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NAGASE & CO., LTD.

20

20

Integrated Report
2020

Integrated Report
2020

Identify

Our Value

Identify / Develop / Expand

Develop

Expand



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About this Report

The NAGASE Group has created this integrated report to help our diverse stakeholders better understand the Group’s wide-ranging business fields and business activities, as well as its unique value creation process. Going forward, we will continue to improve this report as a communication tool for conveying the Group’s corporate value enhancement activities in an easy to understand manner.

| Reference Guidelines |

- International Integrated Reporting Council
- International Integrated Reporting Framework
- Ministry of Economy, Trade and Industry’s Guidance for Collaborative Value Creation



| Period Covered |

April 2019–March 2020 (FY2019).
Some information after March 2020 is also included.

| Organizations Covered |

NAGASE & CO., LTD. and the NAGASE Group

Positioning of this Report

This integrated report organizes information on Management & Sustainability and Business, Products & Services based on “integrated thinking.” Please refer to NAGASE’s website for more detailed information.



Forward-Looking Statements
Non-historic information contained in this integrated report related to the NAGASE Group revenue and profit plans, strategies, assumptions, etc. are forward-looking statements that entail elements of risk and uncertainty. Actual earnings may differ significantly from forecasts due to changes in these elements. Accordingly, the reader is cautioned to refrain from placing undue reliance on such future forecasts contained in this document. Elements that could impact earnings results are not necessarily limited to those explicitly noted in this document.

Our Value

Identify >>> Develop >>> Expand

We identify new businesses that nobody has recognized before, develop them to become businesses creating new value, expand them throughout the world and deliver value to people.

“Identify, Develop and Expand”

The NAGASE Group’s “value proposition” comes from this process and is enhanced by it.
We will continue to value this philosophy and provide value to society.

Identify

Enthusiasm for Solving Issues Enables Us to “Identify”

Identify >>> Develop >>> Expand

We want to create a presence that prompts business partners to say, “Let’s first ask NAGASE.” Since our founding, accumulated involvement in solving problems in a variety of areas has led to an ability to identify new technologies and businesses. The NAGASE Group will continue to “identify” what times require.

History

We Have Identified Technologies Needed for the Future

Now & Future

Identifying New, Next-Generation Businesses Now and in the Future

Early Days of Building Relationships with Foreign Manufacturers

Pursuing the possibilities of chemicals

The NAGASE Group in its early days rapidly sought partnerships with powerful overseas manufacturers to pursue the possibilities of chemicals. In 1900, we started trading with Basel Chemical Co. of Switzerland (at that time called Ciba), and opened an office in Lyon in 1901. This was an extremely advanced move for a Japanese company at the time. Trade expanded with Ciba Specialty Chemicals, and in 1951, we started to import and sell epoxy

resins with electrical insulation properties. This would lead to the development of what is today's Electronics Business.

We also turned our attention to cinematographic film, taking into account the development of the visual image culture, and started trading with Eastman Kodak Co. of the United States in 1923. Technology used to develop the imported film would form the technological foundation of the semiconductor business.



Eastman Kodak's head office at about the time trading started with NAGASE

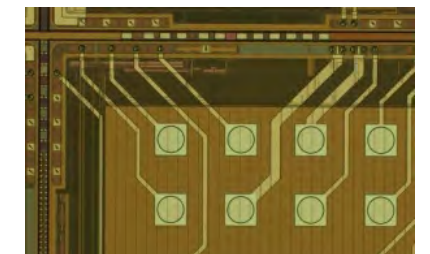
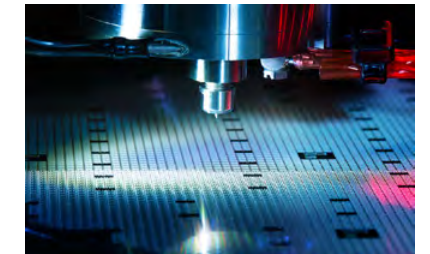
Taking on the Challenges of Next-Generation ICT Business

Beyond 5G

At a time when attention is focused on the shift to 5G (5th generation mobile communication system), which features ultra-high speed, large capacity, ultra-low latency and multiple simultaneous connections, the NAGASE Group believes its fundamental technologies can fulfill an important role for development of equipment and devices related to 5G, and we are moving ahead on development. We are also taking into account the kind of transition that will be

brought by 6G (6th generation mobile communication system expected to be realized by around 2027) through M&A and focusing all our abilities on core technology development.

The next-generation information and communications business aims for the realization of smart cities. This will contribute to “a sustainable world where people live with peace of mind.”



► See P.32–33, “Feature/Initiatives for Next-Generation Businesses Case 1”

Identifying the Possibilities of Engineering Plastics

Partnership with General Electric

The NAGASE Group concluded an agency agreement with General Electric Co. (GE) of the United States in 1968. At the time, polyvinyl chloride (PVC), polyethylene, polystyrene and other general-purpose resins were the mainstream plastics, but NAGASE had the idea that highly functional engineering plastics were indispensable for development of Japanese industry.

At that time, GE was handling engineering plastics in the United States and searching for a partner in Japan. Following an exhaustive investigation, GE designated the NAGASE Group as its most reliable partner in Japan and this led to the conclusion of the agency agreement.

Doing business with GE caused NAGASE to soar in popularity within the industry and later made a significant contribution to expanding bases in Asia.



General Electric



Create the Core of Future Business

New Value Creation (NVC) Office

The mission of the NVC Office set up in April 2017 is to create the core of the NAGASE Group's future business. As its name suggests, the office advances the NAGASE Group's innovation and aims to create new value that will form the core of future business through cross-sectional collaboration among business divisions.

Of the initiatives the NVC Office has conducted over three years, some can actually connect to specific services. One example of this is Materials Informatics (MI) being jointly developed with IBM Corp. This a service for developing new materials that combines the latest data processing technologies with materials science, and we are preparing for market launch.

► See P.34–35, “Feature/Initiatives for Next-Generation Businesses Case 2”

Develop

Staying a Step Ahead

Identify >>> Develop >>> Expand

The Group's Competency Make "Development" Come True

NAGASE presence is not just to bring products in and sell them, but to add value in a way that only NAGASE can. The NAGASE Group is a trading company that also derives strength from the cutting edge and R&D competence of its group manufacturers. The new business we find, we grow into business that creates new value. Those activities form the lineup for NAGASE's "Development."

Manufacturing

Technological Capability
to Create New Value
from Identified Businesses

Core Technologies × Creative Capabilities Nagase ChemteX Corporation

Nagase ChemteX Corporation is a core manufacturing subsidiary of the NAGASE Group and possesses creative technologies in a variety of areas including electronics and biotechnology. In business areas such as functional resins including epoxy, photolithography materials for semiconductors, functional chemicals like conductive coatings, and bio-chemicals with enzymes for food applications, world-first technologies and technologies with top shares in the Japanese market support the Group's innovations. We proactively collaborate with universities, research institutions and partner companies, and strive to introduce new elemental technologies.

We, in close collaboration with members of NAGASE, respond to customers' needs with speed and at the same time provide awareness. In the biomaterial field we focus on, we developed a technology to remove or reduce endotoxins harmful to the body from various materials. Foreseeing increased demand in such fields as medical devices, we are absorbing a wide array of customer needs and enhancing our product lineup. Binding our strengths in the materials and technologies we possess with ideas created through feedback from customers enables us to develop business with value, grown from technology.



