



Diversity and Diversification



Integrated Report 2018

Fiscal Year Ended March 2018

NISSHINBO

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NISSHINBO



Nisshinbo Holdings Inc.

2-31-11, Ningyo-cho, Nihonbashi, Chuo-ku, Tokyo 103-8650, Japan

Dear Shareholders and Investors,

It gives me great pleasure to present you with this year's Integrated Report for Nisshinbo Holdings Inc.

We published our first Integrated Report in July last year and held our regular overseas investor road show the following September. Financial data remains very important to investors, but during the road show I noticed growing interest in ESG and other non-financial information.

For some time, we have been working to ensure a balanced focus on both financial and non-financial aspects of the Nisshinbo Group's development to support growth in corporate value. Respecting diversity has also been an important part of the way we run our business. The Nisshinbo Group has a wide range of different businesses — an automobile brake friction materials business with the leading market share worldwide, a wireless and communications business supplying systems that support public infrastructure and safe maritime navigation, and a micro devices business with prospects for rapid growth driven by the spread of IoT. As the Nisshinbo Group becomes more global, our business is becoming even broader and more complex. By harnessing the increasing diversity of all parts of our operations, I believe we can create the basis for innovation and sustained growth.

This Integrated Report brings together a wide range of financial and non-financial information. We believe it is the ideal tool to showcase the Nisshinbo Group's efforts to increase corporate value.

Please feel free to provide feedback to help us continue to make improvements.

July 2018

A handwritten signature in blue ink that reads "Masaya Kawata". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Masaya Kawata
President
Nisshinbo Holdings Inc.

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Editing Policy

In addition to the usual financial data and information about business strategies, Nisshinbo's Integrated Report 2018 includes an in-depth section about the Group's environmental, social and governance (ESG) activities to provide readers with a more detailed picture of the Group's business activities. This information highlights how the Nisshinbo Group is striving to increase corporate value in areas such as personnel training and the environment, complementing efforts to increase value through earnings growth.

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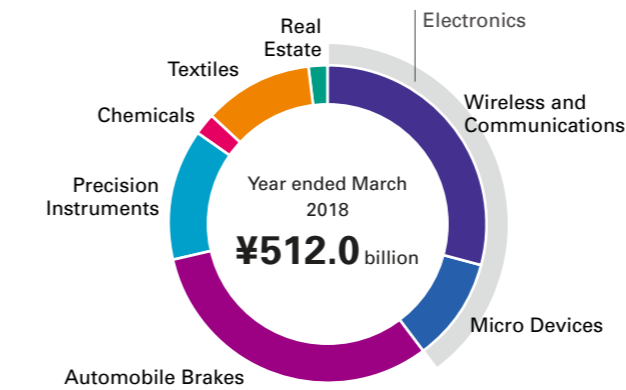
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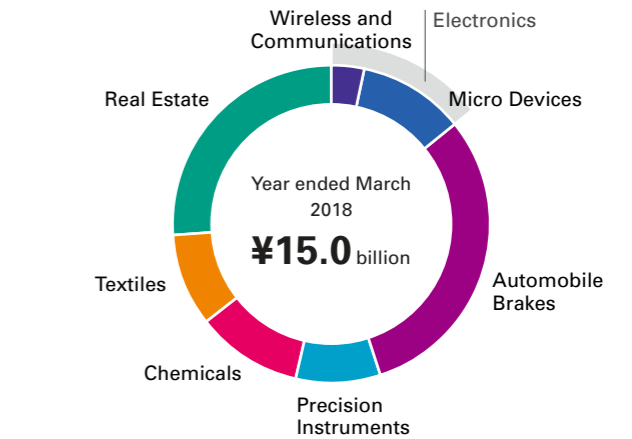
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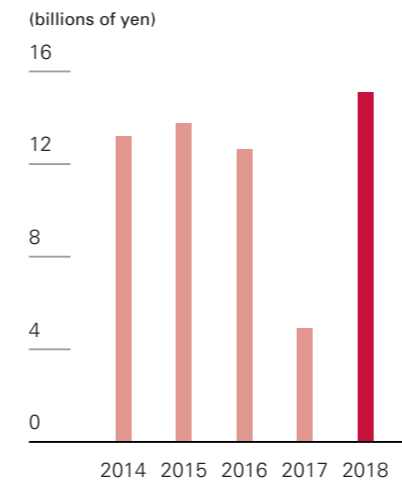


Operating Income

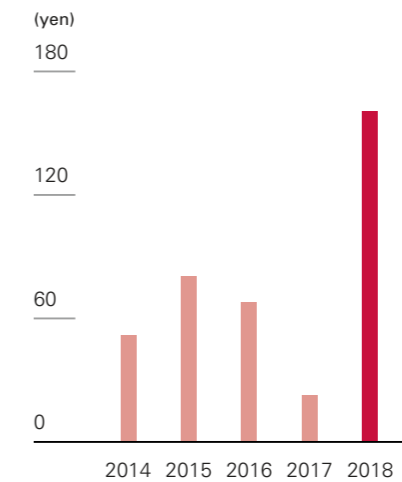


(Years ended March 31)

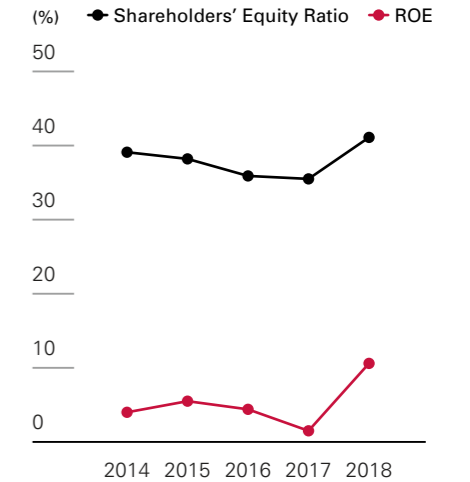
Operating Income



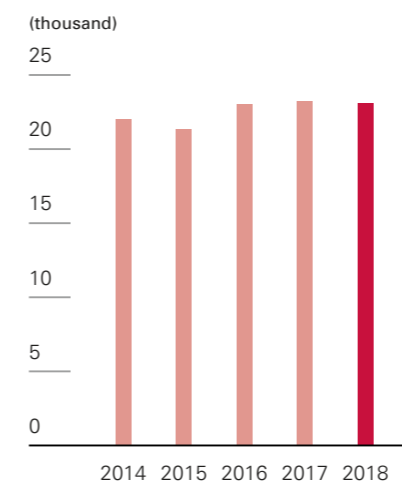
EPS



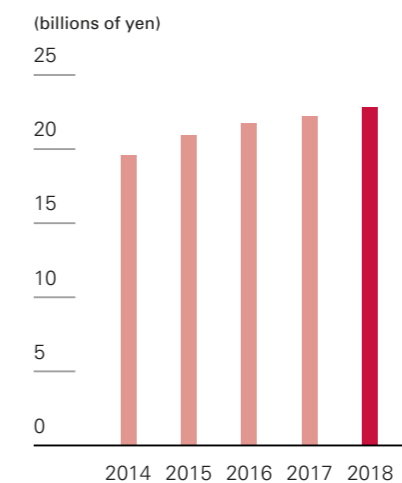
Shareholders' Equity Ratio and ROE



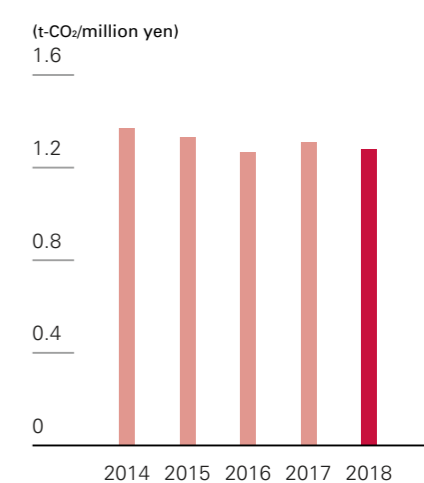
Number of Employees



Research and Development Expenses



Greenhouse Gas Emissions per Unit of Sales



Profile
Strategy
Special Feature
Business Segments
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Our Vision for the Nisshinbo Group



Environment and Energy Company group

As an *Environment and Energy Company* group working to create a sustainable society, Nisshinbo Holdings Inc. is targeting long-term goals of ROE of 12% and net sales of ¥1 trillion in the fiscal year ending December 2025. We have identified four strategic business fields: Wireless Communications and Electronics, Automotive Parts and Devices, Lifestyle and Materials, and New Energy and Smart Society. Focusing on those fields, we aim to continue growing as a company that delivers solutions for today's global society.

Safety



Quality



Customer



Supporting Efforts to Realize the SDGs

Nisshinbo Holdings, Inc. is aiming to help realize a sustainable society, as set out in the Public Entity principle in the Nisshinbo Group Corporate Philosophy. That commitment coincides with the aims of the Sustainable Development Goals (SDGs), which we are working towards through our business activities as an *Environmental and Energy Company* group.



Challenging towards a New Era of Technological Innovation & Super Smart Society



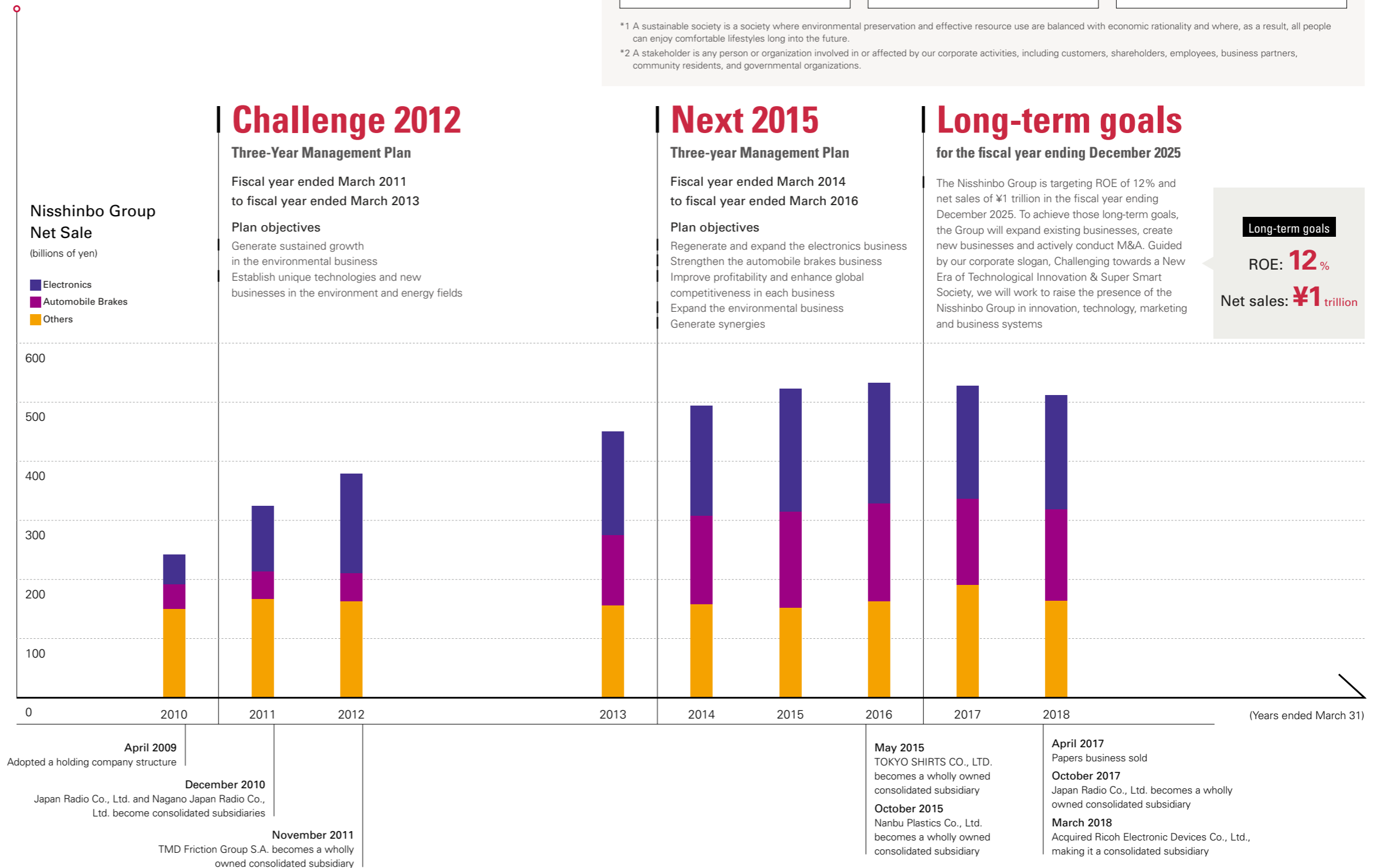
Nisshinbo Holdings will continue to seek out and take on new challenges as the world enters a new era of far-reaching change, driven by accelerating advances in technology and the transition to smart societies. We will reinforce all types of management related to our business – Group, global, environmental, diversity and cash flow management – to help realize a sustainable society.

Nisshinbo Holdings Inc. traces its roots back to Nisshin Cotton Spinning Co., Ltd., which was founded in 1907 to mass produce high-grade cotton yarn. After the war, the Company actively started to develop its operations by moving into non-textile businesses. Led by one of the key principles in its Corporate Philosophy – Public Entity – Nisshinbo's mission is to contribute to society through its business activities.

From 1945 onwards, amid Japan's post-war recovery and rapid economic growth, the Nisshinbo Group shifted its focus from its core, founding business of textiles to automobile brakes, chemicals and other non-textile businesses. In the 1960s, the automobile brakes business expanded, spurred by the growing popularity of cars in Japan. Nisshinbo also actively developed its precision instruments and chemicals businesses, building new plants and adding capacity. The yen appreciated following the Plaza Accord in 1985, forcing the Company to restructure its operations. Textile and non-textile businesses also stepped up moves into overseas markets. In 1990, non-textile businesses generated more than half of the Group's sales for the first time.

Key Events

- 1907** Established Nisshin Cotton Spinning Co., Ltd.
- 1944** Began production of friction materials
- 1946** Nishi Arai Plant begins operations as a chemicals production facility
Friction materials division starts production of brake linings
- 1958** Established Nihon Kohbunshikan Co., Ltd., begins production of plastic bobbins
- 1960** Began production of rigid urethane foam in the chemical products field
- 1981** Completed construction of the Tatebayashi Chemicals Plant (now the Tatebayashi Plant)
- 1997** Established Nisshinbo Automotive Manufacturing Inc. (U.S.A.)
- 1999** Established Saeron Automotive Corporation (South Korea)
- 2000** Established Continental Teves Co., Ltd. (joint venture) (Now Continental Automotive Co., Ltd.)
- 2005** Acquired additional shares in New Japan Radio Co., Ltd.



Diversity and Diversification

Masaya Kawata
President
Nisshinbo Holdings Inc.



Financial Results for the Fiscal Year Ended March 2018

Sales declined but net income rose sharply.

Results Highlights			(millions of yen)	
	17/3	18/3	YoY	Growth rate
Net Sales	527,274	512,048	-15,227	-2.9%
Operating Income	4,890	15,086	+10,195	+208.5%
Ordinary Income	10,556	19,700	+9,144	+86.6%
Net Income Attributable to Owners of Nisshinbo Holdings Inc.	3,575	26,352	+22,778	+637.2%

In the fiscal year ended March 2018, net sales declined 2.9% year on year to ¥512.0 billion and operating income rose 208.5% to ¥15.0 billion. We also posted net income attributable to owners of Nisshinbo Holdings Inc. of ¥26.3 billion, an increase of ¥22.8 billion from the previous fiscal year. There were several reasons for the lower sales and higher profits.

The main reason for the decline in sales was the transfer of the papers business to Daio Paper Corporation. The sale of the business is in line with our growth strategy, which is based on channeling management resources into businesses related to the automotive and super smart society fields. Established 70 years ago, our papers business generated sales of ¥32.6 billion and operating income of ¥2.6 billion in the fiscal year ended March 2017. However, we decided that the business would have more opportunities to develop and grow with Daio Paper, a leading company in paper products.

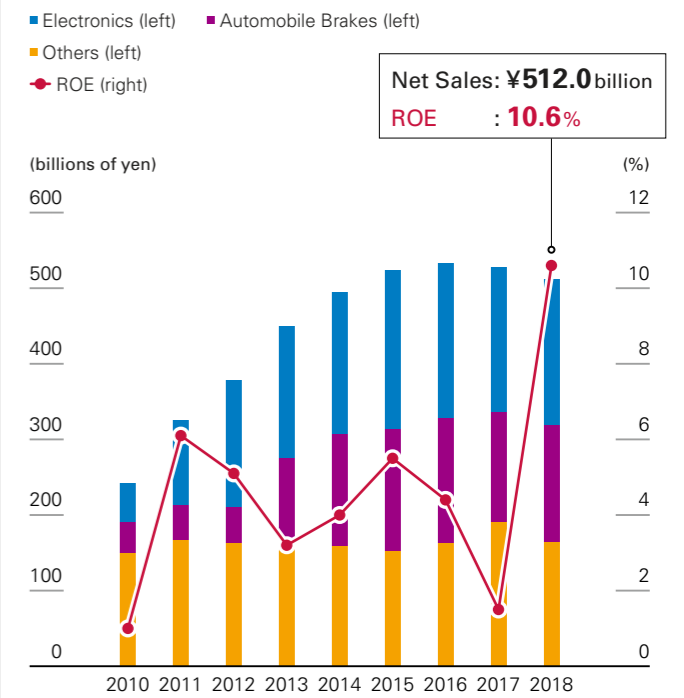
There are two reasons for the strong growth in operating income. First, Japan Radio Co., Ltd., part of the electronics business, moved back into profit with operating income of ¥693 million, compared with an operating loss of ¥5,486 million in the previous fiscal year. In its core marine systems business, Japan Radio launched new equipment for the aftermarket and the small and medium-size vessel market, leading to higher sales. In its solutions and specialized equipment business, sales of large-scale disaster prevention systems declined, but companywide efforts to cut fixed costs helped to support profitability. Second,

in the automobile brakes business, amortization of goodwill related to the acquisition of European company TMD ended in the previous fiscal year, completing the five-year schedule. That lifted profits by just under ¥6.0 billion.

Ordinary income increased year on year, in line with growth in operating income. The steep rise in net income attributable to owners of Nisshinbo Holdings Inc. reflected the booking of ¥11.7 billion in gain on sales of shares of subsidiaries and associates due to the transfer of the papers business, and ¥5.4 billion in gain on the sale of rental real estate.

Long-term ROE goal of 9% achieved.

Net Sales and ROE (Years ended March 31)



In 2009, we divided Nisshin Cotton Spinning Co., Ltd. into separate business segments and established Nisshinbo Holdings Inc. as the Group's holding company. At the time, we set two long-term goals for the fiscal year ending March 2018: sales of ¥600 billion and ROE of 9%. This fiscal year, we achieved ROE of 10.6%, exceeding the target, but we missed our sales target due to the decision to prioritize capital efficiency. However, we should mention that one-off gains from the transfer of the papers business and the sale of rental real estate assets made a substantial contribution to ROE. The Group still needs to do more to increase operating income.

The current fiscal period is a transitional period due to a change in the Group's fiscal year-end from March 31 to December 31. That makes year-on-year comparisons difficult, but in real terms, sales and profits are currently trending ahead of the pace in the fiscal year ended March 2018.

Measures Implemented since 2017

Allocating management resources to drive growth.

To support growth, we need to reinforce Group management and make our business more global, while also improving both offensive and defensive corporate governance. We are accelerating our growth strategy by prioritizing management resources on businesses related to the automotive and super smart society fields. Below is a list of the key measures we have implemented since 2017.

Key measures and outcomes in each business

- Sold papers business
- Invested in ZMP Inc., a venture company developing technology for autonomous vehicles
- Established a new friction materials production site in Yantai, China
- Made Japan Radio Co., Ltd. a wholly owned subsidiary
- Commercially launched carbon alloy catalysts to replace platinum catalysts for fuel cells
- Acquired Ricoh Electronic Devices Co., Ltd., making it a consolidated subsidiary
- Expanded the lineup of copper-free friction materials compatible with new environmental regulations
- Sold the drum brake business
- Established JRC Mobility Inc.
- Decided to make New Japan Radio Co., Ltd. a wholly owned subsidiary
- Broadened and strengthened collaboration between Group businesses

Key measures and outcomes related to corporate governance and stakeholders

- Abolished the internal advisor and consultant system
- Appointed Deloitte Touche Tohmatsu LLC as an additional auditing firm to strengthen auditing of global business activities

- Selected as a constituent stock in ESG indices used by GPIF – MSCI Japan ESG Select Leaders Index and MSCI Japan Empowering Women Index (WIN)
- Held road shows for overseas investors on an ongoing basis
- Integrated Report selected by GPIF's external asset managers in Japan as "excellent" and "most improved"
- Changed fiscal year-end from March 31 to December 31 and started looking at adopting international financial reporting standards (IFRS)

Our Vision for the Nisshinbo Group

Target quantitative and qualitative growth with measures focused on ROE and ESG.

Create constructive dialogue with investors

We place great importance on communicating with investors. Currently, we invite institutional investors to results briefings twice each year, for interim results and full-year results. As President of Nisshinbo Holdings, I attend the briefings with my senior management team. I believe the briefings are a valuable opportunity to gain direct feedback from equity market participants. Also, amid rising awareness of Japan's Stewardship Code, we are receiving a growing number of requests for engagement meetings. We are actively responding to those requests, taking on board opinions objectively and reflecting them in management.

Improve ROE

Based on Nisshinbo's cost of capital, we need to achieve ROE of 9% or higher. That long-term goal was finally attained in the fiscal year ended March 2018. However, there were substantial contributions from extraordinary income. To ensure ROE keeps improving, we have to increase operating income. In our new long-term goals, we are aiming for ROE of 12% in 2025. That is the level we need to aim for as we grow our businesses globally. Our long-term sales goal is ¥1 trillion by 2025. Given that sales have risen at an annual rate of 9.8% (CAGR) since 2009, when Nisshinbo Holdings was established, that target is well within reach. However, we need to prioritize capital efficiency instead of simply chasing sales. While our primary goal is to achieve ROE of 12%, we have no plans to

improve ROE using financial leverage. To reiterate, Nisshinbo must increase operating income. Below are our main balance sheet and operating income assumptions for 2025.

- ▶ To maintain the Group's financial health and protect it from negative developments in the operating environment, we aim to maintain the shareholders' equity ratio at between around 30% and 40%.
- ▶ Total assets currently stand at more than ¥650 billion, while sales are just over ¥500 billion. By 2025, we want to create a leaner company, with total assets roughly equivalent to sales.
- ▶ Based on those goals, shareholders' equity in 2025 will be around ¥400 billion. To achieve ROE of 12%, that means we need to generate net income of about ¥50 billion. Taking into account our corporate tax rate, that equates to operating income of roughly ¥70-80 billion.

Based on the above assumptions, we need to increase the Group's operating margin to more than 7-8%, taking into account variations in each business due to their specific characteristics.

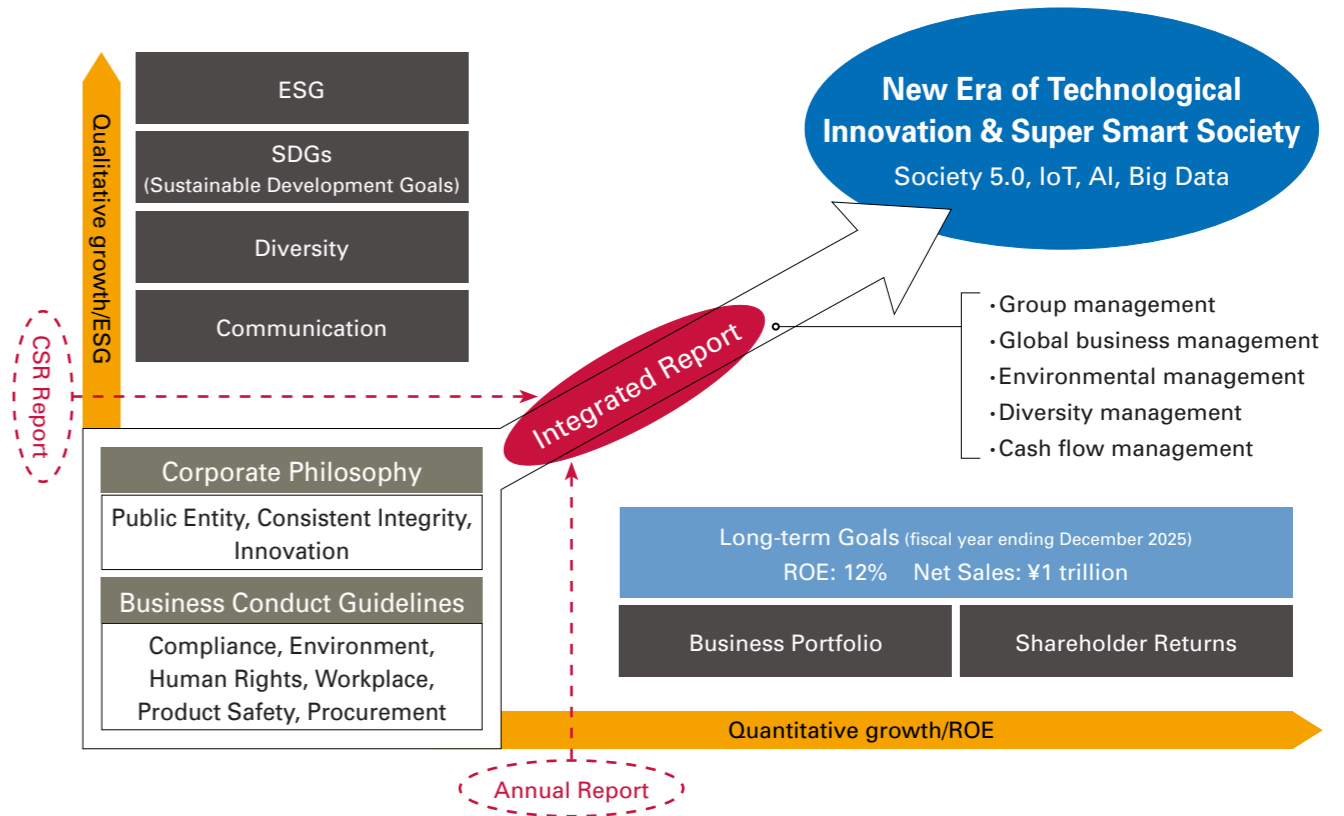
However, we are likely to see distortions in our business if we focus too much on quantitative growth, undermining prospects for sustained growth. We will need to keep the Company on track with qualitative growth, or in other words, stay focused on ESG. Nisshinbo will only be able to grow and develop in a healthy way by balancing quantity and quality. Our approach is visualized in the diagram below.

ESG and SDG initiatives

We regularly visit institutional investors overseas to exchange ideas. However, since 2017 in particular, we have noticed much greater interest in ESG investing. Nisshinbo is aiming to be an *Environmental and Energy Company* group, and Public Entity is a key principle in the Group's Corporate Philosophy.

Increasing the Group's Corporate Value

as an *Environment and Energy Company* group



The Environmental component of ESG is now firmly entrenched at Nisshinbo through contributions we make to society through our business activities. One example is a project being run by Japan Radio in Brazil to promote wider use of rainfall radars in the state of Paraná. The radars are part of an early-warning system that accurately measures rainfall in areas at high risk of landslides due to localized heavy rain. Field testing of the system started in early 2018.

Details about the Group's efforts to promote environmental management can be found later in this report (see pages 36-37 for more details).

In terms of the Social component of ESG, we have actively supported the training of junior tennis players for many years. In 2018, Nisshinbo also became the official sponsor of Japan's table tennis team. Our aim is to support the development of young people through sport.

We are also putting in place the necessary systems to give seniors, women and other diverse groups in our workforce the opportunities to realize their full potential, as part of wider efforts to change the Group's culture. As an initial step, we surveyed employees in the current fiscal period to gain an accurate picture of the situation in the Group. At the same time, all our business sites in countries and regions around the world are actively working to support their local communities.

We are also making progress with the Governance element of ESG. To ensure transparent and fair management and dynamic, bold decision-making, we are implementing offensive corporate governance measures to generate sustained growth and increase corporate value over the medium to long term. One example is our decision to abolish the internal advisor and consultant system in 2017. In 2018, we overhauled the remuneration system for senior executives in order to provide greater incentives to directors to increase Nisshinbo's corporate value. Specifically, we introduced a restricted stock compensation system to replace the existing stock option system.

Going forward, we plan to actively implement ESG measures as a Company that coexists with and contributes to society.

Nisshinbo is tackling issues related to the United Nation's SDGs. We have set out several long-term financial performance goals to be achieved by 2025.

The SDGs, on the other hand, clearly define a number of priority global issues that need to be tackled by 2030 and envision the kind of world we should be working to create. The 17 SDGs contain many elements that coincide with our own development themes and existing technology portfolio. We are now looking into how the SDGs can be integrated into the

Group's management, starting with a project in the current fiscal period to map our value chain.

For more information about our ESG activities, please visit the Nisshinbo Group's CSR website.

