives and employees of Nittobo will strive together to achieve "Long-term Vision 101" and sustainably raise corporate value.

We appreciate your support and understanding.

Mid- to Long-term Business Plan “Long-term Vision 101” and Mid-term Business Plan “Go for Next 100”

Nittobo will celebrate the 100th anniversary of its founding on April 1, 2023.

We aim to grow sustainably for another century. As a first step towards that goal, we drew up “Long-term Vision 101” as the corporate vision to achieve by fiscal 2023, marking our 101st year of business. We also formulated “Go for Next 100” as our four-year Mid-Term Business Plan through fiscal 2020.

“Long-term Vision 101” embodies three basic policies for business management.

- 1) We will work to establish a culture of openness in the Nittobo Group both internally and externally.
- 2) We believe that R&D and technological innovation are essential for the development of Nittobo.
- 3) We will establish and constantly review corporate governance.

1. A Corporate Vision for the Nittobo Group

The Nittobo Group believes that now is the time to lay the foundation for the next century of business. It is our duty to our stakeholders to continue business in our homeland of Japan, while seeking sustainable growth on a global scale.

To that end, we have created the following corporate image to achieve by fiscal 2023 as the start of our next 100 years of business (in our 101st year).

Our Corporate Vision: “Long-term Vision 101”

A company that delivers innovation worldwide from our origins in Fukushima and Japan, offering unique value-added business and products based on client expectations and technology

Vision for Each Business

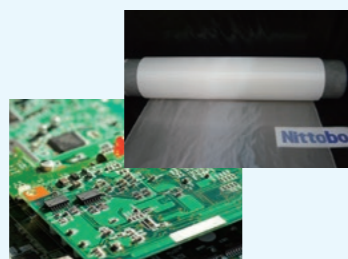
Textile Division

Acceleration of high value-added strategy and expansion of the application of textile technology to industrial material fields with proper business volume and profitability.



Glass Fiber Division

Stable provision of high value-added products in the rapidly changing environment to consolidate our presence as market leader.



Life Science Division

Growth as second pillar of the Nittobo group by leveraging the competence in in vitro diagnostic reagents, specialty chemical, and beverage fields.



2. Overview of the Nittobo Group’s Mid-term Business Plan “Go for Next 100”

The plan covering the four years from fiscal 2017 through fiscal 2020 is an important first step in achieving “Long-term Vision 101” by fiscal 2023. We are building a foundation to maintain current profitability while capturing future growth opportunities.

1 Theme

“Go for Next 100” ~ Challenges for change and creation ~ (FY2017~FY2020)

2 Action Plans

Sales Strategy: Accelerating the shift to high value-added products

1. Sales expansion of NE Glass, T Glass and multi-structured fibers
2. Application of glass products for composite / industrial materials to various uses and share expansion of oversea market
3. Acquisition of domestic top share in immunology field and expansion of oversea business
4. Strategic alliance and M&A

Production Systems: Reinforce the production capacity for high value-added product, cost competitiveness and productivity

1. NE Glass / T Glass
High value-added glass fiber cloth
2. Reagent for in vitro diagnostics
3. Textile technology application to industrial material fields
4. Leverage the artificial intelligence and the Internet of Things technology

R&D: Pursue high value-added technologies for the next generation and beyond

1. Establish a research and development structure to promote mid- to long-term themes (New General R&D)
2. Establish market-in style development structure

Environmental Measures: Reduction of environmental impact

Management Foundation: Establish a robust management foundation

1. Capital efficiency (Leveraging idle real estate, compression of marketable securities)
2. HR education / Skill inheritance
3. Strengthen corporate governance

3 Management Targets

	FY16 results	Mid-term Business Plan	“Long-term Vision 101”
		“Go for Next 100”	(billion yen)
Net sales	83.3	FY20 100.0	FY23 150.0
Operating profit	11.1	12.0	15.0
EBITDA	15.3	20.0	—
Profit	7.5	8.0	10.0
ROE (%)	9.8%	8% or higher	10% or higher
4 years cumulative capital investment	16.4*	55.0*	—

*FY13-16

*FY17-20

4 Financial Strategy and Shareholder Return Policy

Nittobo prioritizes the allocation of capital generated by operating cash flow and asset utilization to capital investments, primarily growth investments, while also seeking a balance between reducing net interest-bearing debt and providing returns to shareholders.

Regarding the shareholder return policy, the Company has a basic stance of providing stable dividend growth, while deciding dividend levels by taking into account the payout ratio. Additionally, the Company considers dynamic and flexible returns to shareholders depending on financial conditions.

3. Progress in Mid-term Business Plan “Go for Next 100”

1 Business results

The first two years of the Mid-term Business Plan served as a period to strengthen the business foundation and prepare for the development of the high value-added products strategy. We promoted capital investments, human resources development, and research and development. We have implemented various initiatives to meet our targets, and from the second half of fiscal 2019, we expect our investments to begin to bear fruit.

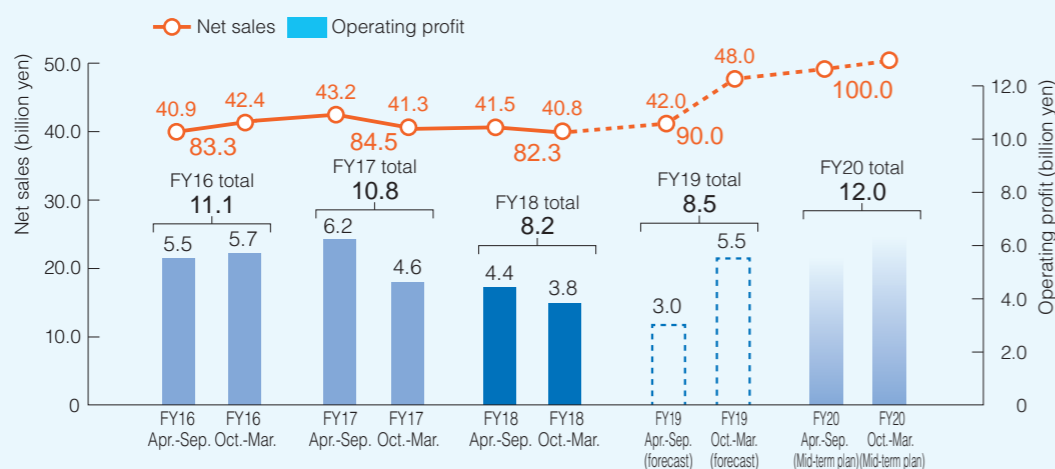
Glass Fiber

- Increased production capacity for special glass, a critical component for high-speed communications, in preparation for the rollout of the 5G next-generation telecommunication network (new production facilities began operation from the first quarter of FY2019)
- Ongoing review of additional production capacity increases in Taiwan and Fukushima from the autumn of 2020 or later with the expectation of continued robust demand for special glass

Life Science

- New factories constructed to increase capacity at production sites in Japan and the United States, with production to ramp up gradually from 2020
- To gain sales networks and know-how for regulatory clearance in the U.S.; acquired Kamiya Biomedical Company
- Expanding supply capacity of raw materials; acquired Capricorn Products
- Strengthening R&D and raw materials development capabilities

Investment to Rimco Development and production of raw materials for in vitro diagnostic reagents using genetically modified silkworms
 Frontier Institute acquisition R&D and production of monoclonal antibodies
 FAN establishment Joint venture with Fujikura Kasei Co., Ltd. for R&D into raw materials for in vitro diagnostic reagents



Mid-term Business Plan “Go for Next 100” (billion yen)

	FY16 results	FY17 results	FY18 results	FY19 forecast	FY20
Net sales	83.3	84.5	82.3	90.0	100.0
Operating profit	11.1	10.8	8.2	8.5	12.0
EBITDA	15.3	15.0	12.2	13.9	20.0
Profit	7.5	10.3	8.0	6.2	8.0
ROE (%)	9.8%	12.5%	9.1%	—	8% or higher

Shareholder returns

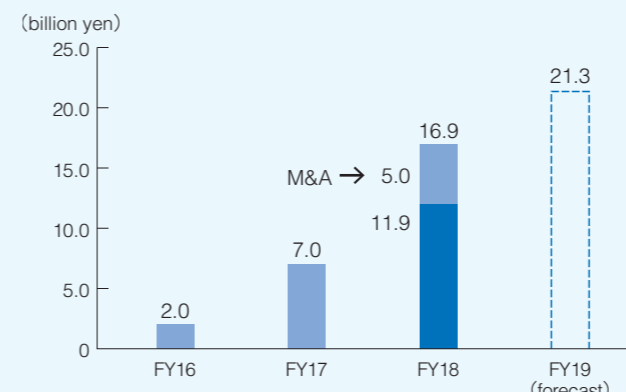
	FY16 results	FY17 results	FY18 results	FY19 forecast
Per share dividend	35 yen	40 yen	40 yen	40 yen
Payout ratio	18.6%	15.2%	19.4%	25.0%
Total return ratio	41.7%*	22.8%	19.5%	25.0%

*Repurchased own shares

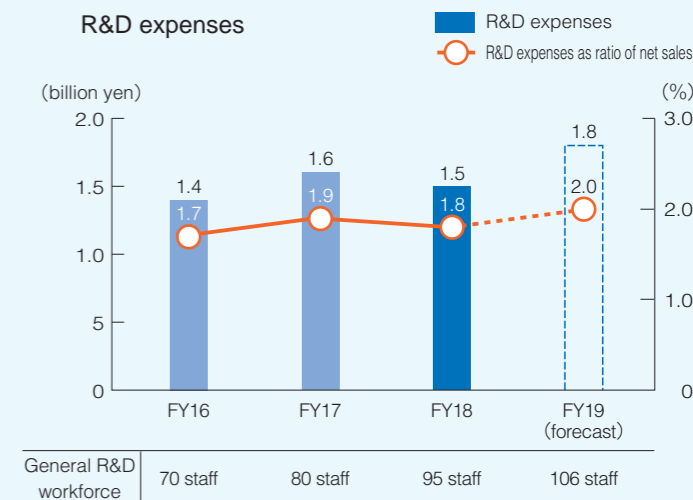
2 Capital Investments and R&D Expenses

- Capital investment plan of 55.0 billion yen over four-year Mid-term Business Plan
- As of end of FY2018, 50.0 billion yen had been earmarked

Capital investment (receipt and approval base)



R&D expenses



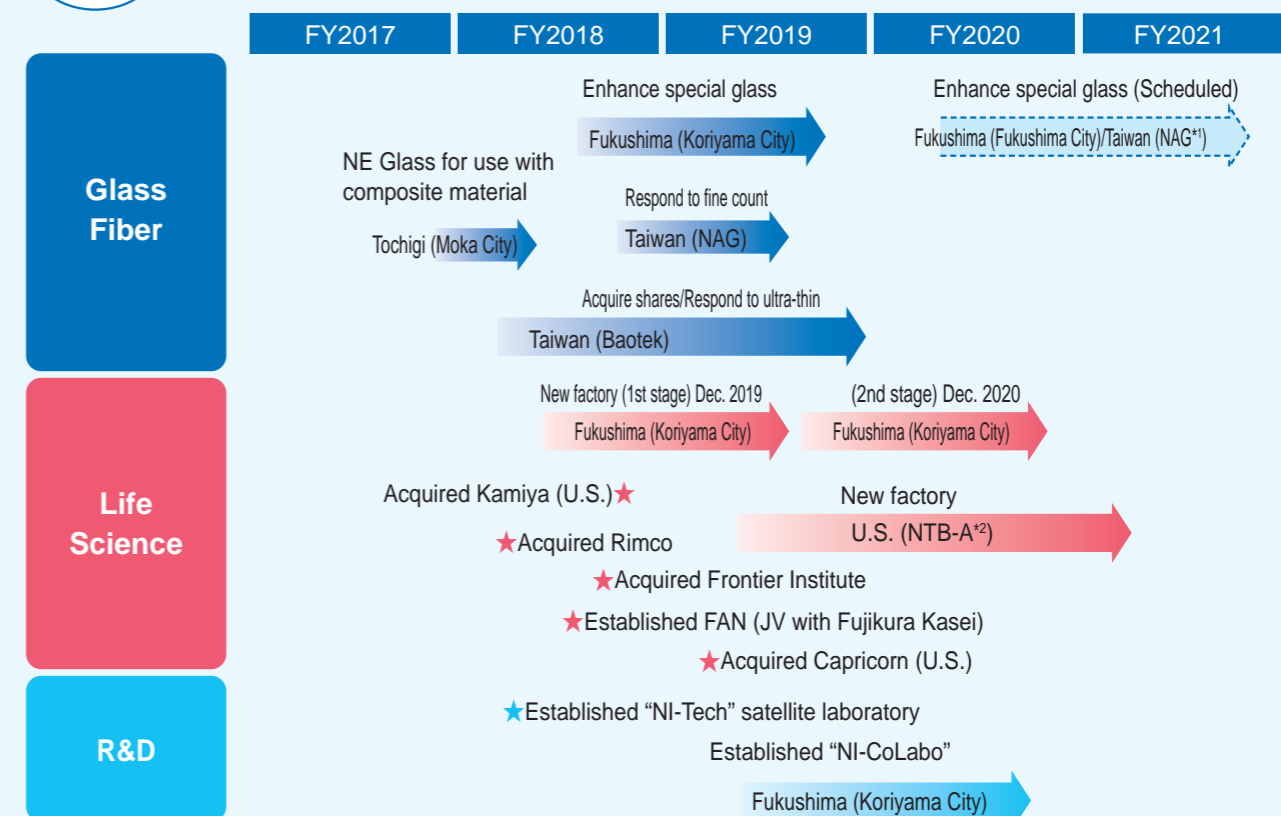
3 Major approved investments (for enhancing added value)

Glass Fiber

- Expanding special glass production facilities in Japan and planning to start overseas production
- Maximizing special glass production in Japan amid shift to overseas production for E Glass yarn (superfine) and glass cloth (ultra-thin)

Life Science

- Building a production, sales and regulatory clearance value chain globally by constructing new factories at production sites in Japan and the United States and using M&As

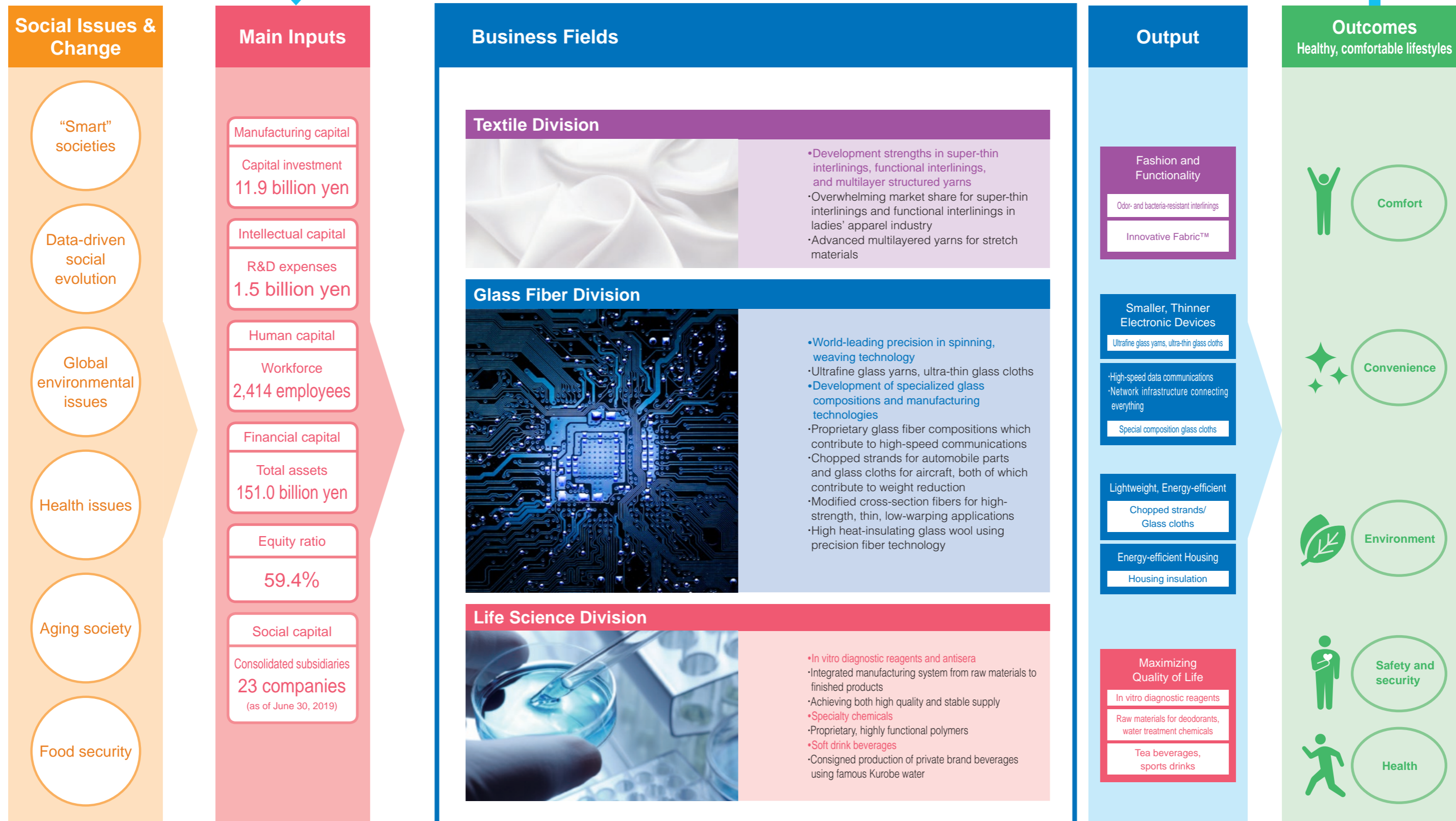


*1 NITTOBO ASIA Glass Fiber Co., Ltd. *2 Nittobo America Inc.