Satoru Fujii
President and CEO
Nagase ChemteX Corporation



Established: 1970
Production and development
bases: Japan (3), China (2),
Europe (1), Americas (1)
Number of employees: 581

Innovation Created with Customers

The Nagase ChemteX Process innovation Center (NPIC), established in September 2019, oversees the application lab, which can develop processes using various types of equipments, and the Universal Design Office, where ideas can be shared instantly, and is a space that leverages the free innovation of Nagase ChemteX engineers and customers. The center is capable of integrated operations from ideas through to implementation and strives to develop new functional resins.

Nagase ChemteX Business

Functional Resins Business	Precision Process Materials Business	Functional Chemicals Business	Bio Chemicals Business
Epoxy adhesives, encapsulants (sheets, liquids)	Resists, developer, etchants, remover, 3D printing materials	Transparent conductive coating materials, acrylic elastomers, special epoxy resins	Food enzymes, industrial enzymes, enzyme preparations for lifestyle, phospholipids
			

R&D Research & Development

Pursuing Business Output
through Various Perspectives
and R&D Competency

Combining Biotechnological Expertise with Frontier Technologies

Nagase R&D Center

The Nagase R&D Center was established in 1990 with the objective of combining the Group's expertise and promoting integrated corporate activities from development and production through to sales. Since 2013, we have focused on R&D in the biotechnology field and have established a research system for studies into molecular biology, applied microbiology, genetic engineering, protein engineering, bioinformatics, fermentation engineering, metabolic engineering and more. The center does not limit itself to supporting Group companies in product development, but also creates its own projects, having successfully

mass produced its proprietary fermentation technology for actinomycetes and plans to soon launch the Nagase ChemteX product Trehangelin, which is expected to have anti-aging effects.

Moreover, a breakthrough has been achieved with the so-called longevity vitamin ergothioneine, which is expected to have applications in foods, cosmetics and pharmaceuticals. Using our strength of microbial fermentation and our dedication to the environmental friendliness, we will continue to move forward with the aim of mass production.



Xiaoli Liu
General Manager
Nagase R&D Center



Established: 1990

Providing Customers with a Place for Open Innovation

Nagase Application Workshop (NAW)

The Nagase Application Workshop is an open innovation laboratory operated on the basis of free thought possible only in a lab operated by a trading company. As a development partner to customers, NAW provides evaluation and analysis of unique new technologies and materials, adds functions for formulation development, proposes new concept color designs, and advances the development of new applications and more. Collaborations occur with materials and process manufacturers and

universities for markets including automotive, office equipment, home appliance, electronics, building and construction, and packaging, etc.

Looking ahead, NAW will focus on themes in the environmental field such as ESG initiatives, and move forward on developing new technologies and materials aimed at building a business model for the NAGASE Group. Furthermore, NAW is also taking action with a view to global Group collaboration regarding the lab's functions.



Akihiro Taniguchi
General Manager
Nagase Application Workshop (NAW)



Established: 2007

Expand

“Chemical Reactions” Going Beyond the Boundaries

Identify >>> Develop >>> **Expand**

NAGASE, which rolls out businesses in a wide variety of business domains, wants the concept of finding different applications for technologies and products to sink in. One of our strengths is having the expertise to unveil businesses meeting the needs of various countries. The NAGASE Group has the power to enlarge and spread business possibilities.

Global Network

Delivering Value Where It's Needed Utilizing a Global Network

Europe

Mainly engaged in the pharmaceuticals and chemicals businesses. In pharmaceuticals, the Group focuses on exporting to Japan pharmaceutical ingredients emanating from Europe, while in chemicals, it is moving ahead on switching from products that place a heavy burden on the environment to bio-chemicals in consideration of the environment.

ASEAN and the Middle East

We are moving ahead on adding high value to core businesses like plastics and mobility-related business. In the food ingredients business, we aim to solve customers' problems through the application lab and various materials.

Greater China

Greater China accounts for the majority of sales in the NAGASE Group outside of Japan, and is currently focused on the four main businesses of semiconductors, mobility, electronics and life and healthcare.

Japan

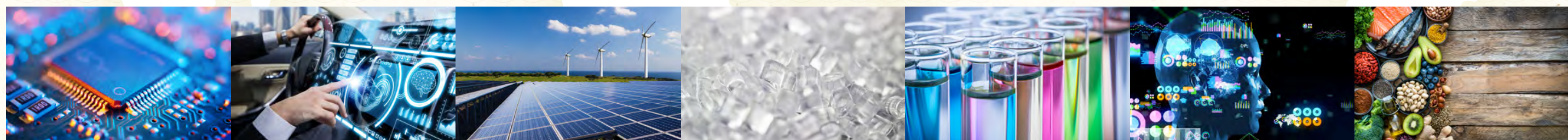
As the heart of the NAGASE Group's global network, Japan not only carries out core businesses, it also proactively develops new fields such as AI and next-generation ICT business.

South Korea

South Korea develops around an axis in the electronics business, including its globally competitive semiconductors. Leveraging the NAGASE Group's global network, we are advancing the worldwide rollout of South Korean products.

Americas

Leveraging the Group's R&D capabilities and network, including the 2019 addition of Prinova Group, LLC, we aim to create synergies within the Group, centered around the food ingredients business field.



Consolidated Net Sales

799.5

billion yen

Overseas 397.1 billion yen

Overseas Sales to Net Sales

49.7 %

Number of Bases

30 124

Countries and Areas

Companies

Number of Manufacturing Companies

15 60

Countries and Areas

Companies

Number of Sales and Servicing Companies

28 64

Countries and Areas

Companies

Number of Employees (Consolidated)

7,207

Overseas 3,248

► See P.70–71, “Regional Strategy”

Driving Our Value

Through its 188 years of business activity, the NAGASE Group has grown into a unique corporate group with a foundation in chemicals. It possesses a wide array of business domains, an information network spanning the globe, and manufacturing as well as R&D capabilities that increase its power as a corporate group. NAGASE's position of maintaining the highest standards of integrity has earned the trust of its partners, and serves as a strength that leads to sustainable growth for the NAGASE Group.

On top of these strengths, which the NAGASE Group built up over many years, it has developed business while adding "new strengths," and continually delivering the value generated by the strengths to all its stakeholders. In this way, the NAGASE Group contributes to realize a sustainable world where people live with peace of mind.

Partnerships Built on Trust

The NAGASE Group's long-standing management philosophy is to maintain the highest standards of integrity. With this idea in mind, we believe in gaining a deep understanding of our customers and building cooperative relationships in which we pursue various possibilities together.

Advanced Technology and Knowledge in the Field of Chemistry

Through connections with various customers, such as leading chemical manufacturers that operate on a global scale, as well as the manufacturing, processing and R&D functions which we have so far acquired, the NAGASE Group has gained an unwavering technological capability and knowledge in the field of chemistry.

A Broad Customer Base

The NAGASE Group possesses a customer base of over 9,000 companies domestically and overseas. The NAGASE Group also boasts global expansion over a wide business domain as well as a strong, independent information network unique to a trading company not bound by any particular manufacturer's technology or product. This allows for proposals that lead to customer value.