<http://www.nisshinbo.co.jp/english/csr>

Our response to Japan's Corporate Governance Code

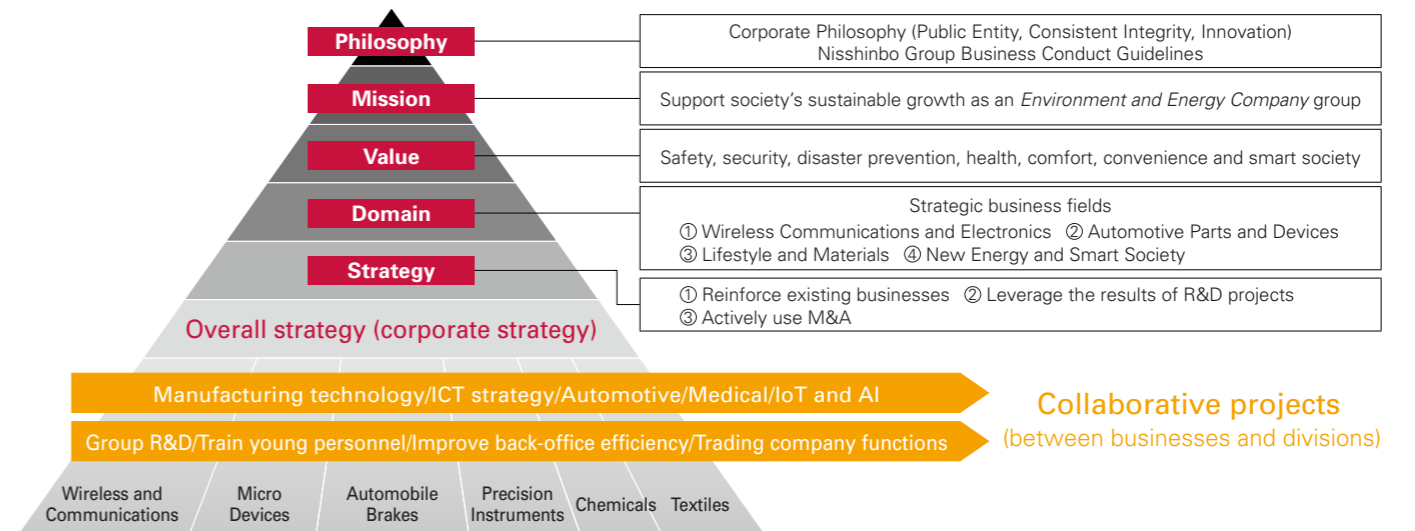
The Corporate Governance Code was revised in June 2018. We carefully studied the changes and adjusted the Nisshinbo Corporate Governance Policy accordingly. Investors are particularly interested in companies' policies for cross-shareholdings. In the fiscal year ended March 2018, we took the following steps related to that type of shareholding.

- As set out in our Corporate Governance Policy, we regularly assess the purpose and economic rationale for cross-shareholdings and report the results to the Board of Directors, which decides whether to retain or sell the shares.
 - We have incrementally reduced the number of companies' shares we hold. In the fiscal year ended March 2018, we cut the number of companies by seven to 73, down from 85 in the fiscal year ended March 2015.
 - At the same time, we have been reducing the number of shares in our holdings.
 - We have also received approaches from companies about selling their cross-holdings of Nisshinbo shares. In accordance with new supplementary principles in the revised Corporate Governance Code, we will respect the wishes of those companies and not hinder the sale of shares.
- Note: Supplementary Principles 1.4.1
When cross-shareholders (i.e., shareholders who hold a company's shares for the purpose of cross-shareholding) indicate their intention to sell their shares, companies should not hinder the sale of the cross-held shares by, for instance, implying a possible reduction of business transactions.

Leveraging the strengths of our diversified business to promote diversity management.

The Nisshinbo Group encourages broad-based interaction between a large number of different businesses and divisions in areas from research and development through to personnel strategy.

The Nisshinbo Group's Strength: Diversity Management



We are currently implementing nine projects using that collaborative approach, which is visualized in the diagram above. For example, in automotive projects, we are reviewing existing technologies in all the Group's businesses and bringing them together to generate new synergies in automotive-related businesses, aiming to spur innovation. One of those projects led to the creation of JRC Mobility Inc., which we spun off as an independent ADAS business in April 2018.

Emerging Growth Drivers

Earnings are set to be driven by a number of emerging growth businesses.

In the near term, the automobile brakes business and the micro devices business are set to drive growth until results start to emerge from collaborative projects that harness the strengths of our diversified business.

Automobile brakes business

We are seeing strong orders for our copper-free friction materials*, which comply with environmental regulations throughout North America. To respond to that demand, we are investing to increase production capacity in North America, which should start feeding through to earnings from 2019.

Micro devices business

Until the fiscal year ended March 2018, the electronics business covered both Japan Radio and New Japan Radio. However, due to the different characteristics of their operations and further growth in our electronics business after the acquisition of Ricoh Electronic Devices, we decided to separate the electronics business into two sub-segments — the wireless and communications business and the micro devices business.

New Japan Radio and Ricoh Electronic Devices are responsible for the micro devices business. Both companies manufacture and supply analog semiconductors. The global market for the type of analog chips they supply is worth around ¥1 trillion. US companies have the top three positions in the market, led by Texas Instruments Inc., but after adding Ricoh Electronic Devices to the Nisshinbo Group, sales have increased to ¥80 billion, giving us the momentum to challenge for third spot. We are looking forward to taking on our rivals in the global market by combining the respective strengths of New Japan Radio and Ricoh Electronic Devices in device design and manufacturing to increase competitiveness (see pages 42-45 for more details about the micro devices business).

* Brake friction materials that comply with new US regulations. The limit on copper content in friction materials will ultimately be reduced to 0.5%.

Guided by its Corporate Philosophy, the Nisshinbo Group is overhauling its business structure in line with its business strategy, aiming to contribute to the sustainable growth of society as an *Environment and Energy Company* group. Our goal is to build a diverse, innovative corporate culture organically and through the use of M&A.



Masahiro Murakami
Vice President
Chief of Corporate Strategy Center

Targeting Growth Fields in Line with Our Corporate Philosophy

Companies must continually adapt to society's ever-changing needs, but some companies are incapable of change because they are trapped by past successes. In the mid-2000s, we realized that the Nisshinbo Group's business structure was no longer in tune with trends and needs in society, prompting us to sharply shift strategic direction towards growth fields where we could respond to those needs. We decided that the environment and energy fields were the best areas to achieve our goals.

As an *Environment and Energy Company* group, we aim to provide solutions that address some of the biggest issues faced by humanity today, such as environmental destruction and global warming, to make life safer and more secure for people everywhere. Contributing to society through our business activities will also translate into growth that rewards stakeholders, which embodies one of the core principles of the Nisshinbo Group's Corporate Philosophy — Public Entity.

That process of growing by serving society is driving a shift in our business portfolio towards growth fields, resulting in a more diverse Group in terms of both businesses and management.

At Nisshinbo, we believe diversity is vital to innovation, while homogeneity is its enemy. Innovation depends on constantly combining different elements in many ways. By creating a company with diverse businesses and people, we are fostering a multitude of different views and values that can become the seed of innovation. However, as we create a more diverse business, we have to remember that the Group also needs cohesion to ensure everybody is working towards the same goals. That's why we are embedding our Corporate Philosophy across the Group to ensure our employees stay true to Nisshinbo's healthy entrepreneurial spirit.

Our Stance on M&A Deals

Using M&A is an effective means of shifting our business portfolio to growth fields. Each M&A deal has its own rationale — to secure a head start for growth, acquire technologies, or to increase competitiveness, for example, but all of our deals will be in growth fields. Our focus will be on driving the development of the business, not on short-term growth or quick investment returns.

In identifying the best M&A targets, we will put priority on

companies that can take on board and share the Nisshinbo Group Corporate Philosophy. PMI* in back-office areas is important, but front-line business integration is absolutely essential. Ensuring our business partner shares our philosophy and values is a vital part of working together towards clear goals that enhance our respective strengths and compensate our respective weaknesses. M&A deals without a common business philosophy are unlikely to succeed, no matter how good the target company's business or technologies.

It is also important that we do not implement deals for the sake of them. Nisshinbo does not have a special M&A division. Instead, we set up project teams on a case-by-case basis. Staff in project teams have to work hard because they need to continue routine duties as well, but our concern is that creating a special division would make M&A an end in itself, undermining the whole idea in the first place — to establish Nisshinbo's presence in growth fields. Another important element of successful M&A is ensuring senior executives are personally involved in negotiations so that they can make decisions with all the information at hand, rather than entrusting everything to the managers in charge of the project. Sticking to our objectives is crucial to the success of M&A, but we need the courage to exit the business before the job is done — if we have to. The acquisition price of a business is not the be-all and end-all of a deal, but we have to be careful not to pay over the odds.

Selling Group businesses can also change our business structure, but there are other options to simply selling a business. The key question is, does that business have better prospects for growth outside the Nisshinbo Group? We have to consider whether any sale would improve customer and business partner satisfaction, and also whether it would be positive for employee stability and future prospects.

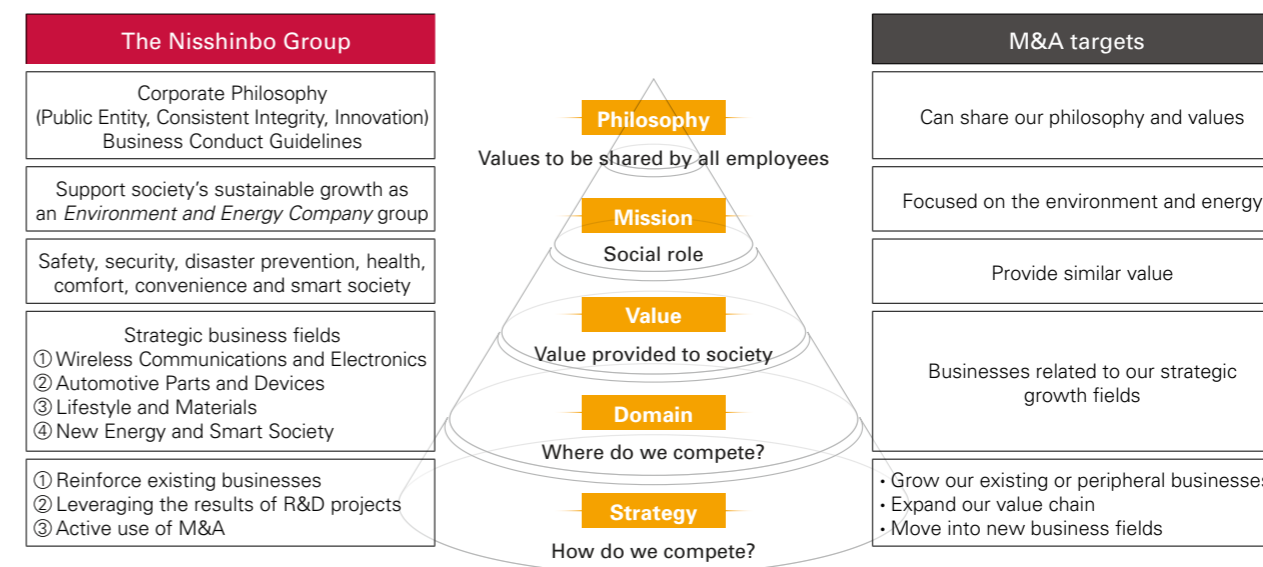
* Post-Merger Integration

Converting Diversity to Innovation

The Nisshinbo Group is targeting ROE of 12% or higher in 2025. Looking even further ahead, we are developing new businesses that have good prospects for growth, such as automotive technologies for vehicles that are safer, more convenient and more energy-efficient, and hydrogen energy technologies that reduce CO₂ emissions. To achieve our targets and make those businesses a success, we have to draw on diverse technologies and values to drive innovation, eschewing our previous approach to diversification of doing everything ourselves.

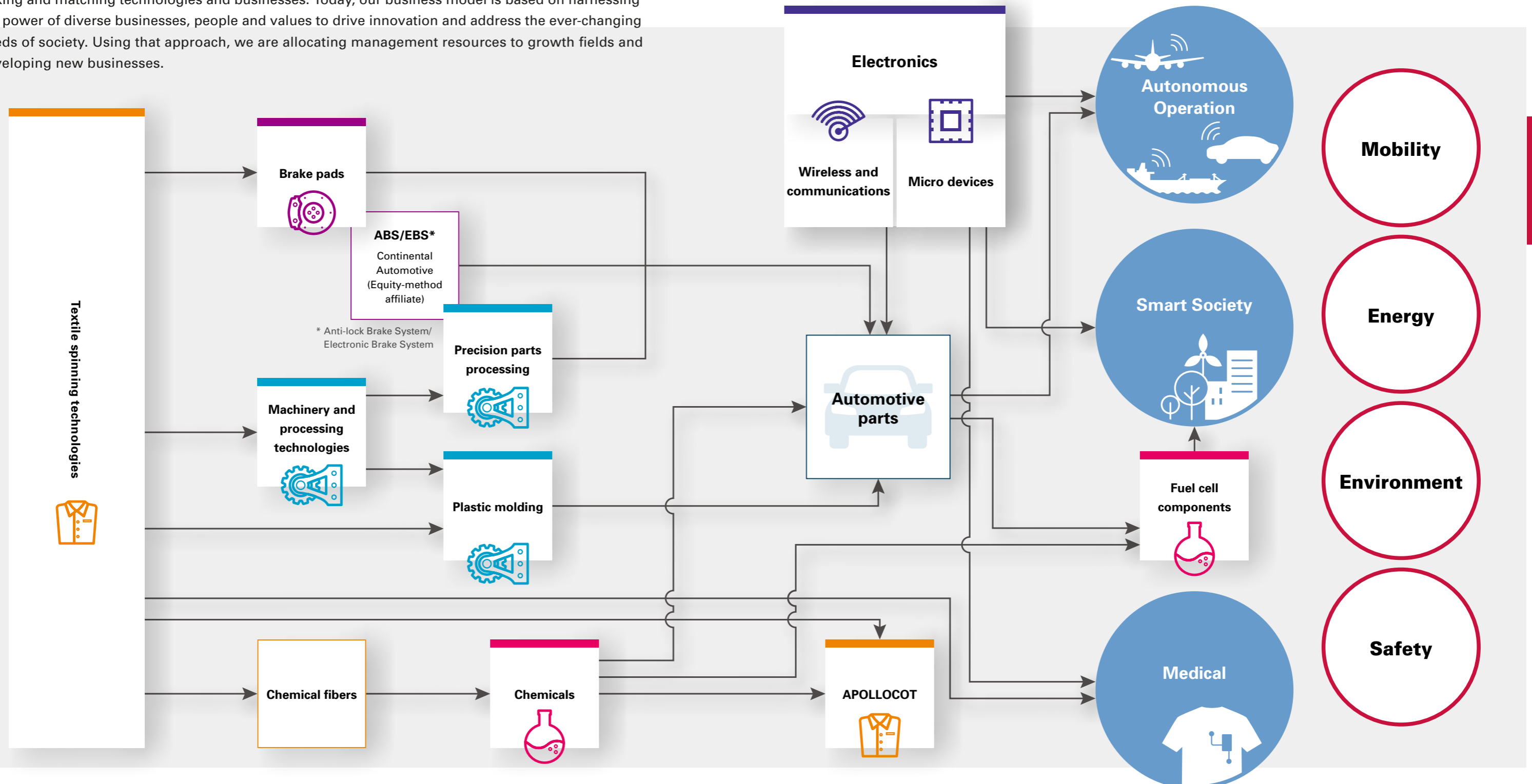
Amid far-reaching changes in societies and economies worldwide, we have to build a business model that dovetails with society's need for sustainable growth, allowing us to contribute to society through our business activities as an *Environment and Energy Company* group.

Basic Stance on M&A



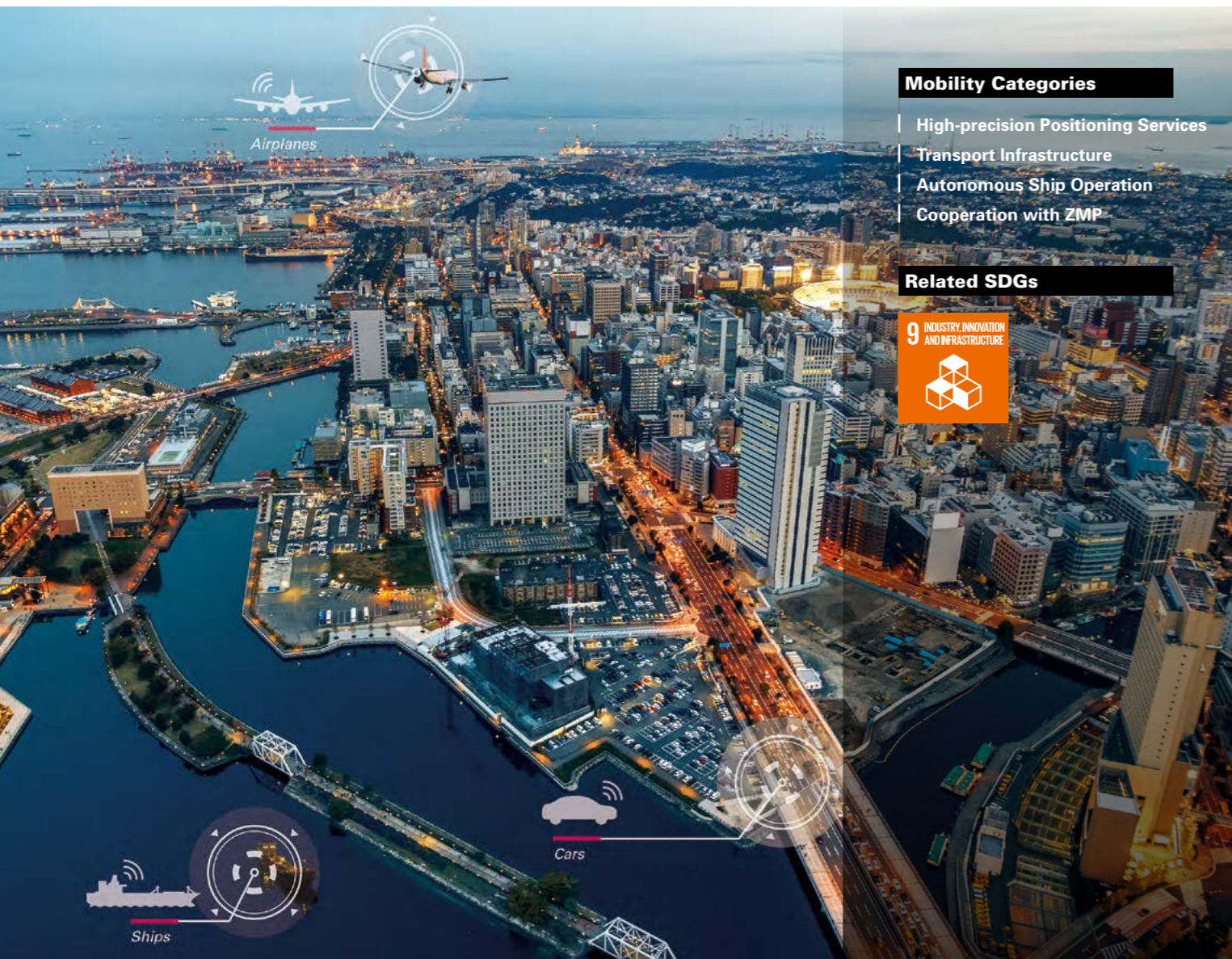
Innovation and Value Creation Powered by Diversity

Since the earliest days of the Company, the Nisshinbo Group has grown and developed by constantly mixing and matching technologies and businesses. Today, our business model is based on harnessing the power of diverse businesses, people and values to drive innovation and address the ever-changing needs of society. Using that approach, we are allocating management resources to growth fields and developing new businesses.



Mobility

Autonomous technology for cars, ships and other modes of transport is attracting growing interest. As technology improves, autonomous systems have the potential to cut traffic accidents and reduce energy used in transport. Nisshinbo is bringing together existing technologies from across the Group and refining its expertise in ADAS and other technologies for autonomous land, sea and air transport. Our goal is to help improve safety and reduce environmental impact.



JRC Mobility Inc. Interview with the President

Kinji Kato

President
JRC Mobility Inc.

Q1 Why did Nisshinbo set up JRC Mobility?

Until now, Nisshinbo has developed its ADAS* business using a Groupwide approach, drawing on automotive-related technologies from various parts of the Group, such as the communications equipment business run by Japan Radio Co., Ltd. However, with Level 4 autonomous driving on track to become a reality by 2025, we need to accelerate our development projects. We also need to establish a manufacturing system that satisfies the quality, cost and delivery (QCD) demands of automakers. Given those requirements, we decided to create an independent company focused on the mobility field by spinning off relevant divisions from Japan Radio's communications equipment business, aiming to make decision-making faster and more flexible.

We are using a two-stage process for the spin off. First, we are transferring divisions responsible for developing high-performance millimeter-wave radar and ultrasound sensors for automotive applications. Next, we plan to transfer all existing automotive products such as electronic toll collection (ETC) devices and GPS equipment to JRC Mobility by January 2020.

* Advanced driver assistance systems

Q2 Tell us about the current state of Nisshinbo's automotive-related operations.

Japan Radio develops and supplies ETC devices used on roads in Japan. In April 2018, the company won an order to develop devices for the next generation of road toll collection systems, with potential applications in Japan and overseas markets.

We plan to double output of ETC devices in a few years' time when development work is completed. We think the new ETC devices have enormous potential, as they are based on a next-generation system that could be adopted by many countries around the world.

Meanwhile, we started real-world testing of DSSS*1 at two locations in Japan from 2018. Over time, the systems will be installed at several thousand major intersections. We also began installing and operating traffic counters*2 this year. We expect highway authorities to steadily adopt Japan Radio's millimeter-wave radars, which are relatively unaffected by environmental conditions.

*1 Driving safety support systems: Transmit information about road conditions, traffic lights and other traffic data to drivers at intersections and other locations to prevent accidents.

*2 Installed on expressways and at other sites, traffic counters monitor vehicle volume and identify cars driving in the wrong direction.

Q3 How do you intend to generate synergies with the Nisshinbo Group?

In addition to automobile brakes, the Nisshinbo Group has a wide range of automotive-related businesses anchored by strong relationships built on trust with users in the automotive sector. The precision instruments business manufactures metal and plastic parts for vehicles and the chemicals business supplies bipolar plates for fuel cells. There are also potential synergies with analog chip supplier New Japan Radio Co., Ltd. in IC sourcing and other technologies.

In June 2017, Nisshinbo Holdings Inc. invested in ZMP Inc., which is developing autonomous robots, drones and other mobility

equipment using camera-based sensing technology. We see new opportunities by combining our sensors and communications technology with ZMP's expertise in autonomous operation.

Safety and security are two other areas where the Nisshinbo Group can provide value to society. Backed by our new business

set up, we plan to strengthen our ability to develop and launch new products, aiming to make an even greater contribution to society in the automotive field and across the full spectrum of mobility, such as ships and aircraft.

High-precision Positioning Services

To make autonomous vehicles a reality, positioning services need to be more accurate than ever before. Today's GPS systems are accurate to within 10 meters. Replacing those systems with high-precision positioning technology that improve accuracy to a few centimeters would enable autonomous vehicles to determine their current road lane using only satellite positioning. That kind of technology is likely to be in high demand from a wide range of fields. Japan Radio Co., Ltd. is developing a global navigation satellite system (GNSS) chip that receives signals from the

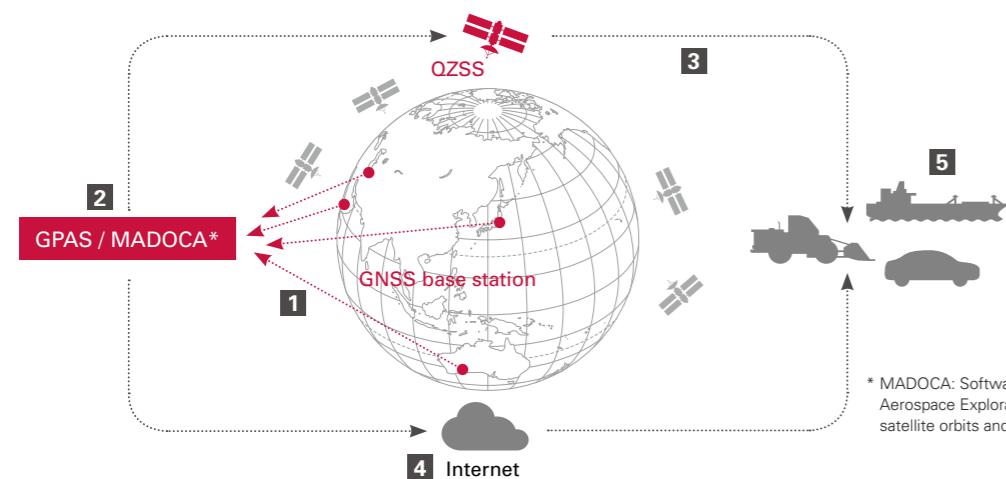
quasi-zenith satellite system (QZSS). The GNSS receiver chips will play a vital role in realizing new high-precision positioning services. We plan to start shipping sample chips in autumn 2018. To promote the new services overseas, Japan Radio became one of the founding shareholders in Global Positioning Augmentation Service Corporation (GPAS) in June 2017.

The new company is tasked with establishing key technologies to support a range of positioning services for the super smart society, including autonomous cars, agricultural machinery and construction equipment, as well as for marine and weather forecasting.

How GPAS Services Will Work

- 1 Ground monitoring stations around the world gather observational data from global navigation satellites
- 2 Using the data, errors in satellite orbits and clocks are accurately calculated
- 3 Corrected data is transmitted to users via QZSS*
- 4 Data distribution via the Internet is also possible
- 5 Transmitted data is used to calculate the position of the user, enabling positioning services accurate to within a few centimeters

* Quasi-Zenith Satellite System



Transport Infrastructure

The Japanese government is rapidly working to create safer transport infrastructure using information and communication technology (ICT). The aim is to cut the number of fatalities from traffic accidents to less than 2,500 in 2018 and build the world's safest road network by 2020. As part of that push, Japan Radio is developing a driving safety support system (DSSS). The system is designed to reduce traffic accidents and improve driving efficiency by using sensors to detect pedestrians and other dangers and transmit warnings wirelessly to drivers.

Using its existing radar sensing technology, Japan Radio has also started supplying traffic counters and systems to detect vehicles driving in the wrong direction. Japan Radio's detection equipment incorporates radar sensing technologies originally developed for marine and weather applications. Compared with existing camera-based equipment, the company's products are compact, competitively priced, and perform better at nighttime and under difficult weather conditions such as fog. They are also less affected by glare and color contrast issues.

- 1 ITS roadside terminals wirelessly connected to the DSSS
 - 2 Onboard terminals
 - 3 Radar-based DSSS detection equipment
- a <vehicle-road / vehicle-vehicle>
Right-turn collision warning system
 - b <vehicle-road / vehicle-vehicle>
Left-turn bicycle collision warning system
 - c <vehicle-road>
Pedestrian crossing collision warning system
 - d <vehicle-road / vehicle-vehicle>
Head-on collision warning system

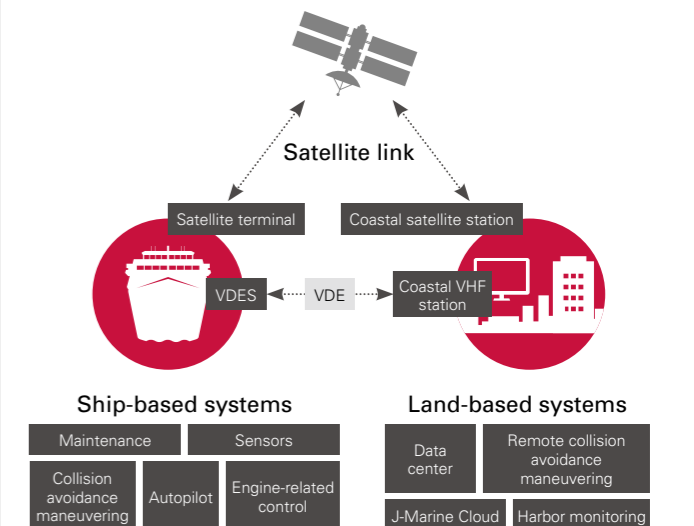


Autonomous Ship Operation

Autonomous ship operation offers many potential benefits, such as fewer collisions, improved ship operation and lower crewing costs. The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) is supporting a number of projects to advance its i-Shipping

concept, which aims to revolutionize productivity in the maritime sector. Under the projects, companies in the sector are developing new technologies and services. Japan Radio is developing a number of core technologies, such as collision avoidance maneuvering technology and a ship-to-shore information sharing system that uses satellite links and a VHF data exchange system (VDES). The company is aiming to achieve semi autonomous ship operation by 2022 and full autonomous operation by 2030. Autonomous operation has the potential to improve safety and reduce environmental impact by increasing fuel efficiency through optimal route planning.

Ship-to-shore Communication System



Cooperation with ZMP

In June 2017, Nisshinbo Holdings Inc. invested in ZMP Inc. to promote collaboration in autonomous technology for cars and other modes of transport, an area where ZMP has a high level of technical expertise. ZMP sells and leases platforms to develop autonomous technologies and is also developing a wireless electroencephalogram sensor and other new products. The company's experiments with robot cargo trolleys and autonomous delivery robots for office buildings and other facilities have been attracting attention. We intend to step up cooperation with ZMP to identify new autonomous operation applications in various modes of transport for the Group's existing portfolio of ICT and sensing technologies.

Energy

Hydrogen fuel cells are the ultimate source of clean energy. They emit no CO₂ emissions during use, making them a promising technology for residential, automotive and other applications. The Nisshinbo Group is aiming to help create a hydrogen-based society by establishing technologies and reducing costs for fuel cells through the development of carbon bipolar plates, carbon alloy catalysts and hydrogen sensors.



R&D Interview

Toshihiro Kijima

Executive Managing Officer
General Manager, Business Development Division

Q1 How will the business development division help Nisshinbo achieve its goal of ¥1 trillion in sales by 2025?

The business development division is tasked with leading Group R&D by knitting together research and development efforts across the whole Nisshinbo Group. Our long-term strategic goal for Group R&D is to provide value for the super smart society. To realize that goal, we are conducting development activities aimed at providing solutions based on four strategic themes — hydrogen, mobility, medical & healthcare and public infrastructure. Across the Group, most spending on research and development is channeled into existing businesses, so achieving our 2025 sales target will depend largely on organic growth in those businesses. With Group R&D, we will target projects that are not part of existing businesses. At the moment, we see the potential for new business worth around ¥50–60 billion from those projects by 2025, but our aim is to increase that amount further.

To create new businesses, we are focusing on the nexus between technology seeds and market needs, and we also want to leverage the Group's strengths by incorporating our existing technologies and customer base.

Q2 How are you encouraging cooperation and generating synergies between Group businesses?

The Nisshinbo Group has a wide range of different business segments, so bringing together all their research and development

teams is like fostering cooperation between different industries. With Group R&D, we are supporting activities that build partnerships, as we think it is vital for everybody in the Group to understand what other divisions do and to secure the understanding of key individuals. We are unlikely to achieve any meaningful results if teams only take a superficial interest in working together. In joint research with other companies, contractual conditions present a significant barrier to progress. That's why I believe the Nisshinbo Group's greatest strength is its vast range of technologies and customers, which create the potential for open innovation within the Group.

Q3 What progress is Nisshinbo making in hydrogen-related products?