Value Creation Process

Corporate Philosophy

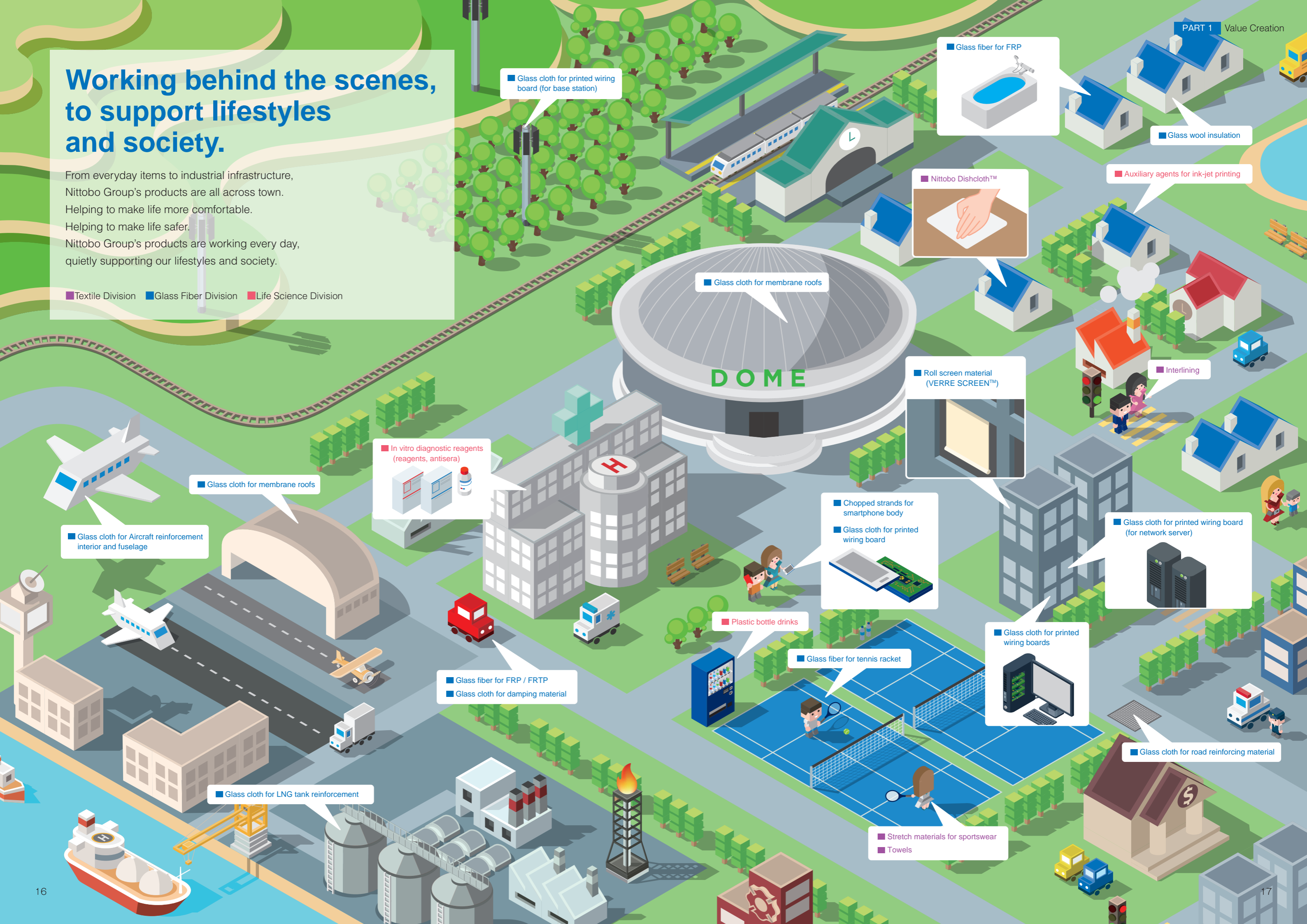
The Nittobo Group will, as a corporate group, enhance its significance by striving to create healthy and comfortable lifestyles, and thereby continue to contribute to the realization of prosperous communities.



Working behind the scenes, to support lifestyles and society.

From everyday items to industrial infrastructure, Nittobo Group's products are all across town. Helping to make life more comfortable. Helping to make life safer. Nittobo Group's products are working every day, quietly supporting our lifestyles and society.

■ Textile Division ■ Glass Fiber Division ■ Life Science Division



■ Glass cloth for printed wiring board (for base station)

■ Glass fiber for FRP

■ Glass wool insulation

■ Auxiliary agents for ink-jet printing

■ Nittobo Dishcloth™

■ Glass cloth for membrane roofs

■ Roll screen material (VERRE SCREEN™)

■ Interlining

■ In vitro diagnostic reagents (reagents, antisera)

■ Glass cloth for membrane roofs

■ Chopped strands for smartphone body
■ Glass cloth for printed wiring board

■ Glass cloth for printed wiring board (for network server)

■ Glass cloth for Aircraft reinforcement interior and fuselage

■ Plastic bottle drinks

■ Glass fiber for FRP / FRTP
■ Glass cloth for damping material

■ Glass fiber for tennis racket

■ Glass cloth for printed wiring boards

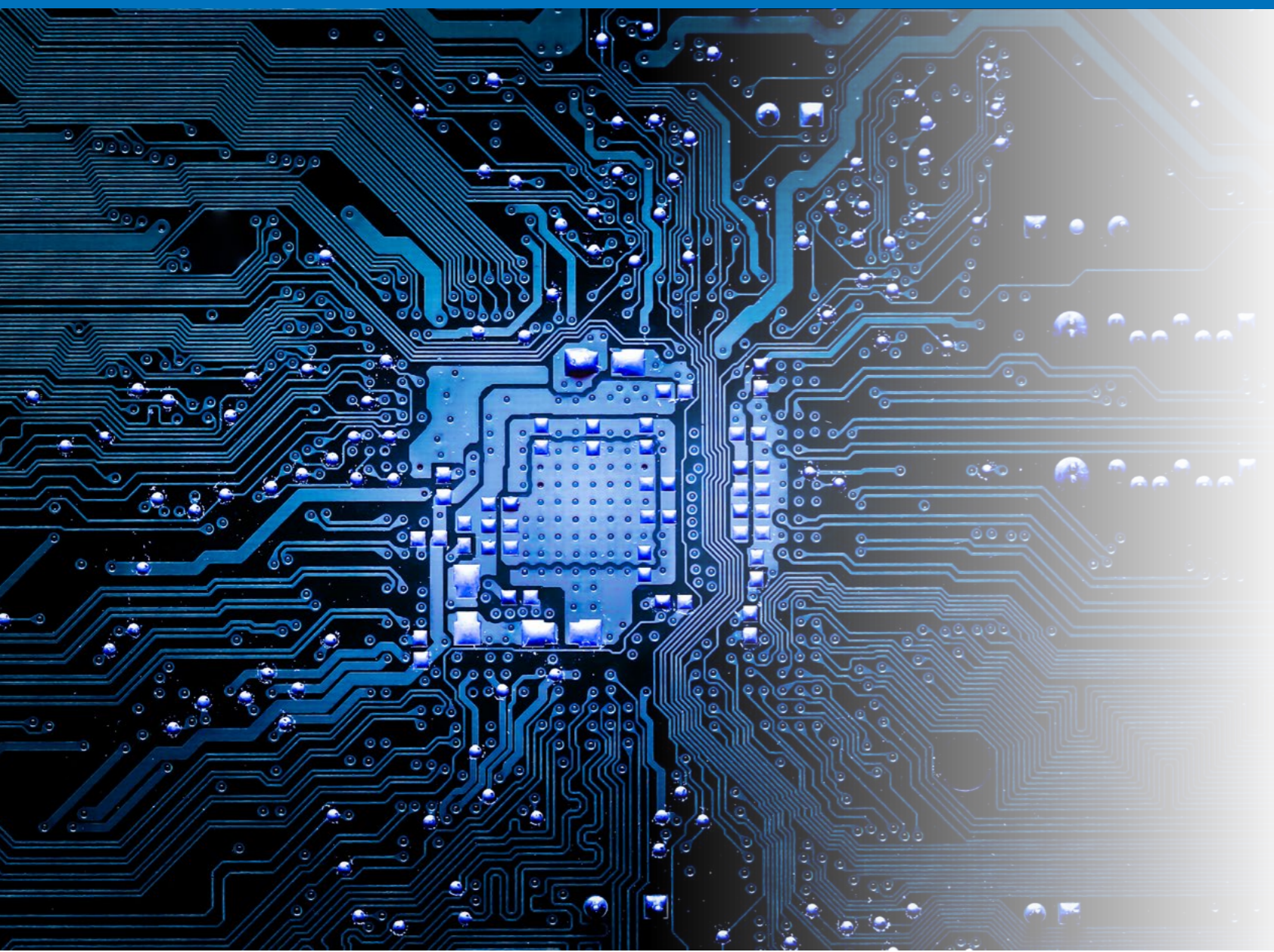
■ Glass cloth for road reinforcing material

■ Glass cloth for LNG tank reinforcement

■ Stretch materials for sportswear
■ Towels

Glass Fiber Creating New Value

In 1938, the Nittobo Group became the first company in Japan to industrially produce glass fiber. Since then, we have led the industry with innovative products meeting the needs of each successive generation. In the 1960s, for example, glass fiber was adopted by electronics manufacturers as a core material for insulating printed wiring boards. We have responded to emerging needs by supplying the world with ever-more precise glass fibers in step with the miniaturization and increasing thinness of electronic parts. In recent years, we have independently developed special glass adopted for electronic components used in next-generation, high-speed communications technologies.



Glass Fiber for 5G

Fifth-generation telecommunications technology (5G) will enable processing and transmission of large amounts of data without latency, along with the simultaneous connection of a massive number of devices. Low dielectric glass which reduces transmission loss is one of the technologies required for printed wiring boards in electronic devices. These technologies make it possible to transmit data at higher speeds and frequencies. In addition, higher speeds and functionality of electronic devices generate more heat on the precision wiring boards. As such, 5G requires new types of glass which can minimize thermal expansion.

Nittobo Special Glass

Nittobo special glass uses unique glass fiber which can support 5G technological innovation. NE Glass is made from glass fibers specially designed with a low dielectric and low dielectric dissipation factor which prevent data transmission loss. NE Glass is used as high frequency components in data center servers and mobile phone base stations which require high-speed processing of large volumes of data.

	Dielectric constant (1GHz)	Dielectric dissipation factor (1GHz)
E Glass	6.8	0.0035
NE Glass	4.8	0.0015

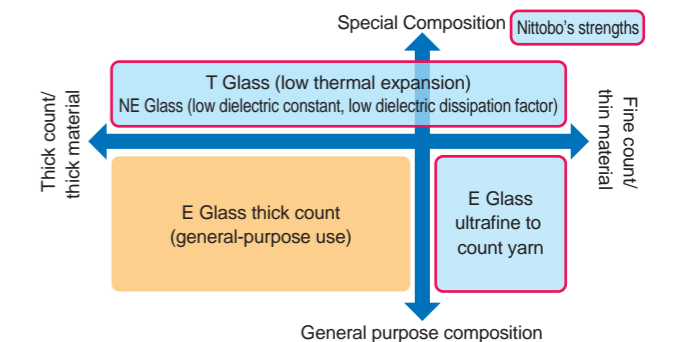
T Glass, another type of special glass, features low thermal expansion as well as high tensile elasticity. T Glass is used for semiconductor package substrates installed in servers, which require high stability and reliability, and in smartphones and other devices which are becoming increasingly compact and functional.

	Thermal expansion coefficient ($\times 10^{-6}/^{\circ}\text{C}$)	Tensile elasticity (GPa)
E Glass	5.6	75
T Glass	2.8	86

These special glass products have become essential components of mobile phone base stations and other communications infrastructure as well as highly functional servers. Nittobo special glass is lauded worldwide for its performance and quality. As we enter a new era in AI, automated driving and other new technologies, the expectations for Nittobo special glass will increase. We will strive to maintain a stable supply of special glass to contribute to the realization of innovative technologies.

Investment Domains

Under its "Vision 101," the Nittobo Group's vision for the Glass Fiber division is to solidify its leadership in the glass textiles industry by maintaining a stable supply of high value-added products to customers amid dramatic change in the industry environment. To achieve this vision, we are bolstering our capabilities in electronic materials field. Our initiatives include building our special glass development capabilities and production capacity, advancing our superfine yarn spinning capabilities, and expanding our glass cloth business at Baotek Industrial Materials Ltd., a Taiwanese company that we converted into a consolidated subsidiary.



Priority investment in expansion of production capability and application expansion of high value-added products (E Glass superfine to fine count yarn and T/NE Glass, etc.)

Major Investments

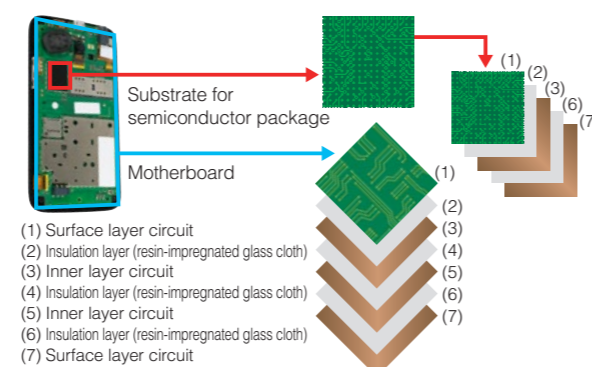
Demand for Nittobo special glass is rising amid the emergence of next-generation communications standard 5G, AI, automated driving and other new technologies. We are responding by expanding production capacity at Fukushima and Taiwan facilities.

Category	Investment Details
Glass fiber yarn	<ul style="list-style-type: none"> Enhance production capability of special glass (T/NE) yarn (to Apr. 2018) Enhance production capability of (T/NE) yarn (operation: from 1st half 2019) Further increase T/NE yarn production Domestic (Fukushima Factory): Establish new furnace (operation schedule: from 2nd half 2020) Overseas (NITTOBO ASIA Glass Fiber Co., Ltd.): Construct new furnace (operation schedule: from 2nd half 2021) Enhance production capacity of fine count yarn Overseas: NITTOBO ASIA Glass Fiber Co., Ltd. (operation schedule: from 2nd half 2019)
Glass fiber cloth	<ul style="list-style-type: none"> Raise cloth production capacity Domestic: Fukushima No.2 Factory/Looms, raise processing capacity (operation: from 2nd half 2018)
Baotek Industrial Materials Ltd. (Taiwan) converted to consolidated subsidiary (June 2019)	

Glass fiber for printed wiring boards

One of the most important applications of glass cloth is electric insulators required in heat-resistance and dimensional stability, as well as electric insulation. Glass fiber is synthesized with epoxy resins, polyimide resins and other materials to form printed wiring board materials for various electronic devices (computers, communications equipment, switching equipment, etc.). Nittobo excels at glass cloth processing (spread out processing technology), which raises the value of printed wiring board products.

Image of glass cloth application



“Nittobo of Immunology” Transforms Medical Care

Nittobo is helping people around the world to live a healthy life by providing high-quality in vitro diagnostic reagents.



Nittobo Group's Strengths

Nittobo possesses an integrated production system ranging from raw materials to final products to stably provide a variety of high quality in vitro diagnostic reagents.