Ability to Create Business

The NAGASE Group has created and provided new value by freely stringing together the various functions of the NAGASE Group such as manufacturing, processing, and R&D. The ability to create new businesses as a "Business Designer" is a significant strength.

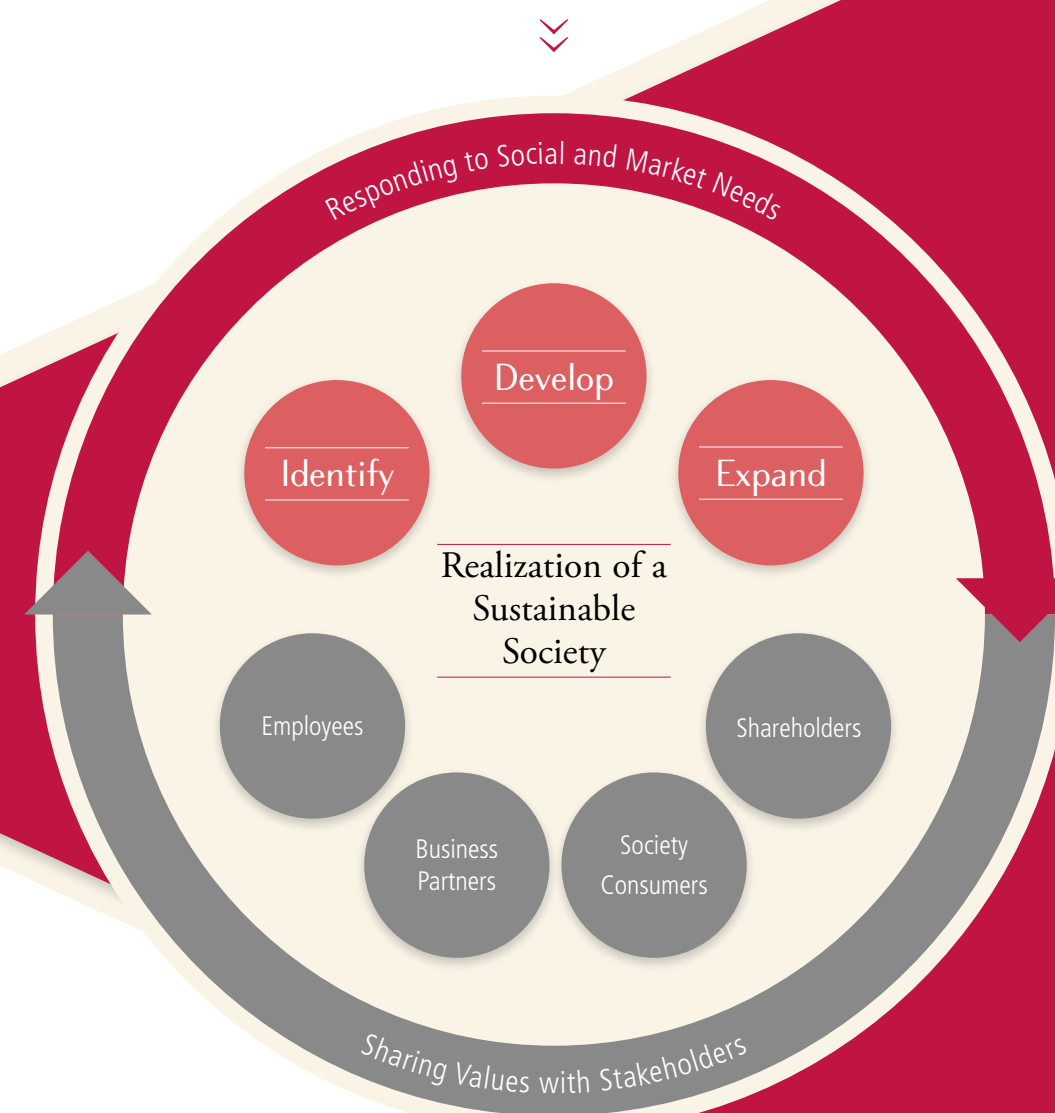
Financial Soundness and Strict Financial Discipline

At the NAGASE Group, our corporate culture ensures financial soundness and strict financial discipline. Our supply and sales foundations are also stable, as we are not heavily dependent on particular products or regions. This kind of financial base allows for new "challenges" that lead to the NAGASE Group's sustainable growth, such as DX and next-generation information communications business.

Our Strengths

Value to the Future

Developing Sustainable Business



Delivering New Value

Summary of the Long-Term Management Policy

Challenges for Growth

- Increase investment
- Accelerate organic growth
- Expand overseas operations

Reinforcement of Business Base

- Restructure global governance
- Increase flexibility in HR management
- Enhance safety and assurance
- Consolidate communications infrastructure

▶ See P. 26–27 "Our Roadmap of Growth"

NAGASE Vision

To realize a sustainable world where people live with peace of mind

▶ See P. 22–23 "Our Philosophy"

Top Message

CEO
Message

Representative Director
and President

朝倉 研二

Kenji Asakura

We will continue
providing society
with value
throughout the ages
and achieve sustainable
growth for the
NAGASE Group



I would like to express my sympathies to those who were affected by the current COVID-19 pandemic.

I would also like to express my heartfelt gratitude to all medical workers who are working hard on providing treatment.

Pursing New Value Proposition as a Business Designer

Accept Changes as an Opportunity for Reform and Continuously Provide Value to Stakeholders

Since its founding, the NAGASE Group has handled products which support many aspects of individual lifestyles with chemicals as its base. The NAGASE Group is always looking ahead at technological trends and identifying the products, technologies and services that will be needed in the future. In this way, the Group continues to transform its business on a flexible basis. Unconstrained by the existing business foundation, the NAGASE Group continues to expand the domain and scope of its business.

In 2020, the COVID-19 pandemic has led to dramatic social and economic changes on a global scale. With the continuing trade tensions between the U.S. and China, and the further rise of protectionism, the situation we find ourselves in grows ever more uncertain. As the international balance of power predicated on free trade continues to shift, we understand that it will be extremely important for the NAGASE Group to find its place.

The global spread of COVID-19 has served as a keen reminder of the importance of our employees and families' well-being, securing an emergency supply chain, and a stable financial base. We accept the sudden changes in the times, the environment, and the needs of all our stakeholders as

opportunities for the NAGASE Group to reform and will work quickly to generate new value creation.

Under these conditions, we believe it is important to maintain the position we have held up until now, which is to conduct investment towards the future. We will continue our prior investment in DX (Digital Transformation) and also invest in next-generation information communications-related businesses such as 5G, which will become critical to future communications infrastructure, regardless of results in the short term.

NAGASE's Business Designer Initiatives Embody "Identify, Develop and Expand"

The concept of a Business Designer has been very important since I became president of the Company. Not limiting ourselves to trading, we will align the six functions of the NAGASE Group (Trading, R&D, Investment, Logistics, Global Network, and Manufacturing) and generate business alongside our partners. Through this concept, we embody the NAGASE Group's value proposition: "Identify, Develop and Expand."