Last year, Ballard Power Systems Inc. selected our carbon alloy catalysts for a fuel cell stack used in portable fuel cell applications. It marks the first commercial use of a non-platinum catalyst in the electrode of a polymer electrolyte fuel cell. The next step is to work with Ballard on the development of new catalyst fuel stacks for fuel cells used in forklift trucks.

Our carbon bipolar plates are already widely used in Ene-Farm residential fuel cell systems, but we also see the potential for adoption in fuel cell vehicles (FCVs). Responsibility for developing carbon bipolar plates for vehicle applications has been transferred from Nisshinbo Chemical Inc. to our division and we are accelerating development by harnessing the resources of the whole Group as a joint project.

We are also continuing to develop hydrogen gas sensors. The project involves bringing together the ultrasound technologies of Ueda Japan Radio Co., Ltd. and the signal processing technologies of Japan Radio Co., Ltd., as well as the customer base of Nisshinbo Holdings Inc. Based on market research, we have decided to focus first on developing helium gas leak detectors. We hope to start test sales of the detectors before the end of 2018.

In the field of renewable energy, such as wind and solar power, electricity companies have not been able to depend entirely on nature for power generation because output does not fit the daily patterns of end-users. To overcome that issue, there is growing momentum behind the idea of using fuel cells to generate electricity to match energy demand periods. Electricity generated by renewable sources is used to split water into oxygen and hydrogen, which is then stored and used later by fuel cells to generate electricity.

The world stands on the verge of a major turning point in energy, and fuel cells are set to play an increasingly important role

in the future hydrogen society. I believe Nisshinbo is well-placed to take advantage of that trend.

Q4 Tell us about your longer term development ideas and strategies.

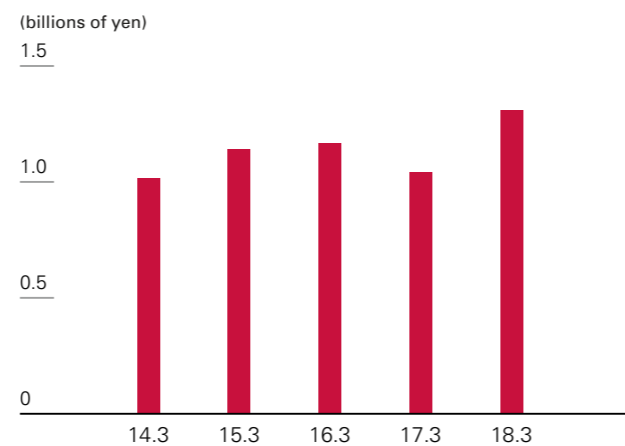
Prompted by Nisshinbo president Masaya Kawata, we started running workshops for young Nisshinbo employees in 2016. One of the aims of the workshops is to encourage talented employees in their late 20s and early 30s to think about what kind of organization the Nisshinbo Group should be in 2030 and beyond. The goal is to cultivate personnel across our organization who can lead the Nisshinbo Group well into the future. In 2017, workshop participants were invited to present their ideas in English at the Management Policy Meeting, which is attended by senior Nisshinbo personnel from around the world. Their ideas were well-received by attendees.

Bipolar Plates for Fuel Cells

Carbon bipolar plates manufactured by the Nisshinbo Group are used in the Ene-Farm residential fuel cell system and in fixed fuel cells for commercial use. In order to improve productivity, we are accelerating the automation of production lines for bipolar plates used in residential applications, where Nisshinbo already has a high market share, and for other promising fixed fuel cell applications.

Meanwhile, in the automotive sector, efforts are under way to develop technology that will steadily reduce the cost of fuel cell vehicles (FCVs). In China and North America in particular, development of fuel cell-powered buses and trucks is gaining momentum. Our carbon bipolar plates are roughly the same thickness as metal versions, but are easier to mold and more resistant to corrosion. They are also ideal for automotive applications due to their low weight. We have transferred all responsibility for development work on automotive bipolar plates to Nisshinbo Holdings, Inc., creating a framework that allows us to draw on the resources of the whole Group. We are targeting adoption in FCVs from 2025.

Carbon Bipolar Plate Sales



Carbon Alloy Catalysts

In cathode catalysts for polymer electrolyte fuel cells (PEFC), we have taken a completely new approach by switching from platinum to carbon as the main material. We can ensure stable supplies of carbon alloy catalysts because they do not use platinum, a precious metal. In September 2017, Ballard Power Systems, Inc., a leading fuel cell manufacturer in Canada, selected our carbon alloy catalysts for portable fuel cell applications, marking the first commercial use of a non-platinum catalyst in a fuel cell electrode. The use of our carbon alloy catalyst has reduced the volume of platinum in Ballard's fuel cell stack by roughly 80%. Ballard added the fuel cell stack to its product range from December 2017 and it is attracting interest for outdoor and backup power supply applications.

We are now pushing for adoption in fuel cell-powered forklifts, which are gaining popularity, particularly in North America. We are also working to improve the performance of our carbon alloy products before the FCV market starts to take off.

In this way, the Nisshinbo Group is already working to make the hydrogen society a reality.



Fuel cell stack

Ultrasonic Gas Sensors

Ultrasonic gas sensors measure differences in the specific gravity of hydrogen, helium and other atmospheric gases. The sensors have been developed by combining technologies from across the Nisshinbo Group – ultrasound technologies developed by Ueda Japan Radio Co., Ltd. for the medical field, and signal processing technologies created by Japan Radio Co., Ltd. for radar and wireless communication products. Unlike existing products, our sensors do not require heaters or rare metal catalysts, helping to extend their usable lives. Response time is also fast and they can detect gas over a wide area. We plan to start test sales of a portable helium gas leak detector in 2018. Compared with large, heavy and expensive existing products, our new sensors are small, light and battery powered, meaning they can be used easily whenever and wherever they are needed.

After securing explosion-proof certification, we plan to roll out portable hydrogen gas leak detectors, while also working on developing smaller versions for use in FCVs. We aim to make our hydrogen detectors the de-facto standard by the 2030s, when FCVs are set to take off in the market.



Ultrasonic gas sensor

Environment

As an *Environment and Energy Company* group, Nisshinbo is harnessing the technologies of Group companies to develop environmental products. Many of the Sustainable Development Goals (SDGs) adopted by the United Nations include environmental factors, highlighting how concerns about the environment are rising globally. Against that backdrop, we are bringing together existing technologies from across the Group to develop new solutions that address environmental issues.



Environment Categories

- Brake Friction Materials Compatible with New Rules on Copper Content
- Carbodilite
- Bio-carriers for Wastewater Treatment
- Glass-like Carbon

Related SDGs



Brake Friction Materials Compatible with New Rules on Copper Content

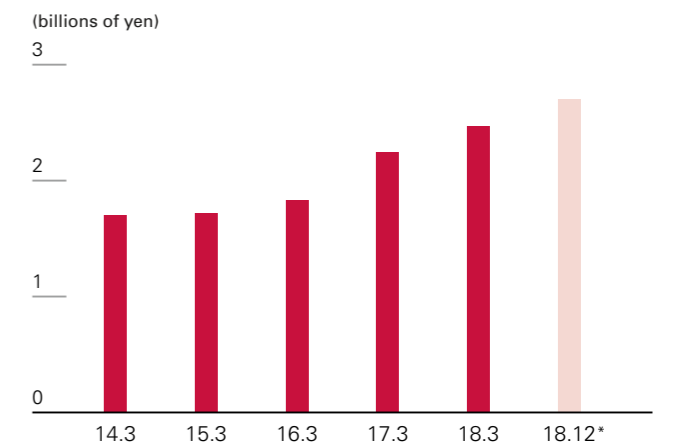
Effective from 2021, environmental regulations in the US will prohibit the sale of friction materials that have a copper content of more than 5% or new vehicles fitted with those materials. From 2025, the limit on copper content will be reduced to 0.5%. Demand for copper-reduced and copper-free friction materials is likely to increase in other markets, as well as the US. We forecast orders for new friction materials will exceed those for existing materials from 2020. We have taken the lead in the sector in developing copper-reduced and copper-free friction materials. The whole Group has worked together to develop the new materials, which were fully launched in 2017. Nisshinbo Brake Inc. is now steadily increasing production capacity for the new materials at its Tatebayashi Plant and at sites in America and other overseas markets. We aim to increase market share by building a volume production framework to address projected growth in demand for copper-reduced and copper-free friction materials, while also making improvements to our products based on market feedback. We plan to expand the product lineup to make a greater contribution to the environment and grow our friction materials business.

Carbodilite

Carbodilite is a high-performance polycarbodiimide-based plastic material developed by the Nisshinbo Group. We supply Carbodilite in water-based, oil-based and powder forms, and as an additive in adhesive agents. Due to its unique highly reactive, low-toxic profile, Carbodilite is blended with coatings, inks and various plastics (polyester-based plastic, biodegradable plastic, polyurethane elastomer and others) to improve the durability, adhesiveness and other properties of secondary products. In the automotive, heavy-duty anti-corrosion coating, construction coating and ink industries, tighter regulations governing volatile organic compounds (VOC) and efforts to reduce environmental impact are spurring demand for Carbodilite, which is a highly safe, water-based additive that can reduce required temperatures in drying processes. Also, in Europe and other markets where rules on the use of non-degradable plastics are being tightened, demand for biodegradable alternatives is growing strongly. Carbodilite, which helps improve the durability of materials

without any loss of biodegradability, is increasingly being adopted for use in biodegradable plastic, pointing to potential growth in demand. We plan to establish more Carbodilite production sites, including possible locations in overseas markets, to support production at our existing Tokushima Plant.

Carbodilite Sales and Forecasts



* Converted to 12-month forecast

Bio-carriers for Wastewater Treatment

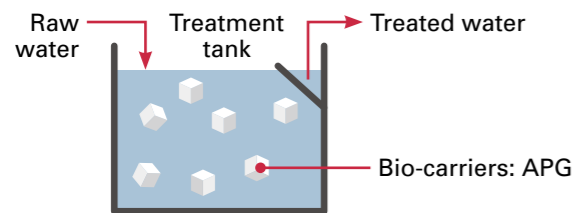
Microorganism-based systems are generally used to treat wastewater from factories and other facilities. To improve the effectiveness of those systems, Nisshinbo Chemical Inc. supplies AQUAPOROUSGEL (APG) bio-carriers for microorganisms. APG is a high-performance bio-carrier that settles rapidly into wastewater, while its sponge-form provides a large surface area for bacteria to attach to and colonize. APG is highly regarded in Japan, where it is used by leading water purification companies.

APG also contributes to water purification processes in other countries, particularly in Asia. APG is used in distributed wastewater treatment facilities and in factory water treatment facilities in China, and in public sewage treatment facilities in the Philippines. Other markets for APG in Asia include Vietnam, Thailand and Taiwan. China faces increasingly serious atmospheric and water pollution problems related to its large land mass and vast population. To address those issues, the government is tightening regulations and increasing penalties for polluters.

Safety

Those tougher rules are spurring rapid growth in demand for bio-carriers in China's water treatment market. We aim to expand our business in the market by stepping up cooperation with Chinese manufacturers to build local production and sales networks.

How Bio-carriers Work



Water purification and APG

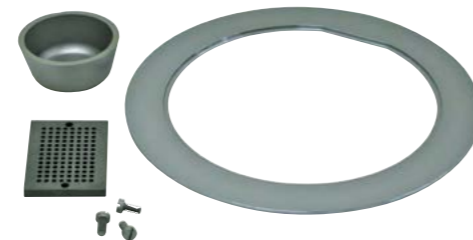


Bio-carriers: APG

Glass-like Carbon

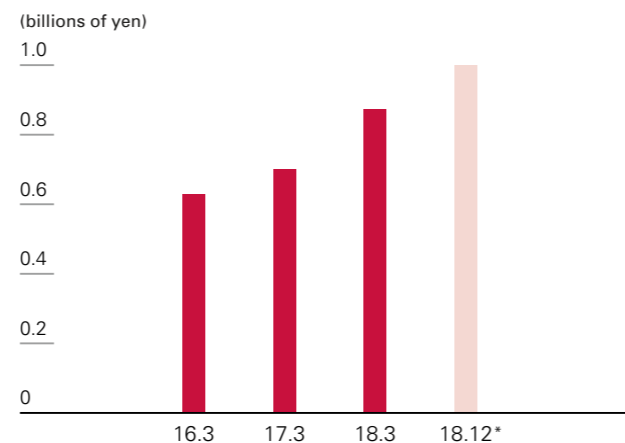
Demand for glass-like carbon is growing on the back of several trends, such as increased demand for high-performance semi-conductors spurred by the shift to vehicle electrification and the spread of IoT and AI, and growing use of OLED screens for smartphones and other applications. Our unique glass-like carbon coating has the high heat-resistance of graphite, as well as low electrical resistance and impermeability to dust, gases and liquids. Those special properties mean glass-like carbon is used for many different types of products in a wide range of

target markets. Until now, our products have largely been used in semiconductor applications, but we also see prospects for growth in other areas. Specifically, work is under way to develop tools for molding neodymium magnets and curved glass screens, which are likely to be key products in smart societies. Existing parts and materials are also being replaced with glass-like carbon versions. We are targeting sales of ¥2.5 billion in 2025. To reach that goal, we plan to actively promote product ideas to customers, increase production capacity and reduce lead times. We will also continue research into revolutionary manufacturing technology to prepare for full-scale production in the future.



Processed glass-like carbon products

Glass-like Carbon Sales and Forecasts



* Converted to 12-month forecast

The Nisshinbo Group creates safety and security solutions for the super smart society and supplies them to markets worldwide by harnessing the technologies and expertise of Group companies. Nisshinbo's safety products include weather radars, river level monitoring equipment and other elements of disaster prevention systems, as well as equipment for ships to ensure safe navigation. Nisshinbo is also developing safety devices for the medical and healthcare field.



Safety Categories

- Weather Radars
- Overseas Solutions Business
- J-Marine NeCST
- Smart Textiles
- Plant Factories

Related SDGs



Weather Radars

Weather radars developed by Japan Radio Co., Ltd. are widely used by Japan's Meteorological Agency and Ministry of Land, Infrastructure, Transport and Tourism and by overseas meteorological agencies to forecast weather conditions and rainfall.

Cases of localized heavy rain have been increasing in Japan in recent years due to thunderclouds occurring in linear precipitation zones and other weather conditions, leading to elevated risk of natural disasters caused by flooding and extreme wind. Existing radar systems, which typically need about five minutes to complete a single observation cycle, are too slow to create stereoscopic images of fast-forming thunderclouds.

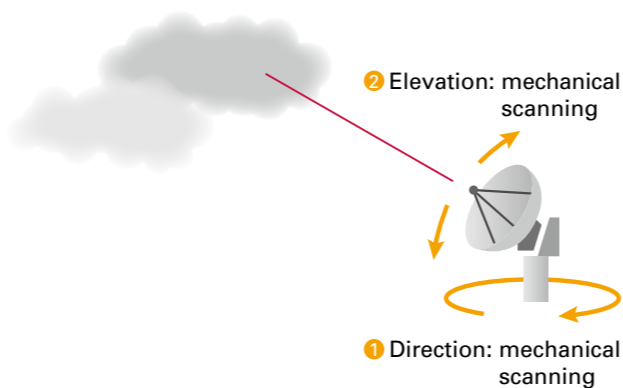
Phased array* weather radars developed by Japan Radio comprise multiple antennas that emit a beam of radio waves that can be electronically steered, enabling fast, stereoscopic observation of thunderclouds. Weather forecasting systems with phased array radars can rapidly create forecasts for localized heavy rain, helping to reduce damage from natural disasters. Japan Radio is running tests on its latest phased array radar at a location in Chiba to overcome challenges such as converting weather observations to rainfall estimates and identifying the difference between rain, snow and hail, which is currently hard to do with current weather radars.

* Compact weather radars with multiple, overlapping antenna beams that reduce blind spots in radar coverage.

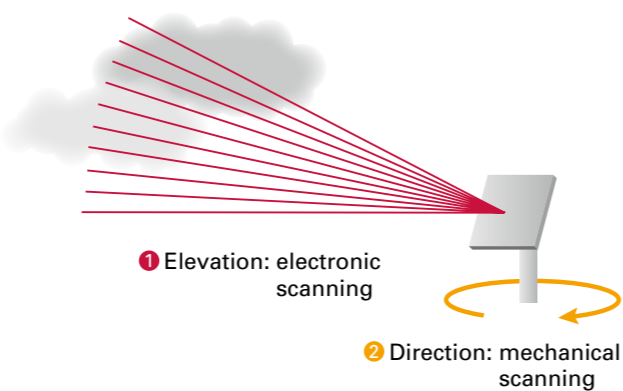


➤ Phased array weather radar

Existing Weather Radars



Phased Array Weather Radars



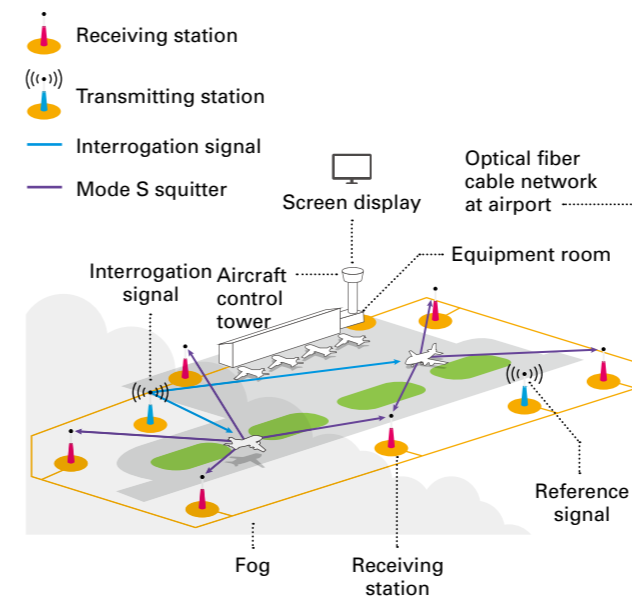
Overseas Solutions Business

Japan Radio is working to increase overseas sales of integrated disaster prevention systems, which combine weather radars, river level prediction and forecasting systems and other elements. The company is focusing on markets in Asia, where there is a growing need for disaster prevention systems.

In Indonesia, where Japan Radio already has a strong track record in wireless facilities for coastal applications, we established a local subsidiary in January 2017 and launched full-scale marketing activities in June to tap rising demand for ship navigation support systems and disaster prevention facilities. We are also working with partners in the public and private sectors in Japan to expand exports of airport surface surveillance

systems and weather radars in Southeast Asia. In May 2018, Japan Radio signed an agreement with the Vietnam Air Traffic Management Corporation to test a new multilateration system* for airport surface monitoring and to cooperate on related technologies, under a contract awarded to us by Japan's Ministry of Internal Affairs and Communications.

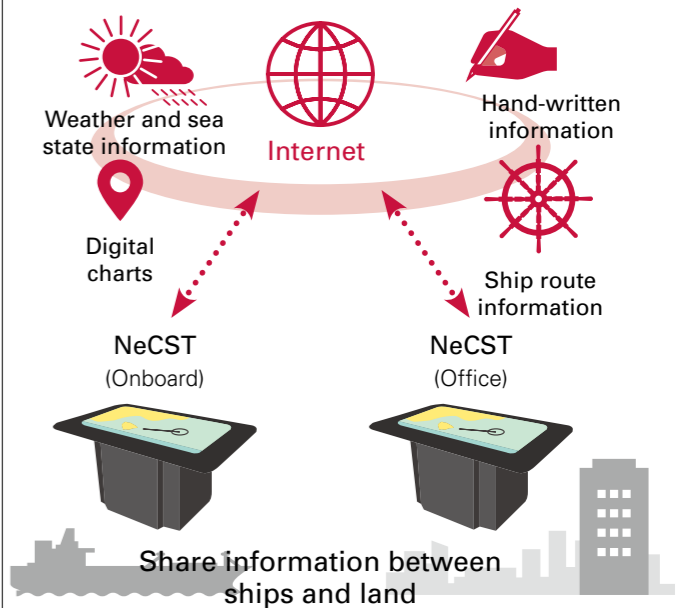
* Multilateration systems receive secondary radar signals from aircraft via multiple receivers located around the airport, enabling precise detection of aircraft positions based on the difference in time between signal reception at each receiver.



J-Marine NeCST

The J-Marine Navigational electronic Conning Station Table (NeCST), jointly developed by Japan Radio and Nippon Yusen Kaisha (NYK) Line, is a vessel navigation support system that manages and shares route information such as digital nautical charts, which are viewable on a large screen. The system is also linked to J-Marine Cloud, a package of cloud-based maritime information services. In a world-first, users can make handwritten annotations to digital charts on the NeCST screen, helping to improve the efficiency of route planning. The system has the potential to be an important part of autonomous shipping operations in the future as it facilitates information sharing between ships and land and supports safe navigation.

During development, we sought to make the system as usable as possible by using input from many experienced crew and by dispatching R&D staff to work on ships. The system, which combines the flexibility of paper charts with the intuitive user interfaces of tablet devices, was launched in January 2018 after undergoing testing on the NYK Group's cruise ship Asuka II. We plan to launch a second-generation system with improved functionality in October 2018. We estimate the target market for the system is roughly 10,000 ships worldwide and we plan to drive uptake by offering different screen sizes.



➤ J-Marine NeCST

Philosophy

Smart Textiles

New digital tools such as IoT and AI now make it possible to connect various physical objects and collect and analyze vast amounts of data from them. Companies are stepping up efforts to develop new markets by using those technologies to add more value to products that are used every day. The Nisshinbo Group aims to help create monitoring services and improve workplace environments by developing smart textiles as devices that can collect more vital data than existing contactless devices.

For example, we are currently developing uniforms for workplaces where people are exposed to loud noise. Drawing on voice-recognition support technology from New Japan Radio Co., Ltd., communication technology from Japan Radio and conductive textiles from Nisshinbo Textile Inc., we have created a uniform that allows the wearer to hear conversations clearly in noisy environments. Using the same principle, we are also developing a waist band that can predict the onset of labor pains. The band collects and analyzes information on the baby's vital signs (heat rhythm, heart rate, pulse, etc.) and relays the information to smartphones or devices in hospitals and clinics. We aim to make these products a reality by combining the sensor development capabilities, data communication and data analysis technologies of Group companies with our textile planning and procurement capabilities.

Plant Factories

Securing stable supplies of safe and reliable food products is a growing problem due to extreme weather events worldwide. Nisshinbo is working on technology to cultivate plants in hermetically sealed plant factories. We have already applied the technology to create Japan's first plant factories that use only artificial light, allowing the cultivation of tasty strawberries all year round, regardless of temperature and weather conditions. The factories are located at our Tokushima and Fujieda business sites and supply strawberries under the APOLLOBERRY brand.

Also, in August 2017, we supplied the facilities and technologies to Okinawa Cellular Telephone Company, which started selling strawberries in Okinawa Prefecture in July 2018.

We will build on our success in plant factories to develop smart factories, using the Group's sensing and communication technologies to monitor and collect large amounts of data on cultivation conditions to support harvest forecasting and stabilize yields. Our aim is to expand the business by supplying smart factory equipment and services.

Plant factories are another example of how we are combining the Group's technologies to contribute to society as an *Environmental and Energy Company* group.



① Strawberry cultivation at a plant factory

The Nisshinbo Group believes strongly that its companies are public entities. While pursuing profit on the basis of fair competition, we consider it our mission to contribute to society at large through our corporate activities. We formulated our Corporate Philosophy and Business Conduct Guidelines to reflect the values and standards of behavior that all our employees around the world share and respect. That framework underpins our activities across a wide range of different business fields.

Philosophy Categories

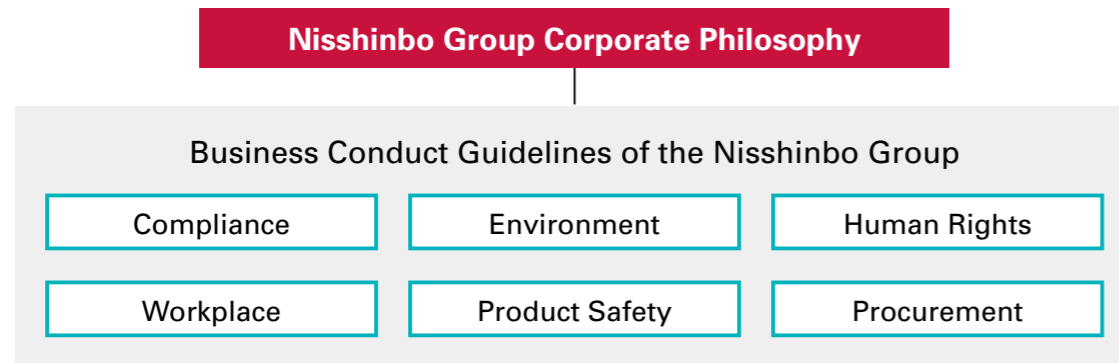
- Nisshinbo Group Corporate Philosophy
- Business Conduct Guidelines
- Fair Competition
- Diversity
- Human Resources
- Safety and Health
- Implementing Environmental Management

Related SDGs

- 3** GOOD HEALTH AND WELL-BEING
- 5** GENDER EQUALITY
- 8** DECENT WORK AND ECONOMIC GROWTH

Nisshinbo Group Corporate Philosophy

The Nisshinbo Group believes strongly that its companies are public entities. While pursuing profit on the basis of fair competition, we consider it our mission to contribute to society at large through our corporate activities. To achieve further growth in global society by utilizing the organizational culture we have cultivated, we have formulated our Corporate Philosophy and Business Conduct Guidelines to reflect the values and standards of behavior that all our employees throughout the world share and respect.



Nisshinbo Group Corporate Philosophy

Our corporate philosophy expresses the values we share as members of the Nisshinbo Group.

PUBLIC ENTITY

Believing that our companies are public entities, we shall aim to realize a sustainable society*1 by proposing solutions to global environmental problems.

We remember at all times and in all our activities that the ultimate goal of our Group is to contribute to society.

We offer products and services that help solve global environmental issues, with an eye to developing a society where all people can enjoy comfortable lifestyles long into the future.

*1 A sustainable society is a society where environmental preservation and effective resource use are balanced with economic rationality and where, as a result, all people can enjoy comfortable lifestyles long into the future.

CONSISTENT INTEGRITY

Respecting the diverse cultures and customs of the world, as well as biodiversity, we shall conduct fair and sincere business activities with pride as a corporate citizen.

We fulfill our social responsibilities as a corporate citizen by acting in good faith and with fairness at all times.

We respect the diverse cultures and customs of countries and regions throughout the world and uphold the laws and regulations of each.

We conduct our business activities with full recognition that the global environment depends on the maintenance of a delicate harmony among all living things and that we are part of that diverse harmony.

INNOVATION

Maintaining our spirit of response to change and unceasing challenge, we shall create an affluent future together with our stakeholders*2.

We work toward the creation of an affluent society by constantly creating new and original value.

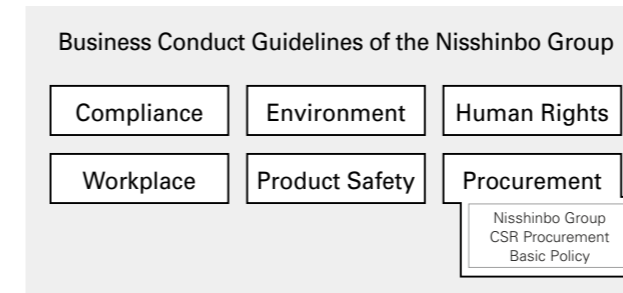
We satisfy stakeholder expectations by sensitively anticipating changes in the times and the environment and boldly taking on new challenges.

We build ties of trust with stakeholders and work together with them in our business activities.

*2 A stakeholder is any person or organization involved in or affected by our corporate activities, including customers, shareholders, employees, business partners, community residents, and governmental organizations.

Business Conduct Guidelines

The Business Conduct Guidelines of the Nisshinbo Group define standards of behavior expected of all executives and employees. The top executives at each Nisshinbo Group company make a commitment to implement the guidelines and establish systems to ensure they are effective. In the event of a serious incident in contravention of the guidelines, they also take responsibility for resolving the issue.



Fair Competition

We have formulated the Nisshinbo Group CSR Procurement Policy, which sets out our basic stance on CSR initiatives across the entire supply chain. To support sustained progress at Group companies, we added the promotion of CSR procurement to our list of key performance indicators in 2017. We also formulated CSR Procurement Guidelines based on business conditions at each Group company and conducted surveys in our supply chain to raise awareness about CSR procurement at suppliers (see page 68 for more details).

New Japan Radio Co., Ltd. established Supply Chain CSR Promotion Guidelines in 2015. The company holds meetings with partner companies to explain its stance on CSR procurement and conducts CSR surveys every other year. In the 2017 survey, the company received responses from all of its 325 key suppliers. Going forward, New Japan Radio will work to build partnerships with suppliers based on mutual trust while also reinforcing efforts to create a sustainable supply chain.

In January 2013, section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act came into effect. As a result, all companies listed on stock markets in the US must disclose whether conflict resources* are used in their products. As a company involved in the supply chains of listed US companies through Group companies in its electronics, automobile brakes, chemicals and precision instruments businesses, Nisshinbo conducts surveys on the use of conflict resources in its operations and reports the results to its customers. We will continue to take steps to promote responsible procurement, such as ensuring the Group is not complicit in human rights abuses and acts of violence.

* Conflict resources refer to four minerals (tin, tantalum, tungsten and gold) mined in the Democratic Republic of the Congo and its neighboring countries that are sold to fund armed insurgents.

Diversity

The Nisshinbo Group aims to create a working environment where employees with diverse values and abilities can reach their full potential, helping to support Innovation, a key principle in the Group Corporate Philosophy.

In April 2018, we formulated and disclosed our Work Style Reform Action Plan, which is based on three themes — rectifying long working hours, encouraging employees to use annual paid holidays, and promoting flexible working.

At the moment, our priority issue is empowering women. We hold a range of training courses and lectures for every level of employee across the Group, including joint seminars for managers and their female staff to raise awareness about this issue. In December 2014, we announced a voluntary action plan to promote women to executive and management positions. In line with the plan, Group companies have developed general business action plans based on the Act on Promotion of Women's Participation and Advancement in the Workplace. Under their plans, Group companies have set specific targets for the number of female managers and new recruits as part of efforts to support women in the workplace.