Nittobo America Inc.

Nittobo America Inc. and Capricorn Products, LLC, which Nittobo acquired in June 2019, produce high quality goat antisera in facilities in the U.S. These antisera are supplied to NITTOBO MEDICAL CO., LTD. and other manufacturers worldwide as raw materials for in vitro diagnostic reagents for immunological tests.

Kamiya Biomedical Company, LLC, a wholly owned subsidiary of Nittobo America Inc., was established in 1983 in the U.S. and manufactures and distributes in vitro diagnostic reagents today. With its home base in the world's largest medical market, Kamiya Biomedical boasts sales networks spanning the globe.

NITTOBO MEDICAL

NITTOBO MEDICAL CO., LTD. manufactures and supplies in vitro diagnostic reagents including those made from goat antisera. Its core strength lies in reagents for immunological tests, utilizing antigen-antibody reaction. Since its establishment in 1986, NITTOBO MEDICAL has stably supplied a variety of high quality in vitro diagnostic reagents, and by today, it has gained a stature as known as “Nittobo of Immunology” in Japan.

CRP measuring reagent kit

It is an immunological in vitro diagnostic reagent kit for measuring levels of C-reactive protein (CRP) in blood. While CRP exists in minute quantities in a healthy person's blood, infectious disease, connective tissue disease, cardiovascular disease, tumors and other inflammations cause the amount to increase. CRP widely diffuses into blood and other body fluids and has functions to remove pathological products caused by inflammations from the body. The CRP measuring reagent kits supplied by the Nittobo Group are immunological in vitro diagnostic reagents utilizing latex particles. In December 2019, NITTOBO MEDICAL will launch a new reagent kit namely N-Assay LA CRP-U Nittobo, which features further improved high-sensitivity.



Initiatives to Promote Nittobo's Strengths

Production

- Increase of the production capacity of in vitro diagnostic reagents with the construction of a new factory for NITTOBO MEDICAL (First phase completion: fall 2019; second phase completion: fall 2020)
- Increase of the production capacity of antisera with the construction of a new factory for Nittobo America Inc. (completion: 2020 onwards)
- Increase of the antiserum production capacity through acquisition of Capricorn Products, LLC (June 2019)

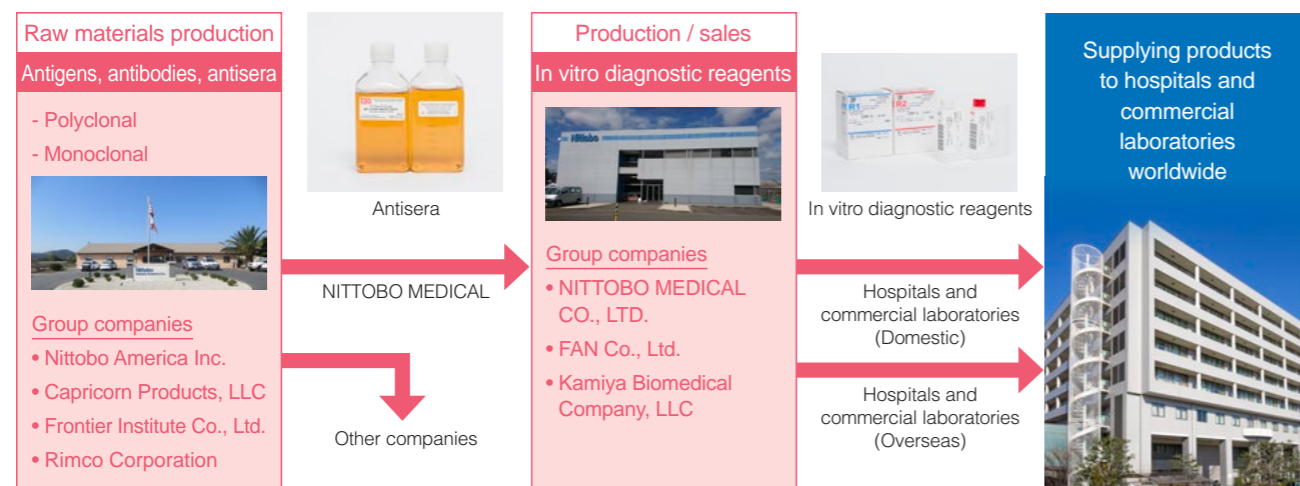
Sales

- Enhancement of the organizations to meet the domestic market needs
- Enhancement of the overseas sales organization
- Enhancement of the overseas sales through acquisition of Kamiya Biomedical Company, LLC

R&D

- Enhancement of the product planning and development organizations
- Enhancement of the R&D of antigens and antibodies through investment in Rimco Corporation and acquisition of Frontier Institute Co., Ltd.
- Enhancement of the product development capabilities through establishment of FAN, a JV with Fujikura Kasei Co., Ltd.
- Enhancement of the advanced research activities through establishment of NI-Tech, a satellite laboratory

Medical business process



What are in vitro diagnostic reagents?

In vitro diagnostic reagents are used for tests done on samples such as blood and urine that have been taken from the body to diagnose illnesses at health checkups and visits to doctors. These reagents are used to measure the levels of

certain substances in the samples and are not used directly on the human body. Results of these tests done in hospitals and commercial laboratories are referred by doctors for deciding on courses of treatment.

Products with Leading Domestic Market Share

TRACP-5b measuring reagent kit

It is an immunological diagnostic reagent kit for measuring TRACP-5b in blood for therapeutic monitoring of osteoporosis. Mostly derived by osteoclastic bone cells, TRACP-5b is used as a bone resorption indicator in blood samples with little physiological variation. The kit has been highly reputed since the test results are not influenced by patients' food intake prior to osteoporosis examinations.

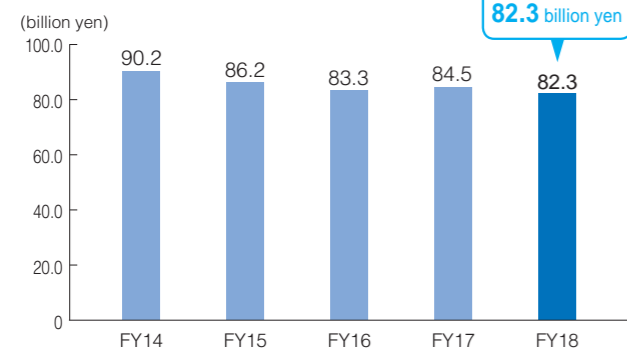
N-Assay LA IgG4 Nittobo

This is an immunological in vitro diagnostic reagent kit for measuring levels of IgG4 in blood. IgG4-related diseases are those of unknown etiology that cause swellings, tubercles and hypertrophic lesions in various organs due to immune deficiencies and high levels of IgG4 in blood. The diseases as a whole are recognized as intractable diseases in Japan.

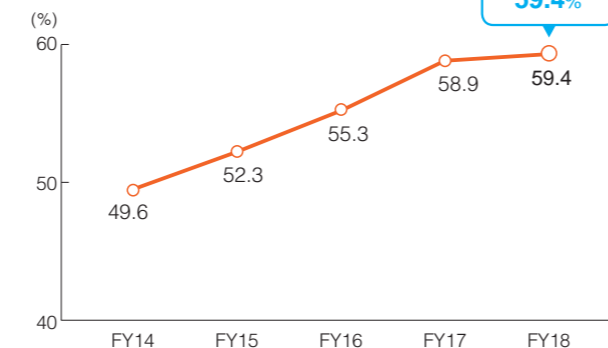
N-Assay LA IgG4 Nittobo is a highly precise in vitro diagnostic reagent kit designed for tests run on an automated analyzer. It has largely increased the number of hospitals and laboratories that are able to measure serum IgG4 in-house.

Consolidated Financial Highlights

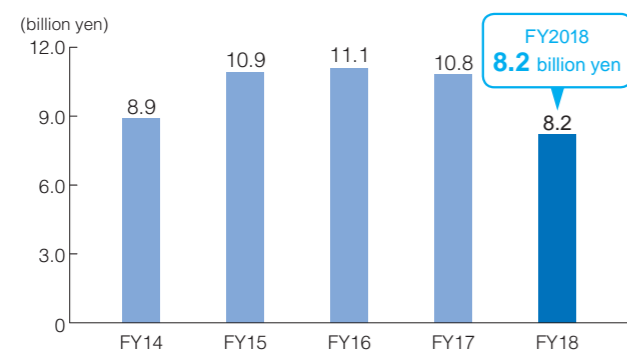
Net sales



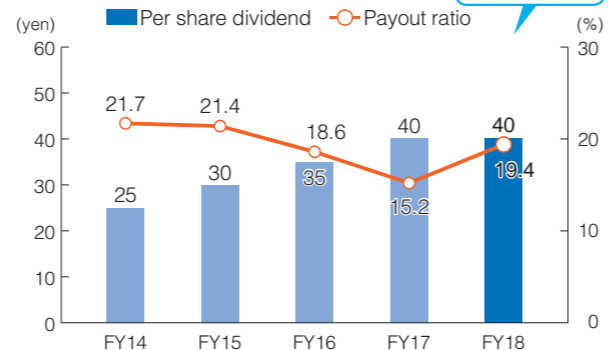
Equity ratio



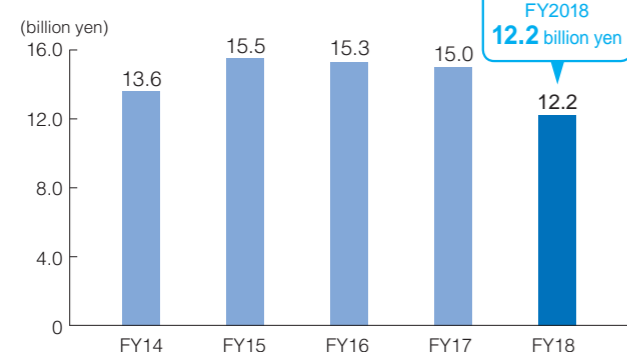
Operating profit



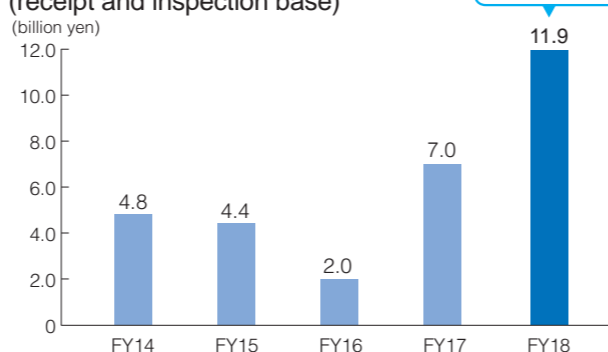
Dividends/Payout ratio



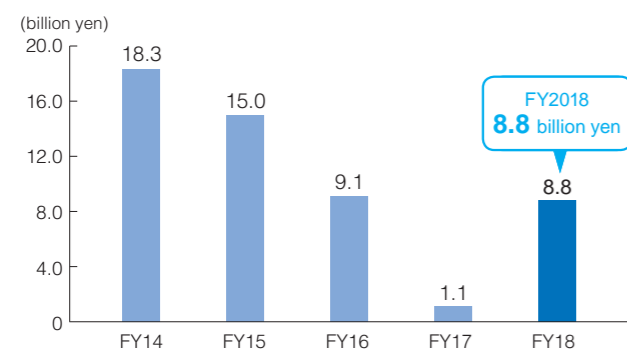
EBITDA



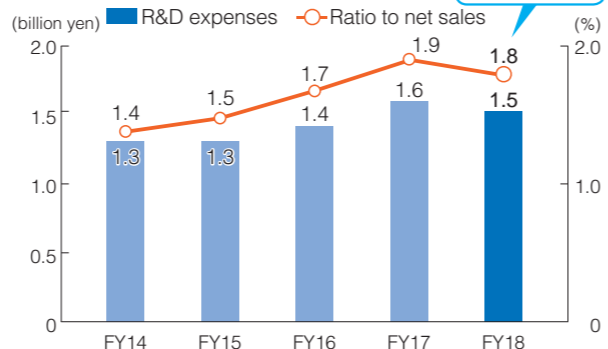
Capital investment (receipt and inspection base)



Net interest-bearing debt



R&D expenses/R&D ratio to net sales



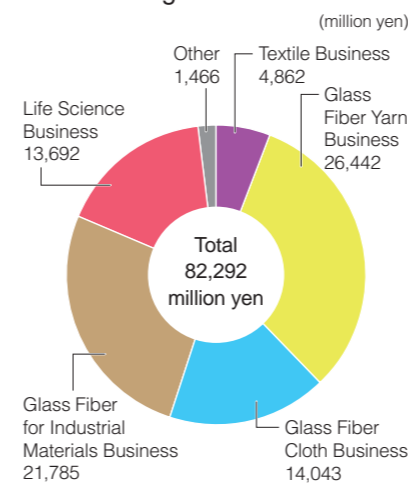
Financial Data (consolidated)

(million yen, except where otherwise indicated)

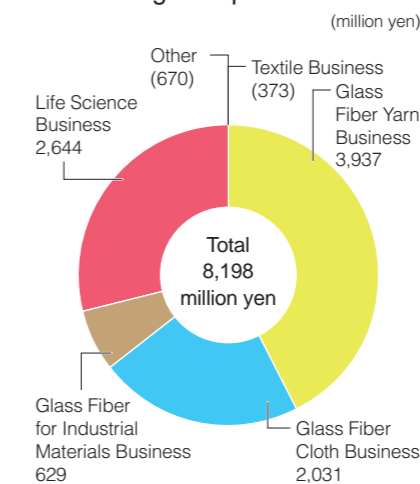
	FY14	FY15	FY16	FY17	FY18
Net sales	90,223	86,199	83,324	84,526	82,292
Operating profit	8,885	10,893	11,148	10,837	8,198
Ordinary profit	8,658	10,974	11,396	11,071	8,934
EBITDA	13,577	15,496	15,278	15,001	12,279
Profit attributable to owners of parent	4,588	5,598	7,479	10,253	7,984
Net assets	73,228	75,455	78,281	87,548	90,740
Total assets	145,956	142,719	140,064	147,160	151,000
Net assets per share (yen)	1,816.62	1,872.51	1,979.98	2,232.43	2,312.06
Basic earnings per share (yen)	115.14	140.50	188.57	263.97	205.76
Equity ratio (%)	49.6	52.3	55.3	58.9	59.4
Return on equity (%)	6.8	7.6	9.8	12.5	9.1
Cash and cash equivalents at fiscal year-end	15,481	17,466	17,428	18,324	16,145
Number of employees	2,685	2,463	2,403	2,456	2,414
Per share dividend (interim dividend; yen)	25.00	30.00	35.00 (15.00)	40.00 (17.50)	40.00 (20.00)
Payout ratio (%)	21.7	21.4	18.6	15.2	19.4

Note: On October 1, 2017, the Company conducted a five-for-one share common stock merger. The calculations presented above restate Net assets per share, Basic earnings per share and Per share dividend under the assumption that the merger was conducted at the start of the fiscal year ended March 31, 2015.

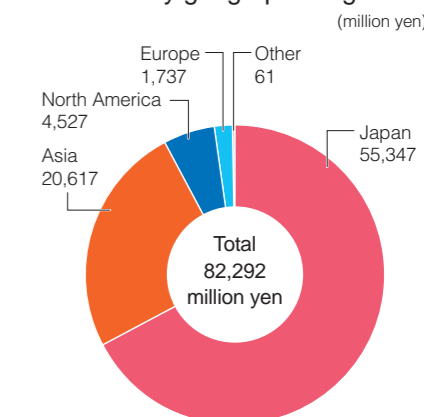
Segment sales



Segment profit/loss



Sales by geographic region



Note: The "Other" segment comprises business not reported under the other segments, including services and industrial machinery-related business.

Textile Business

Business Description

In the textile business, Nittobo manufactures and sells auxiliary materials for clothing, raw yarns, and other products closely connected to our daily lifestyles. Our adhesive interlinings command a large share in the high-end ladies' apparel market, while our multilayer structured yarns are pushing the boundaries of stretch materials. Nittobo Dishcloth™ has been a consumer favorite for more than a half century. In recent years, our Textiles and Glass Fiber Divisions have collaborated to create innovative industrial materials leveraging adhesive and multilayer structured technologies.