I believe that the best thing about being a trading company is the degree of freedom. We are able to work on new businesses unconstrained by a single product or technology. If we add the NAGASE Group's unique manufacturing and development capabilities to the equation, the possibilities of

a Business Designer are endless. We currently possess six functions, but do not intend to limit ourselves to this number. For instance, entirely new functions such as AI may be added. Thinking about the situation in that way is exhilarating.

We continue to share and maximize knowledge within the NAGASE Group as well as strengthen collaboration to create new business and values. We are also crossing business and segment boundaries to launch new initiatives such as business related to next-generation information communications and materials for 3D printers. We hope that our customers can count on us to deliver new and improved value.

Looking Back on the Fourth Year of the Mid-Term Management Plan ACE-2020

• Reform of Our Profit Structure

In fiscal 2019, the NAGASE Group completed the fourth year of its mid-term management plan ACE-2020. We are now seeing both what we could and could not accomplish. Although there are some companies that have not disclosed their outlook for the current fiscal year, we disclosed our outlook based on the presumption that the impact of COVID-19 on the NAGASE Group's business domains will largely improve in the second half of the fiscal year. The inability to meet our goals for ACE-2020 is something that I take very seriously as a manager. Since this is the final year of the plan, we will continue to pursue our targets. Meanwhile, we will be required to reform swiftly in anticipation of an end to the COVID-19 pandemic. I believe that balancing our ACE-2020 goals with the current situation is the critical issue for this year.

With regard to reform of our profit structure among our KPI (key performance indicators), we saw improved profits in the focus areas of Life & Healthcare and Manufacturing as well as major developments in the North America region.

The acquisition of U.S.-based company Prinova in August 2019 spurred reform of our profit structure in the Life & Healthcare segment, and also largely improved the NAGASE Group's overall portfolio. We also established the new Food Ingredients Department in April 2020 to expand the NAGASE Group's food ingredients business. Although Europe and the U.S. are currently our main focus in this division, we are also beginning to develop measures to branch out into Asia.

In the Electronics Business, we steadily took on challenge after challenge, but have not achieved the success we had expected due in part to the market environment. We understand that portfolio reevaluation within the segment is

required. Businesses such as next-generation information communications systems and semiconductors are undoubtedly growing fields, so we will continue to pursue profitability in those areas.

Another major KPI is the improved profitability of our Manufacturing Business. Remarkable progress toward this effort was made in various indices through the efforts each NAGASE Group company put into reform. We are also continuing to withdraw from unsuccessful businesses which we have determined do not have future potential. I believe the Manufacturing Business is headed in the right direction.

One of the major themes of ACE-2020 is inorganic growth through the introduction of a new earnings model. We made it a goal to spur inorganic growth, which will become a growth engine in the future. This will be in addition to organic growth, which has made full use of existing management resources. However, right now there appear to be a number of measures that are not producing concrete results. Regrettably, this happened because our feasibility assessment of business investments was overly optimistic. This is one point we will improve when it comes time to draft the next mid-term management plan.

• Reform of Our Corporate Culture

As for reforming our corporate culture, I believe that the C* in ACE—that is to say, commitment—is extremely important. Under our previous corporate culture, we were unable to seriously assess achievement of the objectives laid out in the mid-term management plan. Yet after thoroughly implementing a PDCA cycle, we have seen satisfactory progress, including a sense of responsibility toward the results and an awareness of working together toward a common goal.

The existence of Prinova was also a major factor. In welcoming Prinova to the NAGASE Group, we became keenly aware of the need to not forcefully impose Japanese methods but to construct a new system while listening to the other party's ideas. As a result, the degree of understanding and awareness of the completed system was extremely high. This, combined with a sense of speed, resulted in a PMI (Post-Merger Integration) that is capable of producing satisfactory results. I think that this will be a tremendous asset for the NAGASE Group, which aims to be a true global company. From now on, I would like to keep a global perspective when making efforts such as reevaluating employees' working styles.

* In the mid-term management plan ACE-2020, ACE stands for accountability, commitment and efficiency.

Realizing a Sustainable World Where People Live with Peace of Mind

Sustainability Management

Around the world, there is growing awareness regarding the realization of a sustainable society. Due to the spread of COVID-19, society is paying more attention to corporate behavior, and I myself have become more aware than I previously was. I believe that management from now on will involve balancing contributions to the sustainability of society as a whole in the short, medium and long term with our own company's sustainable management to increase our profit and increase economic benefits.

Amidst all this, we launched the Sustainability Committee in June 2020. In this committee, in which I serve as chair, we thoroughly discuss the sustainability management of the NAGASE Group. Although our company has grown with a focus on petrochemical-based chemical business, from now on we must continually grow while giving even further consideration to environmental pollution like plastic marine debris and climate change. I believe that contributing to all 17 of the United Nation's SDGs is not about the Nagase Group's sustainability. We will establish a direction while thoroughly analyzing our strengths and the external environment.

The NAGASE Group defines employees, customers, society, consumers and shareholders as its stakeholders, and views employees as our number one priority. We believe that if there is an environment in which employees can work happily, then the company will be set on a path to growth. That in turn will lead to contributions to customers, society and consumers as well as stable dividends for shareholders.

Improve the Efficiency of Board of Directors Meetings

Although we have not deliberated on the separation of management and execution, we are aware of the immense importance of that division. That is part of the reason we increased the number of outside directors from two to three and aim to more actively promote strategic discussions. We anticipate that the opinions of these three outside directors will be better reflected at Board of Directors meetings. We established the likes of a Nomination Committee and a Compensation Committee to ensure greater transparency. We think that this will further enhance the effectiveness of the Board of Directors and, in turn, raise corporate value.

Making Full Use of Various Management Resources to Create New Value

• Food Ingredients Business

In the NAGASE Group, Nagase ChemteX Corporation has treated enzymes as a food ingredient. After incorporating Hayashibara Co., Ltd. as a subsidiary in 2012, the NAGASE Group honed its unique manufacturing capabilities. However, for many years, securing an overseas distribution route was a challenge for the NAGASE Group as a whole. When the NAGASE Group made a subsidiary of Prinova, which possesses a strong sales network in Europe and the U.S., in 2019, all the pieces were finally put into place. As the undeveloped market of Southeast Asia expands, we intend to rapidly accelerate development while expanding our product lineup and services. Establishing the Food Ingredients Department was merely the first step; in the future, we hope to group all related organizations together and operate on a global scale. Because safety is number one when it comes to food ingredients, we are making



even greater efforts to deal with international laws and regulations as well as BCP.

• Next-Generation Information Communications Business

Looking ahead to 5G, which has recently been put into practical use, and even further ahead to 6G, we can see that in the future there will undoubtedly be a need for many chemical ingredients with entirely new properties. We believe that the next-generation information communications business is a business in which the NAGASE Group can contribute to the development of cutting-edge infrastructure by maximizing the technology and networks it has amassed up until now. Cutting-edge research development is always advancing, and needs are constantly being created. If chemical ingredients possessing new properties

are utilized as the basic technology of next-generation information communications, then new value will be created which can help change the world. We will work together by utilizing the NAGASE Group's unique strengths which are focused on ingredients and ingredient processing technology.