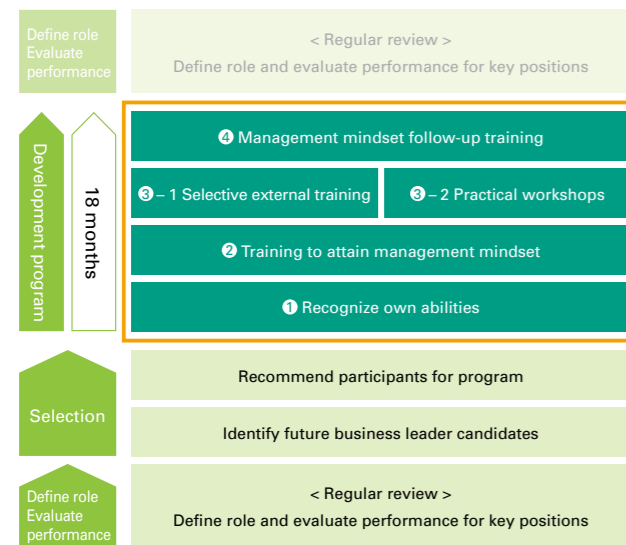
Nisshinbo Holdings has formulated a general business operator action plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children*. Under the plan, we aim to create a workplace where employees can fulfill their potential and maintain their careers while balancing work and life commitments. To achieve that goal, the plan includes a number of targets for paternity leave and diverse work styles. Similar measures are being implemented by 12 Group companies in Japan.

* A law enacted on April 1, 2005 to create healthy and supportive environments for having and raising children.

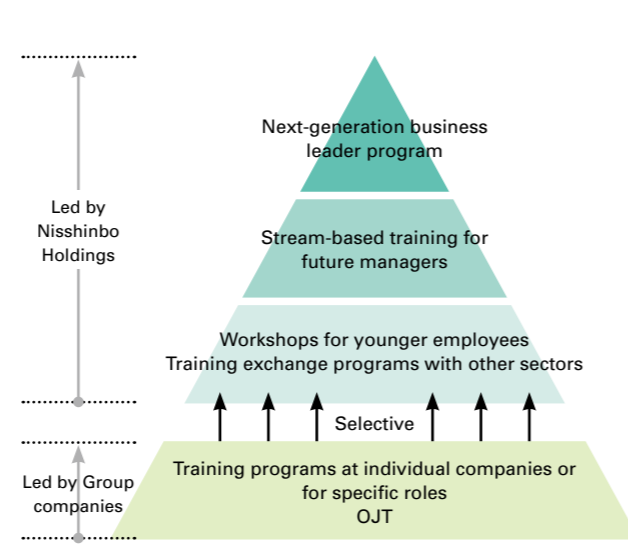
Human Resources

Based on the belief that people are vital to the success of companies, the Nisshinbo Group puts considerable effort into training personnel. Human resources training starts as soon as new graduates enter the Company. Our general training program is separated into streams that will eventually lead to promotion to mid-level manager, section head and division head positions. Employees also take courses for specific skills and learn about safety, human rights and the environment. In our specialist training program, they acquire knowledge in areas specific to each business and job function, such as technology, accounting and intellectual property. These training units and courses combine to form a systemized training scheme. We also run a special program for employees earmarked to become senior managers. The program is designed to foster approaches, knowledge and behavior for their future senior manager roles before they are promoted. In 2016, we also started running a workshop for young employees to consider future group business strategies as part of efforts to cultivate future business leaders.

Systematic Process for Cultivating the Next Generation of Business Leaders — Overview



Systematic Process for Cultivating the Next Generation of Business Leaders — Training Framework



Safety and Health

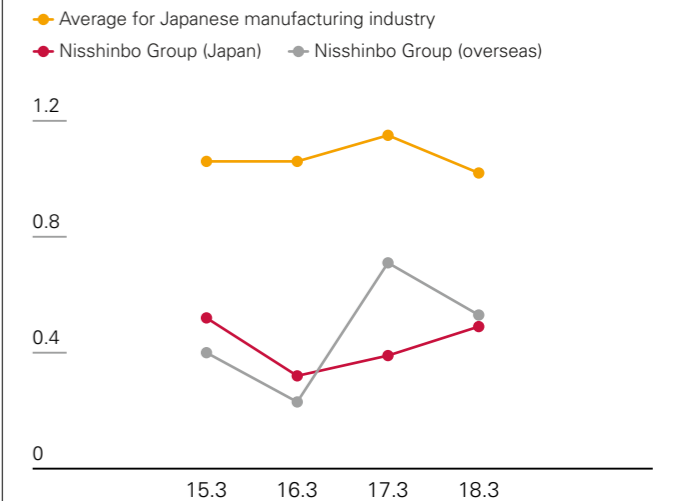
The Nisshinbo Group places top priority on safety in its business activities. In line with that thinking, the Group conducts systematic safety and health activities to promote personal physical and mental wellbeing and to create safe and welcoming workplaces.

At each business site, we conduct risk assessments related to work processes, facilities and chemical substances on a scheduled basis and progressively implement preventative measures in order of priority. We also run small group activities such as danger awareness training and near miss reporting, and implement KK mapping*. We also work to enhance the understanding of safety managers and raise risk assessment standards at each Group company by running training sessions about our approach to risk assessments and how they are implemented. In the event of an accident, we quickly implement countermeasures to prevent any recurrence and share occupational accident reports across the Group to prevent similar accidents from occurring in the future.

New Japan Radio started implementing employee health management from April 2016, aiming to become a Healthy Company. Initial measures were aimed at reducing passive smoking and encouraging employees to take more exercise by walking 10 more minutes each day. In 2017, the company also introduced a system that awards points to employees for healthy activities. The system is designed to incentivize employees to improve their own health by rewarding them with points that can be used to purchase a range of items. New Japan Radio was selected as a White 500 company in 2017 and 2018, recognizing the company's outstanding efforts in health management. New Japan Radio plans to roll out more measures and programs to achieve its goal of becoming a Healthy Company.

* A questionnaire-based exercise that evaluates and classifies each employee's ability to sense danger and any tendency to press ahead with an action even when aware of that danger.

Frequency of Injuries with Lost Work*



* Frequency of injuries with lost work = number of employees injured with lost work ÷ aggregate number of working hours x 1 million

Implementing Environmental Management

As an *Environment and Energy Company* group providing solutions to help tackle humanity's greatest challenge – global environmental issues – the Nisshinbo Group is creating a framework to support the implementation of environmental management. We have set medium- and long-term environmental targets that dovetail with our business plans. By achieving those targets, we aim to help create a sustainable society.

Medium-term Environmental Targets: Key Themes and Results

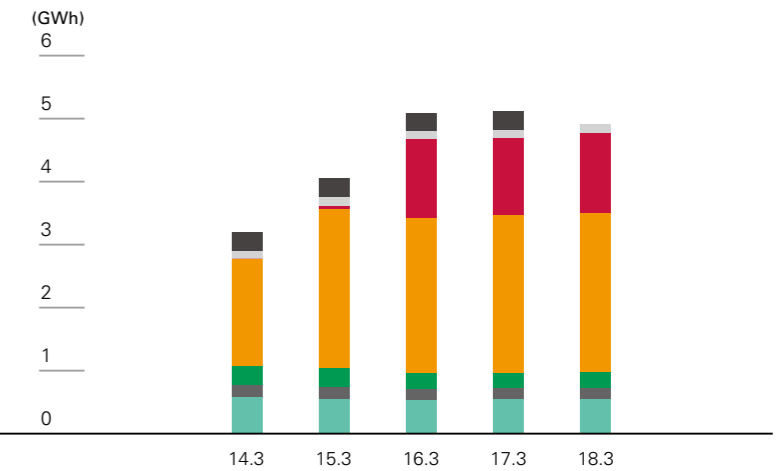
(Fiscal year ended March 2016 to fiscal period ending December 2018)

Key themes	Step up activities to maintain biodiversity	Promote Life Cycle Assessments (LCAs)	Increase the sales ratio for products that contribute to a sustainable society	Reduce energy consumption per unit of sales	Reduce greenhouse gas emissions per unit of sales	Reduce the volume of PRTR substance emissions per unit of sales	Improve the recycling rate
Targets for the fiscal year ending December 2018	Deploy model businesses that put priority on conserving the ecosystem	Ratio of total sales: 40% or more	Ratio of total sales: 40% or more	Reduction of 5% or more compared with fiscal year ended March 2015	Reduction of 5% or more compared with fiscal year ended March 2015	Reduction of 10% or more compared with fiscal year ended March 2015	90% or more
Initiatives	Protect rare species and implement initiatives to preserve forest and river environments.	LCAs involve quantifying the environmental burden and potential environmental impact on the planet and ecosystems of all inputs during a product's lifecycle, from materials sourcing through to disposal. LCAs provide a useful benchmark for designing environmentally friendly products.	Products and services that contribute to the realization of a sustainable society are defined in accordance with the OECD classification for environmental businesses. Products and services that do not come under that definition are assessed using rigorous internal standards. To contribute to humanity through our business activities, we are working to grow sales based on a holistic approach to production and sales.	The Group is introducing solar power systems and switching to LED lighting, mainly at manufacturing sites in Japan and overseas. The Group also selects highly efficient energy systems when upgrading facilities.	Most greenhouse gases originate from energy sources, so lowering greenhouse gas emissions and reducing energy usage are closely linked. Another key measure is reducing CFCs, which have a high global warming potential. CFCs are used in semiconductor fabrication processes. We are installing systems that break down those CFCs, leading to lower emissions.	PRTR substances are chemical compounds that are harmful to people and ecosystems. We have minimized emissions of PRTR substances by switching to alternative low-toxic chemical substances in manufacturing processes.	We are working to reduce raw material and packaging material volumes and effectively reuse waste. We are focusing on raising recycling rates at overseas sites.
Fiscal year ended March 2018	Currently being implemented at 10 business sites	Ratio of total sales: 23%	Ratio of total sales: 44%	Energy usage reduced by 6% compared with fiscal year ended March 2015	Emissions of greenhouse gases reduced by 2% compared with fiscal year ended March 2015	Emissions of PRTR substances up 10% compared with fiscal year ended March 2015	83%
Progress and factors	Steady progress	Steady progress, despite a decline due to the sale of the papers business	Steady progress	Steady progress	Greenhouse gas emissions started falling due to a drop in energy usage in the textiles business.	Emissions rose due to higher emissions at Nanbu Plastics Co., Ltd.	Steady progress, despite a decline due to the sale of the papers business

Solar power generation in the Nisshinbo Group

We are actively installing solar power generation systems at business sites that require large amounts of energy, such as facilities that use thermal processing. In the fiscal year ended March 2018, installation work was mainly carried out at domestic sites, helping to lift the Group's total solar power generation to 4.9GWh.

Business sites and subsidiaries with solar power systems:
 ■ Miei Machinery ■ Chiba ■ Tatebayashi ■ Tokushima
 ■ Nisshinbo Precision Instrument & Machinery Hiroshima
 ■ Nagano Japan Radio ■ Other sites



For more details, please visit the Nisshinbo Group's CSR website.
<https://www.nisshinbo.co.jp/english/csr/>

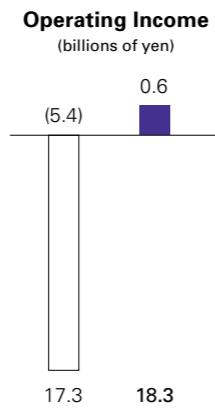
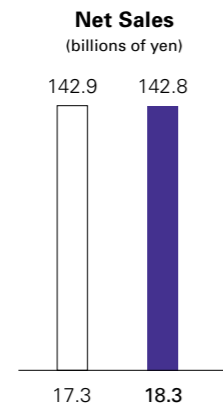
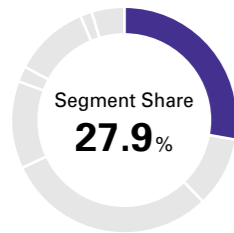
Long-term Environmental Targets (fiscal year ending December 2025)

- 1** Increase the ratio of products that contribute to a sustainable society to **65%** or more of total sales
- 2** Reduce greenhouse gas emissions per unit of sales by **15%** or more compared with fiscal year ended March 2015
- 3** Improve the recycling ratio to **95%** or more

The Nisshinbo Group comprises six businesses: electronics, automobile brakes, precision instruments, chemicals, textiles and real estate. Leveraging the manufacturing technologies and assets of our original spinning business, we have moved into various other business fields, where we supply high-value-added products to satisfy a range of customer needs.

Electronics

Wireless and Communications



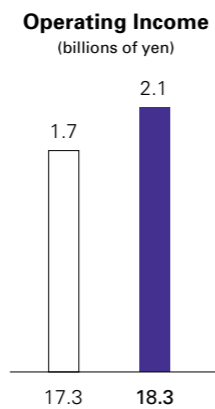
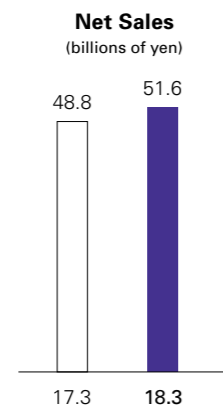
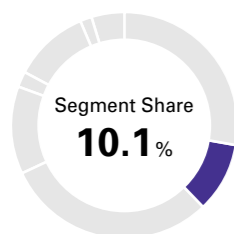
Main business areas

Supplies solutions such as disaster prevention systems and weather radars, as well as marine systems and communications equipment.

Solutions and specialized equipment ▶
Disaster prevention systems and weather radars
Marine systems ▶ Marine radar and communications equipment
Communications equipment ▶ GPS receivers

Electronics

Micro Devices

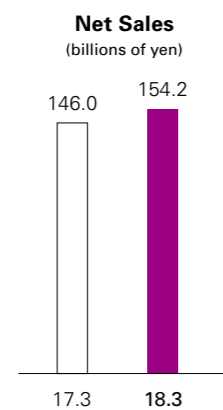
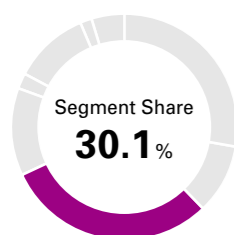


Main business areas

Working to expand sales of analog semiconductors and other electronic devices, supported by microelectronics technologies.

Electronic devices ▶ Semiconductor devices and SAW filters

Automobile Brakes

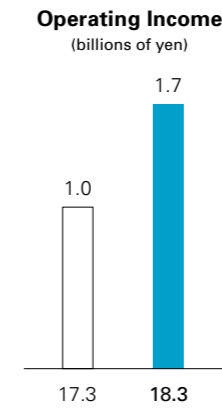
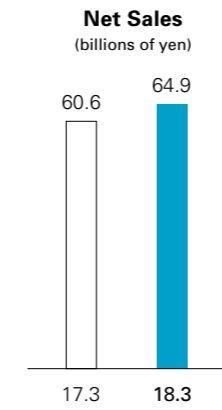
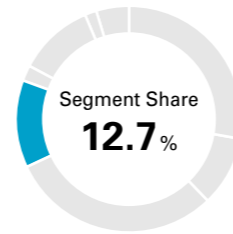


Main business areas

The Nisshinbo Group is the world's leading maker of brake friction materials by market share; now expanding its presence as a true global supplier using its network covering key markets worldwide.

Friction materials ▶ Disc pads and brake linings

Precision Instruments

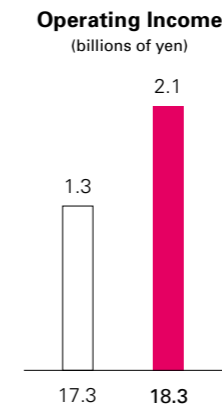
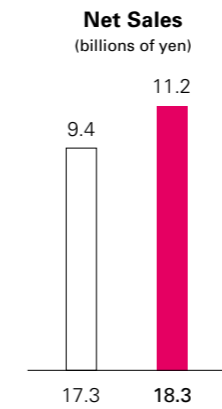
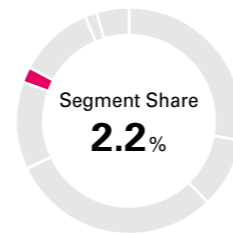


Main business areas

Manufactures plastic products for home appliance and automotive applications and supplies processed precision automotive parts and customized production equipment for customers worldwide, primarily in Asia.

Plastic products
Precision parts processing including parts for electronic brake systems (EBS)
Customized production equipment

Chemicals

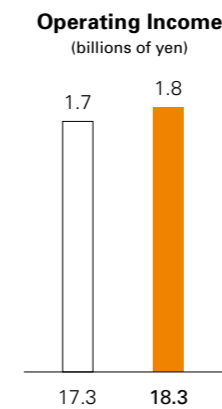
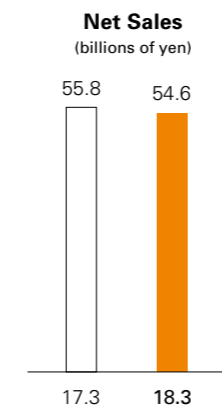
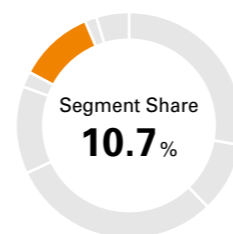


Main business areas

Manufactures a range of highly promising products in the environmental and energy fields, such as Carbodilite, a modifier for biodegradable plastics and waterborne resins, and bipolar plates for fuel cells.

Carbodilite high-performance chemical additive
Thermal insulation products
Bipolar plates for fuel cells
Fine carbon products

Textiles

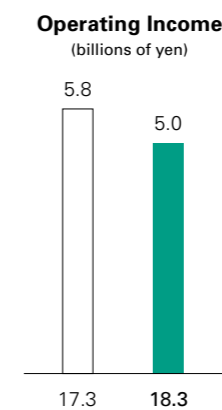
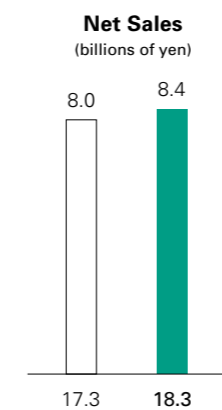
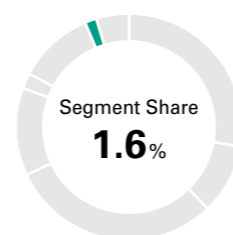


Main business areas

Mainstay business is products made from natural cotton; supplies high-quality "Made by Nisshinbo" dress shirts, denim, uniforms and other products to markets worldwide.

Shirts ▶ Dress shirts, casual shirts and fabric
Textiles ▶ Uniform fabric and casual fabric
Denim ▶ Jeans and denim fabric

Real Estate



Main business areas

Procures funds to support the Nisshinbo Group's growth strategy by effectively utilizing idle plant sites and other real estate assets arising from business restructuring.

Sales ▶ Housing lots
Leasing ▶ ARIO Nishi Arai and other properties



Electronics

Wireless and Communications

Japan Radio Co., Ltd.

In the wireless and communications business, part of the electronics business segment, Japan Radio Co., Ltd. supplies advanced communication and navigation equipment with world-leading reliability to users in the shipping sector. It also provides various disaster prevention systems for dams and river management facilities and weather forecasting systems and is developing a range of autonomous driving and ITS products. Services provided by the business help prevent disasters and ensure the safety of public infrastructure.



GPS compass (navigation support equipment)

Net Sales	(millions of yen)		
	16.3	17.3	18.3
Marine systems	45,360	32,580	33,523
Communications equipment	13,587	14,923	16,028
Solutions and specialized equipment	64,145	67,367	66,116
Mechatronics and power supplies	—	16,498	15,839
Medical equipment	—	9,288	9,038
Other businesses/ Eliminations	2,098	2,251	2,287
Total	125,192	142,909	142,833

Segment Profit	(millions of yen)		
	16.3	17.3	18.3
Marine systems	2,297	(4,836)	(2,287)
Communications equipment	(440)	572	1,387
Solutions and specialized equipment	1,776	(1,976)	1,509
Mechatronics and power supplies	—	(351)	(145)
Medical equipment	—	996	663
Other businesses/ Eliminations	(448)	108	(434)
Total	3,183	(5,486)	693

Note: Figures for Nagano Japan Radio Co., Ltd. and Ueda Japan Radio Co., Ltd. included from the fiscal year ended March 2017.

Summary of financial results for the fiscal year ended March 2018

In the fiscal year ended March 2018, the wireless and communications business reported net sales of ¥142,833 million, down 0.1% year on year, and segment income of ¥693 million, an improvement of ¥6,179 million compared with the previous fiscal year. Profits improved sharply, supported by a drop in variable and fixed expenses as part of a Groupwide cost reduction program.

In marine systems, sales of equipment for new merchant vessels declined, but sales increased overall and losses narrowed due to higher sales of equipment for retrofit projects and for small to medium-size vessels. In July 2017, we established a new subsidiary, Alpatron Marine Korea, in Busan, South Korea. The company is reinforcing our position in the small and medium-size vessel market and the aftermarket in South Korea.

In communications equipment, sales and profits both increased year on year, supported by cost reduction and higher sales of intelligent transport system (ITS) products for automotive applications.

In solutions and specialized equipment, sales of large-scale disaster prevention systems for local governments declined, but the business reported higher sales of driving simulation systems for automakers and equipment for road information systems. Although there was a modest drop in sales overall, the business returned to profit on the back of cost reduction.

Sales of mechatronics and power supplies declined, mainly reflecting delays to new product launches and moves to pare back the product lineup. Cost reduction led to narrower losses.

In medical equipment, sales and profits both fell year on year due to weaker demand caused by production adjustments at customers.

In April 2017, we established the San Jose Technical Development Center in California. The center is tasked with developing highly stable next-generation wireless communications systems that can remain operational during emergencies and disasters, and technologies related to autonomous shipping operations. The center

will also foster links with local companies and research bodies with strong technical capabilities in the San Jose area, which is home to a high concentration of advanced technology firms, to improve the Nisshinbo Group's technologies and competitiveness.

Business strategies for the fiscal period ending December 2018

In the wireless and communications business, we aim to create a stable and profitable operating structure by rebuilding the earnings base in our two main businesses in wireless and communications — marine systems and solutions. We will also identify and focus on strategic businesses to channel resources into growth fields, aiming to increase competitiveness by optimizing the business portfolio.

In marine systems, we will reinforce our presence in the vessel retrofit aftermarket using an LCM*1 business approach. In small and medium-size vessels, we plan to increase demand for our products in the fishing vessel market by strengthening our technical support network and by growing sales of new and distinctive products. In the fiscal year ended March 2018, we launched our J-Marine NeCST navigational support system. In the fiscal year ahead, we plan to roll out an upgraded second-generation system to increase market share.

In communications equipment, we will offer a highly accurate

positioning system based on next-generation GPS receiver units, targeting new applications in the rail, agriculture and construction machinery sectors. In addition, on April 3, 2018, we established JRC Mobility Inc., a wholly owned subsidiary of Nisshinbo Holdings Inc. The new company will focus on communication equipment for the mobility field, aiming to rapidly and accurately respond to developments in the promising market for ADAS*2 and launch new businesses in the near future.

In solutions and specialized equipment, we will target maintenance demand for aging public infrastructure, in addition to providing integrated disaster prevention solutions to counter frequent natural disasters. Demand for disaster prevention systems is also growing in Asia. In response, we will focus on increasing sales of vessel traffic systems (VTS) for ports and sales of integrated disaster prevention systems, which combine elements such as weather radars and river level prediction and forecasting systems. In May 2018, we signed an agreement with the Vietnam Air Traffic Management Corporation (VATM) to test a new multilateration system for airport surveillance and to cooperate on new technologies, under a contract awarded to Japan Radio by Japan's Ministry of Internal Affairs and Communications.

In mechatronics and power supplies, we will work to expand the business and improve profitability by stepping up efforts to win new development projects and improve efficiency in product development.

In medical equipment, we aim to increase sales and profits by offering a wider choice of next-generation diagnostic imaging equipment and compact ultrasound image processing equipment.

*1 Life Cycle Management: Support services for the entire life cycle of vessels, from delivery to decommissioning

*2 Advanced Driver Assistance Systems

Main Locations

Key Companies	Main Locations and Key Subsidiaries	Location	Main Products and Services
Japan Radio Co., Ltd.	Nagano Plant	Nagano, Nagano Prefecture	Disaster prevention systems, mobile communications equipment
	Nagano Japan Radio Co., Ltd.	Nagano, Nagano Prefecture	Disaster prevention systems, mechatronics
	Ueda Japan Radio Co., Ltd.	Ueda, Nagano Prefecture	Wireless communication equipment, medical equipment
	Alpatron Marine Beheer B.V.	The Netherlands	Navigation equipment



Electronics

Micro Devices

New Japan Radio Co., Ltd. / Ricoh Electronic Devices Co., Ltd.

In the micro devices business, part of the electronics business segment, New Japan Radio Co., Ltd. supplies analog semiconductors, SAW filters* and other electronic devices and microwave products. It also supplies components for communications satellites, devices for smartphones and products for automotive and industrial machinery applications, demand for which is growing. Ricoh Electronic Devices Co., Ltd. became part of the Nisshinbo Group in March 2018.

* Surface Acoustic Wave filters: used in smartphones and other communication devices

Net Sales		(millions of yen)	
	16.3	17.3	18.3
New Japan Radio	47,817	48,865	51,665
Ricoh Electronic Devices	—	—	—
Total	47,817	48,865	51,665

Segment Profit		(millions of yen)	
	16.3	17.3	18.3
New Japan Radio	3,127	1,792	2,138
Ricoh Electronic Devices	—	—	—
Total	3,127	1,792	2,138

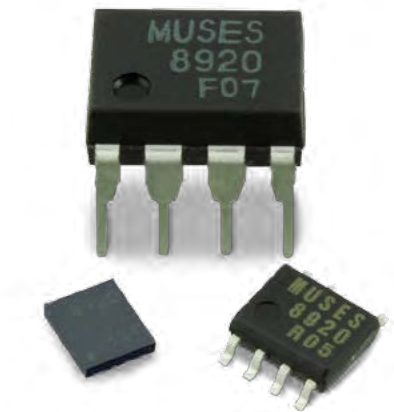
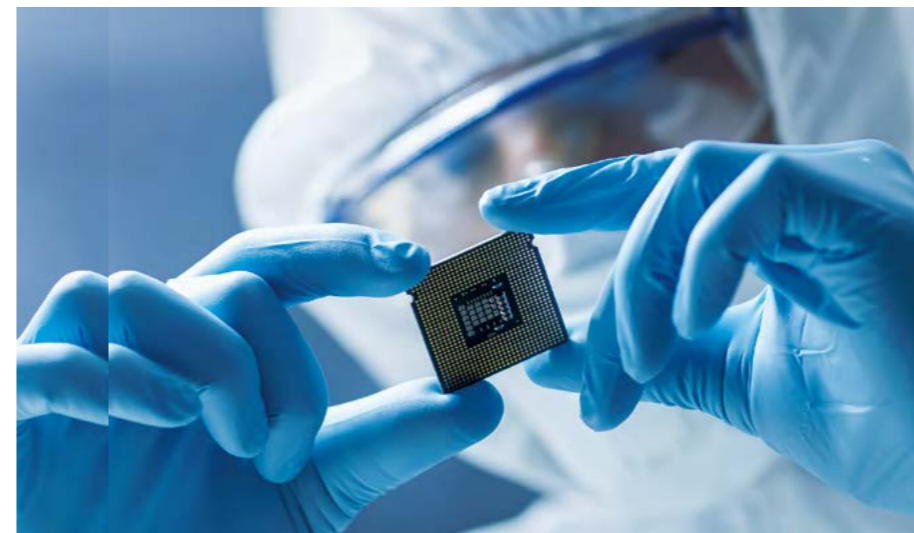
Summary of financial results for the fiscal year ended March 2018

In the fiscal year ended March 2018, the micro devices business reported net sales of ¥15,665 million, up 5.7% year on year, and segment income of ¥2,138 million, up 19.3%.

In mainstay electronic devices, sales of devices for communications equipment fell sharply due to an inventory correction in the Chinese smartphone market. However, sales of automotive devices were firm, mainly driven by orders from domestic customers. Demand was supported by the growing shift to electrification in the automotive sector, which is leading to an increase in the number of electronic components per vehicle. Sales of devices for industrial machinery were also strong, reflecting rising orders from machinery manufacturers in Japan, which are benefiting from buoyant capital investment in China.

Sales of microwave devices increased sharply on the back of firm demand for communication satellite components from customers in the US, China, India, Korea and Israel, reflecting solid demand for satellite communication equipment used in marine applications and trunk line applications for base stations. Sales of microwave tubes for marine radar systems were supported by firm repair and maintenance demand.

In March 2018, Nisshinbo Holdings Inc. acquired 80% of shares in Ricoh Electronic Devices, making it a subsidiary of the Nisshinbo Group. From the fiscal period ending December 2018, New Japan Radio and Ricoh Electronic Devices will be responsible for the newly established micro devices business. Assets and liabilities held by Ricoh Electronic Devices were included in the consolidated balance sheets as of March 31, 2018. The company's earnings will be reflected in consolidated results from the fiscal period ending December 31, 2018.



High-quality operational amplifier for high-end audio equipment

Business strategies for the fiscal period ending December 2018

In automotive applications, the shift to customized devices has gathered pace in recent years. New Japan Radio, with its integrated in-house system covering device design through to manufacturing, has benefited from that trend, seeing growth in orders from automakers and Tier 1 parts suppliers. In 2016, we established a subsidiary in Frankfurt, Germany to win business from automakers and suppliers in Europe, and we expect our automotive device business to become increasingly international in the years ahead. In industrial machinery applications, we see good prospects for strong growth in sales, mainly supported by rising investment in industrial robots in China. In the fiscal year ended March 2018, demand for MEMS*1 devices for smartphone applications declined, but devices for AI-powered speakers are a promising growth market. In microwave products, there is a growing need for Internet environments accessed via satellite, which is likely to sustain strong demand for microwave devices used in communication satellites.

The acquisition and consolidation of Ricoh Electronic Devices is set to lift sales sharply in the segment's micro devices business.

The company is focused on power management integrated circuits (PMICs), supplying a range of compact, energy-efficient and high-performance CMOS analog semiconductors. Ricoh Electronic Devices has one of the best track records in the industry for PMICs used in smartphones. We aim to reinforce our business in automotive and IoT applications and a wide range of other markets by combining New Japan Radio's bipolar technologies with Ricoh Electronic Devices' CMOS technologies.

We are also targeting major synergies in manufacturing through a collaborative relationship that reinforces the companies' respective positions in front-end and back-end processes*2.

We plan to make New Japan Radio a wholly owned subsidiary of Nisshinbo Holdings on September 1, 2018. The move will enable faster and more dynamic decision-making and investment decisions, helping to accelerate the Group's growth and increase its competitiveness.