Interlinings

Interlinings are an auxiliary material for clothing used between the outer and inner materials to retain and adjust clothing shape

- [Strengths]
- Processing and adhesive technology to produce the world's thinnest, lightest interlinings
 - Development of products with deodorizing, antibacterial and other functions, along with products reducing the environmental burden

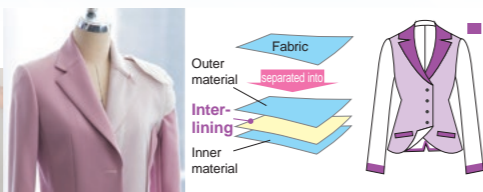
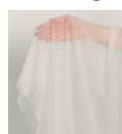
Raw yarns

"C-S-Y™" (core spun yarn) is a multilayer structured yarn in two or three layers combining staple fibers and polyurethane to create innovative stretch fabrics. The applications are broad, from denim to suits, socks and other clothing used for daily apparel along with bandages for medical and sports applications.

- [Strength]
- World-class technology in multilayer structured yarn covering

Main Products

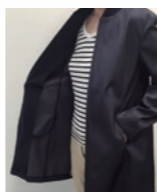
Adhesive interlinings



Apparel sections using interlinings

Innovative Fabric™

Materials used for both inner materials and interlining. Reduces weight, simplifies sewing processes



Multilayer structured yarns



Nittobo Dishcloth™



Social and Environmental Contributions

Nittobo supplies environmentally conscious products to contribute to sustainable societies.

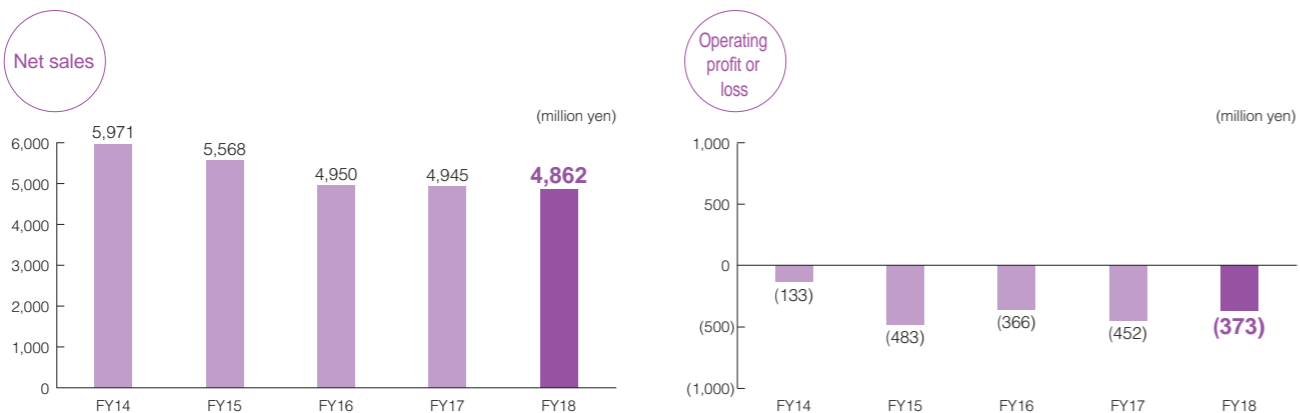


Environmentally conscious product catalogue "For Sustainability"

FY2018 Business Results

Sales of interlinings were robust mainly for ladies' apparel in the first half of the fiscal year, but struggled in the second half, affected by unfavorable weather conditions and a warm winter. Profitability improved from the penetration of price increases and production shift from China to Japan. In raw yarn products, sales of C-S-Y™ yarns for casual clothing declined.

Business result highlights



Glass Fiber Division

Glass Fiber Yarn Business

Business Description

The Glass Fiber Yarn Business manufactures and sells glass fiber yarn, as well as roving and chopped strands used as base materials of composite materials.

Glass fiber yarn

Two important properties of glass are insulation and heat-resistance. Glass yarns processed into cloth have become indispensable as an electrical insulating material for printed wiring boards. Nittobo possesses proprietary technology to manufacture superfine yarns with world-class precision, along with special yarns with such functionality as low-dielectric and low thermal expansion properties.

Nittobo is preparing for robust growth in special glass demand by gradually launching new furnaces from FY2019 to boost production capacity. Additionally, we are planning to invest approximately 10 billion yen to establish a glass melting furnace at the Fukushima Factory in 2020 and construct a glass melting furnace plant in Taiwan the following year to boost special glass production capacity.

- [Strengths]
- Manufacturing technology for the world's most precise yarns (4μm)
 - Development and manufacturing of low-dielectric and low thermal expansion special glass

Glass fiber for composite materials

Rovings and chopped strands are used for reinforcement of a wide range of products, including casings for smartphones, tablets, and notebook PCs, along with helmets, automotive parts, bathtubs, plastics and other consumer products.

- [Strength]
- Flat fibers with an oval shape cross-section to control the warping and twisting of molded products

Main Products



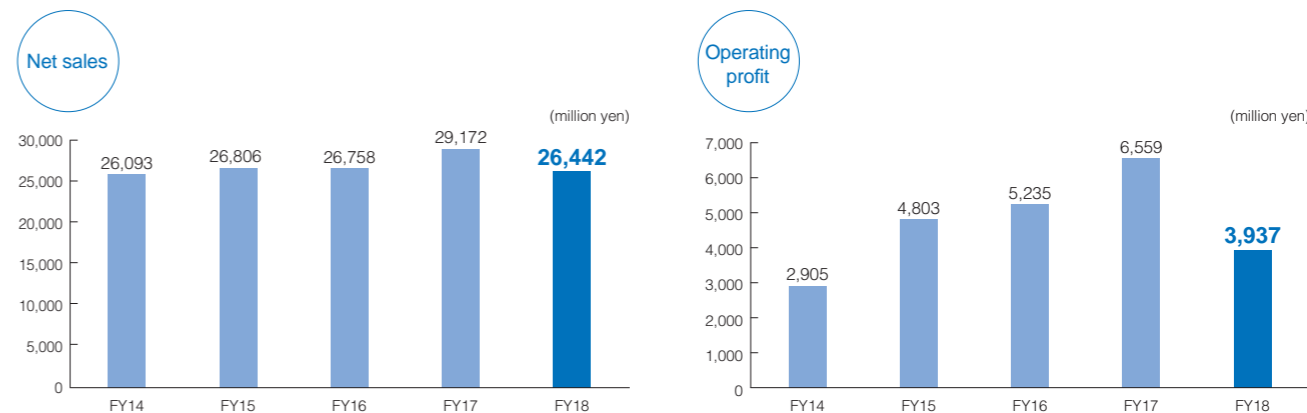
Social and Environmental Contributions

Nittobo's ultrafine yarns contribute to the development of thinner and more compact electronic devices such as smartphones.

FY2018 Business Results

Sales declined mainly for high value-added products such as glass fiber yarns for electronic materials and composite materials for chopped strands used in reinforced plastics, impacted by the production adjustment of smartphones. In addition, large-scale facility repairs implemented in the first quarter reduced the profit.

Business result highlights



Glass Fiber Division

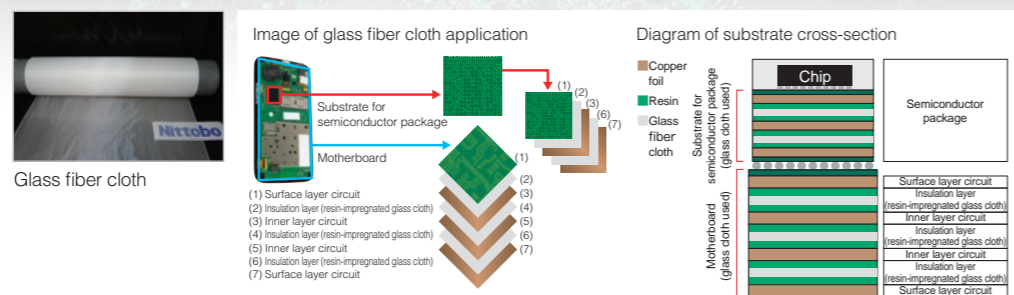
Glass Fiber Cloth Business

Business Description

The glass fiber cloth business produces glass cloth used as electronic device components. Glass cloth is widely used as an electric substrate material because of its superior electric insulation, heat-resistance, and dimensional stability. Nittobo's ultra-thin glass cloth provides superior thinness and fiber distribution consistency, making it ideal for compact but highly functional electric devices. Our special glass cloths are developed using unique compositions and feature low dielectric constant and low dielectric dissipation factor required in broadband communications, as well as low thermal expansion. These properties make the cloths vital components of data center equipment, mobile phone base stations, high frequency components, and semiconductor packages for servers and smartphones.

Nittobo is committed to bolstering its unique technologies even further to support the advent of 5G next-generation telecommunications, AI, IoT and other new developments in the field of technology. We will continue to make cutting-edge research and development advancements and boost our production capacity both in Japan and abroad to optimize our development and production structures.

Main Products



High-performance glass cloth

Low-dielectric glass cloth (NE Glass)

The demand for low-dielectric components has risen due to the higher speeds and frequencies of computers, mobile devices, and communications infrastructure. Nittobo has developed original NE Glass yarn with low-dielectric constant and low-dielectric dissipation factor properties ideal for these applications.

Low thermal expansion glass cloth (T Glass)

T Glass yarn's unique composition minimizes heat expansion while providing high tensile elasticity, ensuring superior dimensional stability and rigidity.

Ultra-thin glass cloth

Ultra-thin glass cloths are ideal solutions for modern electric devices with high-density printed wiring board mountings in increasingly smaller, thinner and lighter designs. These cloths provide exceptional workability for micro-diameter holing with lasers and drills, along with superior dimensional stability and surface smoothness for layered boards.

For more information on special glass, please see pages 18-19.

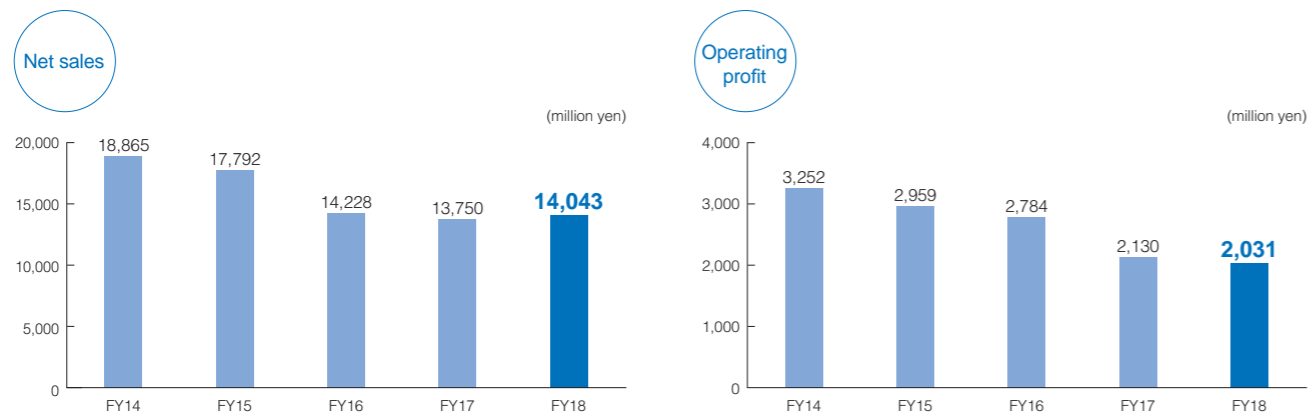
Social and Environmental Contributions

Glass cloth made from Nittobo special glass is used as a low-dielectric substrate for electric components, helping to realize the next-generation telecommunication standard 5G.

FY2018 Business Results

Demand for special glass used as electronics materials for high speed data communications remained strong. However, profitability worsened due to damage suffered by Nittobo Macau Glass Weaving Co., Ltd. during a typhoon in August 2017.

Business result highlights



Glass Fiber Division

Glass Fiber for Industrial Materials Business

Business Description

The glass fiber for industrial materials business develops glass wool products and glass fiber products for industrial applications.

Glass wool

In 1949, the Nittobo Group became the first Japanese company to manufacture glass wool. Today, we remain a pioneer in the field with an extensive portfolio of proprietary technology. Glass wool is used widely as insulation material in residences and buildings, contributing to energy efficiency. Moreover, glass wool is an environmentally friendly product contributing to resource recycling, as the raw materials include discarded bottles and glass windows.

- [Strengths]
- Proprietary precision fiber technology for high insulating effect and energy-efficiency housing
 - Formaldehyde-free insulation for human-friendly housing

Glass fiber

Industrial-use glass fiber has a wide range of applications, from membranes for large-scale buildings to damping materials for automobiles. Leveraging the lightness and fireproof properties of glass fiber, we continue to develop new applications in the automobile and aircraft industries to serve the demand for energy efficiency and lightweight materials.

- [Strengths]
- High-strength, weather-resistant membranes using superfine glass fiber
 - World-class broad-cut membranes

Main Products



Social and Environmental Contributions

Housing insulators with improved performance through precision fiber technology contribute to the creation of energy-efficient societies.

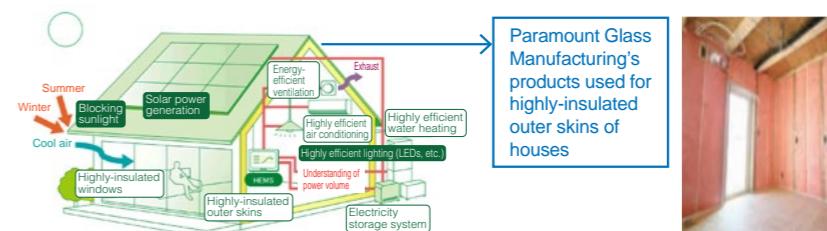
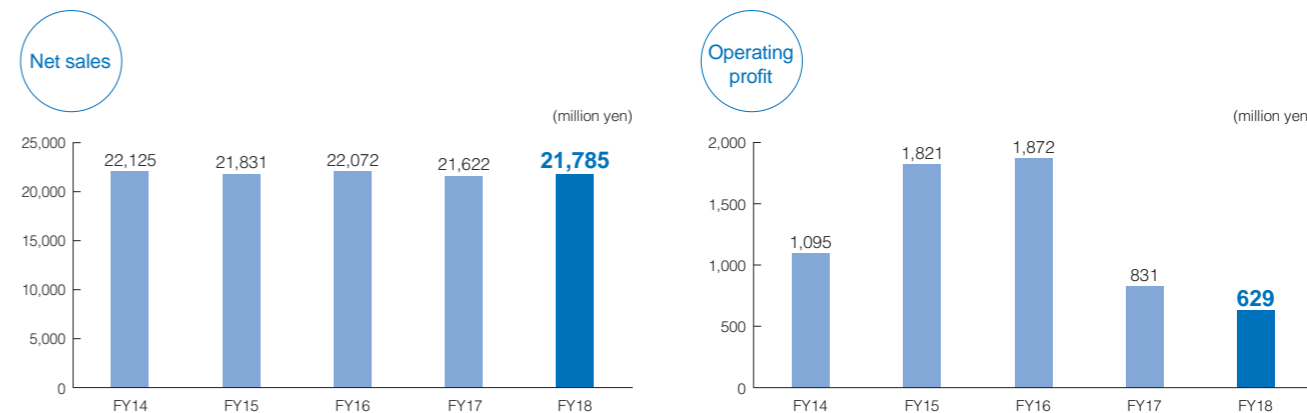


Diagram: Net-Zero Energy House (ZEH) proposed by Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry. ZEH promotes housing with both a comfortable interior environment and an annual net energy consumption of zero or less.

FY2018 Business Results

Sales of glass cloth used as industrial and construction materials were stable during the year. Sales and profit of glass wool for house heat insulation declined mainly due to large-scale investment for facilities in the first quarter, as well as an increase in logistics, raw materials, and fuel costs.

Business result highlights



Life Science Business

Business Description

Life science business manufactures and supplies in vitro diagnostic reagents and antisera, specialty chemicals, and soft drinks.

In vitro diagnostic reagents

In Japan high value-added diagnostic reagents have been demanded due to its increasing aging population and a shift from treatment to prevention to curb medical costs. In overseas markets demand for in vitro diagnostic reagents has been increasing due to a growing demand for high value-added medical care such as highly sensitive immunological tests and genetic tests in developed countries, as well as increased opportunities for receiving medical examinations in emerging countries led by increased household incomes and improved social insurance systems.

The Nittobo Group's immunological in vitro diagnostic reagents and antisera, in which the Group's strength lies, are highly unique and competitive in markets around the world. The Nittobo Group will further enhance its sales to overseas markets where demand is expected to increase by boosting its production capacity and accelerating its research and development activities. From 2019 onwards the Nittobo Group will start its operation of a new factory integrating a production facility and a warehouse in Koriyama, Fukushima Prefecture and will build a new factory at its production site in California, U.S.A., where antisera, a raw material of in vitro diagnostic reagents, are produced.