• Digital Transformation

The NAGASE Group is working on developing a Group-wide digital marketing platform as the first step toward producing its own form of Digital Transformation (DX). The NAGASE Group launched a team in the U.S., where there is an abundance of talented individuals with specialized skills. Then in April 2020, it also established a new organization in Japan called the Global Marketing Office to make digital marketing widespread throughout the entire Group. Yet digital marketing is not NAGASE's only form of DX. For instance, services for a new material development system using AI (material informatics, or "MI"), which the NVC (New Value Creation) Office developed in cooperation with IBM, is scheduled for release within the current fiscal year. Other projects include information sharing and streamlining of the NAGASE Group's in-house manufacturing business and management of overall supply chain logistics using blockchains. We hope to advance these projects in an integrated manner and create a model that will outpace our competitors.

Looking Ahead to the Next Mid-Term Management Plan

We have spent time discussing measures for the next mid-term management plan starting from fiscal 2021. Social and economic conditions were radically altered at the beginning of the year due to the spread of COVID-19. However, we believe that the so-called "post-coronavirus" world will practically overlap with the world we envisioned when discussing the next mid-term management plan with regard to matters such as the acceleration of digitalization. We were fortunate that we were able to get a jump start in that regard, but feel that we must accelerate efforts even more.

We uphold the phrase "maintain the highest standards of integrity" as our management philosophy. From now on, the way we do business as a trading company will change as digitalization progresses. Nevertheless, we believe that deep down what customers seek from us is quality and trust. No matter the business environment, we always go back to this mentality of "highest standards of integrity." We aim to achieve a sustainable world where people live with peace of mind.

I kindly ask for your continued understanding and cooperation.

CFO Message



Creating New Business and New Value by Raising Corporate Value

Masaya Ikemoto
Director and Executive Officer

Mid-Term Management Plan
Completing the Fourth Year of
ACE-2020

Under the mid-term management plan ACE-2020, we worked on optimizing our business portfolio as part of reform of our profit structure, giving particular attention to Life & Healthcare and Electronics as our focus businesses.

With regard to the Life & Healthcare business, as a biochemical company, we worked on becoming a corporation that could propose businesses more connected to daily life, such as dietary culture or medicine, prior to acquiring Hayashibara Co., Ltd. in 2012. I believe that stance led to the acquisition of Prinova in 2019, and became a tremendously important step during the period of ACE-2020.

On the other hand, the Electronics Business was unfortunately unable to meet its targets. We went through many cycles of trial and error in these four years, but the Electronics Business is now experiencing difficulties at the stage right before it enters the next new lifecycle of business.

The acceleration of global expansion is a necessity for

expanding and strengthening our profit structure. At the NAGASE Group, business expansion in Asia has been progressing for a while. However, in Europe and the U.S. business hasn't expanded to the extent of Asia so that the NAGASE Group could show our presence, despite concentrated efforts particularly in North America. In this sense, the acquisition of Prinova served as a major stepping stone towards expansion of the food ingredients business in North America.

The Manufacturing Business has come to occupy a larger percentage of our earnings every year. As that situation progresses, it will probably be necessary for the NAGASE Group to create a NAGASE Standard to explain our manufacturing criteria. To put it another way, NAGASE is a brand built on great trust; its name alone signifies that it is dependable in terms of technology, finance, and partnership. From now on, we will contemplate the role of the NAGASE Group's Manufacturing Business while further increasing our level of quality and profitability.

We promote rationalization and improved efficiency of organizations and functions as part of the reform of our corporate culture. One result of this has been the transfer of intra-Group administrative duties to Nagase Business Expert

Co., Ltd. (P.19). I feel that there is still a lot of reform that can be done. We will organize a system to generate a steady profit while at the same time providing business and products.

We made advancements to uphold investment discipline. In the past, there were businesses we continued despite being unprofitable. Naturally, from the viewpoint of raising corporate value, we must continue businesses that are worth continuing and quickly decide to withdraw from those that are not. Under ACE-2020, we revised the investment guidelines that serve as a standard for decisions making. Consequently, we are in the process of organizing businesses that require direction and deliberating on each one individually. From now on, as the investment environment grows increasingly challenging, we will actively invest in businesses for which we can confidently envision a future.

Perceiving a Turning Point in the Rapidly Changing Business Environment

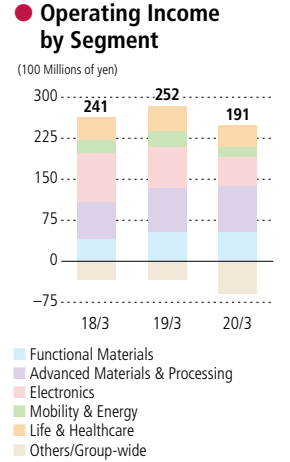
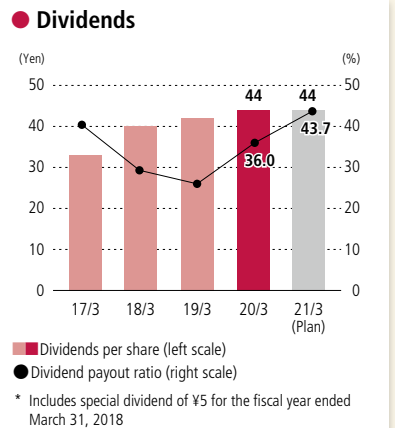
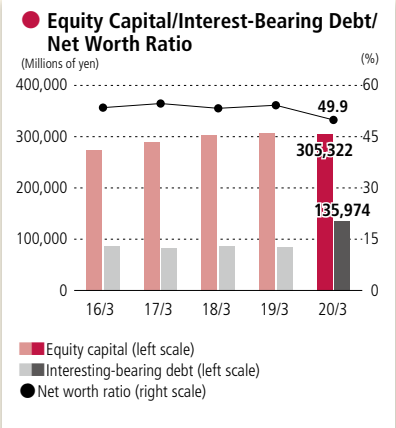
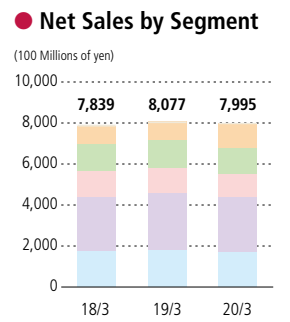
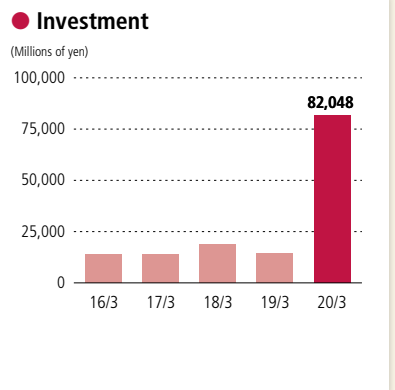
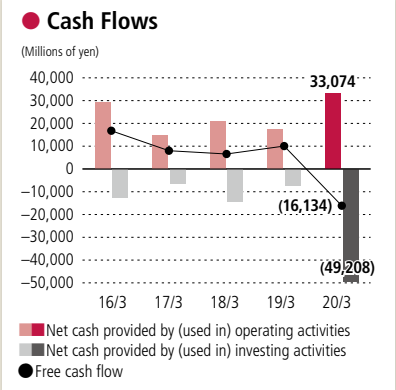
Looking back at recent events, the impact of COVID-19's spread is just as serious as we thought.