*1 Micro-electro-mechanical systems: small devices made using semiconductor fabrication technology

*2 See pages 44-45 for more details about the potential synergies between New Japan Radio and Ricoh Electronic Devices.

Main Locations

Key Companies	Main Locations and Key Subsidiaries	Location	Main Products and Services
New Japan Radio Co., Ltd.	Kawagoe Works	Fujimino, Saitama Prefecture	Electronic devices, microwave products
	Saga Electronics Co., Ltd.	Kanzaki, Saga Prefecture	Electronic devices, microwave products
	NJR Fukuoka Co., Ltd.	Fukuoka, Fukuoka Prefecture	Electronic devices, microwave products
	THAI NJR CO., LTD.	Thailand	Electronic devices, microwave products
Ricoh Electronic Devices Co., Ltd.	Yashiro Plant	Kato, Hyogo Prefecture	Electronic devices

Micro Devices Business Strategy

Guided by its corporate slogan, *Challenging towards a New Era of Technological Innovation & Super Smart Society*, the Nisshinbo Group is pursuing innovation in a wide range of fields. New Japan Radio Co., Ltd. leads the Group's efforts in electronic technologies. Our analog chips, which include a range of microscopic sensors, are needed for new products being developed by businesses across the Nisshinbo Group. In March 2018, Ricoh Electronic Devices Co., Ltd. became part of the Group. We plan to generate synergies with the company to support Nisshinbo's continued growth in the electronics field.



Ryo Ogura
President
New Japan Radio Co., Ltd.

The Nisshinbo Group's Market Position

The global analog semiconductor market is worth around ¥4 trillion and the market for our main analog chips is worth about ¥1 trillion. With the acquisition of Ricoh Electronic Devices, the Nisshinbo Group now has one of the leading market shares in Japan and ranks around fourth worldwide.

New Japan Radio has leveraged its strong industry position in signal processing-related devices. We have built an extensive product range that includes sensors, amplifiers and AD converters,

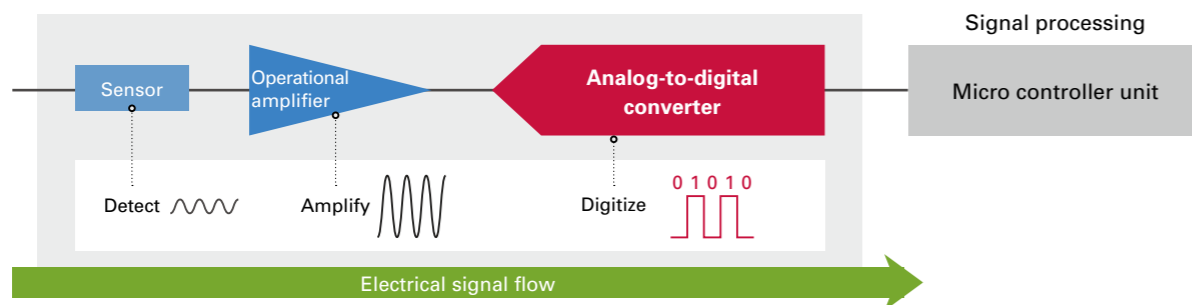
which convert analog signals to digital outputs. That lineup, along with our strengths in chip packaging technology, means New Japan Radio can provide one-stop solutions to clients. In the automotive field, where demand for customized chip designs is growing, we are highly regarded by automakers, helping us to secure major orders.

New Japan Radio supplies MEMS microphones for smartphones and other products. With AI speakers becoming increasingly popular, shipments of MEMS microphones are rising steadily. The time needed to develop and launch electronic devices differs depending on the final application, whether IT, industrial or automotive. That means we need separate development teams for each type of product.

Two Promising Growth Markets

Vehicles and industrial equipment are our two most promising growth markets. In the automotive field, there is a growing shift to electronic systems, which is leading to an increase in the number of electronic sensors per vehicle. Suppliers and automakers typically start working together on new automotive components several years before they are used in vehicles, and we are currently developing new products with an SOP* date of 2021. In 2016, we set up a new office in Germany as our first move into the European auto market. We plan to increase our presence in Europe going forward.

How Analog Semiconductors Work (signal processing chips)



In industrial equipment, we are seeing an increase in the number of sensors used in control equipment and industrial robots, spurred by factory automation and the adoption of IoT. Japan's industrial equipment manufacturers have a high share of the market and we have business relationships with almost all those companies.

To address rising demand for automotive and industrial equipment applications, New Japan Radio plans to build a new chip package facility, which will be operated by subsidiary Saga Electronics Co., Ltd. The facility is scheduled to start production as early as 2020.

* Start of production

Synergies with Ricoh Electronic Devices

The consolidation of Ricoh Electronic Devices has lifted sales in the Group's micro devices business to around ¥80 billion. Third place in the global market is now within sight and we plan to increase sales to ¥100 billion. In addition to growing sales, we see significant potential for cost synergies and improvements to our device design capabilities. Ricoh Electronic Devices is focused on energy-efficient, high-performance power management integrated circuits (PMICs) and is one of the top suppliers for the smartphone sector. New Japan Radio has a strong position in the automotive and industrial equipment markets, so there is minimal overlap in business fields. We plan to draw on our combined strengths in all fields to reinforce our business. The acquisition has also expanded the Group's capabilities in chip production, with Ricoh Electronic Devices specializing in front-end chip fabrication processes and large-diameter wafer processing. New Japan Radio's presence in chip testing, assembly and other

back-end processes means Ricoh Electronic Devices no longer needs to outsource that work, which should help reduce costs by keeping chip fabrication processes in-house. By switching to in-house production and encouraging closer cooperation, I'm confident we can lower costs and establish a robust quality assurance system – a vital step in expanding our automotive-related business. We also plan to take advantage of advanced design and development resources at Ricoh Electronic Devices to develop new electronic devices for automotive and industrial applications. We have been business partners with Ricoh Electronic Devices for more than 30 years and the company will now play a key role in implementing our business strategy.

New Japan Radio to Become Wholly Owned Subsidiary of Nisshinbo Holdings

We have agreed to make New Japan Radio a wholly owned subsidiary of Nisshinbo Holdings Inc., effective September 1, 2018. We believe the move is vital to help us respond to rapid changes in the operating environment by creating faster, more flexible decision-making and investment decision processes. We also have to create a framework that allows us to tap the Nisshinbo Group's highly skilled personnel and extensive expertise to help us grow our business in the automotive and industrial equipment fields. For example, Japan Radio Co., Ltd. has a portfolio of fundamental wireless and communications technologies, which is something we lack. By stepping up communication with other divisions in the Nisshinbo Group, we aim to create a steady stream of new products and businesses in the advanced driver assistance systems (ADAS) field and in the medical & healthcare field.

Ricoh Electronic Devices has a strong position in compact, energy-efficient PMICs, with one of the highest shares in the smartphone market. By joining the Nisshinbo Group, we will be able to work more closely with New Japan Radio, which also has a range of analog semiconductor technology. But we are also excited about the prospect of new growth opportunities in application fields such as vehicles, communication and healthcare. For example, we can now offer a wider choice of solutions to clients by combining the Nisshinbo Group's sensors and communication modules with our own low-power PMICs.

Going forward, we plan to focus on the automotive and industrial equipment fields, which offer prospects for sustained growth. Our goal is to increase the ratio of automotive sales from around 10% now to about 20% by around 2020. We will also seek cost synergies

with New Japan Radio by collaborating in manufacturing, aiming to raise the operating margin to over 10% by 2020.

The Nisshinbo Group has positioned electronics as a growth business. We will play our part by making necessary and timely investments to grow our business in order to further strengthen our presence in the analog semiconductor market.

Satoru Taji
President
RicoH Electronic
Devices Co., Ltd.





Automobile Brakes

Nisshinbo Brake Inc. / TMD Friction Group S.A.

Nisshinbo is a global supplier with world-class development capabilities in the field of friction materials, which are key components in automobile brake systems. Our strategy in the automobile brakes business is to address the specific requirements of each market and customer with three businesses — Nisshinbo Brake, TMD Friction Group and Saeron Group — aiming to meet global automaker needs for optimum parts procurement as the world’s leading friction materials company.



Disc pads

Net Sales	(millions of yen)	
	16.3	17.3
NISB* —Domestic	25,272	25,058
NISB —Overseas	45,699	40,509
TMD	99,787	86,423
Eliminations	(5,721)	(5,929)
Total	165,037	146,062

Segment Profit	(millions of yen)	
	16.3	17.3
NISB —Domestic	1,142	1,486
NISB —Overseas	5,722	5,045
TMD	1,725	2,068
Goodwill amortization	(6,576)	(5,921)
TMD (Adjustment for Japanese accounting standard)	(2,899)	(2,540)
Consolidation adjustments	—	(145)
Total	(887)	(7)

* Nisshinbo Brake Inc.

Summary of financial results for the fiscal year ended March 2018

In the fiscal year ended March 2018, the automobile brakes business reported net sales of ¥154,205 million, up 5.6% year on year, and segment income of ¥6,119 million, an improvement of ¥6,126 million from the previous fiscal year. Amortization of goodwill related to the acquisition of TMD was completed in the previous fiscal year, supporting the sharp rise in profits.

In Nisshinbo Brake’s domestic operations, sales increased year on year due to a pickup in new car sales, with sales volumes for light vehicles recovering from the impact of the fuel economy data scandal in the previous year. However, changes in the product mix and other factors pushed profits down year on year. In the US, profits and sales both declined amid peaking demand and a rising share of SUV sales in the North American car market. The picture was similar in South Korea, where a drop in new car sales led to weaker sales and profits. However, sales and profits increased in Thailand on the back of strong car sales and the launch of new products. Sales and profits also rose in China. Nisshinbo Brake teamed up with TMD in 2016 to begin aftermarket sales in some areas of the Middle East. We have since extended our presence in the aftermarket to all parts of the Middle East and also launched sales in major countries in Africa.

Higher sales of aftermarket products lifted sales at TMD, which also helped the company move into profit. TMD is aggressively expanding its operations. The company has recently opened new sales offices in Russia, Poland and Singapore, moved into a new distribution center in Germany and opened a new distribution center in Lithuania.

In July 2017, we established Saeron Automotive Yantai Co., Ltd. as a new manufacturing subsidiary in the fast-growing Chinese market. The company will fix the Group’s lack of production capacity and strengthen Nisshinbo’s presence in China.

Also, we sold our foundation brakes business in April 2018

after comprehensively assessing its prospects based on the Group’s growth strategy and the growth potential of the business in the Nisshinbo Group.

* Established with investment from two Nisshinbo Group consolidated subsidiaries (Saeron Automotive Corporation 90% stake, Saeron Automotive Beijing Co., Ltd. 10% stake)

Business strategies for the fiscal period ending December 2018

Domestic car sales are likely to be flat in 2018 as the impact of new models drops out. We expect car sales to continue rising in Thailand and China, but demand in the US, Europe and South Korea is likely to be close to the level in the previous fiscal year.

Against that backdrop, Nisshinbo Brake’s Tatebayashi Plant will start work on fundamentally overhauling its production activities. Specifically, we plan to install production lines that combine multiple manufacturing processes, introduce computer-controlled raw material mixing systems, and use IoT technologies to visualize conditions on production lines, allowing us to better predict issues and maintain equipment. The project, which is scheduled for completion in 2020, will reduce lead times, save labor and cut CO₂ emissions through improvements in energy efficiency.

Main Locations

Key Companies	Main Locations and Key Subsidiaries	Location	Main Products and Services
Nisshinbo Brake Inc.	Tatebayashi Plant	Ora, Gunma Prefecture	Automobile brake friction materials
	Nisshinbo Automotive Manufacturing Inc.	U.S.A.	Automobile brake friction materials
	Saeron Automotive Corporation	South Korea	Automobile brake friction materials
	Nisshinbo Somboon Automotive Co., Ltd.	Thailand	Automobile brake friction materials
	Saeron Automotive Beijing Corporation	China	Automobile brake friction materials
	Nisshinbo Saeron Changshu Automotive Co., Ltd.	China	Automobile brake friction materials
TMD Friction Group	TMD Friction GmbH	Germany, etc.	Automobile brake friction materials

In China, our new manufacturing subsidiary, Saeron Automotive Yantai Co., Ltd., is working to start volume production in 2019.

As a supplier, TMD faces tougher price negotiations with customers in the aftermarket due to mergers between some customers. In response, TMD plans to reinforce its brands and improve operating efficiency, such as completing the integration of production sites in Germany. TMD Brazil also completed its move to a new plant in 2017.

As one of the first in the industry to develop copper-reduced and copper-free friction materials*¹, Nisshinbo Brake has started volume production of NAO*² materials. In the fiscal period ending December 2018, we plan to sharply increase output of the new friction materials, while also using detailed market feedback to further improve quality and increase market share.

To address the growing popularity of electric vehicles, plug-in hybrids and fuel cell vehicles, we plan to improve the NVH*³ performance of our friction materials and develop products that are ideally suited to electronically controlled brake systems.

*¹ Demand for these products, which are compatible with US regulations on copper content, is projected to increase worldwide. US environmental regulations, effective from 2021, prohibit the sale of new friction materials or vehicles fitted with friction materials that have a copper content of more than 5%. From 2025, the limit on copper content will be reduced to 0.5%.

*² Non-Asbestos Organic

*³ Noise Vibration Harshness



Precision Instruments

Nisshinbo Mechatronics Inc.

Utilizing various areas of expertise accumulated over more than 70 years, this segment focuses on plastic products, mainly for the home appliance and automotive sectors, and precision parts processing, primarily metal processing for the automotive sector. The segment also makes customized production equipment to meet the specific needs of customers. We are working closely with Nanbu Plastics Co., Ltd., which became a subsidiary in 2015, to develop these businesses globally, centered on Asia.



Automotive EBS valve block



Plastic components for air conditioners

Net Sales	(millions of yen)	
	16.3	17.3
		18.3
Mechatronics	14,283	14,996
Plastic products	18,464	49,081
Eliminations	(3,222)	(3,390)
Total	29,525	60,687

Segment Profit	(millions of yen)	
	16.3	17.3
		18.3
Mechatronics	(88)	808
Plastic products	448	1,204
Eliminations	(42)	(964)
Total	318	1,049

Summary of financial results for the fiscal year ended March 2018

In the fiscal year ended March 2018, the precision instruments business reported net sales of ¥64,918 million, up 7.0% year on year, and segment profit of ¥1,725 million, an increase of 64.4%.

In precision parts processing, sales and profits rose year on year, supported by higher sales in Japan and increased output at Nisshinbo-Continental Precision Machining (Yangzhou) Co., Ltd., a joint venture with Continental Automotive Holding Co., Ltd.

Sales and profits also rose year on year in plastic products, driven by increased orders at subsidiaries in China and India and by higher orders for automotive products and cost savings at Nanbu Plastics. Our subsidiary in India moved to a new plant in 2017 and is now contributing to consolidated profits by leveraging the merits of the new facility. Also, at our existing site in Thailand, we constructed a new plant that is set to start operations in 2018. We plan to use the plant to win more orders and boost profit margins.

In customized production equipment, orders for customized machines increased and costs were reduced, but sales and profits both declined year on year due to weaker orders for aftermarket services.

Business strategies for the fiscal period ending December 2018

In the precision instruments business segment, our main target markets are home appliances and automotive applications.

In plastic products, we need to build a global production framework, as our main customers — leading Japanese makers of air conditioners — continue to expand their operations worldwide.

Nisshinbo Mechatronics (Thailand) Ltd. aims to improve productivity and increase orders using its newly constructed plant, while Nisshinbo Mechatronics (Shanghai) Co., Ltd. will look at optimizing production activities, including in southern Guangzhou. Nisshinbo Mechatronics (India) Pte. Ltd. will expand its operations in response to market growth, aiming to increase market share and lift profits.

Nanbu Plastics will work to generate greater synergies with the Nisshinbo Group, using a new business site on the premises of Nisshinbo Precision Instrument & Machinery Hiroshima Corp. to carry out production activities closer to product supply destinations. Also, automotive products developed jointly by Nanbu Plastics and its customers will be made by Nisshinbo Mechatronics (Thailand), which will then supply them to local customer sites in Thailand.

We forecast firm earnings in the precision instruments business segment, supported by growth in the automotive market. Nisshinbo-Continental Precision Machining (Yangzhou) continues to increase output of EBS valve blocks to meet rising

demand in the Chinese and Indian markets. The company plans to build a manufacturing framework with annual production capacity of 10 million units by 2020, while also maintaining and improving quality.

In customized production equipment, the machine tool market is likely to remain buoyant in the fiscal period ending December 2018, but the business will also work to secure orders from users in the Nisshinbo Group, helping to improve manufacturing technologies across Nisshinbo businesses.

Main Locations

Key Companies	Main Locations and Key Subsidiaries	Location	Main Products and Services
Nisshinbo Mechatronics Inc.	Miai Machinery Plant	Okazaki, Aichi Prefecture	Plastic products, automotive precision parts
	Hamakita Plant	Hamamatsu, Shizuoka Prefecture	Automotive precision parts
	Nisshinbo Precision Instrument & Machinery Hiroshima Corp.	Higashihiroshima, Hiroshima Prefecture	Automotive precision parts
	Nisshinbo-Continental Precision Machining (Yangzhou) Co., Ltd.	China	Automotive precision parts
	Nisshinbo Mechatronics (Shanghai) Co., Ltd.	China	Plastic products
	Nisshinbo Mechatronics (Thailand) Ltd.	Thailand	Plastic products
	Nisshinbo Mechatronics India Private Limited	India	Plastic products
Nanbu Plastics Co., Ltd.		Shizuoka Prefecture, etc.	Plastic products



Chemicals

Nisshinbo Chemical Inc.

Drawing on a broad base of expertise and intellectual property in the chemical field, this segment is pushing ahead with the development of environment-related products on a global basis, such as actively switching to materials with low global warming potential in its mainstay thermal insulation products. Our environment- and energy-related products include bipolar plates for fuel cells and Carbodilite, a high-performance plastic material that increases the durability of biodegradable plastics and waterborne resins, which have minimal environmental impact. We are investing management resources in these promising growth areas as a matter of priority.



Fuel cell bipolar plates



Carbodilite

Net Sales	(millions of yen)	
	16.3	17.3
		18.3
Fuel cell bipolar plates	1,166	1,040
Carbodilite	1,834	2,248
Thermal insulation products	3,765	4,982
Others	984	701
Subsidiaries	644	631
Eliminations	(108)	(121)
Total	8,285	9,483

Segment Profit	(millions of yen)	
	16.3	17.3
		18.3
Fuel cell bipolar plates	(107)	(169)
Carbodilite	236	578
Thermal insulation products	507	689
Others	18	137
Subsidiaries	97	74
Eliminations	1	0
Total	753	1,309

Summary of financial results for the fiscal year ended March 2018

In the fiscal year ended March 2018, the chemicals business reported net sales of ¥11,285 million, up 19.0% year on year, and segment profit of ¥2,112 million, up 61.3%.

In thermal insulation products, sales increased on the back of higher demand for insulation base solution for spray-on and civil engineering applications, as well as for bio-carriers for wastewater treatment and refrigeration panels for LNG carriers. In bio-carriers, demand is growing in China on the back of tighter environmental regulations, which is spurring adoption in distributed wastewater treatment (the Japanese approach to water purification).

Sales of functional chemical Carbodilite increased year on year, supported by higher sales of products used as a cross-linking agent*1 for waterborne resins. As a result, sales in this business reached a record high. We are receiving a high level of inquiries about Carbodilite from potential customers in Japan and overseas, particularly for use as a safe, environmentally friendly waterborne cross-linking agent and as a biodegradable plastic modifier*2.

In fuel cell bipolar plates, cost reduction and higher shipments for residential fuel cells and fixed fuel cells supported growth in sales and profits.

In glass-like carbon products, orders increased due to continued strong demand in the semiconductor and OLED panel market.

*1 Cross-linking agent: A chemical compound that links polymers, changing the physical and chemical properties of materials.

*2 Modifier: Additives that improve the properties of plastics, such as durability.

Business strategies for the fiscal period ending December 2018

The chemicals business will continue to step up development and marketing for Carbodilite, fuel cell bipolar plates, bio-carriers for wastewater treatment and glass-like carbon products.

We aim to increase sales of Carbodilite as a cross-linking agent for waterborne resins and as a biodegradable plastic modifier. Over the medium and long term, we also see prospects for growth in Carbodilite demand in the waterborne resin field for applications such as automotive coatings, heavy-duty anti-corrosion coatings and ink. Meanwhile, more countries, particularly in Europe, are introducing restrictions on the use of non-biodegradable plastics. Carbodilite is currently manufactured at our Tokushima Plant, but we are looking at expanding production at overseas sites in the future.

In fuel cell bipolar plates, we are targeting wider adoption in the fixed fuel cell market by tapping into rising interest among fuel cell manufacturers, in addition to existing residential fuel cell applications. With Nisshinbo Holdings Inc. now responsible for developing fuel cell bipolar plates for fuel cell vehicles, all the Group's resources are being used to drive adoption in the automotive sector.

In bio-carriers for wastewater treatment, we plan to cultivate closer links with Chinese manufacturers in distributed wastewater

treatment, an approach that China's water sector is starting to adopt. Our goal is to increase sales by building a local production and sales network. We are also targeting opportunities related to major public-sector sewage treatment projects by conducting field testing with public water companies.

In glass-like carbon, we forecast higher sales of plate products amid rising demand, which is being driven by the shift to high-performance semiconductors such as processors and memory devices. In coated products, we anticipate increased demand for glass-like carbon molding tools, which are used to make curved glass screens for automotive displays and smartphones.

Main Locations

Key Companies	Main Locations and Key Subsidiaries	Location	Main Products and Services
Nisshinbo Chemical Inc.	Take Plant	Chiba, Chiba Prefecture	R&D Center (Carbodilite)
	Asahi Plant	Asahi, Chiba Prefecture	Urethane products, fine carbon products
	Tokushima Plant	Tokushima, Tokushima Prefecture	Carbodilite
	Chiba Plant	Chiba, Chiba Prefecture	Carbon bipolar plates for fuel cells



Textiles

Nisshinbo Textile Inc.

Since its founding in 1907, Nisshinbo has led the Japanese textile industry with its state-of-the-art technologies and high quality. Nisshinbo subsequently expanded its business globally in the fields of spinning, weaving, processing and sewing, and today possesses some of the world’s most advanced technologies in product development and production. Nisshinbo is currently working to increase global sales of the APOLLOCOT brand by mobilizing its sophisticated textile processing technologies.



↑ Oikos



Net Sales	(millions of yen)	
	16.3	17.3
		18.3
Nisshinbo Textile	23,410	20,935
Japanese Subsidiaries	31,884	29,271
Brazil	3,886	4,488
Indonesia	14,701	13,609
China	2,459	2,125
Eliminations	(16,210)	(14,586)
Total	60,127	55,842

Segment Profit	(millions of yen)	
	16.3	17.3
		18.3
Nisshinbo Textile	291	469
Japanese Subsidiaries	1,381	1,321
Brazil	105	132
Indonesia	328	213
China	(10)	6
Eliminations	(317)	(364)
Total	1,779	1,777

Summary of financial results for the fiscal year ended March 2018

In the fiscal year ended March 2018, the textiles business reported net sales of ¥54,640 million, down 2.2% year on year, and segment profit of ¥1,876 million, up 5.5%.

In the domestic market, demand for wrinkle-free shirts remained firm throughout the fiscal year, supporting strong sales of APOLLOCOT shirt fabric. Sales of work uniform fabric, inner-wear spandex and hot-melt film for clothing increased, but sales and profits in domestic operations declined overall due to weak sales of denim fabric and poor sales at TOKYO SHIRTS CO., LTD.

Overseas, sales of products made by our Indonesian subsidiary for supply to third countries and regions, such as the US, Europe and the Middle East, fell short of their target, but sales of products for the Japanese market were firm. Sales increased at our Brazilian subsidiary amid a decline in inventories in retail channels. The company’s price hikes also took hold, lifting profitability. Overall, there was a notable improvement in performance at the Brazilian subsidiary.

Business strategies for the fiscal period ending December 2018

In the shirt business, we will work to grow sales of wrinkle-free shirt fabric, centered on APOLLOCOT, the leading easy-care shirt fabric in the textile sector.

In Indonesia, our main production region, we will continue to implement the Nisshinbo Textile group’s companywide improvement program called T-KAIZEN to achieve our goal of global cost-competitiveness and global quality. We will also work to boost sales of products to the US, Europe, the Middle East and other third countries and regions.

In the textiles business, we aim to win more orders for our custom-made uniforms in the durable workwear market. We will also focus on securing orders for service sector uniforms.

In denim fabric, we aim to achieve global cost-competitiveness by increasing production capacity at our joint venture in Indonesia, PT. Malakasari Nisshinbo Denim Industry*, in order to strengthen and expand the denim business.

In the materials development business, we are targeting higher sales of high-value-added products made from distinctive materials, such as non-woven fabric for face masks and low-temperature thermal adhesive fiber for stitchless clothing.

In product development, we plan to leverage the strengths of the Nisshinbo Group’s electronics business to develop smart textiles with embedded sensing capabilities. We intend to work closely with Japan Radio Co., Ltd. and New Japan Radio Co., Ltd. to create textiles for two main themes — monitoring services and better workplace environments.

We are also carrying out research and development into anhydrous dyes, formalin-free processing and non-starch textile manufacturing, which all have the potential to significantly reduce environmental impact in the natural textile manufacturing sector.

* A joint venture with Indonesian denim maker PT. Malakasari.

Main Locations

Key Companies	Main Locations and Key Subsidiaries	Location	Main Products and Services
Nisshinbo Textile Inc.	Fujieda Plant	Fujieda, Shizuoka Prefecture	Developed materials
	Tokushima Plant, Yoshinogawa Plant	Tokushima Prefecture	Developed materials, denim products
	PT. Nikawa Textile Industry	Indonesia	Textile spinning and weaving
	PT. Nisshinbo Indonesia	Indonesia	Textile weaving and dyeing
	Nisshinbo Do Brasil Industria Textil Ltda.	Brazil	Textile spinning
	Nisshinbo (Shanghai) Co., Ltd.	China	Textile products
	TOKYO SHIRTS CO., LTD., Naigai Shirts Co., Ltd.	Tokyo etc.	Dress shirts

Overview of Business Segments



Real Estate

Nisshinbo Holdings Inc.

Nisshinbo's real estate business redevelops properties that have become vacant as a result of business changes at Group companies. Income from those activities is used to fund the Group's growth strategy, such as launching new businesses and expanding global operations. Income is generated from two main sources — property leasing and the sale of housing lots. Nisshinbo has actively developed the housing lot sales business since 2009, when the Group moved to a holding and operating company structure. The Group's domestic real estate portfolio includes many land and property sites with excellent locations, generating strong earnings for the real estate business.

Financial Results	(millions of yen)		
	16.3	17.3	18.3
Net Sales	8,358	8,084	8,406
Segment Profit	5,795	5,811	5,067

Summary of financial results for the fiscal year ended March 2018

In the fiscal year ended March 2018, the real estate business reported net sales of ¥8,406 million, up 4.0% year on year, and segment profit of ¥5,067 million, down 12.8%.

In the property leasing business, leasing operations were firm for land, office buildings, commercial facilities and other properties, but sales and profits both declined due to the disposal of a large commercial facility in Nagoya. The sale of the property resulted in a gain on the sale of property, plant and equipment of ¥5,163 million, which was reflected as other income in the Group's consolidated results.

In the housing lot sales business, we continued to sell housing lots at sites in Kawagoe (Saitama) and Okazaki (Aichi) and we started selling lots in the north section of the former Japan Radio Co., Ltd. site in Mitaka (Tokyo), helping to lift sales year on year. However, profits declined due to the completion of sales at the former Nagoya Plant site (Aichi), where margins on housing lots were high.

Business strategies for the fiscal period ending December 2018

The real estate business will continue to fulfill its role as a source of funds to help Nisshinbo attain its management targets by

effectively utilizing the real estate assets of the whole Group. We plan to continue generating stable earnings by focusing on the following projects.

Plans for the redevelopment of the north section of the former Japan Radio site in Mitaka (Tokyo) include the sale of around 680 condominium units in 2020 and 2021. Groundwork for the condominium started in March 2018.

At the former Miai Plant site (Aichi), we plan to sell around 360 detached homes and land for commercial, medical and welfare facilities between 2019 and 2024. Land redevelopment is now under way.

We plan to complete the sale of the remaining four lots at Kawagoe and the remaining two lots at Okazaki in the fiscal period ending December 2018.



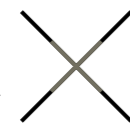
Management Framework

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President and Outside Director Dialogue



Shinobu Fujino
Outside Director
Career Counselor*



Masaya Kawata
President

Nisshinbo Is Entering a New Era

Shinobu Fujino has served as outside director for three years since her appointment in 2015. She is the Nisshinbo Group's first female director. In this section, Ms Fujino and Nisshinbo's president Masaya Kawata talk about the Group's recent achievements and how Nisshinbo should adapt to the changing needs of society.

Looking Back on the Last Three Years

Fujino: The Nisshinbo Group has a presence in a wide range of business fields and proposals discussed by the Board of Directors can be very detailed. When I first joined the board, I took plenty of time to ensure I was well-briefed before meetings. In the last three years, I have also made a point of visiting many operating companies and facilities to gain a detailed understanding of the Group and its businesses. I now have a much better grasp of Nisshinbo, but I continue to keep up to speed with developments, as the Group is constantly changing due to frequent business mergers and acquisitions.

I think discussions at board meetings have become more effective. Three years ago, meetings sometimes lasted until late in the evening. Now, meetings begin earlier and are not open-ended, helping to make discussions more productive.

Kawata: As a company that has traditionally appointed men to senior management positions, Ms Fujino's appointment to the board is a highly significant step from the perspectives of promoting diversity in leadership and creating a more rounded corporate governance framework. Ms Fujino is Nisshinbo's only female director at the moment, but we plan to appoint more

* Career counselors provide advice to people in companies, public agencies and educational institutions by accurately identifying their abilities and values to help them choose their best career path and develop as individuals.

women to the board. However, as our first female director, Ms Fujino's impact has been considerable. It's vital that we draw on the unique perspectives of women, as men-only discussions about workstyle reforms and empowering women in the workplace are not useful. I personally have benefited from Ms Fujino's input, one example being when she checked with me to ensure there was sufficient female representation at workshops for young Nisshinbo employees. We plan to increase and offer better opportunities for women to advance their careers. As well as her role on the Board of Directors, Ms Fujino is active in many other areas of the Company, so I look forward to working with her on that issue.