- [Strengths]
- An integrated production system from raw materials to finished products allows the Nittobo Group to stably supply a variety of high quality products
 - The Nittobo Group has the top market share in Japan for a variety of items, such as inflammation biomarkers and an osteoporosis biomarker, while distributing more than 100 types of diagnostic reagent kits

Specialty chemicals products

In the specialty chemicals products business, the Group engages in the development and sale of highly unique functional polymers such as Poly-allylamine and the polyamine series. We research, develop, manufacture, and sell highly unique products to customers with high entry barriers in a wide range of industry sectors, such as toiletries, papermaking, metals, electronic materials, and generic drugs.

Soft drinks

In the soft drinks business, we specialize in high-variety, small lot production to meet the needs of individual brand owners through OEM production of private brands. We pursue differentiation from competitors and have secured stable earnings by meticulously following recipes and rapidly switching between product types.

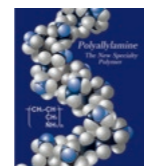
Main Products

In vitro diagnostic reagents



Inflammation biomarkers Osteoporosis biomarker

Specialty chemicals products



Soft drinks



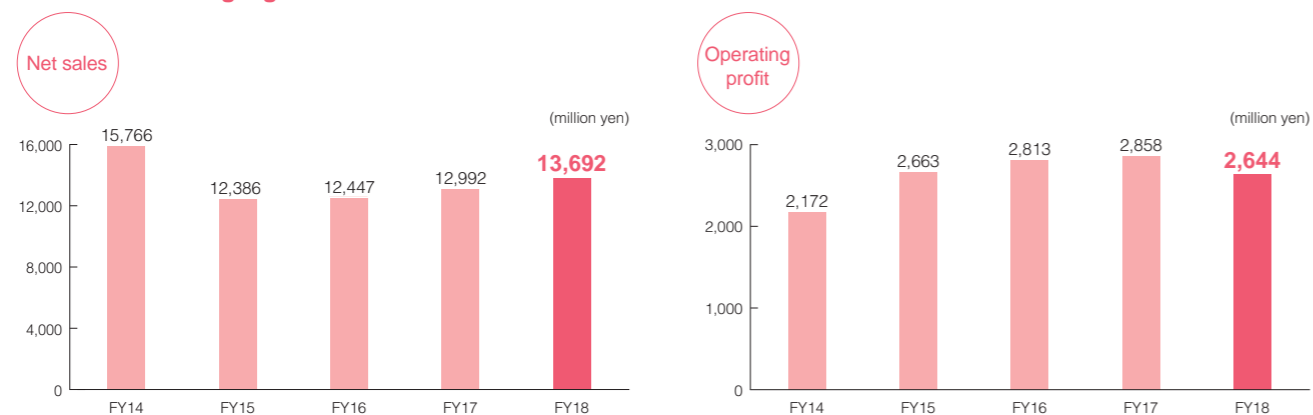
Social and Environmental Contributions

The Nittobo Group helps create healthy lifestyles for people around the world through the supply of immunological in vitro diagnostic reagents and antisera.

FY2018 Business Results

Profit declined mainly due to the cost incurred for enhancement of research and development and sales function while focusing on sales of immunological in vitro diagnostic products such as antisera and reagents. In the specialty chemicals products sector, high value-added products have been steadily supplied both domestic and overseas market. In the beverage products sector, while focusing on production of a variety of small lot products to meet the demand, raw materials and distribution costs increased.

Business result highlights



Research and Technological Development

Since its establishment in 1928, the Nittobo Group has actively pursued research and technological development and provided the world with numerous highly original products suited to the needs of the times. Under the motto "Let's turn anything into fibers," Nittobo Group became the first company in Japan to commercially produce glass fiber, glass wool, a staple fiber, and rock wool. This posture of engaging in research and technological development with a pioneering spirit is carried on today in the textiles, glass fiber, and life science business sectors, and we believe that it will continue to be the driving force for increasing the Nittobo Group's competitive advantage and corporate value into the future.

R&D System

Customer needs are becoming increasingly diverse and sophisticated, and global competition has markedly intensified. In view of these circumstances, the Nittobo Group has integrated research and development organizations previously affiliated with the business divisions and established the research and development Headquarters in order to create a research and development system capable of engaging in forward-looking research and technological development and creating high value-added, highly original products in a timely manner. While engaging in in-depth exploration of long-term research and development themes grounded in the specialized perspective of each business division and market needs, we will also undertake research and development focused on group-wide themes in pursuit of cross-business synergies.

To renew the Nittobo Group's research environment and facilities and further strengthen development capabilities, we are constructing NI-CoLabo, a new research and development site in Koriyama City, Fukushima Prefecture. This research and development center will integrate research and technological development functions and house facilities including an open laboratory to promote collaborative research with government agencies, private companies, and educational institutions, space for exhibitions and study tours, and a training center for engineers. Scheduled for completion in April 2020, NI-CoLabo will become the core of the Group's research and technological development activities.

Collaborative Research between Industry, Government, and Academia

From the perspective of open innovation, the Nittobo Group actively engages in collaborative research with government agencies, private companies, and educational institutions with the aim of accelerating development and expanding our business domains.

In July 2018, we opened NI-Tech, a satellite laboratory center within the Innovation Center of NanoMedicine in Kawasaki City, Kanagawa Prefecture, as a new research and development site to strengthen the life science business. Preparing an optimal research environment for open innovation in the Greater Tokyo area has enabled us to promptly capture rapidly changing medical information and accelerate creation of medical diagnosis technologies suitable for development on a global scale.



Fiber R&D Center (Fukushima City)



NI-CoLabo (Koriyama City—Architectural rendering)



NI-Tech (Satellite laboratory within the Innovation Center of NanoMedicine in Kawasaki City)

CSR Initiatives

The Nittobo Group aims to become a good corporate citizen and "Best Partner" of communities.

Responsibilities as a corporate citizen

The Nittobo Group is aware of its responsibilities as a corporate citizen and addresses CSR issues with the aim of "contributing to the realization of prosperous communities," a principle embodied in the corporate philosophy.

As articulated in the Nittobo Declaration, which expresses shared values fundamental to being a corporation trusted by society, the Nittobo Group aspires to be a "Best Partner"

of communities, and we attach importance to sharing satisfaction with all of our stakeholders (communities). In keeping with these values, we will seriously address environmental and social issues and ceaselessly strive to improve governance in order to contribute to society by creating value through our business activities, and achieve enhancement of corporate value and sustained growth.

Environment

- Solutions to environmental problems through businesses and products
- Continuous efforts to reduce environmental impacts

Social

- Harmonious coexistence with local communities
- Human resource utilization (promoting diversity and women's participation)

Governance

- Constant review of governance in pursuit of fair and highly transparent management
- Rigorous compliance
- Strengthening of risk management

Harmonious Coexistence with Communities

Each of the Nittobo Group's business sites seeks harmony with society and engages in business activities with the aim of growing and developing together with its host community.

Participation in the 69th Nationwide Tree Planting Festival in Fukushima 2018

On June 10, 2018, the Nittobo Group participated in tree planting at the 69th Nationwide Tree Planting Festival in Minamisoma City, Fukushima 2018. In addition, workers from the Fukushima Factory planted 100 Japanese black pines in March, ahead of the festival.

The Nationwide Tree Planting Festival, held each spring since 1950 as the main event of the National Land Afforestation Campaign, is attended by the Emperor and Empress of Japan and numerous participants from all over the country. Highlights of the event are the planting of saplings by the Emperor and Empress and commemorative tree planting by participants. The festival was held in Fukushima Prefecture, the birthplace of Nittobo, as a symbolic event to promote afforestation with the participation of residents of Fukushima Prefecture and accelerate the recovery, reconstruction, and development of Fukushima. The Nittobo Group endorsed the aim of the festival and provided sponsorship and participation.



Community beautification activities

The Nittobo Group's business sites engage in community beautification activities. The Fukushima Factory participates in a cleanup project for the Arakawa River, a clear river that flows through Fukushima City. In addition, the Fukushima No. 2 Factory engages in cleanup activities at a nearby river together with local residents.



Arakawa River cleanup project in Fukushima City



Volunteer river cleanup work in the Sakura area

Blood drive activities

The Fukuyama Enterprise Center has cooperated in blood drives for more than 40 years. A bloodmobile visits the Center every year in the spring and autumn, and the executives and employees donate blood. In 2015, Fukushima Prefecture awarded the Center a governor's Certificate of Appreciation for Organizations Cooperating in Public Health Projects in recognition of its blood drive activities over many years.



Bloodmobile (Fukuyama Enterprise Center)



Fukushima Prefectural Governor's Certificate of Appreciation for Organizations Cooperating in Public Health Projects

Support for education

The Fukushima Factory holds children's science classes every year to increase interest in science and the environment among the children who will become tomorrow's leaders.

The Fukuyama Enterprise Center has engaged in similar initiative since FY2012. Other factories have hosted plant tours for students and other visitors as well.



Children's science class (Fukushima Factory)



Children's science class (Fukuyama Enterprise Center)

Fukushima reconstruction support

Every year since 2016, the Nittobo Group has held Fukushima Marche, a fair to support the reconstruction of Fukushima Prefecture, at the Tokyo Headquarters. At the fair, we publicize initiatives for reconstruction of Fukushima Prefecture and for food security and safety by displaying panels depicting reconstruction and recovery in Fukushima Prefecture and selling local culinary specialties from the prefecture.



Support for regional vitalization and sports

The Nittobo Group serves as an official club partner of Fukushima United FC, a J.League soccer team that is active around the country with the aim of supporting the development and regional vitalization of Fukushima through sports.



A parent-child soccer class

Active Roles of Diverse Talent

In the Nittobo Declaration, we state, "We are committed to becoming a corporate group in which the potential of our respective, independent employees is valued and thereby inspires our employees to freely and willingly share their own ideas, ultimately achieving greater results through teamwork." To that end, we provide Group employees with opportunities for growth and self-realization in the belief that employee growth equates to corporate growth and encourage our employees to be good citizens, first and foremost, and to think deeply, observe widely, act courageously, and follow through with their jobs. We will continuously undertake enhancement of corporate value so that active employee participation builds stakeholder trust and makes all of our stakeholders glad they chose Nittobo.

Diversity and Inclusion

Discussion by employees with different perspectives and personalities can lead to success in meeting diverse customer needs and delivering 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 in which each individual can fully demonstrate his or her capabilities. One way of laying the foundation for such a diverse organization is to respect and promote diversity and inclusion.

Human Resource Development

Manufacturing involves various types of work, and a wide variety of people including young talent and seasoned veterans, men and women, Japanese and foreign nationals, re-employed workers, mid-career hires, temporary workers, and other employees of various generations with different experiences and values work at Nittobo. To maximize the performance of these diverse human resources, and thus realize further business and individual growth, we will meticulously engage in human resource (HR) management focused on individuals, while continuously enhancing our HR systems and training programs.

1) Development of the next generation management leaders

In addition to conventional stratified training for young employees, newly promoted managers, and other managers, in FY2018 Nittobo launched its Successor Development Programs. These programs are designed to match the growth stage of each employee, focusing mainly on young employees and middle management, in order to develop future leaders. These programs consist of intensive training for business skills and action learning using practical cases we need to resolve. Through the training, these programs develop understanding on the role of senior managers and improve managerial qualifications.

In today's unprecedented business environment, developing business persons who can overcome preconditions is an indispensable activity. We believe it leads to an essential pillar for business strategies. Nittobo will systematically develop the leaders who drive our businesses.

2) Development of global talent

To prepare for further globalization, it is essential that Nittobo create a corporate culture that enables diverse human resources to actively participate in our businesses, and develop human resources that can demonstrate their capabilities in that environment. We have prepared wide-ranging opportunities for employees to improve their foreign language skills and programs that allow employees to actually experience work or research overseas and are enhancing mechanisms that support the voluntary efforts of individuals to become who they want to be.

Offsite Training

Course	Content
Overseas language study course	Overseas study mainly for the development of foreign language skills
Study at business schools	MBA acquisition at a business school in Europe or the U.S.
Overseas research institute assignment course	R&D in a global environment
Overseas company internship course	Practical experience in a global environment
Graduate school for working people course	MBA/MOT* acquisition while continuing work*

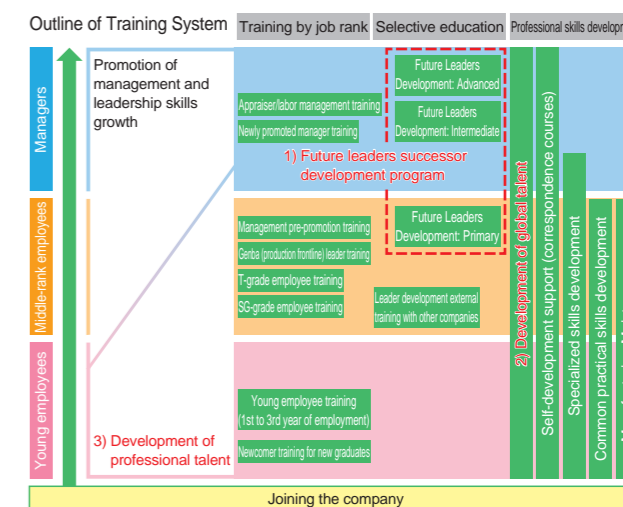
*MBA: Master of Business Administration / MOT: Management of Technology

Activities Support (Growth Support Program)

Course	Content
TOEIC test	Conducted in-house (at company expense)
Online English conversation lessons	Opportunities for English conversation practice (at company expense)
Foreign trade practice course	Export-related skills acquisition (at company expense)
Overseas company internship course	TOEIC, business English conversation, etc. (fixed-amount company contribution)

3) Development of professional talent

Before becoming managers, Nittobo employees pursue development as specialized professionals in their areas of specialization 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 enhance customer satisfaction. We also provide wide-ranging support for individual skills development, offering a program to assist employees in obtaining public qualifications necessary for work and a distance learning assistance program that includes e-learning.



Work Style Reform and Health Management

Promotion of work-life balance

Average monthly overtime per employee at Nittobo in FY2018 was approximately nine hours, about half the manufacturing industry average. To enable employees to experience job satisfaction and demonstrate their best performance while simultaneously maintaining an appropriate work-life balance, we will continue to develop an environment in which people pursue long careers. Also, in Japan, which has a declining birthrate and aging population, it is important to prepare a worker-friendly environment for employees with childcare or nursing care responsibilities. We are striving to enhance programs that enable a flexible response to such individual life events, expanding flex work and introducing an annual paid leave by the hour system and a staggered working hours system.

Work-Life Balance Support Programs

Childcare	Nursing care
Hourly paid leave	Hourly paid leave
Childcare leave	Nursing care leave
Shorter working hours during pregnancy, staggered working hours	Flextime system
Pregnancy leave	Shorter working hours system for nursing care
Childbirth leave (employees and spouses)	Accumulated sick leave (employee/nursing of family members)
Childcare leave	Overtime exemption and limitation
Flextime system	Late-night work exemption
Shorter working hours system for childcare	
Nursing-care leave	
Accumulated sick leave (employee/nursing of family members)	
Overtime and late-night work exemption and limitation	
Babysitter expense assistance	

Work after the age of 60

A declining working population is a major social issue in Japan, which has a declining birthrate and aging population, and competition to secure human resources is likely to become increasingly intense. For this reason, we will enhance programs and mechanisms that motivate employees to pursue long careers at Nittobo. We are focusing particularly on enhancing HR programs and benefits and developing a working environment to enable employees to continue to work after the age of 60 and will implement initiatives to make Nittobo a company that employees will be glad they chose until the end of their careers.

Programs for Employees Age 60 and Over

- Post-retirement re-employment (100% re-employment rate except for personal reasons)
- Average re-employment wage of 80% of the wage at retirement
- Introduction of an optional corporate defined contribution pension plan in addition to the defined benefit pension plan
- Promotion of capital investment for working environment development

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 enjoyment of recreation. We have also taken out comprehensive medical expense insurance to alleviate the expense burden on employees when injury or sickness occurs.

Environmental Initiatives

The Nittobo Group is aware of the importance of global environmental problems, and we have developed a code of conduct specifying voluntary, proactive engagement in energy conservation, effective use of resources, pollution prevention, and other environmental conservation activities for the purpose of creating and maintaining a better environment, a requirement for business continuity. In accordance with this philosophy, we have established the Nittobo Environmental Charter and Company-Wide Environmental Policy and are striving for continuous improvement of the environment. In addition, we will set environmental impact reduction targets, a component of one of the five action plans in the mid-term business plan.