When we assess this impact from a medium- to long-term perspective, we see three stages. In the first stage, we assess how much this will impact results, and by what channels we can escape from that impact. In the second stage, we assess when the things that changed due to the pandemic will return to the way they were before and what will happen if they don't. Then in the third stage, we assess whether the norms of the altered economy will become permanent. As the NAGASE Group, we must consider these three stages as well as future business policies and solutions.

If we draw a comparison to the 2008 financial crisis when problems in the financial system occurred, this time we were forced to implement social distancing measures, which had a huge impact on physical places of business. In other words, this meant that the impact on the real economy was tremendous.

From the perspective of corporate finance, the impact on the cash flows and capital structures of our customers and business partners is also significant. More serious consideration will probably become necessary when conducting business. Naturally, the way we approach investments will also change.

We are now at a generational turning point. Even if we were to take away the impact of COVID-19, this is without a



doubt a major turning point. Therefore, the big question now is how the NAGASE Group will lead the way forward. It is also becoming necessary to assess how we will use this experience in the post-coronavirus environment and how we will change things like working styles as well as salary and evaluation systems from the perspective of corporate governance in addition to risk management.

Of course, changes are also opportunities. For instance, IT tools had been a focal point in communication with customers and coworkers. Fortunately, the NAGASE Group has been working on DX (Digital Transformation) since before the COVID-19 pandemic. By clearly perceiving turning points in the rapidly changing business environment and providing solutions with flexible ways of thinking, we will seize business opportunities.

Raising the Corporate Value of the NAGASE Group

• Utilize Global Governance to Maximize Synergy

Our overseas business expanded significantly through the acquisition of Prinova in fiscal 2019. Locally hired employees currently make up over half of our workforce.

Faced with these conditions, pursuing a universally standardized governance system and maximizing Group synergies is becoming a key issue. Under ACE-2020, we

worked more on organizational development in China and the U.S. in addition to revising our original Japanese governance system to enhance regional control. Actual efforts have only just begun, but we are steadily moving forward.

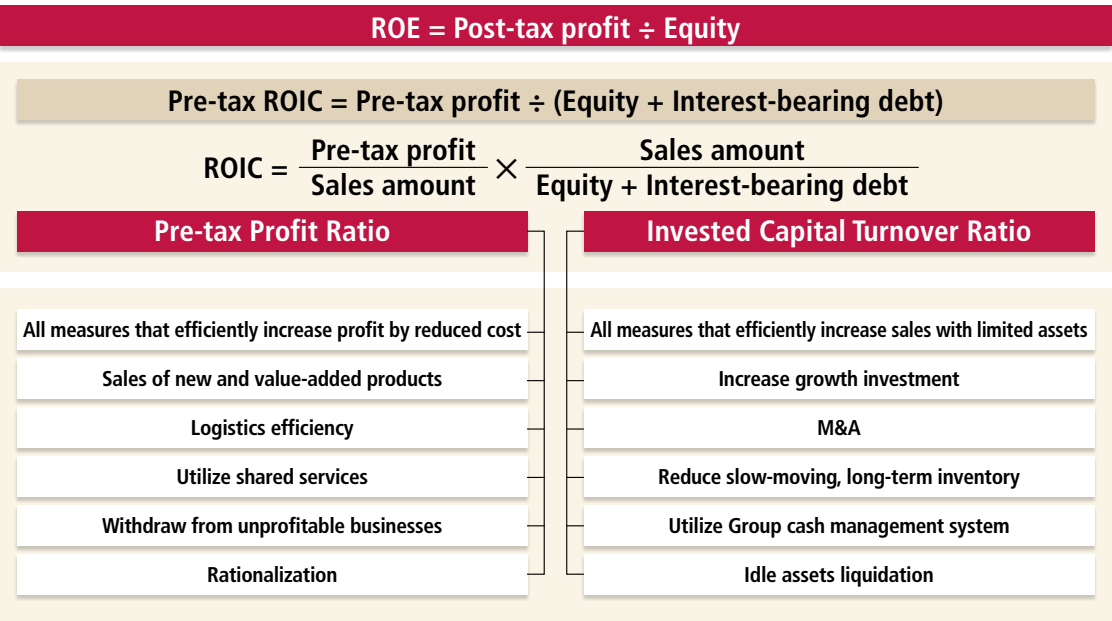
During Prinova’s integration into the NAGASE Group, we carried out high-quality PMI (Post-Merger Integration) and fostered understanding and trust in our respective cultures. Prinova also become accustomed to the NAGASE Group’s way of thinking. Even now, we are working to achieve more advanced synergy while engaging in daily conversation. We hope that Prinova will utilize its own product lineup and platforms in Europe and the U.S. and make advances in the fields of sports nutrition, infant nutrition and food for seniors.

• Aiming for Capital Cost Management that Fits the NAGASE Group

Under ACE-2020, we added ROIC (Return on Invested Capital) to the index. By introducing ROIC, we aim to transition into management aware of the cost of capital by having executive management thoroughly discuss capital costs.

We at NAGASE are considering actively expanding businesses with high ROIC. However, businesses in the NAGASE Group are built on a sturdy customer base over many years. Therefore, even in the case of a business with low ROIC, we will not simply withdraw but rather incorporate the business into the expansion of a new business by using the existing customer base.