Diversity in the Nisshinbo Group

Fujino: The Nisshinbo Group is also steadily stepping up its support for women's careers, such as encouraging female employees to take part in Management Policy Meetings. The next step is to promote women to management roles and higher positions. Many women already have frontline leadership roles in Nisshinbo's businesses. We now need to help them advance their careers by improving personnel systems and workplace culture to create an even better working environment. That will take time, but we have to stay firmly committed to our objective over the medium and long term.

The Nisshinbo Group mainly runs manufacturing businesses that supply products to other companies, but all our products ultimately end up with consumers. It's important to remember that our employees are also consumers too. To satisfy society's diverse needs, we have to draw on their diverse opinions in decision-making processes. That's why we should promote diversity from the perspective of increasing corporate value, not because of wider public pressure.



Kawata: Society is split equally between men and women, but men often outnumber women at Japanese companies, particularly in management positions, which tend to be dominated by men. That's an issue that needs to be addressed. Some of the products developed by the Nisshinbo Group are specifically targeted at female consumers, such as textile products. It's especially important to ensure our female employees are involved in the development of those products.

We publicly disclose targets such as the ratio of women we are aiming for in management positions, but leaders in all our departments and divisions, not just staff in personnel departments, need to fully understand the importance of having a diverse workforce. My aim is to raise the presence of women across the company, such as increasing representation at meetings and encouraging more women to lead presentations. That will depend on increasing the number of women in leadership positions, which will take time. In scientific and engineering fields, we face the issue of low numbers of female graduates in the job market. We are actively hiring mid-career female engineers to compensate for that shortage.

To improve the working environment for women in the Nisshinbo Group, we have increased networking opportunities for female managers at key companies and added more flexibility to personnel systems.

We also have to create a corporate culture that values honest opinions between employees, regardless of age or gender, by making workplaces more diverse. Along with the Group's common zero-tolerance policy on power harassment and sexual harassment, we aim to create a corporate culture anchored by open-minded communication.

Concrete Steps to Realize Our Vision for Nisshinbo

Fujino: When I joined Nisshinbo, one of my first impressions was that the Group had a strong vertical structure. But in the last year or so, the close links across the Group have become clearer, such as communication between Group companies and the focus on harnessing synergies between businesses.

Kawata: Our aggressive M&A strategy over the last few years has led to growth in the number of internal organizations and personnel. That means lateral communication within the Group is more important than ever. In particular, the composition of the Group's workforce seems to change every year. The goal of our M&A deals has been to create synergies to drive forward individual businesses and the Group as a whole, rather than simply add on more people and profits. In many cases, businesses that seem to have little in common have uncovered areas of collaboration in surprising places. Identifying that potential depends on innovative thinking and communication.

Fujino: In discussions at board meetings, it was clear to me that M&A deals are now an indispensable part of business, but also that they are difficult to achieve. Speed and timing are key to successful deals, and although we can assess risk beforehand, there is no way of knowing for sure how well a company is doing until the deal has been finalized. We naturally conduct rigorous due diligence, but the post-merger integration (PMI) process has a large impact on the extent of synergies generated after the deal closes. The Nisshinbo Group draws on its track record from past deals, but it also needs to keep building up experience in business mergers.

Kawata: I agree. The PMI process is particularly important. The Group has to review the outcomes of past M&A deals and



learn from experience. We will continue to accumulate know-how, learning as we go along.

Fujino: The Group needs to have a clear strategic direction to ensure M&A strategy is effective. Nisshinbo is aiming to be an *Environment and Energy Company* group. As well as implementing an M&A strategy in line with that goal, Nisshinbo should define its vision and narrative more clearly for internal and external stakeholders to ensure accountability.

Kawata: Amid rising interest in ESG, the consensus worldwide is that companies have to tackle environmental themes if they want to remain viable.



In the automotive field – one of the Group's key business areas – a concept called CASE* is gaining ground. As the concept becomes more widespread, we will see growing interest in environmental and energy issues driven by growth in car sharing services, vehicle electrification and other trends. The Nisshinbo Group will also step up the supply of environmental and energy-related products by developing copper-free friction materials, devices for fuel cell vehicles and other automotive products.

We have to avoid making decisions that are focused on short-term gains and that are out of step with those trends. In that context, M&A deals that serve only to increase business volume are meaningless.

Japanese companies are seen as lagging behind their overseas counterparts in ESG, but I think that reflects a lack of accountability and communication on our part. As the saying goes, "a word to the wise is enough." Many countries overseas do not have Japan's so-called high-context culture, so Japanese companies operating in the global market need to be more explicit about communicating their strengths and goals. That is part of what it means to be accountable to stakeholders. Given those trends, I'm pleased to say that our 2017 Integrated

Report was rated as excellent by the GPIF's domestic external asset managers, showing that our efforts to communicate with investors is paying off. We plan to continue enhancing our IR and PR capabilities going forward.

* Connected, Autonomous, Shared, Electric

Promoting Employees to Support Nisshinbo's New Era

Fujino: Business leaders in their 30s are no longer rare in Japan, particularly at Internet firms and in other emerging industries. In contrast, people looking at Nisshinbo from the outside will probably see a traditional Japanese manufacturer with a clear hierarchical structure. To support the Nisshinbo Group's new era, we need a much more flexible personnel strategy, including measures to promote diversity. I have high hopes for younger employees, who have the unique insights we need to address society's emerging needs and uncover hidden business opportunities. We also have to rate our employees based on their unique skills and value, not only on their work experience. To harness the Group's potential, we should consider early promotions for promising leadership candidates who can fill key management positions, in order to accelerate personnel development.



Kawata: The key to rapidly enhancing the capabilities of our staff is to give them a kind of "intellectual trial by fire." But that has to come from hands-on experience, not from training alone. We see significant improvements in the capabilities of younger employees who have been posted overseas, where they often have to manage teams of local employees. The connections they make with local people and culture and their new-found global perspective become important strengths in their careers later on. We now have to work out how to cultivate that type of employee in Japan. We also plan to actively send promising female employees to overseas positions, provided conditions are safe, as part of our earlier-mentioned efforts to train and support female staff. It will take time to break down barriers in organizations at core Group companies, but as we move into new business fields, we will create new companies and consider appointing young, capable employees to lead them.

Today's dialogue was very useful. Normal meetings of the Board of Directors are efficiently run, but we usually have to work through a large number of agenda points. I hope we can create more opportunities like this for detailed and wide-ranging conversations with outside directors.

Fujino: I couldn't agree more. As an outside director, I look forward to offering more advice to the board.

Board of Directors, Audit & Supervisory Board Members and Managing Officers

(As of June 28, 2018)

Board of Directors



Director,*1
President

Masaya Kawata



Director,*1
Vice President

Masahiro Murakami

Chief of Corporate Strategy Center
Responsible for Property Management
Department



Director,
Senior Executive Managing Officer

Kenji Ara

President, Japan Radio Co., Ltd.



Director,
Executive Managing Officer

Ryo Ogura

President, New Japan Radio Co., Ltd.



Director,
Executive Managing Officer

Takayoshi Okugawa

Chief of Business Support Center



Director,
Executive Managing Officer

Koji Nishihara

Chairman, Nisshinbo Brake Inc.



Director*2

Tomofumi Akiyama

Chairman,
Fukoku Mutual Life Insurance Company



Director*2

Noboru Matsuda

Lawyer



Director*2

Yoshinori Shimizu

Professor Emeritus at Hitotsubashi
University



Director*2

Shinobu Fujino

Career Counselor

*1 Representative director *2 Outside director

Audit & Supervisory Board Members



Yoichi Fujiwara



Takumi Ohmoto



Yo Kawakami*



Shiro Manabe*

Director and Managing
Executive Officer,
Shikoku Chemicals Corporation

* Outside Audit & Supervisory Board member

Managing Officers

President

Masaya Kawata*

Vice President

Masahiro Murakami*

Senior Executive
Managing Officer

Kenji Ara*

Executive Managing
Officers

Ryo Ogura*

Takayoshi Okugawa*

Koji Nishihara*

* Concurrent board member



Executive Managing Officer

Toshihiro Kijima

General Manager,
Business Development Division



Executive Managing Officer

Kazunori Baba

President, Nisshinbo Textile Inc.



Managing Officer

Akihiro Ishizaka

Senior Manager of Corporate
Strategy Department, Corporate
Governance Department and
Automotive Business Strategy
Department



Managing Officer

Makoto Sugiyama

Senior Manager of CSR Department,
Diversity Development Department,
Human Resources and
Administration Service Department
and Overseas Administration Service
Department



Managing Officer

Yasuji Ishii

President, Nisshinbo Brake Inc.



Managing Officer

Toshihiro Masuda

President, Nisshinbo
Mechatronics Inc.



Managing Officer

Shuji Tsukatani

Senior Manager of Finance,
Accounting and IT Service
Department



Managing Officer

Akihiro Kamei

President, Nisshinbo Chemical Inc.

Corporate Governance

Nisshinbo believes it needs to increase corporate value over the medium and long term as an *Environment and Energy Company* group by operating its various businesses based on the three key principles in its Corporate Philosophy – Public Entity, Consistent Integrity and Innovation – and on global business management and cash flow management. To achieve this, we are improving the quality of corporate governance and other aspects of our organizational culture. In parallel, we are striving to deliver quantitative growth in earnings and shareholder value, focusing on ROE to improve profitability and placing importance on the share price in management decisions.

By making rapid and bold decisions based on risk-taking in line with our management principles, we are working to enhance management efficiency while ensuring transparency, improve accountability, act ethically and build a stronger corporate governance structure founded on our Corporate Philosophy.

Corporate Governance Policy

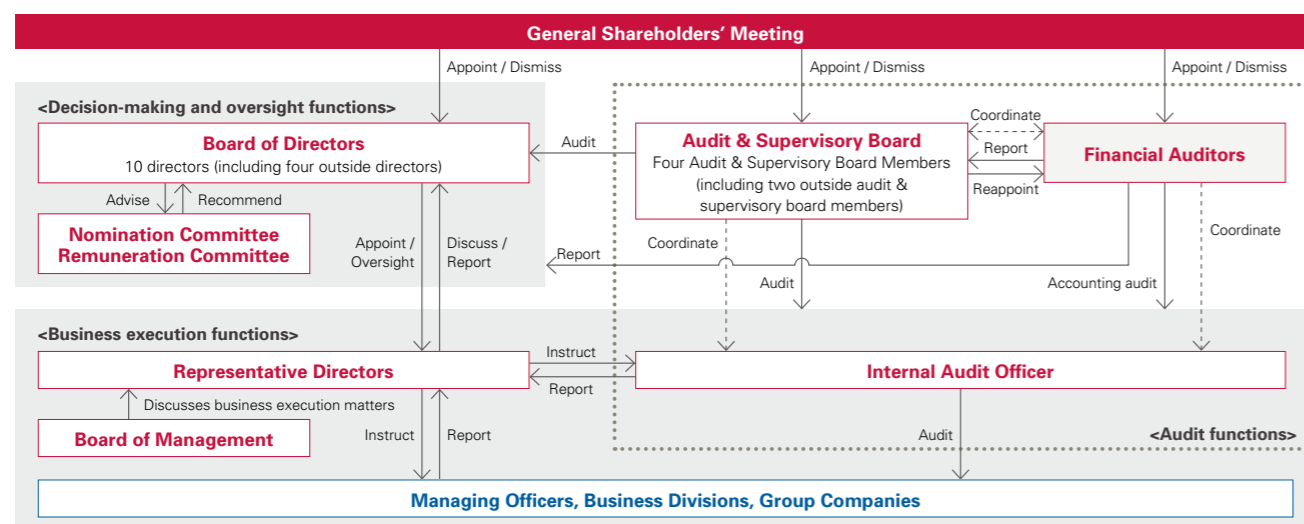
We have formulated the Nisshinbo Corporate Governance Policy, which clearly states our basic thinking on corporate governance and related initiatives. By steadily implementing the principles of the policy and revising and improving its content as needed, we aim to improve the effectiveness of governance and create a framework for rapid and bold decision-making that contributes to sustained growth and increased corporate value over the medium and long term.

Corporate Governance Structure

Nisshinbo has separated decision-making and oversight from business execution and adopted a managing officer system to reinforce those functions. By transferring responsibility for business execution to managing officers and strengthening oversight by the Board of Directors, we are improving management efficiency and transparency and creating an effective governance structure that will support the Group's sustained growth and enhance corporate value over the medium and long term.

Nisshinbo has established an Audit & Supervisory Board. The members of the Audit & Supervisory Board monitor the execution of duties by directors in accordance with audit policy and plans determined by the board.

Corporate Governance Structure



Representative Directors

Representative directors are appointed by resolutions of the Board of Directors. As of June 28, 2018, the president and vice president were the Company's two representative directors.

Directors

As of June 28, 2018, the Company had 10 directors, including four outside directors. The Board of Directors is responsible for making decisions on important management matters and for monitoring the execution of duties by directors. Directors are appointed for one-year terms in order to clarify management responsibility each fiscal year.

Managing Officers

Nisshinbo has adopted a managing officer system to speed up decision-making for business execution and clarify operational responsibilities. As of June 28, 2018, the Company had 14 managing officers, including five with dual roles as directors. Managing officers are also appointed for one-year terms.

Nisshinbo has appointed several outside directors and outside audit & supervisory members. These outside appointments also sit on the Company's voluntarily established Nomination Committee and Remuneration Committee.

We have adopted this structure as we believe it ensures operations are conducted in an appropriate manner. Under this structure, outside directors draw on their depth of experience and expertise to monitor business management from an objective and independent standpoint, while outside members and internally appointed standing members of the Audit & Supervisory Board work closely with the Internal Audit Office.

Securing the Rights and Equal Treatment of Shareholders

The Company shall ensure that the exercise of minority shareholder rights is not impeded and will take appropriate measures to fully protect shareholder rights. The Company will implement various measures related to communication with shareholders and investors and ensure the appropriate operation of the General Shareholders' Meeting.

With respect to cross-shareholdings, the Company may hold shares of business partners with the goal of maintaining and strengthening the business or alliance relationship, to the extent deemed necessary from the standpoint of raising corporate value. These cross-shareholdings are regularly assessed to determine the necessity of the holdings and the presence or absence of economic rationality. The results of the assessments are reported to the Board of Directors, which discusses the merits of continuing to hold the shares or selling them.

The exercise of voting rights related to cross-shareholdings shall be performed after deciding in each individual case the purpose of the holdings from the standpoint of raising the corporate value of the Company and the relevant business partner.

Nisshinbo has not adopted takeover defense measures. In the event that the Company decides to implement a capital

policy that could harm the interests of shareholders, the Company will provide a clear explanation to shareholders about the necessity and rationale for the policy and follow the necessary procedures.

Appropriate Cooperation with Stakeholders Other than Shareholders

As values shared by all officers and employees that serve as the basis for corporate governance initiatives, the Company has established the Nisshinbo Group Corporate Philosophy. The Company has also established the Business Conduct Guidelines of the Nisshinbo Group to define standards of behavior expected of our executives and employees in six areas: compliance, the environment, human rights, workplace safety, product safety and procurement. Directors and managing officers take the initiative to provide this guidance by themselves and constantly educate employees on compliance with these guidelines and widely disseminate them.

Ensuring Appropriate Information Disclosure and Transparency

The Company carries out active corporate communication by appropriately combining statutory disclosures with voluntary information. When disclosing information, the Company takes into account the convenience and accessibility of the information for the user, including high-value-added non-financial information. In addition, the Company shall disseminate information in English such as by preparing English-language annual integrated reports.

To increase the transparency and objectivity of the nomination and appointment process for directors, Audit & Supervisory Board members and managing officers, the Company has appointed independent outside directors to the Remuneration Committee and the Nomination Committee, which are positioned as advisory bodies of the Board of Directors.

Remuneration for Directors and Auditors (Fiscal year ended March 2018)

Classification	Total remuneration (Millions of yen)	Remuneration breakdown (Millions of yen)			Total number of payees
		Basic remuneration	Stock options	Bonus	
Directors (Excluding outside directors)	170	133	7	29	7
Audit and Supervisory Board members (Excluding outside audit and supervisory board members)	32	32	—	—	2
Outside directors and outside Audit and Supervisory Board members	52	52	—	—	7

Notes: 1. Total maximum compensation
Directors: ¥400 million per year (Employee salaries of individuals simultaneously appointed as employee and director are not included in payments to directors. Directors are also eligible to receive subscription rights to new shares as stock options, up to a maximum value of ¥40 million per year).
Audit & Supervisory Board members: ¥70 million per year
2. The Company had 10 directors and four Audit & Supervisory Board members as of March 31, 2018.

Responsibilities of the Board

Directors and the Board of Directors recognize that they have a fiduciary duty to shareholders and thus strive to appropriately reflect shareholders' intentions within the board. By overseeing the preparation and management of internal control and risk management systems, directors and the board help to monitor business execution and decision-making. At the same time, the Company fearlessly confronts risk and works to achieve governance that is focused on quick and bold decision-making. In this manner, the Company aims to achieve greater accountability to stakeholders, increased profitability, and higher returns for shareholders.

In light of the above, the Board of Directors deliberates and decides on important management matters at board meetings, such as the formulation of management strategies and plans, changes to the business portfolio group structure, and the implementation of M&As. These management matters are determined based on the criteria for agenda items stipulated under the Companies Act of Japan, other statutory and regulatory requirements, and various internal rules that govern the Board of Directors and the delegation of authority. Further, in its deliberations and decisions, the board keeps the following matters in mind.

- Alignment with corporate philosophy and management policy
- Compliance with laws and regulations and corporate ethics
- Increasing medium- to long-term corporate value
- Securing the trust of various stakeholders including shareholders, customers, employees, business partners, and local communities

To promote the globalization of each Nisshinbo company along the lines of environment and energy, the Board of Directors selects personnel who possess extensive management and professional experience and high-level expertise and who can enrich and ensure the diversity of the board. The current Board of Directors is composed of 10 directors, of which four are independent outside directors (including one woman). The maximum number of directors is set at 14 in the Company's Articles of Incorporation.

With respect to independent outside directors, the Board of Directors shall obtain the consent of the person in question and appoint them after carefully determining their eligibility as an independent director, taking into consideration the external requirements set forth in the Companies Act and the independence standards set by securities exchanges. To ensure that outside directors and outside Audit & Supervisory Board members are able to properly fulfill their roles and responsibilities, when nominating a candidate, the Company shall understand the status of officers who concurrently serve in other listed companies or companies and organizations that correspond to such, and verify

that it will not interfere in their attendance of the Company's Board of Directors meetings, Audit & Supervisory Board meetings, or their work.

Independent Outside Directors at Nisshinbo Holdings Inc.

Name	Reasons for appointment
Tomofumi Akiyama	Mr. Akiyama has extensive experience in corporate management through his previous role as President of Fukoku Mutual Life Insurance Company. Drawing on his extensive management experience and judgment, Mr. Akiyama provides oversight of management activities at the Nisshinbo Group.
Noboru Matsuda	Mr. Matsuda has experience as a public prosecutor and lawyer and has specialist legal knowledge. Drawing on his highly specialist expertise, long track record and judgment, Mr. Matsuda provides oversight of management activities at the Nisshinbo Group.
Yoshinori Shimizu	Mr. Shimizu has specialist knowledge, mainly in the fields of finance and monetary affairs, in his role as a university professor. Drawing on his highly specialist expertise, long track record and judgment, Mr. Shimizu provides oversight of management activities at the Nisshinbo Group.
Shinobu Fujino	Ms. Fujino has specialist knowledge and experience, mainly in the field of personnel development, in her role as a career counselor. Drawing on her extensive expertise and experience and her perspective as a woman, Ms. Fujino provides oversight of management activities at the Nisshinbo Group and contributes to the promotion of diversity management.

Dialogue with Shareholders

The IR Director, who oversees policies and measures related to communication with shareholders and investors, accurately and fairly disseminates information outside the Company and proactively conducts IR activities. The IR Director also strives to enhance the General Shareholders' Meeting, where senior management can interact directly with shareholders, and the results briefings and briefings to overseas investors. In addition, the Company plans and conducts individual meetings with domestic and overseas investors throughout the year.

If deemed necessary, the IR Director and other directors and managing officers take part in responding to applications for interviews from shareholders and investors.

The status of IR activities including measures and policies about communication with shareholders and investors is routinely reported to the Board of Directors where it is reviewed.

Measures to Improve the Effectiveness of the Board of Directors

As part of efforts to improve the effectiveness of the Board of Directors, the Company is taking a number of steps to ensure outside directors participate appropriately in board meeting discussions by putting forward their opinions.

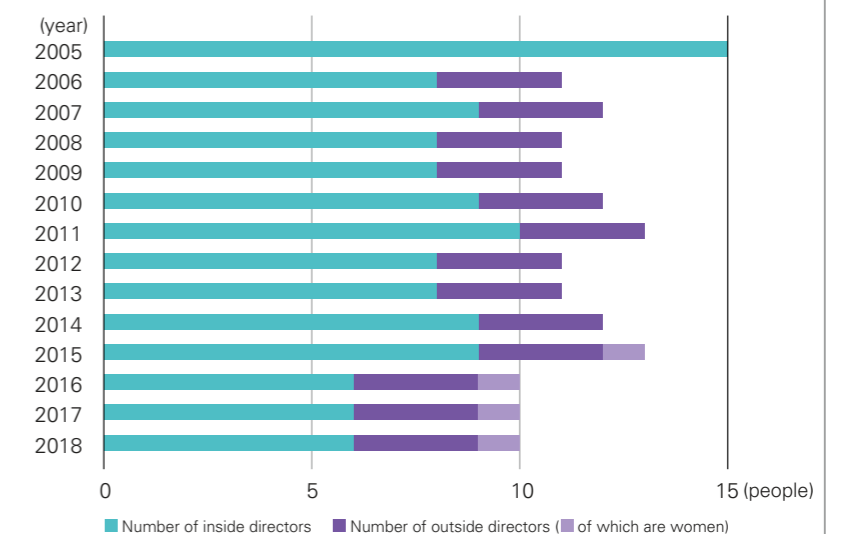
At the start of board meetings, the chairperson provides an overview of the Company's operating environment and current strategic direction, giving board members the necessary background to discuss the subsequent agenda points. In the case of highly specialist topics, outside directors are briefed beforehand to deepen their understanding. Key statements made during meetings are recorded in the minutes, allowing for appropriate feedback.

When necessary, board members are also given the opportunity to visit business sites and attend business briefings. In addition to board meetings, regular meetings are held between outside directors, Audit & Supervisory Board members and the president. Board members are also required to attend twice-yearly Management Policy Meetings with business managers and candidates for management posts, in order to deepen their understanding of the Group's business activities.

Corporate Governance Reforms

- 2006** Introduced outside director system and managing officer system, reduced term of office for directors from two years to one
- 2015** Increased number of outside directors from three to four
- 2016** Reduced number of board members from 13 to 10 (including four outside directors)
Established Remuneration Committee and Nomination Committee (both discretionary bodies), started evaluating effectiveness of Board of Directors
- 2017** Abolished internal advisor and consultant system
- 2018** Introduced restricted stock compensation system

Composition of the Board of Directors



Survey of Directors and Audit & Supervisory Board Members

In April each year, the Company surveys all directors and all audit & supervisory board members about the effectiveness of the Board of Directors. Responses to this year's survey were again collated and reported to the board. The survey was used to assess the effectiveness of the Board of Directors and to discuss improvements by helping the board understand the current situation, identify and analyze any issues and compare responses with those in the previous year's survey. The following areas were assessed:

1. Operation of the Board of Directors
2. Discussions by the Board of Directors
3. Composition of the Board of Directors
4. Provision of information and training opportunities to the Board of Directors

The results of the survey indicate that the 10 directors, including four outside directors with diverse backgrounds, have dynamic discussions during board meetings, and that the board is appropriately fulfilling its decision-making function for key management matters and its oversight function for business execution. To further improve the effectiveness of the Board of Directors, Nisshinbo has revised its criteria for raising and validating matters discussed by the board and worked to create clear documents and explanations for board members. In board meetings, the weighting for matters related to management strategy and medium- to long-term business objectives has been raised further in order to stimulate and deepen discussion by the board.

Risk Management

In order to fulfill its corporate social responsibility by contributing to society through ongoing business activities, the Nisshinbo Group has established systems to ensure stable operations by mitigating a range of risks that could have a serious impact on the smooth operation of its business.

Crisis Management System and Disaster Rapid Response System

Firefighting teams at each Group business site have access to compact water pumps, chemical protection suits, life-saving equipment, chemical fire trucks and other equipment suited to the facilities and location of each site. As part of efforts to improve emergency response capabilities, business sites also conduct regular rapid response drills to increase readiness for early-stage fires, life-saving situations and other potential emergencies such as gas or chemical leaks.

Major business sites also conduct comprehensive disaster drills, which are reviewed by managing officers, to ensure disaster prevention management activities remain at a high state of readiness.

Initiatives to Ensure Business Continuity

As explained above, the Nisshinbo Group has conducted disaster drills as part of disaster readiness inspections for some time, helping to adjust and improve disaster and fire prevention plans. In the past, disaster drills focused on first-response training at individual business sites, but the Group now recognizes that a coordinated and joint response by damaged facilities, business segments, head office divisions and Nisshinbo Holdings is an essential part of responding to a major earthquake or other disaster that causes widespread damage. After the initial response phase, when human and physical damage is ascertained following the disaster (usually completed within 72 hours), the

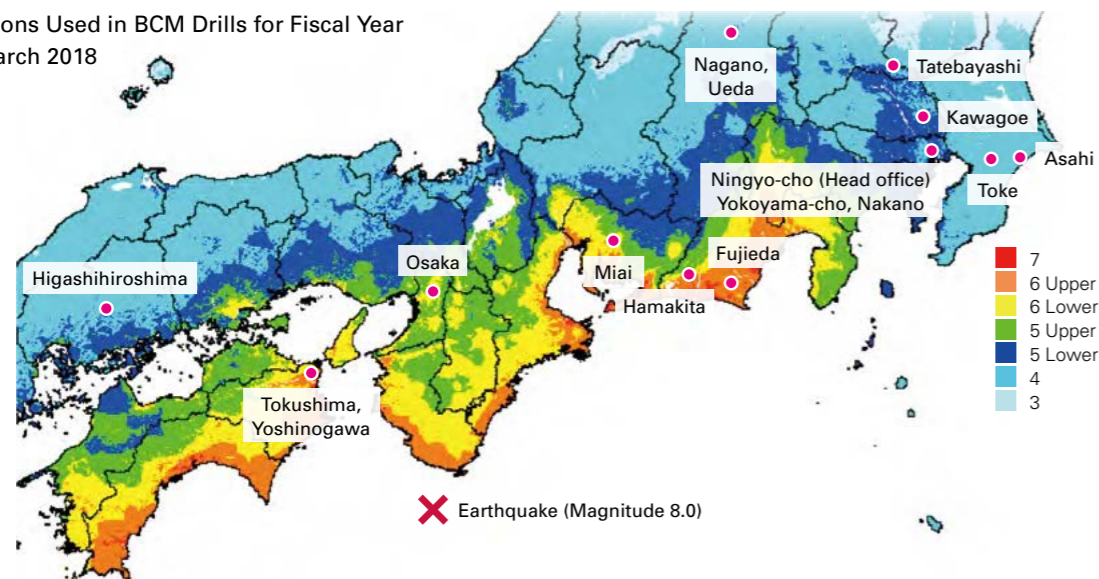
management team decides whether to activate the Group's business continuity plan (BCP).

To prepare for that kind of scenario, we started running business continuity management (BCM) drills in the fiscal year ended March 2016. In the fiscal year ended March 2018, we held our third BCM drill, which ran from August 31 to September 1, 2017. The key elements of the drill were as follows:

- **Safety confirmation and emergency contact system drill:** All of the approximately 12,000 domestic employees in the Nisshinbo Group, including those at domestic affiliates, practiced uploading their information to the system.
- **Emergency reporting drill:** The 12 emergency contacts at each Group company reported the situation at their sites to the Group Crisis Response Team. The method of reporting emergencies (emails sent to a designated address) was carefully rechecked.
- **Group Crisis Response Team drill:** A Nisshinbo Holdings Emergency Headquarters led by the president, was set up at Nisshinbo's head office building and used to conduct practical training drills.

The drill was completed one hour earlier than planned due to an improvement in the abilities of participants compared with the previous fiscal year. We will continue to increase the Group's proficiency through regular training drills, as rapid and accurate information gathering and calm judgment will be needed in the event of an actual emergency.

Assumptions Used in BCM Drills for Fiscal Year Ended March 2018



Initiatives to Protect Personal Information

The Nisshinbo Group recognizes that one of its key corporate social responsibilities is to ensure important information related to all its stakeholders is protected and managed appropriately. In order to fulfill this responsibility, the Company handles personal information in accordance with its internal privacy policy. In addition, internal audits are conducted in line with Company regulations to ensure systems are working properly, and steps are taken to prevent data leaks and realize ongoing improvements.

In addition, to raise awareness about the importance of protecting personal information among all our employees, we provide training when employees join the Group or on promotion, and run training programs at individual business sites in line with annual plans. Also, with the start of Japan's new national identity system in January 2016, we formulated new regulations governing the handling of personally identifiable information and responded to changes in the EU's system for protecting personnel information, which came into effect in May 2018.

Initiatives to Ensure Information Security

The Nisshinbo Group is constantly reinforcing information security measures to prevent leaks of personal information about

customers and other sensitive information.

Nisshinbo widely uses anti-virus software, an email monitoring system to prevent targeted mail system attacks and installs security update programs to ensure its IT devices and systems are fully protected against attack from computer viruses. We also use an information security management system to monitor access to critical data and prevent unauthorized IT devices from accessing our network. Using these tools, we are working to prevent and control internal data leaks and block external attacks on our systems.

Group companies are required to follow information security guidelines. To ensure continuous improvement in information security, we conduct regular internal IT audits of domestic subsidiaries to confirm the guidelines are being followed. We are working to raise awareness of information security among users of IT systems across the Group through regular training programs using learning materials that clearly set out rules to be followed.

In addition, we are migrating the Company's business servers from an internal location to an external data center to ensure business continuity in the event of a major natural disaster.