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 environmentally 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	Promote energy-saving, resource-saving, recycle-oriented, and environmentally conscious operations in all business domains in Japan and abroad.
3. Compliance with environmental policy and voluntary management	Conform to laws and regulations in addition to other requirements and principles as well as stipulate voluntary environmental policy and management standards 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 and raise their environmental and safety awareness levels mainly by making environmental and safety policies known to them, and strive to hand down the global environment to posterity.

Established on October 1, 1998
Revised on July 1, 2005

Company-Wide Environmental Policy



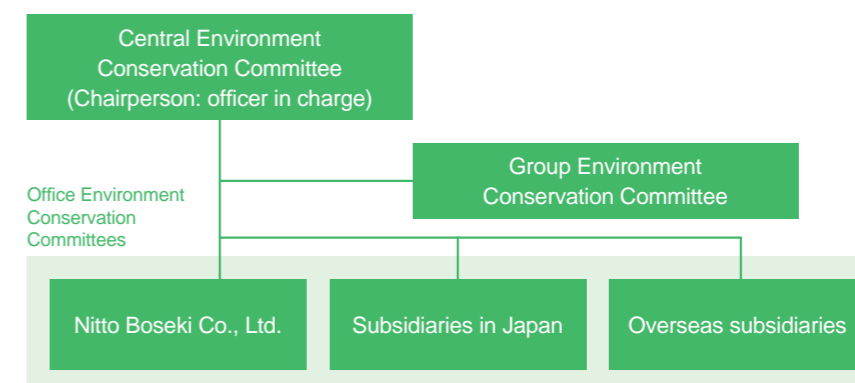
Environmental Management Organization

The Nittobo Group has established the Central Environment Conservation Committee (whose chairperson is elected from among the board members).

The Committee, which consists of members elected from business and administrative units as well as members in charge of technology and production, who are elected from business units, discusses important environment-related activities and matters as the Group's central supervisory and deliberative organ related to environmental protection.

In addition, in order to share company-wide information and raise each other's awareness level, environmental managers who are responsible for promoting environmental management at each Office Environment Conservation Committee and Committee members in charge of technology and production have organized the Group Environment Conservation Committee to engage in Group-wide environmental protection activities.

Central Environment Conservation Committee Organization



Environmental Impacts of the Nittobo Group

The Nittobo Group manufactures a wide range of products by using natural resources and chemical substances as raw materials and consuming fuel and electric energy.

Major environmental impacts include carbon dioxide generated as a result of energy consumption, chemical substances that are discharged to the environment without

being collected, and industrial waste that is simply incinerated or sent to external landfill sites. The Nittobo Group is striving to reduce environmental impacts by using resources in a reasonable way while taking the needs of the environment into consideration.

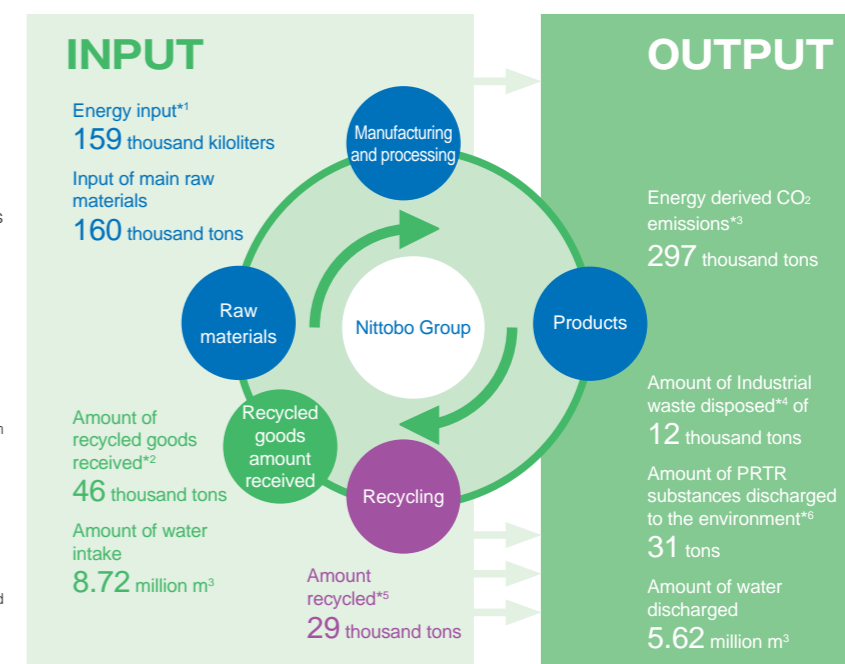
Range of Data Collection

The Nittobo Group conducts an environmental protection survey for its consolidated subsidiaries once a year.

The material balance shown in the figure on the right has been obtained by collecting data from Nittobo and its consolidated subsidiaries in Japan and abroad on environmental impacts (Data on certain items are not collected from some overseas business sites).

Results for FY2018 (updated in July 2019)
Domestic business sites: Data collected from April 2018 to March 2019
Overseas business sites: Data collected from January to December 2018

*1 Energy input: Amount of energy obtained by converting fuel used at factories and other sites for manufacturing and electricity purchased into crude oil.
*2 Amount of recycled goods received: Amount of recycled resources received by Nittobo's factories and other sites from other companies as raw materials.
*3 Energy-derived CO₂ emissions: Amount of carbon dioxide emitted by consuming energy at factories and other sites for manufacturing.
*4 Amount of industrial waste disposed of: Portion of industrial waste generated at factories and other sites, which is not used effectively and is simply incinerated, sent to landfill sites, or otherwise disposed of.
*5 Amount recycled: Portion of industrial waste generated at factories and other sites, which is effectively used or recycled for reuse.
*6 Amount of PRTR substances discharged to the environment: Amount of substances discharged to air and water by factories and other sites, which are subject to the stipulations in the PRTR Act. (Act on Confirmation, Etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof)



Status of Environmental Impact Reduction in the Nittobo Group

The Nittobo Group uses large amounts of energy in glass melting furnaces, used mainly to manufacture glass fiber, and emits carbon dioxide (CO₂). For this reason, the Group has reduced CO₂ emissions by converting glass melting furnace fuel from heavy oil to utility gas and by installing oxygen combustion systems at Group factories.

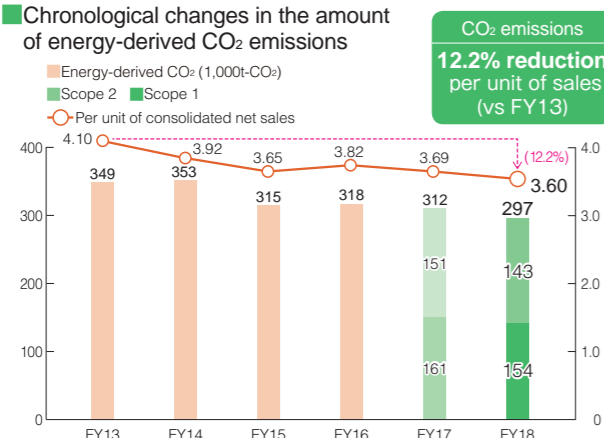
Since the installation of oxygen combustion systems in particular enables CO₂ emissions reduction by improving the combustion efficiency of melting furnaces and other equipment and also enables substantial elimination of

nitrogen oxides (NO_x), it has led to reduced emissions of air pollutants. The status of environmental load in FY2018 is as shown below. The Group was able to reduce CO₂ emissions per sales unit by 12.2% compared to the FY2013 level. We have reduced the total amount of air pollutant emissions by 67.0% from the FY2013 level, thanks in part to the installation of oxygen combustion systems.

We also achieved improvement year on year in the recycling rate. The Group will continue to work in unison to reduce environmental impacts.

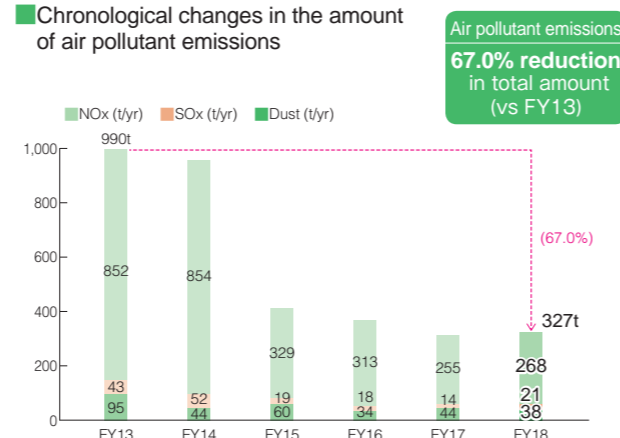
Chronological Changes in Key Environmental Parameters of the Nittobo Group

Chronological changes in the amount of energy-derived CO₂ emissions



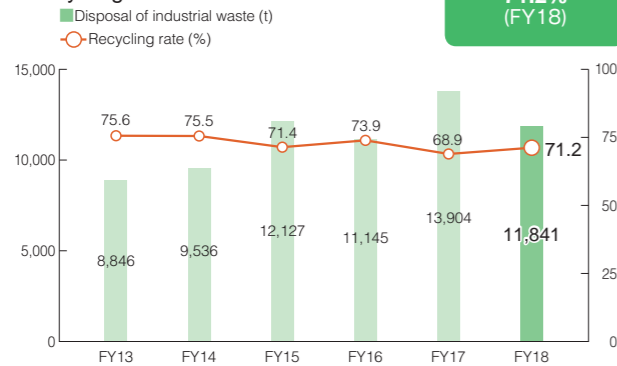
CO₂ emissions
12.2% reduction per unit of sales (vs FY13)

Chronological changes in the amount of air pollutant emissions



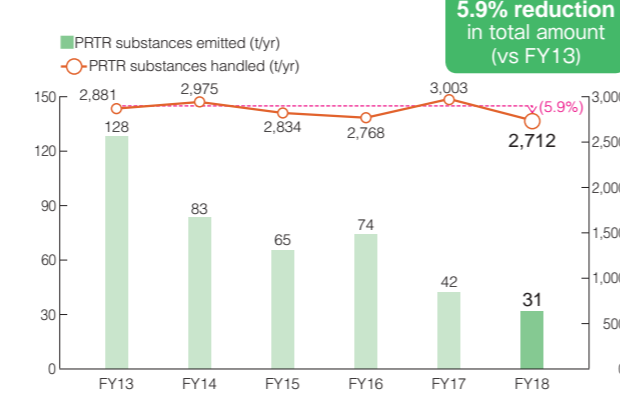
Air pollutant emissions
67.0% reduction in total amount (vs FY13)

Chronological changes in the amount of industrial waste disposal and the recycling rate



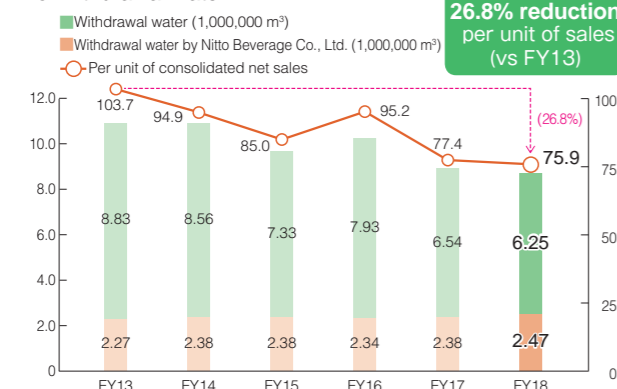
Recycling rate
71.2% (FY18)

Chronological changes in the amounts of PRTR substances emitted and handled



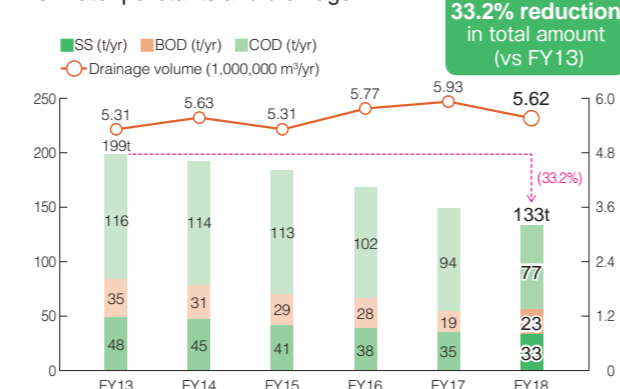
PRTR substance emissions
5.9% reduction in total amount (vs FY13)

Chronological changes in the amount of withdrawal water



Water intake
26.8% reduction per unit of sales (vs FY13)

Chronological changes in the amounts of water pollutants and drainage



Water pollutants
33.2% reduction in total amount (vs FY13)

Amount of Scope 3 emissions by the Nittobo Group

In fiscal year 2017, the Nittobo Group started to calculate the amount of greenhouse gas emitted (Scope 3) in its value chain. The results for fiscal year 2018 are as follows:

Category	Amount of CO ₂ emitted (t-CO ₂)	Calculation method
Category 1	121,975	Calculated by multiplying the purchase prices of the top 70% of products and services purchased by business sites by the CO ₂ unit value stipulated in the guidelines
Category 2	25,116	Calculated by multiplying the amount of capital goods (buildings, structures, machinery, and equipment) by the CO ₂ unit value stipulated in the guidelines
Category 5	456	Calculated by multiplying the amount of each type of waste by the CO ₂ unit value stipulated in the guidelines
Category 6	313	Calculated by multiplying the number of employees by the CO ₂ unit value stipulated in the guidelines
Category 7	221	Calculated by multiplying the amount of transportation expenses by the CO ₂ unit value stipulated in the guidelines
Category 9	3,785	Amount of CO ₂ emitted as included in the periodic reports of specified shippers under the Energy Conservation Act

*The amount of CO₂ emitted in each category was calculated with reference to the Ministry of the Environment's Green Value Chain Platform and other guidelines.

Reference materials: - Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ver.2.2), Ministry of the Environment
- Database of Emissions Intensity for Accounting of Greenhouse Gas Emissions from Organizations throughout the Supply Chain (Ver.2.4), Ministry of the Environment

Environmental Audits

Since 1999, the Nittobo Group has been conducting periodic environmental audits for its business sites as stipulated in the Action Guidelines for the Nittobo Environmental Charter. Environmental audits are intended to evaluate each business site's environmental management system objectively to determine whether it is working properly by checking compliance status with the Group's environmental policy and relevant environmental laws and regulations.

Environmental protection issues to be addressed by each business site vary from one site to another because business sites manufacture different products, but each business site's environmental protection activities are audited from two

aspects: environmental management audits and compliance audits (A total of 35 environmental laws and regulations in Japan are classified into six categories when these activities are evaluated).

If problems are identified during audits, business sites are required to submit improvement plans so that the problems are positioned as issues to be addressed in the future and the plans are used effectively in further environmental protection activities. Environmental audits are viewed as an effective tool for promoting and improving voluntary management, and the Nittobo Group will continue environmental audits on a Group-wide basis in the years to come.



An environmental audit



An environmental audit

ISO 14001 certified business site

Company/Business site	Certification date	Company/Business site	Certification date
Nittobo/Fukushima Factory, Fukushima No.2 Factory	January 27, 2001	Paramount Glass Manufacturing Co., Ltd./Naganuma Factory	March 27, 2001
Fuji Fiber Glass Co., Ltd.	February 16, 2003	Paramount Glass Manufacturing Co., Ltd./Suzuka Factory	March 3, 2010
Nitto Glasstex Co., Ltd.	January 17, 2003	Paramount Glass Manufacturing Co., Ltd./Ebetsu Factory	March 31, 2003

Corporate Governance

Basic Approach Concerning Corporate Governance

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

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

The Company introduced an executive officer system in June 2003 and has created a system able to maximize the effect of consolidated management by invigorating the Board of Directors and speeding up decision making. Since June 2008, management has been conducted by further clarifying 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 shifted to a company with a Nomination Committee, etc. By doing so,

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

Corporate Governance System

Board of Directors

The Company's basic policy is to constitute the Board of Directors with directors from within the Company with capabilities and knowledge on each business and management in general, and at least the same number of external directors as internal directors, who are able to express opinions beneficial for the enhancement of governance from the perspectives of diverse stakeholders and society, in order to ensure a system enabling appropriate supervision of the Company's business execution by the Board of Directors as a whole, and has specified that the Board of Directors shall have no more than 12 members in its Articles of Incorporation.

At the time of publication of this report, the Company's Board of Directors was made up of six members including three external directors.

The Board of Directors is responsible for supervision of

Nomination, Remuneration and Audit Committees

As a company with Nomination Committee, etc., the Company has established a Nomination Committee, a Remuneration Committee and an Audit Committee. The roles of the committees and overviews of the members of the committees as of the submission date are as follows.