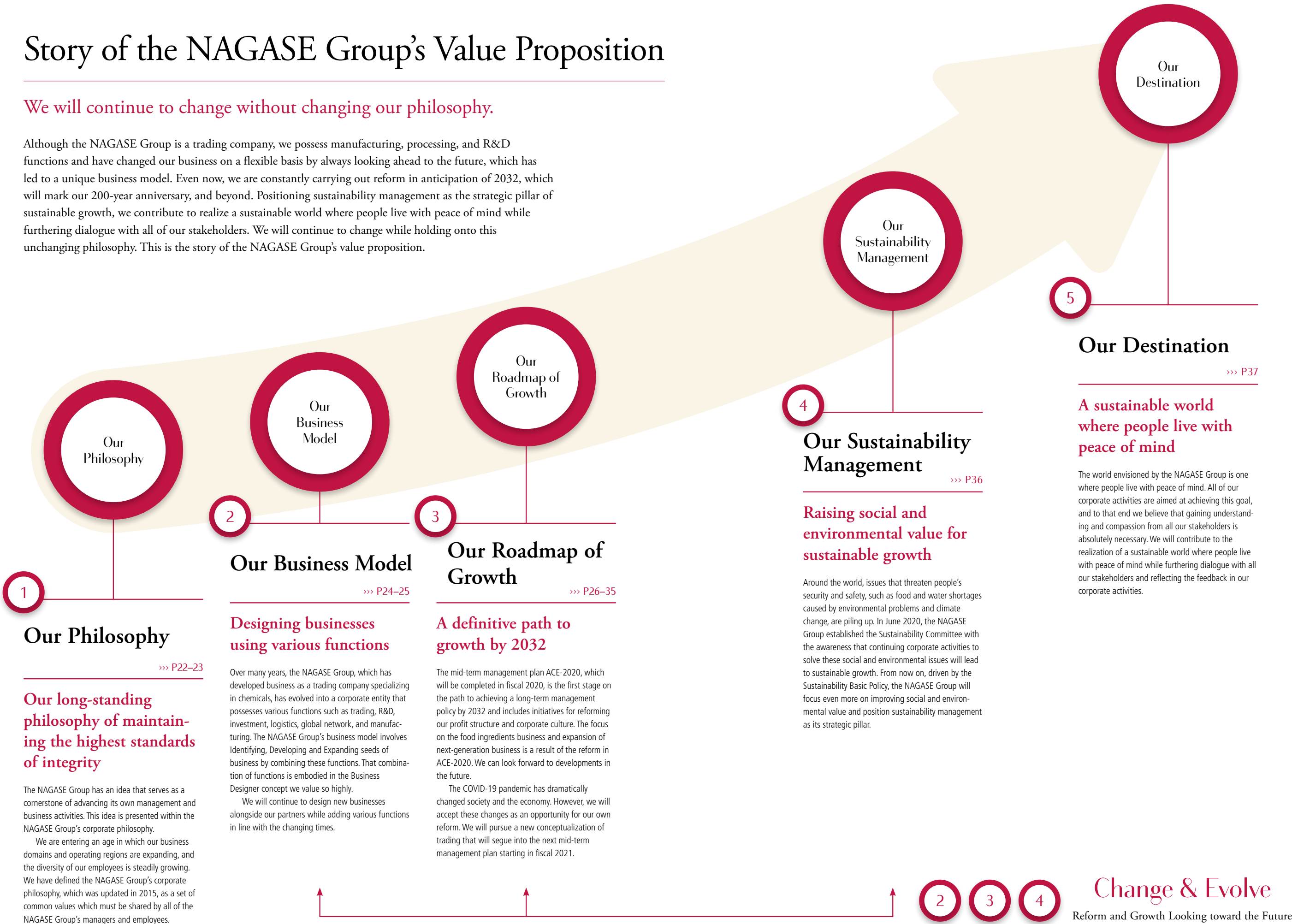
Numerical Targets under ACE-2020



Story of the NAGASE Group's Value Proposition

We will continue to change without changing our philosophy.

Although the NAGASE Group is a trading company, we possess manufacturing, processing, and R&D functions and have changed our business on a flexible basis by always looking ahead to the future, which has led to a unique business model. Even now, we are constantly carrying out reform in anticipation of 2032, which will mark our 200-year anniversary, and beyond. Positioning sustainability management as the strategic pillar of sustainable growth, we contribute to realize a sustainable world where people live with peace of mind while furthering dialogue with all of our stakeholders. We will continue to change while holding onto this unchanging philosophy. This is the story of the NAGASE Group's value proposition.





Our Philosophy

A Sense of Values Shared Within the NAGASE Group

The NAGASE Group works toward sustainable growth and raising corporate value with an eye toward 2032—its 200th anniversary—and beyond. In the 188 years since our founding, our business domains and operating regions have expanded, and the diversity of our employees has steadily grown. Amidst these changes, we have defined the NAGASE Management Philosophy, NAGASE Vision and NAGASE Way as a set of common values for all Group employees. By embodying these common values in our daily activities, each of us helps realize a sustainable world where people live with peace of mind.

NAGASE Management Philosophy

We recognize our responsibility to society and offer beneficial products and services while maintaining the highest standards of integrity. Through our growth, we will contribute to society and enrich the lives of our employees.

NAGASE Management Philosophy

The NAGASE Vision

To realize a sustainable world where people live with peace of mind, each of us embodies our value proposition, “Identify, Develop and Expand” through daily activities.

Strengths/Characteristics

- Maintaining the highest standards of integrity for almost 200 years
- Working with partners to enable new businesses
- Driving new technologies with knowledge and experience
- Staying a step ahead of the market to actively offer solutions

Value Proposition

- We “Identify, Develop and Expand” new businesses
 1. Identify: We discover untapped business opportunities
 2. Develop: We convert opportunities into customer value
 3. Expand: We deliver solutions to multiple fields and regions

Vision for the Future

- We will contribute to a sustainable world where people live with peace of mind

NAGASE Vision

The NAGASE Way

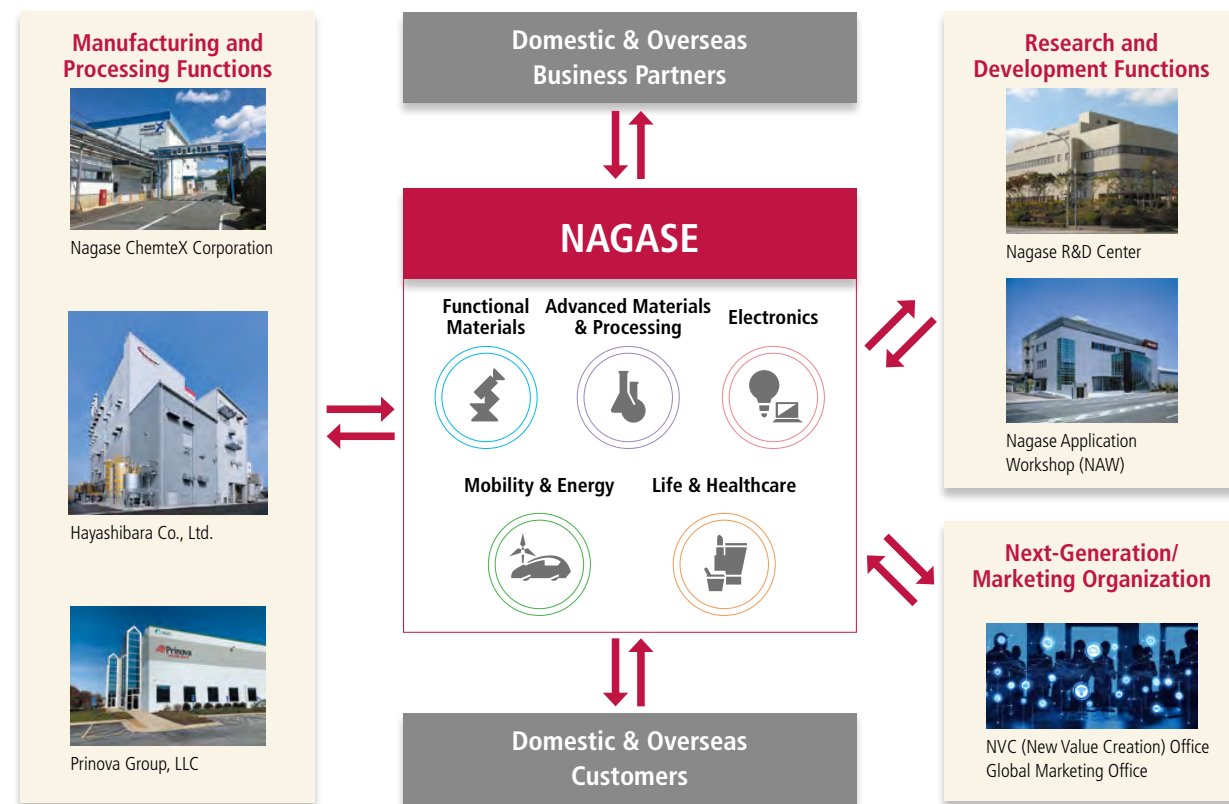
- Always be customer-oriented.
- Always be a creative challenger.
- Always use the power of the NAGASE Group.
- Always think globally and act locally.
- Always think systematically and act speedily.