Compliance

Based on two principles in its Corporate Philosophy – Public Entity and Consistent Integrity – the Nisshinbo Group's mission is to act with fairness and integrity in order to contribute to society through its business activities. We have formulated the Nisshinbo Group Business Conduct Guidelines in order to win trust from the public through fair and honest business activities.

Corporate Ethics Committee

Nisshinbo has established a Corporate Ethics Committee to handle all compliance matters across the Group. The committee answers directly to the president and is led by a director with a dual role as a managing officer.

The Corporate Ethics Committee is responsible for (1) implementing corporate ethics systems and regulations, (2) deciding the content and methods of corporate ethics training for employees, and (3) formulating and implementing investigations, responses, procedures and remedial measures related to consultations and reports received through the Company's Corporate Ethics Reporting System.

Corporate Ethics Reporting System

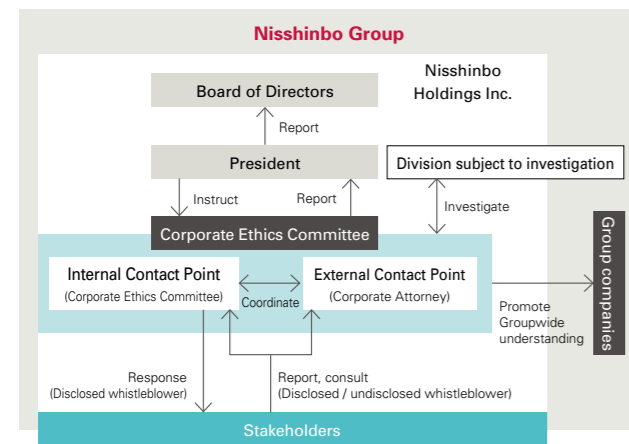
The Nisshinbo Group has established a Corporate Ethics Reporting System to rapidly identify and prevent any reoccurrence of poten-

tial or actual legal violations. Group employees and external parties can submit reports to the system. Group employees can use the system to communicate directly with the Corporate Ethics Committee or an outside corporate attorney. Every effort is made to protect those who have used the system from unfair treatment.

If the Corporate Ethics Committee receives a report via the system, it launches an investigation and takes appropriate action where necessary. If the outside corporate attorney receives a report, appropriate action is taken based on close cooperation with the Corporate Ethics Committee. Serious matters are promptly reported to the president. In the case of reports received from individuals who have provided their name and contact details, the Corporate Ethics Committee provides information to them, such as updates on the investigation and a summary of its conclusions. Regular reports are also submitted to the Board of Directors and the Audit & Supervisory Board to ensure any information and concerns reported to the committee

are dealt with in an objective manner. In addition, the Corporate Ethics Committee works to prevent any future violations of laws or corporate ethics by providing information to all companies in the Group about its response to the issue based on the results of the investigation.

Corporate Ethics Reporting System



Compliance Education

In order to ensure fair and honest business practices, the Nisshinbo Group conducts compliance training for different employee levels and work sites and provides training to employees prior to overseas assignments.

From the fiscal year ended March 2017, we added annual compliance training for all manager-grade employees in the Group to our list of KPIs in order to raise awareness about compliance. We also created a compliance training manual for managers in both Japanese and English to be used in training sessions across the Group.

In addition, compliance training is provided at each subsidiary in accordance with conditions in each country, region and industry.

Initiatives to Prevent Corruption

In recent years, countries worldwide have been reinforcing regulatory systems and stepping up efforts to prevent and expose bribery and corruption. Nisshinbo is working to prevent any such illegal activity, in line with rules in the Nisshinbo Group Business Conduct Guidelines. In the fiscal year ended March 2016, we published a Corruption Prevention Guidebook with information about related laws and regulations overseas, as well as in Japan. The guidebook is provided to all Group companies, including subsidiaries overseas. In addition to information about Article 18 of Japan's Unfair Competition Prevention Act (prohibition of provision of illicit profit, etc., to foreign public officials,

etc.), the guidebook provides information about international treaties and laws designed to prevent corruption, such as the United Nations Convention Against Corruption (UNCAC), OECD treaties on preventing corruption of overseas public officials in international transactions, the US Foreign Corrupt Practices Act (FCPA) and its related guidelines, and the UK Bribery Act. An updated guidebook containing the latest information was distributed to all the Group's subsidiaries in the fiscal year ended March 2018.

Ensuring Business Confidentiality

Nisshinbo signs non-disclosure agreements with suppliers to prevent any leak of confidential information such as intellectual property, technologies and expertise disclosed to them during the product design and development stage.

We also conduct annual internal audits to check whether the Group's trade secrets are being managed appropriately.

CSR Procurement Basic Policy

As part of its corporate social responsibility (CSR) initiatives, the Nisshinbo Group has set out its policy on procurement in the Nisshinbo Group Business Conduct Guidelines. The Group has also formulated the Nisshinbo Group CSR Procurement Basic Policy, clarifying its stance on seven specific areas: legal compliance, fair trade, information security, environmental protection, human rights, health and safety, and quality assurance.

1. To strictly observe all legal obligations and social norms
2. To always pursue business in a sound and fair manner
3. To properly manage all information
4. To give due consideration to protection of the environment
5. To respect all basic human rights
6. To strive for a secure and healthy living and working environment
7. To aim to ensure the quality and safety of all products and services

We are working to extend our CSR initiatives across the entire supply chain by asking suppliers to adhere to our principles in those seven areas.

To promote steady improvement in CSR procurement, each Group company is now required to formulate their own CSR Procurement Guidelines. In the fiscal year ended March 2018, Group companies also conducted supplier CSR surveys, which are now included in the Group's list of KPIs. Going forward, we will work closely with our suppliers to implement CSR procurement.

Financials

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The Nisshinbo Group's Financial Strategy

The Nisshinbo Group's long-term goals are ROE of 12% and sales of ¥1 trillion in the fiscal year ending December 2025. To achieve those goals, we will use capital investment to grow existing businesses, invest in R&D to create new businesses and advance strategic M&A deals. We are implementing the following financial strategy to secure funds in support of those efforts.



Takayoshi Okugawa
Executive Managing Officer
Chief of Business Support Center

Measures to Achieve Our Long-term Goals

Our long-term goals for 2025 and our balance sheet and profit projections for the same year are explained in the Message from the President (see pages 6-11 for more details). To reiterate what Mr. Kawata says, we aim to increase capital efficiency and achieve ROE of 12% by prioritizing growth in operating income. Specifically, we will streamline the balance sheet to create a leaner company, while also aiming to generate operating income of ¥70-80 billion and lift the operating margin to around 7-8%.

Guided by the main principles of the Group's Corporate Philosophy — Public Entity, Consistent Integrity, and Innovation — Nisshinbo, as an *Environment and Energy Company* group, is channeling management resources into businesses related to the

automotive and super smart society fields as part of its medium- to long-term business strategy. Reflecting that approach, we have separated investment into two categories — growth investment and underlying investment. To achieve our strategy objectives, the operating margin in growth businesses will have to be higher than in existing businesses. All investment decisions will take into account the Group's cost of capital, which is currently around 6%.

Procuring and Allocating Funds to Invest in Growth

In the fiscal year ended March 2018, operating income and net income both exceeded start-of-year forecasts. However, looking back at the previous three years, we fell short of our forecasts in each fiscal year and it was imperative that we improved the earnings capabilities of our businesses to also help us procure funds on better terms.

As I mentioned earlier, we need to make timely investments in growth fields to strengthen earnings. In the automobile brakes business, we have moved quickly to respond to tighter regulations on brake friction materials in North America by developing copper-free friction materials. Orders for those materials have been strong, so we approved an investment to increase production capacity. The micro devices business, which has strengthened its presence in the market with the acquisition of Ricoh Electronic Devices Co., Ltd. earlier this year, will also invest heavily to address projected growth in demand for devices used in automotive and industrial machinery applications.

Meanwhile, we aim to invest the equivalent of roughly 4% of sales in research and development. We need to maintain that level of investment to generate cash flow in the future. Again, investment in research and development will be targeted on businesses in the automotive and super smart society fields, where demand for investment is strong. Examples include Nisshinbo's parts and materials for fuel cell vehicles, which attracted considerable attention in the media in autumn 2017, and the establishment of JRC Mobility Inc. (see page 17 for more details).

To help us generate the cash for those investments, we will need to tighten inventory management even further. As of March 31, 2018, inventory assets stood at roughly ¥100 billion. Even taking into account the characteristics of each business, I'm confident we can reduce inventories to support cash flow. Specifically, our businesses need to firmly take the initiative and set targets that will drive change in their operations and cut inventories. We are also selling real estate assets and securities holdings to procure funds for investment. We have formulated the Nisshinbo Corporate Governance Policy based on Japan's Corporate Governance Code. In line with our policy, we remain committed to reducing cross-shareholdings and we regularly assess the purpose and economic rationale for holding those shares.

We expect to seek funding from external sources to meet strong demand for funds across the Group. Interest-bearing debt is currently just under ¥150 billion, but we have the capacity to lift that to ¥200 billion without putting stress on the business. However, with interest rates now rising in Europe and North America and the economic outlook increasingly hard to read, we have to be a little more cautious than before.

Supporting the Group's Global Strategy

The Nisshinbo Group is stepping up efforts to create a global business to drive sustained growth. In the fiscal year ended March 2018, the overseas sales ratio reached 47%, and we expect the ratio to rise even higher. That accelerating global expansion is leading to an increase in the number of subsidiaries based overseas. Given that trend, we recently appointed Deloitte Touche Tohmatsu LLC as an additional auditing firm to help us widen and strengthen auditing procedures.

We also decided to change the Group's consolidated fiscal year-end from March 31 to December 31 to increase the efficiency of Group operations and to enhance management transparency by improving the timing and quality of corporate disclosures. We next plan to look at the possibility of adopting international financial reporting standards (IFRS).

Another trend in our increasingly global business is the growing need to deal with tax matters and cross-border transactions in each market, particularly in emerging economies. We plan to reinforce tax governance processes as a management priority.

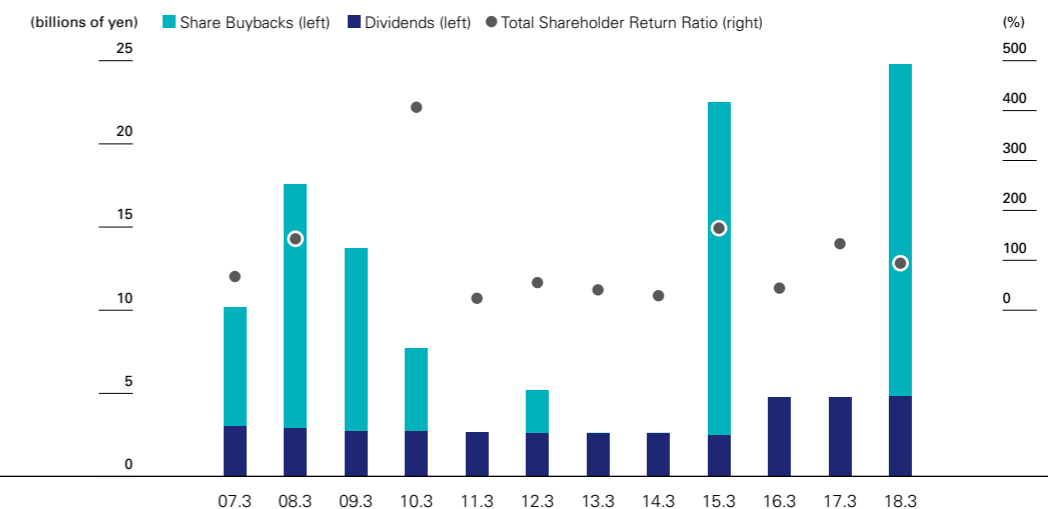
Shareholder Return Policy

The Nisshinbo Group is targeting a consolidated dividend payout ratio of roughly 30% through stable and consistent dividends. For the fiscal year ended March 2018, we maintained the annual dividend at ¥30 per share. Going forward, we are committed to paying a base-level dividend of ¥30 per share. When the Group has sufficient internal reserves to fund investment in growth, such as research and development, increases in capital investment and M&A deals, we will endeavor to return profits to shareholders through dividend hikes and share buybacks after taking into account the Group's financial stability.

Recent Performance

	2015		2016		2017		2018	
	Initial forecast	Actual	Initial forecast	Actual	Initial forecast	Actual	Initial forecast	Actual
Net Sales	530,000	523,758	550,000	533,989	570,000	527,274	520,000	512,048
Operating Income	18,000	13,744	20,000	12,617	16,000	4,890	15,000	15,086
Ordinary Income	22,000	20,650	25,000	17,034	21,000	10,556	20,000	19,700
Net Income Attributable to Owners of Nisshinbo Holdings Inc.	10,000	13,694	16,000	10,776	10,000	3,575	20,000	26,352

Dividends, Share Buybacks and Total Shareholder Return Ratio



Note: Total shareholder return ratio not shown for the fiscal year ended March 2009 due to losses in that year.

Eleven-Year Summary

(For the years ended March 31)

(millions of yen)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Operating Results											
Net Sales	¥322,412	¥286,167	¥242,409	¥325,555	¥379,340	¥450,693	¥494,350	¥523,758	¥533,989	¥527,274	¥512,048
Electronics	76,475	60,549	51,699	112,820	169,907	175,308	187,743	209,116	205,368	190,852	193,621
Automobile Brakes	59,812	49,230	41,046	46,119	47,450	118,849	148,699	161,887	165,037	146,062	154,205
Precision Instruments	34,021	35,602	24,908	32,020	25,191	24,520	28,655	28,608	29,525	60,687	64,918
Chemicals	9,582	8,059	6,309	7,284	8,258	8,150	8,810	8,138	8,285	9,483	11,285
Textiles	76,094	64,392	53,222	57,400	60,964	54,736	54,630	51,073	60,127	55,842	54,640
Papers	33,547	34,214	31,536	30,326	30,220	30,524	31,686	31,280	32,585	32,648	—
Real Estate	5,010	6,011	6,298	12,437	9,082	15,367	10,567	9,246	8,358	8,084	8,406
Other Businesses	27,871	28,110	27,391	27,149	28,268	23,239	23,560	24,410	24,704	23,616	24,973
Operating Income	12,034	408	3,570	19,843	4,170	13,394	13,175	13,744	12,617	4,890	15,086
Net Income (Loss) Attributable to Owners of Nisshinbo Holdings Inc.	12,290	(1,286)	1,896	11,185	9,416	6,418	9,012	13,694	10,776	3,575	26,352
Financial Position											
Equity	¥245,909	¥193,698	¥193,639	¥211,557	¥213,751	¥242,623	¥276,865	¥306,938	¥284,472	¥275,753	¥290,434
Total Assets	424,706	366,858	358,110	479,852	534,584	551,933	611,311	678,486	651,793	646,288	654,227
Capital Expenditures	24,280	16,872	13,027	12,800	15,705	20,123	19,896	36,909	22,862	30,505	30,103
Depreciation and Amortization	16,890	18,025	12,960	13,158	14,550	18,969	21,486	23,111	22,571	22,264	22,183
Cash Flows											
Net Cash Provided by Operating Activities	¥24,779	¥11,939	¥27,538	¥16,529	¥12,974	¥34,095	¥26,075	¥37,120	¥39,566	¥26,768	¥32,415
Net Cash Provided by (Used in) Investing Activities	(19,147)	(14,393)	(9,949)	11,591	(57,861)	(10,973)	(19,862)	(21,271)	(22,793)	(31,429)	(1,798)
Net Cash Provided by (Used in) Financing Activities	(8,829)	11,940	(30,347)	703	16,835	(24,073)	(2,321)	(6,238)	(9,044)	3,595	(34,785)
											(yen)
Per Share											
Net Income (Loss) Attributable to Owners of Nisshinbo Holdings Inc.	¥63.34	¥(7.08)	¥10.38	¥63.32	¥53.83	¥36.74	¥51.60	¥80.33	¥67.93	¥22.52	¥160.59
Shareholders' Equity	1,179.43	985.19	1,034.04	1,036.80	1,063.19	1,198.67	1,369.78	1,634.07	1,472.26	1,444.94	1,659.29
Cash Dividends	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	30.00	30.00	30.00
											(%)
Key Ratios											
Shareholders' Equity Ratio	53.0	49.0	51.1	38.0	34.7	37.9	39.1	38.2	35.9	35.5	41.1
Return on Assets (ROA)	2.7	(0.3)	0.5	2.7	1.9	1.2	1.5	2.1	1.6	0.6	4.0
Return on Equity (ROE)	5.1	(0.6)	1.0	6.1	5.1	3.2	4.0	5.5	4.4	1.5	10.6
Payout Ratio	23.6	—	144.5	23.7	27.9	40.8	29.1	18.7	44.2	133.2	18.7
ESG Indicators											
Number of Employees	13,253	12,726	12,488	18,292	22,304	22,083	22,052	21,387	23,055	23,256	23,104
Number of Patents Approved	—	—	—	1,986	1,986	2,293	2,448	2,424	2,441	2,402	2,399
Greenhouse Gas Emissions per Unit of Sales (t-CO ₂ /million yen)	—	—	—	—	—	—	1.372	1.330	1.267	1.311	1.279

Notes: 1. In the fiscal year ended March 2017, Iwao & Co., Ltd. was merged with Nisshin Toa Inc., both of which are consolidated subsidiaries. The apparel textile operations of Iwao & Co., Ltd. included in the other businesses segment were reclassified under the textiles business segment as a result. Figures from the fiscal year ended March 2013 have been adjusted to reflect this change.

2. The Group's elastomer operations were transferred from the chemicals business to the textiles business in the fiscal year ended March 2016. Figures from the fiscal year ended March 2015 have been adjusted to reflect this change.

Management's Discussion and Analysis

Highlights

- All businesses performed well, but net sales declined due to the sale of the papers business at the start of the fiscal year.
- Operating income increased sharply, reflecting a large improvement in profitability at Japan Radio Co., Ltd. and the end of the amortization schedule for TMD goodwill.
- The next fiscal period will be a transitional period ending on December 31, 2018, due to a change in fiscal year-end.

Operating Results

The Nisshinbo Group reported net sales of ¥512,048 million (US\$4,877 million), down 2.9% year on year. Sales increased in the electronics, automobile brakes, precision instruments and chemicals businesses, but net sales declined, mainly due to the sale of the papers business.

Operating income increased 208.5% year on year to ¥15,086 million (US\$144 million), largely reflecting a move into profit at Japan Radio in the electronics business and higher profits in the automobile brakes business due to the completion of the amortization schedule at the end of the previous fiscal year for goodwill related to the TMD acquisition.

Net income attributable to owners of Nisshinbo Holdings Inc. rose 637.2% to ¥26,352 million (US\$251 million). The large increase mainly reflected the booking of gain on sales of shares of subsidiaries and gain on sales of property, plant and equipment due to the transfer of the papers business.

In March 2018, the Company acquired 80% of outstanding shares in Ricoh Electronic Devices Co., Ltd., making it a consolidated subsidiary. The company, which is focused on analog power management integrated circuits (PMICs), will help the Nisshinbo Group accelerate the expansion of its semiconductor and electronic devices businesses, particularly in the promising automotive and IoT fields. At this point, only the financial position (balance sheet) of Ricoh

Electronic Devices has been reflected in the Company's consolidated balance sheets, as of March 31, 2018. We started reflecting earnings (income statement) and goodwill amortization in the consolidated statements of income from the fiscal period ending December 31, 2018.

Average exchange rates for the fiscal year ended March 31, 2018 were ¥112.04/US\$ and ¥127.22/€. For the fiscal period ending December 31, 2018, we assume average exchange rates of ¥110/US\$ and ¥130/€.

Medium-term Management Strategy

One of the key principles of the Nisshinbo Group Corporate Philosophy is Public Entity, which expresses our desire to contribute to society through our business activities, while also developing the Company to benefit stakeholders. We will step up efforts to realize that philosophy by increasing our focus on environmental, social and corporate governance issues, and by providing solutions that address some of the biggest issues faced by society today, such as environmental destruction and global warming, to make life safer and more secure for people everywhere.

Guided by that philosophy and approach, the Group is focusing on four strategic business areas: wireless

communications and electronics, automotive parts and devices, lifestyle and materials, and new energy and smart society. Specifically, we are pursuing tireless innovation to reinforce existing businesses, leveraging the results of R&D projects and actively seeking M&A opportunities.

Going forward, we will implement our growth strategy by first channeling management resources into businesses in the automotive field and the super smart society field.

In the automobile brakes field, we have started production of friction materials that are compatible with new regulations on copper content, demand for which is projected to expand worldwide. In the US, new regulations are scheduled to come into effect from 2021 that will limit the use of copper in brake friction materials to prevent water pollution. The Nisshinbo Group has moved quickly to develop friction materials with less or no copper and is one of the first in the industry to start mass production of materials that are compatible with the new regulations. We plan to steadily expand our lineup of those materials, aiming to grow our business by helping to protect the environment.

In the chemicals field, we are working towards the commercialization of parts for fuel cell vehicles (carbon bipolar plates and catalysts to replace platinum) by accelerating development through our strengthened alliance with Canadian company Ballard Power Systems Inc., a global pioneer in fuel cells.

In the electronics field, we are preparing to move into advanced driving assistance systems (ADAS) by leveraging the Group's strengths in wireless communication technology and electronic component manufacturing technology.

We will continue to focus on existing public infrastructure businesses such as disaster prevention systems and wireless communication systems for marine applications, but with Industry 4.0, the Internet of Things (IoT) and artificial intelligence (AI) gaining momentum, we plan to bring together our sensing and communication technologies to help create super smart societies. We will draw on our technologies and expertise in electronics, mechatronics

and chemicals and actively seek M&A targets and business partners to diversify our business, aiming to deliver results as an *Environmental and Energy Company* group. Based on the above approach, the Nisshinbo Group will work towards its long-term goals of net sales of ¥1 trillion and ROE of 12% in the fiscal year ending December 2025.

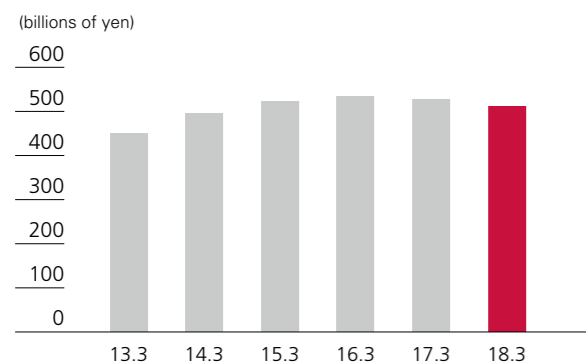
Change in Fiscal Year-end and Selection of Accounting Standards

The Company is changing its fiscal year-end from March 31 to December 31, effective from the fiscal period ending December 31, 2018. The transitional fiscal period ending December 2018 will include nine months of results (April 1, 2018 to December 31, 2018) for the Company and subsidiaries with March fiscal year-ends, 10 months of results (March 1, 2018 to December 31, 2018) for subsidiaries with February fiscal year-ends, and 12 months of results (January 1, 2018 to December 31, 2018) for subsidiaries with December fiscal year-ends, which will coincide with the new consolidated fiscal year.

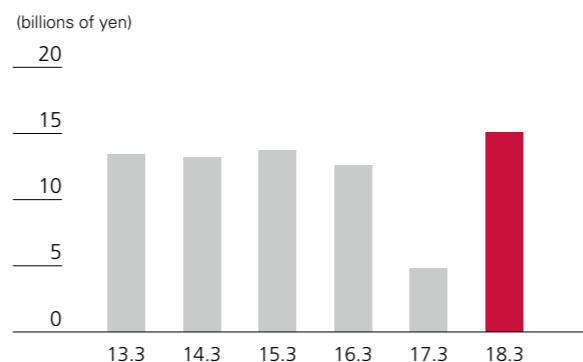
Japan Radio, which is part of the electronics business, tends to book a large proportion of sales and profits in January, February and March, because it supplies equipment to central government and local government agencies. As a result, April through December accounts for a relatively low weighting of net sales and profits in the Nisshinbo Group's consolidated results.

The Nisshinbo Group currently uses Japanese accounting standards. However, given that the Company's basic management policy is to develop its business globally, overseas operations are likely to account for a growing share of consolidated earnings. From that perspective, we are considering voluntarily adopting International Financial Reporting Standards (IFRS), a common set of global accounting standards. However, no final decision has been made on timing and other factors related to voluntary adoption of IFRS at this stage.

Net Sales



Operating Income



Segment Results

	Net Sales (millions of yen)		Segment Profit (millions of yen)	
Electronics	193,621	up 1.5%	3,022	improvement of ¥6,262 million
Automobile Brakes	154,205	up 5.6%	6,119	improvement of ¥6,126 million
Precision Instruments	64,918	up 7.0%	1,725	up 64.4%
Chemicals	11,285	up 19.0%	2,112	up 61.3%
Textiles	54,640	down 2.2%	1,876	up 5.5%
Real Estate	8,406	up 4.0%	5,067	down 12.8%
Other Businesses	24,973	up 5.7%	46	improvement of ¥137 million

Note: Changes in net sales and segment profit (loss) are year-on-year figures; please refer to pages 40 to 54 for details on performance in individual segments.

Dividend

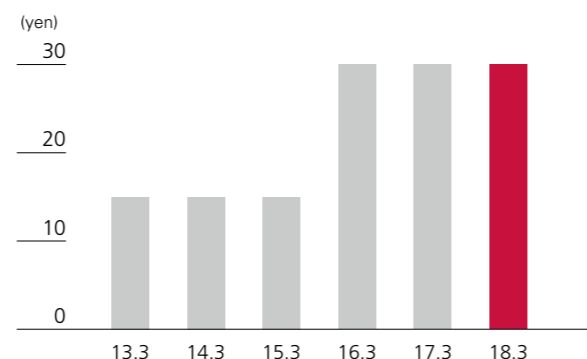
The full-year dividend for the fiscal year ended March 2018 is ¥30 (US\$0.29) per share, the same amount as for the previous fiscal year.

By focusing on ROE, Nisshinbo is aiming to deliver sustained increases in shareholder value through the distribution of profits and other means. We also intend to accelerate investment in areas that drive growth, such as R&D, capital expenditures and M&A, aiming to secure even greater support and trust from the public, markets and stakeholders as an *Environmental and Energy Company* group.

In principle, we intend to pay an interim dividend and a year-end dividend, targeting stable and consistent dividends based on a consolidated payout ratio target of around 30%.

Also, when the Group holds sufficient internal reserves to fund growth strategies, we plan to actively return profits to shareholders through share buybacks and other means after considering factors such as financial stability.

Cash Dividends



Financial Position

Total assets at the end of the fiscal year stood at ¥654,227 million (US\$6,231 million), an increase of ¥7,939 million from the end of the previous fiscal year. That mainly reflected increases of ¥5,599 million for inventories, ¥5,348 million for investment securities and ¥4,145 million for investments in and advances to unconsolidated subsidiaries and affiliates, and decreases of ¥3,372 million for cash and cash equivalents and ¥4,236 million for deferred tax assets.

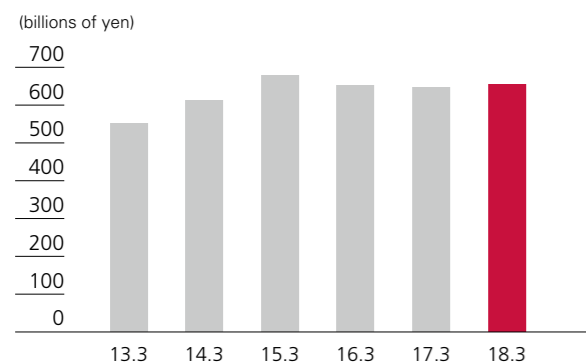
Total liabilities at the end of the fiscal year were ¥363,793 (US\$3,465 million), a decline of ¥6,742 million from the end of the previous fiscal year. The main changes in liabilities were increases of ¥5,108 million for payables, ¥1,225 million for accrued expenses and ¥2,747 million for accrued income taxes, and decreases of ¥2,665 million for

short-term bank loans, ¥3,033 million for other current liabilities, ¥5,471 million for long-term debt, ¥1,227 million for liabilities for retirement benefits and ¥3,415 million for deferred tax liabilities.

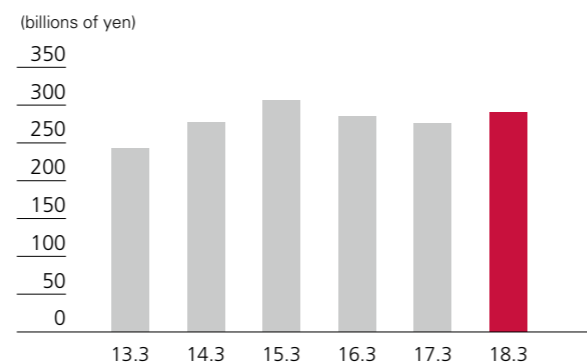
Equity at the end of the fiscal year totaled ¥290,434 million (US\$2,766 million), an increase of ¥14,681 million from the end of the previous fiscal year. That primarily reflected increases of ¥9,132 million for capital surplus, ¥21,588 million for retained earnings, ¥5,654 million for net unrealized gain on available-for-sale securities and ¥2,646 million for foreign currency translation adjustments, and a decrease of ¥24,644 million for noncontrolling interests.

As a result of the above, the shareholders' equity ratio increased 5.6 percentage points to 41.1%.

Total Assets



Equity



Cash Flows

Cash Flows from Operating Activities

Cash provided by operating activities totaled ¥32,415 million (US\$309 million), mainly reflecting cash provided of ¥33,487 million from income before income taxes and ¥22,183 million from depreciation and amortization, against cash used of ¥14,396 million for gain on sales of investment securities and investments in and advances to unconsolidated subsidiaries and affiliates, ¥5,092 million for gain on sales of property, plant and equipment and ¥4,375 million for equity in earnings of an unconsolidated subsidiary and affiliates.

Cash Flows from Investing Activities

Cash used in investing activities totaled ¥1,798 million (US\$17 million), primarily reflecting cash used of ¥29,567 million for purchase of property, plant and equipment and ¥6,914 million for purchase of investments in subsidiaries with changes in consolidation scope, against cash provided

of ¥8,110 million from proceeds from sales of property, plant and equipment, ¥6,009 million from proceeds from sales of investment securities and investments in and advances to nonconsolidated subsidiaries and affiliates, and ¥21,136 million from proceeds from sales of investments in subsidiaries with changes in consolidation scope.