[Nomination Committee] The Nomination Committee determines the content of proposals to elect and dismiss directors to be submitted to the General Meeting of Shareholders. It is made up of four directors (three of whom are external directors), and is chaired by External Director Kunihisa Hama. Meetings of the Nomination Committee are held as needed. The Nomination Committee selects the Company's director candidates who are believed to be the

business execution through selection of directors making up the Nomination, Remuneration and Audit Committees, election and dismissal of executive officers and delegation of business to executive officers, approval of matters related to operations that have an impact on basic management policy such as mid-term business plans and annual budgets, and approval of 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 a vote of confidence in directors is obtained in 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 by adopting the approach of putting the right people in the right place.

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 is made up of four directors (three of whom are external directors), and is chaired by External Director Hiroshi Kamibayashi. 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 accounting auditors and the Audit Office, audits, etc. are conducted based on audit plans approved

in the Audit Committee. It is made up of four directors (three of whom are external directors), and is chaired by External Director Masamichi Ouchi. An Audit Committee Secretariat

has been established as an organization for assisting the duties of the Audit Committee. In principle, the Audit Committee holds meetings at least once every three months.

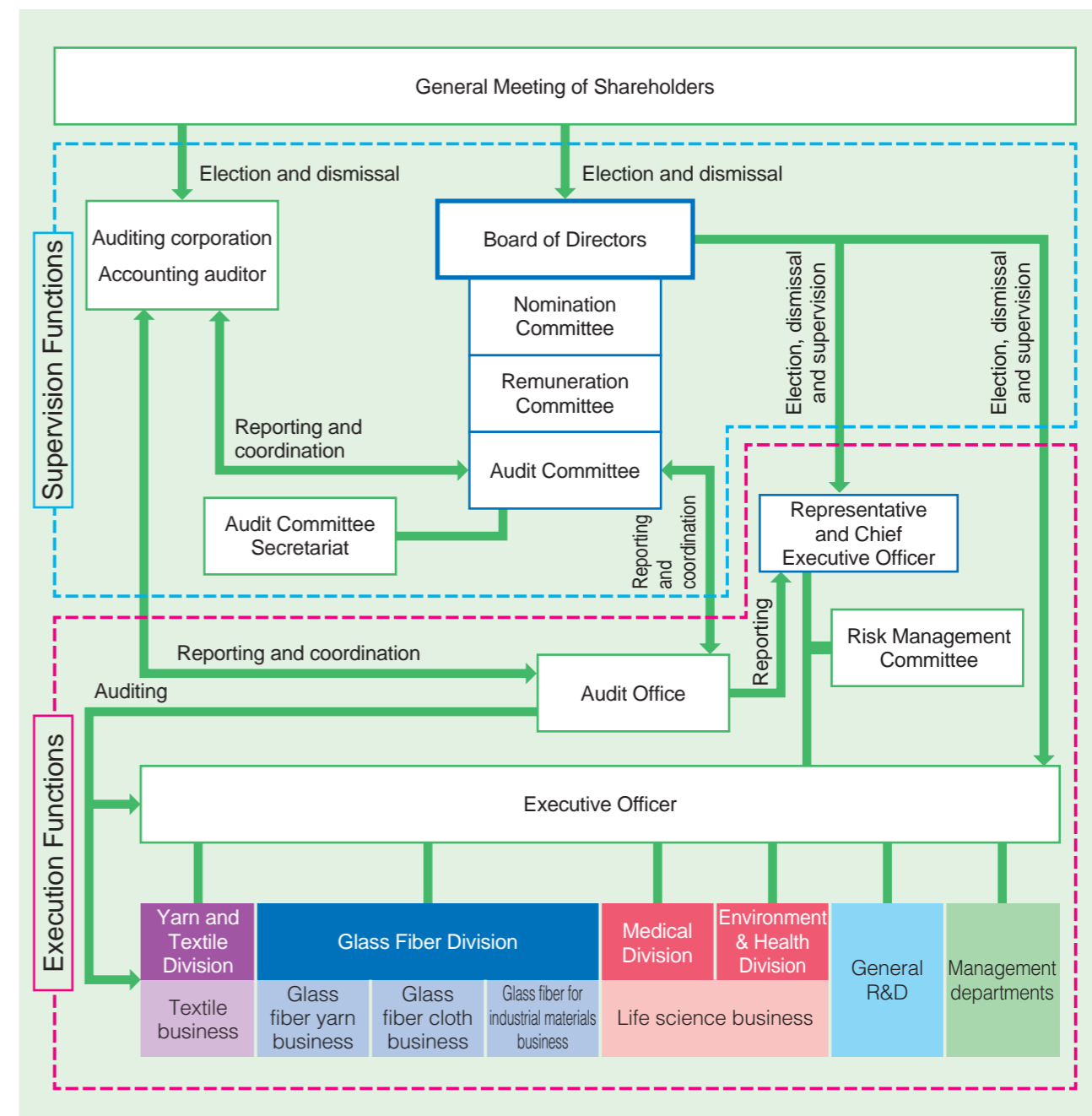
Execution of Business

As of the date of the publication of this report, the Company had 10 executive officers, of which one has been selected as 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.

Diagram of Corporate Governance System



Self-evaluation Concerning the Effectiveness of the Board of Directors

Evaluation of the Effectiveness of the Board of Directors

The composition, operation, supervision, support structure, shareholder dialogue, etc. of the Company's Board of Directors are analyzed and evaluated by the Board of Directors based on evaluations by each director by implementing surveys using external attorneys.

In response to discussion about deeper discussion about management strategy based on technical innovation and globalization, and enhancing feedback on the state of dialogue with investors, in the self-evaluation of the effectiveness of the Board of Directors during FY2017, the following initiatives were adopted in FY2018.

- With regard to large capital investments and M&A projects in Japan and abroad, in addition to discussion in multiple advance report meetings to the Board of Directors and individual explanations to external directors, the Company conducted deeper discussion in the Board of Directors and increased opportunities for discussion of management strategy including global operation through explanations, etc. to members of the Board of Directors by external experts such as consultants.

- With regard to dialogue with investors, the frequency of reporting to the Board of Directors was changed from semiannually to quarterly, and the content of reporting was also enhanced, in addition to commencing dialogue between top management including the President and decision makers at institutional investors.

In a survey covering FY2018, it was found that the operation of the Board of Directors was improved and that it functioned effectively and efficiently. Meanwhile, the opinion was expressed that further improvements need to be made to matters such as the suitability of personnel for the Board of Directors; the diversity and term of office of directors; the activities of the Nomination, Remuneration and Audit Committees; and communication with directors and executive officers.

The Company will continue to make improvements to ensure the Board of Directors performs effective supervisory functions.

Executive remuneration

Executive remuneration, etc.

(i) Matters pertaining to policy the determination of the amount of executive remuneration, etc. and the method of calculation thereof

(a) Method of deciding policy

The Company determines policy related to the determination of individual remuneration of directors and executive officers on the basis of objective data, etc. from external consultants in the Remuneration Committee made up of a majority of external directors and chaired by an external director, based on the provisions of the Companies Act related to a Company with Nomination Committee, etc.

Furthermore, the policy is based on the approach of providing strong motivation for officers to achieve their performance targets while maintaining transparency and rationality, fostering awareness for medium- to long-term management, and conforming with the interests of stakeholders including shareholders and investors, and the performance targets used for calculating remuneration also reflect this approach.

(b) Outline of the policy

The Company's executive remuneration (excluding external directors) is made up of base remuneration determined by the state of competency expected of each position (behavior evaluation) and the state of performance (performance evaluation), and performance-linked remuneration that varies within a range of 0% to 150% according to the level of achievement of individual performance targets based on company performance targets from the previous fiscal year and the activities and performance of the responsible departments, and the current fiscal year's remuneration is based on a combination of these.

Performance-linked remuneration has not been established for external directors due to the role of supervising management from an independent and objective perspective.

Percentage of Remuneration by Position

Position	Composition of executive remuneration (if the level of achievement of company and individual targets is 100%)		
	Base remuneration	Performance-linked remuneration (note)	
		Company performance portion	Individual performance portion
Representative and Chief Executive Officer	67%	16.5%	16.5%
Senior Managing Executive Officer	69%	15.5%	15.5%
Other officers (excluding external directors)	71%	14.5%	14.5%
External directors	100%	-	-

(Note) Performance-linked remuneration (company performance + individual performance) is set at 50% of base remuneration for the Representative and Chief Executive Officer, 45% of base remuneration for the Senior Managing Executive Officer, and 40% of base remuneration for other officers (excluding external directors).

Performance Targets and Percentage of Reflection in Performance-linked Remuneration

	Operating profit (compared to budget)	Operating profit (year on year)	ROE (year on year)	Dividends (year on year)
Company performance portion	25%	25%	25%	25%
Individual performance portion	Operating income of division handled (compared to budget)		Status of initiatives to address issues in mid-term business plan for division handled	
	40%		60%	

Process of Determining Remuneration

The Remuneration Committee chaired by an external director checks the exhibition of competencies and the level of achievement of company performance targets and individual performance targets, and calculates and determines individual amounts based on the aforementioned remuneration percentages and percentages of reflection in performance-linked remuneration.

<Calculation rules>

(Base remuneration)

This is determined using a base remuneration table that is a matrix based on four levels of behavior evaluation and nine levels of performance evaluation.

(Performance-linked remuneration)

- Company performance portion = amount of base remuneration for each prior fiscal year x percentage of company performance portion for each position x level of achievement of company performance portion for the previous fiscal year

- Individual performance portion = amount of base remuneration for each prior fiscal year x percentage of individual performance portion for each position x level of achievement of individual performance portion for the previous fiscal year

Performance-linked remuneration is determined by combining the company performance portion and the individual performance portion calculated as shown above.

The Remuneration Committee checks the suitability of the level of remuneration based on data on executive remuneration periodically provided by external consultants.

<Reference>

Targets and actual values of company performance targets for the 157th fiscal year used in the calculation of performance-linked remuneration in the 158th fiscal year

[Operating profit (compared to budget)]

Target: 11,500 million yen / Actual: 10,837 million yen

[Operating profit (year on year)]

Target: 11,149 million yen / Actual: 10,837 million yen

[ROE (year on year)]

Target: 9.8% / Actual: 9.4%

[Dividends (year on year)]

Target: 35 yen per share / Actual: 40 yen per share

*Individual performance targets are set using individual quantitative and qualitative targets, and calculated based on the results thereof.

(ii) Total amount of remuneration, etc. by type of officer, total amount by type of remuneration, etc., and number of officers who are recipients thereof

Type of officer	Total amount of remuneration, etc. (million yen)	Total amount by type of remuneration, etc. (million yen)			Number of officers who are recipients
		Fixed remuneration	Performance-linked remuneration	Retirement benefits	
Directors (excluding external directors)	67	46	21	-	4
Executive officers	219	153	66	-	11
External directors	96	96	-	-	4

(Notes) 1. The numbers of recipients of payment shown in the table above include, where applicable, one director and executive officer who retired as of the conclusion of the 157th Ordinary General Meeting of Shareholders held on June 27, 2018.

2. The amount paid to executive officers does not include the wages paid for employment as an executive officer for those who also serve as employees.

3. The Company's performance-linked remuneration is calculated based on the previous fiscal year's performance, and the amount combined with fixed remuneration (base remuneration) is defined as remuneration for the current fiscal year, and this is paid as a regular equal wage.

Dialogue with Stakeholders

The Corporate Communication Officer is responsible for general dialogue with shareholders, and the Corporate Communication Division is the internal department responsible for providing assistance thereto. The Company endeavors to have 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 Division 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.

(i) 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.

(ii) In principle, we publish information being disclosed on the Nittobo Group's website, and also endeavor to provide fairer and broader disclosure.

(iii) We conduct briefings for analysts and institutional investors promptly after the announcement of annual and semi-annual financial results.

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 executive officer in charge of the Corporate Communication Department, and appropriately provided as feedback to management executives and the Board of Directors by means of reporting to the Executive Meeting, etc. as needed.

Adequate care is given to 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

- System for ensuring that the execution of duties of the Group's officers and employees is in compliance with laws, regulations and the articles of incorporation
- The Representative and Chief Executive Officer sets an example and ensures that the Group's officers and employees are aware of the Group's Corporate Philosophy, Nittobo Declaration which espouses shared values in order to become a company trusted by society, and Nittobo Behavior Program and Code of Conduct, both of which provide a set of action guidelines, and also endeavors to make them known to all officers and employees in the Group.
- Executive officers and employees foster a healthy corporate culture that forms the basis for compliance by spreading and implementing the Nittobo Declaration.
- Executive officers and employees comply with laws, regulations, the articles of incorporation and internal rules, etc. based on the Nittobo Behavior Program and Code of Conduct, and the departments responsible for compliance strive to raise awareness of compliance to increase their effectiveness.
- Violations of laws and regulations are prevented, quickly discovered and appropriately addressed through a Corporate Ethics Help Line, which is a whistleblowing

program with an internal whistleblowing contact and an external contact connecting to a law firm.

- The officer in charge of the Risk Management Department periodically reviews the state of establishment of the Nittobo Group's internal control system to ensure the current conditions are consistent with the Group's basic policy. The results of the review are reported to the Representative and Chief Executive Officer, who reports to the Board of Directors, which passes resolutions if any revisions to the basic policy are required.

- The Audit Committee reports the results of operational audits and compliance audits, etc. to the Board of Directors as appropriate.

• Other system for ensuring appropriate operations by the Nittobo Group

- The Nittobo Declaration, the Nittobo Behavior Program, the Code of Conduct and the Corporate Ethics Help Line apply to the entire Nittobo Group, and efforts are made to raise awareness of these.

- Auditing offices are established in major subsidiaries to ensure appropriate operations, and the Company's Audit Office also conduct internal audits with a view to the entire Nittobo Group.

Risk Management

The Company has established the Nittobo Group's basic risk management policy and system in the Rules for Risk Management as a corporate group including subsidiaries. Based on the basic policy and system, the Risk Management Committee chaired by the Representative and Chief Executive Officer appropriately manages various risks surrounding our business and prevents such risks from occurring.

Furthermore, the Company is also striving to strengthen its legal risk management system by putting in place a system that enables it to receive various kinds of guidance as the occasion demands, such as opinions and advice from corporate attorneys and specialized lawyers regarding corporate management and daily operations.