Cash Flows from Financing Activities

Cash used in financing activities totaled ¥34,785 million (US\$331 million), mainly reflecting cash used of ¥8,327 million for the repayment of long-term debt, ¥4,764 million for cash dividends paid, and ¥20,011 million for purchase of treasury stock.

As a result of the above, cash and cash equivalents at the end of the fiscal year totaled ¥36,478 million, a decline of ¥3,372 million from the end of the previous fiscal year.

Production Results

Production results in each segment for the fiscal year under review were as follows:

Industry Segment	Amount (millions of yen)	Year-on-Year Change (%)
Electronics	194,999	+2.4
Automobile Brakes	123,367	+7.4
Precision Instruments	58,148	+5.1
Chemicals	7,178	+9.5
Textiles	34,500	-1.6
Other Businesses	611	+12.7
Total	418,803	-2.2

Notes: 1. Amounts are calculated based on manufacturing costs.

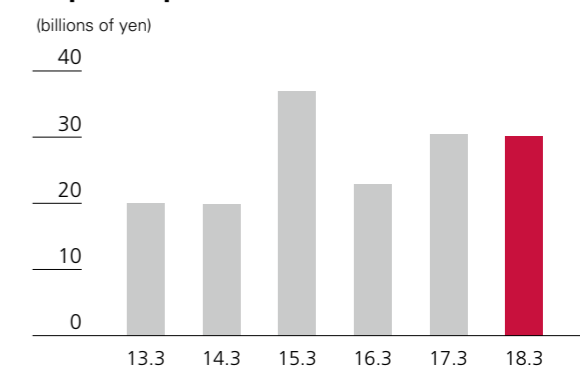
2. The real estate business does not engage in manufacturing, and therefore the above table does not include any amounts from this segment.

Capital Expenditures

The Nisshinbo Group channels its capital expenditures into priority product fields that offer the potential for long-term growth and into upgrading manufacturing equipment to raise product quality. It also invests in environmental initiatives such as the reduction of greenhouse gases and in manufacturing facilities to address rising demand in China, Southeast Asia and other emerging markets. As a result, in the fiscal year ended March 2018, capital expenditures totaled ¥30,103 million (US\$287 million). In the electronics business, Japan Radio invested ¥1,851 million, mainly in the marine systems business, and New Japan Radio invested ¥4,329 million, primarily in electronic device manufacturing and research and development facilities. In the automobile brakes business, TMD invested ¥8,754 million, mainly to expand friction material manufacturing facilities at TMD Friction Esco GmbH, a TMD consolidated subsidiary, and

Nisshinbo Brake Inc. invested ¥3,390 million, mainly in manufacturing and research and development facilities for products that are compatible with new regulations on copper content.

Capital Expenditures



Risk Information

Forward-looking statements in this report are based on information available to the Nisshinbo Group as of March 31, 2018.

Risks Associated with New Businesses

The Nisshinbo Group is actively developing new businesses such as carbon catalysts in order to expand sales and profits. However, uncertainties are inherent in new businesses and the development of appealing new products and the formation of new markets may not proceed as anticipated. This could delay or prevent the recovery of prior investments.

Risk of Fluctuation in the Value of Investment Securities

Investment securities held by Nisshinbo are marked to market in accordance with accounting standards for financial products, and the Company implements impairment accounting based on even stricter internal standards for a portion of these securities. Based on current accounting standards and standards for asset impairment, there is a limited possibility that impairment losses will have an impact on net income, as the acquisition cost of the investment securities was low. However, comprehensive income may fluctuate significantly owing to changes in market value. Also, the Company plans to limit increases in interest-bearing liabilities by selling investment securities to procure capital needed for mergers and acquisitions, overseas business development, and capital investment, but misalignment of the timing between sale and investment may give rise to unforeseen circumstances.

Risks Associated with Product Quality

The majority of the Nisshinbo Group manufactures products in accordance with international quality control standards, but there is no guarantee that quality-related problems will not occur in the future. The Company has product liability insurance, but the occurrence of a large liability could have an adverse impact on the Group's financial results.

Risks Associated with Market Shifts Relating to Product Sales Prices and Raw Material Procurement

Some of the Nisshinbo Group's products can be significantly affected by fluctuations in market prices owing to market developments and competition with other companies. Sales prices for textile products and raw materials procured by the Group such as cotton, steel and other materials are particularly susceptible to these market trends. The New Japan Radio Group generates more than 80% of its consolidated sales from semiconductor devices. Significant fluctuations in demand in the semiconductor market may therefore have a large impact on the Nisshinbo Group's financial results.

Risks Associated with Changes in Customer Business Performance

The customers of the Nisshinbo Group's automobile brakes business are automobile manufacturers that conduct business globally. The cancellation of contracts or requests to sharply reduce prices owing to changes in the business results of such client companies are factors outside the control of Nisshinbo, and consequently may have an impact on the Group's financial results.

The Japan Radio Group has a relatively high ratio of business with central and local governments, so sales tend to be concentrated in March. In addition, trends in central and local government spending plans and capital expenditures in the telecommunications sector may affect the Group's financial results.

Risks Associated with the Supply Chain

The Group may face difficulties in securing necessary components owing to changes in the economic environment. For example, rapid developments in specific parts supply regions and product fields may affect supply capacity at parts companies and lead to delivery delays. This in turn could impact the Group's shipment plans or lead to deterioration in margins owing to sharp increases in the price of components.

Risks Associated with Fluctuations in Exchange Rates

Fluctuations in foreign exchange rates can have an impact on the yen value of the Nisshinbo Group's revenues, expenses, receivables and payables arising from business transactions that are denominated in foreign currencies and on foreign currency translation adjustments in the financial statements related to overseas consolidated subsidiaries, which prepare their statements in foreign currencies. While the Group takes steps to mitigate the risk of exchange rate fluctuations, not all this risk can be avoided. Fluctuations in exchange rates may therefore affect the Group's financial results, with periods of yen appreciation putting pressure on profits.

Risks Associated with Unforeseen Revisions to Laws and Regulations

Products supplied by the Japan Radio Group are subject to a range of laws and regulations governing areas such as national security. These laws include export restrictions, import regulations and environmental and recycling laws. The Japan Radio Group has established clear internal regulations regarding compliance with these laws. However, unforeseen revisions to laws and regulations may limit the Group's business activities and lead to an increase in costs.

Risks Associated with Overseas Business Development

The Nisshinbo Group owns many production bases overseas. Risks inherent to this international presence include unforeseen changes in laws and regulations, unfavorable political or economic factors and social turmoil.

Risks Associated with Financial Covenants Related to Capital Procurement

The Nisshinbo Group has secured funding from multiple financial institutions. The Company and some consolidated subsidiaries have entered into commitment line contracts and term loan contracts. These companies are bound by certain financial covenants.

Risks Associated with Disasters and Accidents

The Nisshinbo Group takes steps to manage risk related to disasters and accidents. However, a large earthquake or other major disaster or a sudden accident such as a fire may cause significant damage to the Group's manufacturing facilities, leading to the suspension of production activities that causes shipment delays. The Group may also incur considerable costs to restore damaged buildings or facilities.

In addition, the outbreak and spread of a new infectious disease may have an impact on the Group's operations.

Consolidated Balance Sheets

March 31, 2018 and 2017

ASSETS	Millions of Yen		Thousands of U.S. Dollars (Note)
	2018	2017	2018
CURRENT ASSETS:			
Cash and cash equivalents	¥36,478	¥39,850	\$347,410
Time deposits	6,568	7,841	62,552
Receivables:			
Trade notes	24,043	7,011	228,981
Trade accounts	127,211	141,288	1,211,533
Unconsolidated subsidiaries and affiliates	1,010	1,034	9,619
Other	4,568	5,388	43,505
Allowance for doubtful receivables	(784)	(579)	(7,467)
Inventories	105,369	99,770	1,003,514
Deferred tax assets	4,878	6,001	46,457
Other current assets	6,633	7,196	63,172
Total current assets	315,974	314,800	3,009,276
PROPERTY, PLANT AND EQUIPMENT:			
Land	37,812	39,215	360,114
Buildings and structures	170,516	176,205	1,623,962
Machinery, equipment and tools	349,754	321,119	3,330,990
Construction in progress	12,649	9,130	120,467
Total	570,731	545,669	5,435,533
Accumulated depreciation	(384,713)	(360,184)	(3,663,933)
Net property, plant and equipment	186,018	185,485	1,771,600
INVESTMENTS AND OTHER ASSETS:			
Investment securities	85,862	80,514	817,733
Investments in and advances to unconsolidated subsidiaries and affiliates	31,858	27,713	303,410
Deferred tax assets	6,631	9,744	63,152
Goodwill	8,945	8,078	85,191
Other	18,939	19,954	180,371
Total investments and other assets	152,235	146,003	1,449,857
TOTAL	¥654,227	¥646,288	\$6,230,733

Note: The translations of Japanese yen amounts into U.S. dollar (\$) amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥105 to \$1, the approximate rate of exchange at March 31, 2018.

LIABILITIES AND EQUITY	Millions of Yen		Thousands of U.S. Dollars (Note)
	2018	2017	2018
CURRENT LIABILITIES:			
Short-term bank loans	¥46,312	¥48,977	\$441,067
Commercial paper	30,000	30,000	285,714
Current portion of long-term debt	8,245	8,661	78,524
Payables:			
Trade notes	22,187	19,394	211,305
Trade accounts	49,748	53,028	473,790
Unconsolidated subsidiaries and affiliates	14	11	133
Other	16,170	10,578	154,000
Accrued expenses	18,062	16,837	172,019
Accrued income taxes	5,777	3,030	55,019
Deferred tax liabilities	106	190	1,009
Other current liabilities	12,435	15,468	118,429
Total current liabilities	209,056	206,174	1,991,009
LONG-TERM LIABILITIES:			
Long-term debt	65,005	70,476	619,095
Liability for retirement benefits	48,055	49,282	457,667
Deferred tax liabilities	27,410	30,741	261,048
Other long-term liabilities	14,267	13,862	135,876
Total long-term liabilities	154,737	164,361	1,473,686
Total liabilities	363,793	370,535	3,464,695
EQUITY:			
Shareholders' equity:			
Common stock—authorized, 371,755,000 shares; issued, 178,798,939 shares in 2018 and 2017	27,588	27,588	262,743
Capital surplus	26,719	17,587	254,467
Retained earnings	189,186	167,598	1,801,771
Treasury stock—at cost, 16,818,957 shares in 2018 and 20,013,820 shares in 2017	(24,610)	(23,090)	(234,381)
Total shareholders' equity	218,883	189,683	2,084,600
Accumulated other comprehensive income:			
Net unrealized gain on available-for-sale securities	42,964	37,310	409,181
Deferred (loss) gain on derivatives under hedge accounting	(19)	3	(181)
Foreign currency translation adjustments	10,361	7,715	98,676
Post-retirement liability adjustments	(3,418)	(5,276)	(32,552)
Total	49,888	39,752	475,124
Stock acquisition rights	152	163	1,447
Noncontrolling interests	268,923	229,598	2,561,171
Total equity	290,434	275,753	2,766,038
TOTAL	¥654,227	¥646,288	\$6,230,733

Consolidated Statements of Changes in Equity

Years Ended March 31, 2018 and 2017

Millions of Yen

	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Total Shareholders' Equity	Accumulated Other Comprehensive Income						Total Equity
						Net Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Post-Retirement Liability Adjustments	Stock Acquisition Rights	Noncontrolling Interests	
BALANCE, APRIL 1, 2016	¥27,588	¥17,599	¥168,825	¥(23,156)	¥190,856	¥36,219	¥(56)	¥11,887	¥(5,216)	¥169	¥50,613	¥284,472
Cash dividends, ¥30.00 per share			(4,762)		(4,762)							(4,762)
Net income attributable to owners of Nisshinbo Holdings Inc.			3,575		3,575							3,575
Change in scope of consolidation—transactions with noncontrolling interests		(6)			(6)							(6)
Purchase of treasury stock				(2)	(2)							(2)
Disposal of treasury stock		(6)		68	62							62
Adjustment due to increase in consolidated subsidiaries			(39)		(39)							(39)
Other			(1)		(1)							(1)
Net change in the year						1,091	59	(4,172)	(60)	(6)	(4,458)	(7,546)
BALANCE, MARCH 31, 2017	¥27,588	¥17,587	¥167,598	¥(23,090)	¥189,683	¥37,310	¥3	¥7,715	¥(5,276)	¥163	¥46,155	¥275,753
Cash dividends, ¥30.00 per share			(4,764)		(4,764)							(4,764)
Net income attributable to owners of Nisshinbo Holdings Inc.			26,352		26,352							26,352
Change in scope of consolidation—transactions with noncontrolling interests		0			0							0
Purchase of treasury stock				(20,011)	(20,011)							(20,011)
Disposal of treasury stock		(18)		194	176							176
Changes by share exchanges		9,150		18,297	27,447							27,447
Net change in the year						5,654	(22)	2,646	1,858	(11)	(24,644)	(14,519)
BALANCE, MARCH 31, 2018	¥27,588	¥26,719	¥189,186	¥(24,610)	¥218,883	¥42,964	¥(19)	¥10,361	¥(3,418)	¥152	¥21,511	¥290,434

Thousands of U.S. Dollars (Note)

	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Total Shareholders' Equity	Accumulated Other Comprehensive Income						Total Equity
						Net Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Post-Retirement Liability Adjustments	Stock Acquisition Rights	Noncontrolling Interests	
BALANCE, MARCH 31, 2017	\$262,743	\$167,495	\$1,596,171	\$(219,904)	\$1,806,505	\$355,333	\$29	\$73,476	\$(50,247)	\$1,552	\$439,571	\$2,626,219
Cash dividends, \$0.29 per share			(45,371)		(45,371)							(45,371)
Net income attributable to owners of Nisshinbo Holdings Inc.			250,971		250,971							250,971
Change in scope of consolidation—transactions with noncontrolling interests		0			0							0
Purchase of treasury stock				(190,581)	(190,581)							(190,581)
Disposal of treasury stock		(171)		1,847	1,676							1,676
Changes by share exchanges		87,143		174,257	261,400							261,400
Net change in the year						53,848	(210)	25,200	17,695	(105)	(234,704)	(138,276)
BALANCE, MARCH 31, 2018	\$262,743	\$254,467	\$1,801,771	\$(234,381)	\$2,084,600	\$409,181	\$(181)	\$98,676	\$(32,552)	\$1,447	\$204,867	\$2,766,038

Consolidated Statements of Cash Flows

Years Ended March 31, 2018 and 2017

Millions of Yen
Thousands of U.S. Dollars (Note)

	2018	2017	2018
OPERATING ACTIVITIES:			
Income before income taxes	¥33,487	¥6,717	\$318,924
Adjustments to reconcile net income to net cash provided by operating activities:			
Income taxes—paid	(3,196)	(9,630)	(30,438)
Depreciation and amortization	22,183	22,264	211,267
Amortization of goodwill	1,688	8,264	16,076
Equity in earnings of an unconsolidated subsidiary and affiliates	(4,375)	(4,406)	(41,667)
Provision for (reversal of) doubtful receivables	76	(133)	724
Provision for contingent loss	—	2,046	—
(Decrease) increase in liabilities for retirement benefits	(202)	2,022	(1,924)
(Gain) loss on sales of property, plant and equipment, net	(5,092)	662	(48,495)
Loss on impairment of long-lived assets	4,522	4,093	43,067
Gain on sales of investment securities and investments in and advances to unconsolidated subsidiaries and affiliates, net	(14,396)	(2,358)	(137,105)
Loss on write-down of investment securities and investments in and advances to unconsolidated subsidiaries and affiliates	120	76	1,143
Changes in operating assets and liabilities:			
Increase in receivables	(2,651)	(6,997)	(25,248)
(Increase) decrease in inventories	(2,353)	1,235	(22,410)
Increase (decrease) in payables	3,692	(1,259)	35,162
Other—net	(1,088)	4,172	(10,362)
Total adjustments	(1,072)	20,051	(10,210)
Net cash provided by operating activities	32,415	26,768	308,714
INVESTING ACTIVITIES:			
Proceeds from sales of property, plant and equipment	8,110	955	77,238
Proceeds from sales of investment securities and investments in and advances to unconsolidated subsidiaries and affiliates	6,009	4,568	57,228
Purchase of property, plant and equipment	(29,567)	(29,219)	(281,590)
Purchase of investment securities and investments in and advances to unconsolidated subsidiaries and affiliates	(414)	(135)	(3,943)
Decrease (increase) in time deposits—net	1,929	(4,372)	18,371
Purchase of investments in subsidiaries with changes in consolidation scope	(6,914)	—	(65,847)
Proceeds from sales of investments in subsidiaries with changes in consolidation scope	21,136	—	201,295
Purchase of investments in subsidiaries	—	(3,443)	—
Other—net	(2,087)	217	(19,876)
Net cash used in investing activities	(1,798)	(31,429)	(17,124)
FINANCING ACTIVITIES:			
Proceeds from long-term debt	1,975	30,415	18,810
Repayment of long-term debt	(8,327)	(14,809)	(79,305)
Decrease in short-term bank loans—net	(2,647)	(5,978)	(25,209)
Cash dividends paid	(4,764)	(4,762)	(45,371)
Purchase of treasury stock	(20,011)	(2)	(190,581)
Decrease in other long-term liabilities	(693)	(605)	(6,600)
Purchase of additional shares of consolidated subsidiaries	—	(80)	—
Other—net	(318)	(584)	(3,029)
Net cash (used in) provided by financing activities	(34,785)	3,595	(331,285)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	796	(1,388)	7,581
NET DECREASE IN CASH AND CASH EQUIVALENTS	(3,372)	(2,454)	(32,114)
CASH AND CASH EQUIVALENTS OF NEWLY CONSOLIDATED SUBSIDIARIES, BEGINNING OF YEAR	—	32	—
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	39,850	42,272	379,524
CASH AND CASH EQUIVALENTS, END OF YEAR	¥36,478	¥39,850	\$347,410

Segment Information

Years Ended March 31, 2018 and 2017

Millions of Yen

	2018								
	Electronics	Automobile Brakes	Precision Instruments	Chemicals	Textiles	Real Estate	Other Businesses	Eliminations/Corporate	Consolidated
Sales:									
Sales to external customers	¥193,621	¥154,205	¥64,918	¥11,285	¥54,640	¥8,406	¥24,973	¥—	¥512,048
Intersegment sales or transfers	12	22	333	146	4	1,473	1,605	(3,595)	—
Total	¥193,633	¥154,227	¥65,251	¥11,431	¥54,644	¥9,879	¥26,578	¥(3,595)	¥512,048
Segment profit [Operating income]	¥3,022	¥6,119	¥1,725	¥2,112	¥1,876	¥5,067	¥46	¥(4,881)	¥15,086
Segment assets	¥229,694	¥171,161	¥74,964	¥9,369	¥54,509	¥49,460	¥34,188	¥30,882	¥654,227
Other:									
Depreciation and amortization	¥5,298	¥10,101	¥3,571	¥220	¥1,340	¥1,249	¥204	¥200	¥22,183
Increase in property, plant and equipment and intangible assets	¥6,185	¥15,340	¥5,574	¥47	¥2,152	¥1,095	¥43	¥(333)	¥30,103

Millions of Yen

	2017									
	Electronics	Automobile Brakes	Precision Instruments	Chemicals	Textiles	Papers	Real Estate	Other Businesses	Eliminations/Corporate	Consolidated
Sales:										
Sales to external customers	¥190,852	¥146,062	¥60,687	¥9,483	¥55,842	¥32,648	¥8,084	¥23,616	¥—	¥527,274
Intersegment sales or transfers	30	27	798	116	7	765	2,074	1,686	(5,503)	—
Total	¥190,882	¥146,089	¥61,485	¥9,599	¥55,849	¥33,413	¥10,158	¥25,302	¥(5,503)	¥527,274
Segment profit (loss) [Operating income (loss)]	¥(3,240)	¥(7)	¥1,049	¥1,309	¥1,777	¥2,603	¥5,811	¥(91)	¥(4,321)	¥4,890
Segment assets	¥215,959	¥151,264	¥72,135	¥8,430	¥56,660	¥21,494	¥53,762	¥37,392	¥29,192	¥646,288
Other:										
Depreciation and amortization	¥4,832	¥9,556	¥3,048	¥307	¥1,493	¥989	¥1,556	¥194	¥289	¥22,264
Increase in property, plant and equipment and intangible assets	¥8,597	¥11,150	¥4,994	¥322	¥1,282	¥561	¥1,053	¥3,065	¥(519)	¥30,505

Thousands of U.S. Dollars (Note)

	2018								
	Electronics	Automobile Brakes	Precision Instruments	Chemicals	Textiles	Real Estate	Other Businesses	Eliminations/Corporate	Consolidated
Sales:									
Sales to external customers	\$1,844,010	\$1,468,619	\$618,267	\$107,476	\$520,381	\$80,057	\$237,838	\$—	\$4,876,648
Intersegment sales or transfers	114	210	3,171	1,390	38	14,029	15,286	(34,238)	—
Total	\$1,844,124	\$1,468,829	\$621,438	\$108,866	\$520,419	\$94,086	\$253,124	\$(34,238)	\$4,876,648
Segment profit [Operating income]	\$28,781	\$58,276	\$16,429	\$20,114	\$17,867	\$48,257	\$438	\$(46,486)	\$143,676
Segment assets	\$2,187,562	\$1,630,105	\$713,943	\$89,228	\$519,133	\$471,048	\$325,600	\$294,114	\$6,230,733
Other:									
Depreciation and amortization	\$50,457	\$96,200	\$34,010	\$2,095	\$12,762	\$11,895	\$1,943	\$1,905	\$211,267
Increase in property, plant and equipment and intangible assets	\$58,905	\$146,095	\$53,086	\$448	\$20,495	\$10,428	\$409	\$(3,171)	\$286,695

History

- 1907** Established Nisshin Cotton Spinning Co., Ltd.
- 1958** Established Nippon Kohbunshikan Co., Ltd. (name changed to Nippon Kohbunshi Co., Ltd. in 1986) (acquired by Nisshinbo Mechatronics Inc. in 2010)
- 1972** Established Nisshinbo Do Brasil Industria Textil LTDA. (Brazil)
- 1989** Established Kohbunshi (Thailand) Ltd. (Thailand) (name changed to Nisshinbo Mechatronics (Thailand) Ltd. in 2011)
- 1993** Established Pudong Kohbunshi (Shanghai) Co., Ltd. (China) (name changed to Nisshinbo Mechatronics (Shanghai) Co., Ltd. in 2010)
- 1995** Established Nisshinbo Urban Development Co., Ltd.
- 1996** Established Nisshinbo Somboon Automotive Co., Ltd. (Thailand)
- 1997** Established Nisshinbo Automotive Manufacturing Inc. (U.S.A.)
- 1998** Established P.T. Gistex Nisshinbo Indonesia (Indonesia) (name changed to P.T. Nisshinbo Indonesia in 2010)
- 1999** Established Saeron Automotive Corporation (South Korea)
- 2000** Purchased additional shares of P.T. Nikawa Textile Industry (Indonesia)
- Established Continental Teves Co., Ltd. through merger with Continental Teves AG & Co. oHG (name changed to Continental Automotive Co., Ltd. in 2007)
- 2002** Established Nisshinbo (Shanghai) Co., Ltd. (China)
- Acquired all shares of Iwao & Co., Ltd.
- 2003** Established Saeron Automotive Beijing Corporation (China)
- 2004** Established Continental Automotive Corporation (Lian Yun Gang) Co., Ltd. (China)
- 2005** Acquired additional shares of New Japan Radio Co., Ltd.
- 2006** Acquired additional shares of Japan Radio Co., Ltd. and Nagano Japan Radio Co., Ltd.
- 2008** Acquired all shares of Nisshinbo Brake Sales Co., Ltd. (acquired by Nisshinbo Brake Inc. in 2010)
- 2009** Spun off five businesses — Textiles, Automobile Brakes, Papers, Precision Instruments, and Chemicals — and converted to holding company; corporate name changed to Nisshinbo Holdings Inc.
- 2010** Established Nisshinbo-Yawei Precision Instruments & Machinery (Jiangsu) Co., Ltd. (China) (formerly Jiangsu Yawei Nisshinbo Precision Instruments & Machinery Co., Ltd.)
- Acquired additional shares of Japan Radio Co., Ltd., making it a consolidated subsidiary
- Nagano Japan Radio Co., Ltd. also became a consolidated subsidiary as a result
- 2011** Established Nisshinbo Saeron (Changshu) Automotive Co., Ltd. (China)
- Established Nisshinbo Singapore Pte. Ltd. (Singapore)
- Acquired all shares of TMD Friction Group S.A. (Luxembourg)
- 2012** Established Nisshinbo Business Management (Shanghai) Co., Ltd. (China)
- 2014** Established Nisshinbo-Continental Precision Machining (Yangzhou) Co., Ltd. (China)
- 2015** Acquired all outstanding shares of TOKYO SHIRTS CO., LTD.
- Changed Company's sector classification on stock markets from textile products to electrical equipment
- Acquired all outstanding shares of Nanbu Plastics Co., Ltd.
- 2016** Nagano Japan Radio Co., Ltd. and Ueda Japan Radio Co., Ltd. became wholly consolidated subsidiaries of Japan Radio Co., Ltd.
- 2017** Sold the papers business
- Japan Radio Co., Ltd. became a wholly owned consolidated subsidiary
- 2018** Acquired Ricoh Electronic Devices Co., Ltd., making it a consolidated subsidiary
- Sold the foundation brakes business
- Established JRC Mobility Inc.
- New Japan Radio Co., Ltd. became a wholly owned consolidated subsidiary

Key Companies in the Nisshinbo Group

Company	Location	Main Products and Services
Electronics		
Wireless and Communications		
Japan Radio Co., Ltd.	Japan	Disaster prevention systems, mobile communications equipment
Alphatron Marine Beheer B.V.	The Netherlands	Navigation equipment
Micro Devices		
New Japan Radio Co., Ltd.	Japan	Electronic devices, microwave products
Ricoh Electronic Devices Co., Ltd.	Japan	Electronic devices
Automobile Brakes		
Nisshinbo Brake Inc.	Japan	Automobile brake friction materials
TMD Friction Group S.A.	Europe	Automobile brake friction materials
Saeron Automotive Corporation	South Korea	Automobile brake friction materials
Nisshinbo Automotive Manufacturing Inc.	U.S.A.	Automobile brake friction materials
Nisshinbo Somboon Automotive Co., Ltd.	Thailand	Automobile brake friction materials
Nisshinbo Saeron Changshu Automotive Co., Ltd.	China	Automobile brake friction materials
Precision Instruments		
Nisshinbo Mechatronics Inc.	Japan	Plastic products, automotive precision parts
Nanbu Plastics Co., Ltd.	Japan	Plastic products
Nisshinbo Precision Instrument & Machinery Hiroshima Corporation	Japan	Automotive precision parts
Nisshinbo-Continental Precision Machining (Yangzhou) Co., Ltd.	China	Automotive precision parts
Nisshinbo Mechatronics (Thailand) Ltd.	Thailand	Plastic products
Continental Automotive Corporation	Japan	Automotive precision parts
Chemicals		
Nisshinbo Chemical Inc.	Japan	Urethane products, high-performance chemical products
Textiles		
Nisshinbo Textile Inc.	Japan	Shirt fabric, developed materials
NISSHINTOA IWAO INC.	Japan	Textile products
TOKYO SHIRTS CO., LTD.	Japan	Shirts
Nisshinbo Do Brasil Industria Textil Ltda.	Brazil	Textile spinning
PT. Nikawa Textile Industry	Indonesia	Textile spinning and weaving
PT. Nisshinbo Indonesia	Indonesia	Textile weaving and dyeing
Real Estate		
Nisshinbo Urban Development Co., Ltd.	Japan	Real estate operations
Other		
Nisshinbo Singapore Pte. Ltd.	Singapore	Group company support
Nisshinbo Business Management (Shanghai) Co., Ltd.	China	Group company support

Corporate Data

(As of March 31, 2018)

Founded

February 5, 1907

Common Stock

¥27,588 million (US\$251 million)

Employees

Parent Company	219
Subsidiaries	22,885
Total	23,104

Head Office

2-31-11, Ningyo-cho, Nihonbashi, Chuo-ku, Tokyo 103-8650, Japan

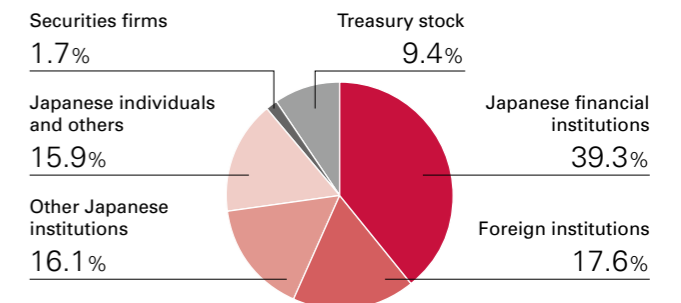
Shareholders

23,503

Basic Stock Information

Sector	Electrical equipment
Stock code	3105
Number of shares per trading unit	100 shares
Business year	January 1 to December 31 * The 176th period is a nine-month fiscal period from April 1, 2018 to December 31, 2018.
Shareholder record date for dividends	December 31 (June 30 for interim dividend) * The interim dividend record date for the 176th period is September 30, 2018.
Total shares authorized	371,755,000 shares
Total shares issued	178,798,939 shares (As of March 31, 2018)
Treasury stock	16,818,957 shares (As of March 31, 2018)
Transfer agent	Mitsubishi UFJ Trust and Banking Corporation 1-4-5, Marunouchi, Chiyoda-ku, Tokyo 100-8212, Japan

Composition of Shareholders



Major Shareholders

(As of March 31, 2018)

Shareholder name	Number of shares held (thousand shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd.	26,338	16.26
Japan Trustee Services Bank, Ltd.	21,345	13.18
Fukoku Mutual Life Insurance Company	12,000	7.41
Teijin Ltd.	6,028	3.72
Trust & Custody Services Bank, Ltd.	4,698	2.90
Shikoku Chemicals Corporation	2,600	1.61
Mizuho Bank, Ltd.	2,345	1.45
The Japan Wool Textile Co., Ltd.	2,282	1.41
JP MORGAN CHASE BANK 385151	1,825	1.13
Nisshin Cotton Spinning Clients' Shareholding Association	1,754	1.08

Stock Price and Trading Volume