Directors and Officers



Directors

(1) Yuichi Tsuji	Director	(4) Kunihisa Hama	External Director
(2) Toyoshi Nishizaka	Director	(5) Hiroshi Kamibayashi	External Director
(3) Yu Nozaki	Director	(6) Masamichi Ouchi	External Director

Executive Officers

(1) Yuichi Tsuji*	Representative and Chief Executive Officer	
(7) Kazuhisa Toda	Senior Managing Executive Officer	Responsible for the Glass Fiber Division and Medical Division, General Manager of the Glass Fiber Division, General Manager of the Medical Division, and General Manager of the Medical Division Product Planning and Development Headquarters
(3) Yu Nozaki*	Managing Executive Officer	Responsible for the Audit Office and the Risk Management Department
(8) Minoru Takeuchi	Managing Executive Officer	Head of the Research Institute
(9) Shigeru Maeyama	Managing Executive Officer	Responsible for the Fukuyama Enterprise Center, Redevelopment of the Fukuyama Region, and General Manager of the Glass Fiber Division Production and Technology Headquarters
(10) Kazuhiko Igarashi	Executive Officer	Deputy General Manager of the Glass Fiber Division
(11) Kazuyuki Utsugi	Executive Officer	Responsible for the Yarn and Textile Division and the Environment & Health Division, General Manager of the Environment & Health Division
(12) Hiroyuki Tada	Executive Officer	Responsible for the Personnel Department, Corporate Planning Department, General Affairs Department, 100-year Anniversary Project, Corporate Communication Department, Accounting & Finance Department, Information Systems Department, Procurement Department, Osaka Branch and Nagoya Branch
(13) Hideki Ishihara	Executive Officer	Deputy Head of Research Institute and General Manager of the Medical SC New Technology Strategy Office
(14) Hideyuki Hatanaka	Executive Officer	Deputy Head of Research Institute, Head of Research Planning management Department, and Head of Fiber R&D Center

*Also serves as Director

(as of September 1, 2019)

Consolidated Financial Statements

Nitto Boseki Co., Ltd. and Consolidated Subsidiaries

Consolidated Balance Sheet

(Millions of yen)

	As of March 31, 2018	As of March 31, 2019
Assets		
Current assets		
Cash and deposits	18,673	16,145
Notes and accounts receivable - trade	25,891	25,353
Merchandise and finished goods	6,486	7,757
Work in process	3,130	3,978
Raw materials and supplies	15,502	16,850
Other	3,385	2,593
Allowance for doubtful accounts	(4)	(4)
Total current assets	73,065	72,674
Non-current assets		
Property, plant and equipment		
Buildings and structures, net	12,332	12,246
Machinery, equipment and vehicles, net	10,097	13,400
Land	14,748	12,595
Leased assets, net	3,022	2,414
Construction in progress	1,836	5,973
Other, net	656	892
Total property, plant and equipment	42,693	47,523
Intangible assets	1,510	1,680
Investments and other assets		
Investment securities	25,698	24,757
Retirement benefit assets	285	287
Deferred tax assets	2,743	2,935
Other	1,200	1,177
Allowance for doubtful accounts	(36)	(36)
Total investments and other assets	29,890	29,122
Total non-current assets	74,095	78,326
Total assets	147,160	151,000

(Millions of yen)

	As of March 31, 2018	As of March 31, 2019
Liabilities		
Current liabilities		
Notes and accounts payable - trade	9,331	9,415
Short-term borrowings	4,887	7,708
Current portion of long-term borrowings	5,387	5,290
Lease obligations	569	449
Income taxes payable	2,389	532
Provision for bonuses	1,159	1,110
Other	9,002	7,559
Total current liabilities	32,726	32,066
Non-current liabilities		
Long-term loans borrowings	6,383	9,696
Lease obligations	2,999	2,445
Provision for repairs	5,981	5,013
Retirement benefit liability	10,371	9,805
Other	1,150	1,232
Total non-current liabilities	26,886	28,193
Total liabilities	59,612	60,259
Net assets		
Shareholders' equity		
Share capital	19,699	19,699
Capital surplus	19,037	19,037
Retained earnings	45,105	51,440
Treasury shares	(2,538)	(2,544)
Total shareholders' equity	81,304	87,633
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	6,068	3,542
Foreign currency translation adjustment	1,197	429
Remeasurements of defined benefit plans	(1,941)	(1,892)
Total accumulated other comprehensive income	5,324	2,079
Non-controlling interests	919	1,027
Total net assets	87,548	90,740
Total liabilities and net assets	147,160	151,000

Consolidated Statement of Income

(Millions of yen)

	For the fiscal year ended March 31, 2018	For the fiscal year ended March 31, 2019
Net sales	84,526	82,292
Cost of sales	54,312	54,632
Gross profit	30,214	27,660
Selling, general and administrative expenses	19,376	19,461
Operating profit	10,837	8,198
Non-operating income		
Interest income	26	63
Dividend income	631	578
Share of profit of entities accounted for using equity method	–	77
Rental income	82	88
Foreign exchange gains	–	292
Other	290	354
Total non-operating income	1,031	1,454
Non-operating expenses		
Interest expenses	237	208
Foreign exchange losses	214	–
Expenses related to inactive real estate for rent	75	322
Other	269	187
Total non-operating expenses	797	718
Ordinary profit	11,071	8,934
Extraordinary income		
Gain on sales of non-current assets	4,262	1,895
Gain on sales of investment securities	529	883
Total extraordinary income	4,792	2,779
Extraordinary losses		
Loss on disposal of non-current assets	239	451
Impairment loss	729	1,035
Loss on disaster	374	371
Other	36	25
Total extraordinary losses	1,379	1,883
Profit before income taxes	14,484	9,830
Income taxes - current	3,857	1,003
Income taxes - deferred	337	808
Total income taxes	4,195	1,812
Profit	10,289	8,017
Profit attributable to non-controlling interests	35	33
Profit attributable to owners of parent	10,253	7,984

Consolidated Statement of Comprehensive Income

(Millions of yen)

	For the fiscal year ended March 31, 2018	For the fiscal year ended March 31, 2019
Profit	10,289	8,017
Other comprehensive income		
Valuation difference on available-for-sale securities	690	(2,512)
Foreign currency translation adjustment	261	(675)
Remeasurements of defined benefit plans, net of tax	278	49
Share of other comprehensive income of entities accounted for using equity method	–	(107)
Total other comprehensive income	1,231	(3,246)
Comprehensive income	11,520	4,771
Comprehensive income attributable to		
Comprehensive income attributable to owners of parent	11,479	4,739
Comprehensive oncome attributable to non-controlling interests	40	31

Consolidated Statement of Changes in Net Assets

For the fiscal year ended March 31, 2018 (April 1, 2017 to March 31, 2018)

(Millions of yen)

	Shareholders' equity					Accumulated other comprehensive income				Non-controlling interests	Total net assets
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
Balance at beginning of current period	19,699	19,037	36,313	(1,757)	73,292	5,382	935	(2,220)	4,097	890	78,281
Changes of items during period											
Dividends of surplus			(1,460)		(1,460)						(1,460)
Profit attributable to owners of parent			10,253		10,253						10,253
Purchase of treasury shares				(780)	(780)						(780)
Net changes of items other than shareholders' equity						686	261	278	1,226	28	1,255
Total changes of items during period	-	-	8,792	(780)	8,011	686	261	278	1,226	28	9,267
Balance at end of current period	19,699	19,037	45,105	(2,538)	81,304	6,068	1,197	(1,941)	5,324	919	87,548

For the fiscal year ended March 31, 2019 (April 1, 2018 to March 31, 2019)

(Millions of yen)

	Shareholders' equity					Accumulated other comprehensive income				Non-controlling interests	Total net assets
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
Balance at beginning of current period	19,699	19,037	45,105	(2,538)	81,304	6,068	1,197	(1,941)	5,324	919	87,548
Changes of items during period											
Dividends of surplus			(1,649)		(1,649)						(1,649)
Profit attributable to owners of parent			7,984		7,984						7,984
Purchase of treasury shares				(6)	(6)						(6)
Net changes of items other than shareholders' equity						(2,526)	(767)	49	(3,245)	108	(3,136)
Total changes of items during period	-	-	6,335	(6)	6,329	(2,526)	(767)	49	(3,245)	108	3,192
Balance at end of current period	19,699	19,037	51,440	(2,544)	87,633	3,542	429	(1,892)	2,079	1,027	90,740

Consolidated Statement of Cash Flows

(Millions of yen)

	For the fiscal year ended March 31, 2018	For the fiscal year ended March 31, 2019
Cash flows from operating activities		
Profit before income taxes	14,484	9,830
Depreciation	4,164	4,080
Impairment loss	729	1,035
Increase (decrease) in retirement benefit liability	(236)	(512)
Increase (decrease) in provision for repairs	543	(967)
Interest and dividend income	(658)	(642)
Interest expenses	237	208
Loss (gain) on sales and valuation of investment securities	(529)	(883)
Share of loss (profit) of entities accounted for using equity method	-	(77)
Loss (gain) on sales and retirement of non-current assets	(4,023)	(1,443)
Decrease (increase) in notes and accounts receivable - trade	(1,763)	521
Decrease (increase) in inventories	(3,742)	(3,500)
Increase (decrease) in notes and accounts payable - trade	1,168	359
Other, net	114	(60)
Subtotal	10,488	7,948
Interest and dividend income received	658	642
Interest expenses paid	(250)	(204)
Income taxes paid	(3,104)	(3,068)
Net cash provided by (used in) operating activities	7,791	5,317
Cash flows from financing activities		
Purchase of non-current assets	(4,480)	(12,634)
Proceeds from sales of non-current assets	6,379	3,770
Purchase of investment securities	(1)	(3,954)
Proceeds from sales of investment securities	1,305	2,064
Purchase of shares of subsidiaries resulting in change in scope of consolidation	-	(511)
Other, net	(677)	(122)
Net cash provided by (used in) investing activities	2,524	(11,389)
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	(2)	2,926
Proceeds from long-term loans payable	160	9,590
Repayments of long-term loans payable	(6,804)	(6,374)
Repayments of finance lease obligations	(568)	(529)
Purchase of treasury shares	(780)	(6)
Cash dividends paid	(1,460)	(1,649)
Other, net	(12)	(9)
Net cash provided by (used in) financing activities	(9,467)	3,948
Effect of exchange rate change on cash and cash equivalents	47	(55)
Net increase (decrease) in cash and cash equivalents	895	(2,178)
Cash and cash equivalents at beginning of period	17,428	18,324
Cash and cash equivalents at end of period	18,324	16,145

Company Profile

Company Profile

Dates of establishment

February 1898 Koriyama Kenshi Boseki Co., Ltd. (Koriyama)
 April 1918 Fukushima Seiren Seishi Co., Ltd. (Fukushima)
 April 1923 Nitto Boseki Co., Ltd.

Head Office at: Aza Higashi 1, Gonome, Fukushima-shi, Fukushima, 960-8161, Japan

Headquarters at: 2-4-1, Kojimachi, Chiyoda-ku, Tokyo, 102-8489, Japan

Paid-in capital: 19.6 billion yen

Representative and Chief Executive Officer: Yuichi Tsuji

Employees: 2,414 (Consolidated) 820 (Parent company)
 (as of March 31, 2019)

Business Locations

Tokyo Headquarters

2-4-1, Kojimachi, Chiyoda-ku, Tokyo, 102-8489, Japan

Administration Division

Telephone: +81-3-4582-5111

Textile Division

Telephone: +81-3-4582-5160

Glass Fiber Division

Telephone: +81-3-4582-5170

Medical Division

Telephone: +81-3-4582-5450

Environment & Health Division

Telephone: +81-3-4582-5280

Osaka Branch

4-3-10, Kouraihashi, Chuo-ku, Osaka-shi, Osaka, 541-0043, Japan

(Nissei Fushimicho Building New Building)

Telephone: +81-6-6208-5015

Nagoya Branch

2-14-21, Nishiki, Naka-ku, Nagoya-shi, Aichi, 460-0003, Japan

(Maruyama Nissei Building)

Telephone: +81-52-231-5131

Fukushima Factory

1, Aza Higashi, Gonome, Fukushima-shi, Fukushima, 960-8581, Japan

Telephone: +81-24-546-3131

Fiber R&D Center

Telephone: +81-24-546-3138

Fukushima No.2 Factory

20, Ipponsugi, Sakurashimo, Fukushima-shi, Fukushima, 960-2154, Japan

Telephone: +81-24-593-1231

Fukuyama Enterprise Center

1, Aza Shiojima, Fukuhara, Fukuyama-cho, Koriyama-shi, Fukushima, 963-8061, Japan

Telephone: +81-24-932-6011

Medical R&D Center

Telephone: +81-24-932-6261

Tomari Enterprise Center

500, Hirayanagi, Asahi-machi, Shimoniikawa-gun, Toyama, 939-0744, Japan

Telephone: +81-765-82-1133

Niigata Enterprise Center

6-50, Toshincho, Higashi-ku, Niigata-shi, Niigata, 950-0065, Japan

Telephone: +81-25-273-7191

Itami Production Center

1-6-1, Kuwazu, Itami-shi, Hyogo, 664-8501, Japan

Telephone: +81-72-782-2621

Satellite Laboratory

Suite #3108, 3rd floor, Innovation Center of NanoMedicine 3-25-14,

Tonomachi, Kawasaki-ku, Kawasaki-shi, Kanagawa, 210-0821, Japan

Telephone: +81-44-266-8322

Ni-Tech (Medical SC Newtech Strategy Office)

Business Operations

- Manufacture, processing, and sale of textile products
- Manufacture, processing, and sale of glass fiber products
- Manufacture, processing, and sale of chemical products and pharmaceutical products
- Manufacture and sale of refreshing beverages
- Planning, supervision, and contracting for construction
- Design, manufacture, and sale of machinery and equipment
- Purchase, sale, lease, and management of real estate and facilities

Consolidated Subsidiaries

Textiles	Nittobo Interlining Co., Ltd. Chiyoda-ku, Tokyo Sale of interlining
	Bunkyo Seiren Co., Ltd. Fukui-shi, Fukui Processing of textile
	Nittobo Niigata Co., Ltd. Niigata-shi, Niigata Production and sale of core spun yarns, etc.
Glass fiber yarn	Nitto Glass Fiber Manufacturing Co., Ltd. Koriyama-shi, Fukushima Production of glass fiber products
	Fuji Fiber Glass Co., Ltd. Moka-shi, Tochigi Production of glass fiber products
	NITTOBO ASIA Glass Fiber Co., Ltd. Chiayi County, Taiwan Production and sale of glass fiber products
Glass fiber cloth	Soyo Co., Ltd. Chiyoda-ku, Tokyo Sale of glass fiber products, etc.
	Shinwa Denzai Co., Ltd. Chiyoda-ku, Tokyo Sale of glass fiber products, etc.
	Nittobo Taiwan Co., Ltd. Taipei, Taiwan Sale of glass fiber products
Glass fiber for industrial materials	Nittobo Macau Glass Weaving Co., Ltd. Macau Production of glass fiber products
	Baotek Industrial Materials Ltd. Taoyuan, Taiwan Production and sale of glass fiber products
	Nitto Glasstex Co., Ltd. Oizumi-machi, Oura-gun, Gunma Production of glass fiber products
Life science	Paramount Glass Manufacturing Co., Ltd. Sukagawa-shi, Fukushima Production and sale of glass wool
	Nittobo FRP Laboratory Co., Ltd. Koriyama-shi, Fukushima Production and sale of glass fiber products, etc.
	NITTOBO MEDICAL CO., LTD. Chiyoda-ku, Tokyo Production and sale of in vitro diagnostic reagents and specialty chemicals
Others	Frontier Institute Co., Ltd. Ishikari-shi, Hokkaido Development, manufacturing and sales of bioassay kits and consignment of antibody production
	Nitto Beverage Co., Ltd. Asahi-machi, Shimoniikawa-gun Toyama Production and sale of soft drink
	Nittobo Ecology Co., Ltd. Chiyoda-ku, Tokyo Various contracted services
Others	Nittobo America Inc. California and Iowa, U.S.A. Production and sale of antisera
	Kamiya Biomedical Company, LLC Washington, U.S.A. Production and sale of in vitro diagnostic reagents
	Capricorn Products, LLC Maine, U.S.A. Production and sale of antisera for in vitro diagnostic reagents
Others	Nittobo Allied Service Co., Ltd. Fukushima-shi, Fukushima Reagents various contracted services and insurance agency
	Nittobo Techno Co., Ltd. Koriyama-shi, Fukushima Design, manufacture, and sale, design and construction of civil engineering work and building

(as of June 30, 2019)

Stock Information

Stock Status

Authorized number of shares 120,000,000 shares

Number of shares issued 39,935,512 shares
 (including treasury shares, 1,133,293 shares)

Number of shareholders 10,939

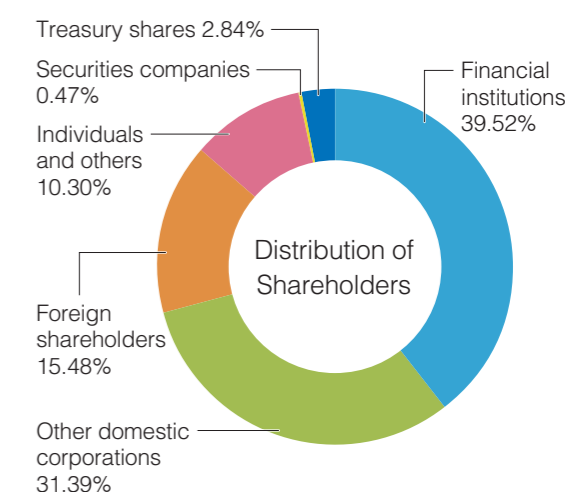
Major shareholders

As of March 31, 2019

Name	Number of shares held (in thousands)	Percentage of shares held*
The Master Trust Bank of Japan, Ltd. (Trust account)	2,772	7.14
Japan Trustee Services Bank, Ltd. (Trust account)	2,429	6.26
Sumitomo Real Estate Sales Co., Ltd.	2,383	6.14
Nippon Life Insurance Company	1,614	4.16
The Dai-ichi Mutual Life Insurance Company, Limited	1,316	3.39
UNIZO Holdings Company, Limited	1,113	2.87
Sumitomo Life Insurance Company	1,082	2.79
JP MORGAN CHASE BANK 385632	1,008	2.60
AIR WATER INC.	997	2.57
Central Glass Co., Ltd.	948	2.44

* The percentage of shares held excludes treasury shares.

Distribution of Shareholders



Stock-related Administration

Fiscal Year April 1 to March 31

Ordinary General Meeting of Shareholders Late June

Record date 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:
<https://www.nittobo.co.jp/koukoku/index.htm> (Japanese only)
 However, if an electric 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 First Section of the Tokyo Stock Exchange (Securities code: 3110)

Shareholder registry administrator and Special Account Administrator 1-2-1, Yaesu, Chuo-ku, Tokyo, 103-8670, Japan
 Mizuho Trust & Banking Co., Ltd.