NAGASE Way

2

Our Business Model — Business Model

Structure of NAGASE's Business



A Business Designer that Fully Utilizes the NAGASE Group's Various Functions

The NAGASE Group is a unique corporate group that owns research facilities and manufacturing companies within the Group while acting as a trading company that specializes in chemicals. We develop global business for a variety of industries including dyes/pigments, coating materials/inks, surfactants, office automation (OA), electrical equipment, home electronics, automobiles, LCDs, semiconductors, pharmaceutical/medical applications, cosmetics and functional food ingredients. The NAGASE Group is noted for its broad product development which extends from upstream to downstream operations; it is through this development that the number of business partners both domestically and overseas has increased to nearly 9,000.

In addition to various manufacturing and processing functions such

as Nagase ChemteX Corporation, Hayashibara Co., Ltd. and Prinova, we also possess R&D functions such as the Nagase R&D Center, Nagase Application Workshop (NAW) and NVC (New Value Creation) Office.

These various "functions" allow us to string each one together to create new businesses. As a Business Designer that goes beyond the framework of a specialized trading company, we develop unique businesses that set us apart from competitors.



Story ①

Focusing on the LCD field, which requires high capabilities, since the early days of the market.

Growth of filters business made possible by broad customer network.

Nagase Filter Co., Ltd. is a Group company whose mainstay product is Denafilter™, a stainless-steel filter used for removing (filtering) foreign particles from raw materials such as molten polymers. The business was



Denafilter™

created with a focus on the patented TP retainer technology that makes up the filter's mesh structure.

This filter is primarily used in film production lines for food packaging and industrial usage. We were one of the first companies to

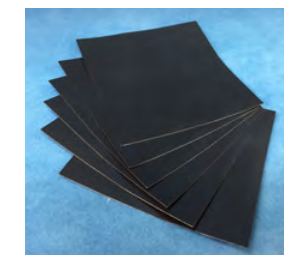
notice the potential of a market for optic films for LCDs, which were not selling well at the time, and so we worked on furthering sales activities and boosting the functionality of the product. Together with Nagase ChemteX, we developed cleaning technology, which clears blockages so the filter can be reused, and built a factory. Meanwhile, we made steady business developments, such as introducing testing equipment to Nagase Application Workshop and problem-solving together by actually using the filters with the customer's plastics. In 2006, we incorporated OEM companies for business expansion and will continue to utilize the broad business domain of the NAGASE Group moving forward. We also plan to develop business in fields such as oil and gas.

Investment and Manufacturing	Detected the potential for patenting, and made the business into a subsidiary at the appropriate time
Trading	Anticipated changes in the electronics market and quickly concentrated efforts in the LCD field
Global Network	Rapid overseas expansion using the NAGASE Group's network

Story ②

Epoxy Sheets: Changed the manufacturing process of smartphone parts. Unique technology aimed at customers' latent needs.

Epoxy sheet is a remarkable material that maintains the adhesiveness and heat resistance of epoxy resins while forming a sheet shape that is easy to process. When Nagase ChemteX began development in 2000,



Epoxy Sheet

most epoxy resins used in the manufacturing of electrical components for communication through devices like cellphones came in liquid form. The NAGASE Group developed and marketed a sheet that would allow hollow sealing (creating a hollow structure in which the resin does not enter) of the electrical components, which did not work well with the

liquid epoxy. This sheet was the first of its kind in the world.

Epoxy sheet made from hollow sealing material was an unconventional product, and the technology exceeded our customers' expectations. Therefore, it was strategically positioned as a technology that distinguishes NAGASE's strengths from its competitors. By accurately assessing problems through communication with customers, we have developed and proposed epoxy sheets that are incorporated into the customer's manufacturing process. Through introduction of the epoxy sheet, manufacturing processes were simplified, the cost of producing peripheral parts was lowered, and downsizing was achieved. This led the epoxy sheet to become the de facto standard for a subset of parts manufacturing, and it developed through NAGASE's network to its main customers in Europe, North America and Asia.

Trading	Sales capabilities with in-depth knowledge of precision molded parts and manufacturing processes, and collaboration with partner companies
Manufacturing	Willingness to develop new, unconventional products and technological ability to bring those ideas to fruition
Global Network	Expanded to Asia, Europe and North America through the NAGASE Group's network

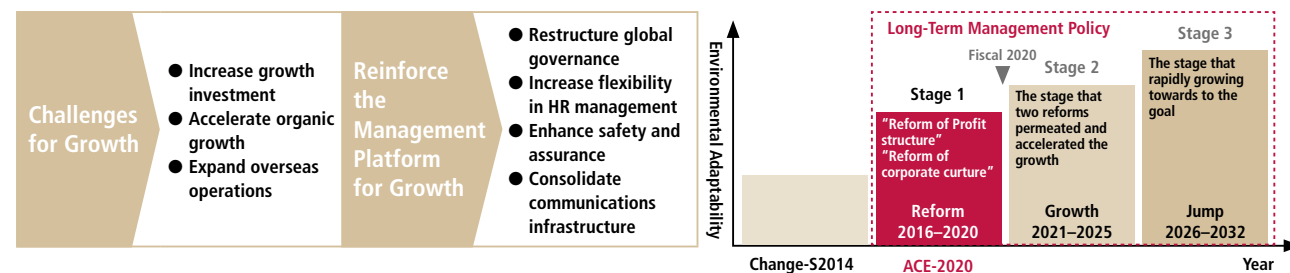


Our Roadmap of Growth

Long-Term Management Policy

In the lead up to 2032, which marks our 200th anniversary, the NAGASE Group formulated a long-term management policy and initiated the mid-term management plan ACE-2020 as the first stage to achieve the goal*. In fiscal 2020, the final year of ACE-2020, we will swiftly handle changes in needs due to the spread of COVID-19 while continuing to pursue our targets.

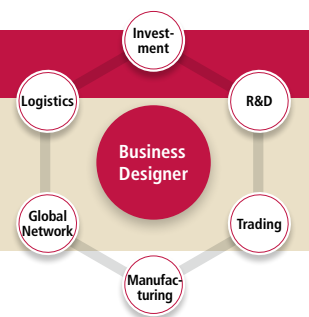
* Normalization of the profit level is more than three times greater than the fiscal year ended March 31, 2015



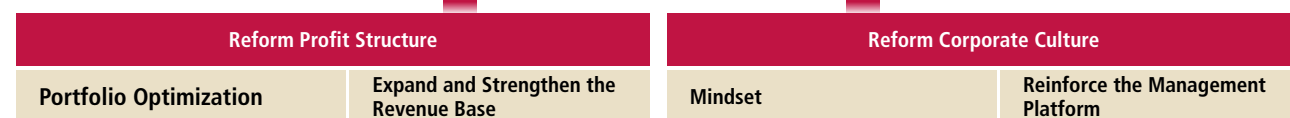
ACE-2020 Basic Policy

NAGASE Transforms from Shosha/ Trading to Business Designer

NAGASE strings all the groups together to create and provide new value to the world through 6 key functions.

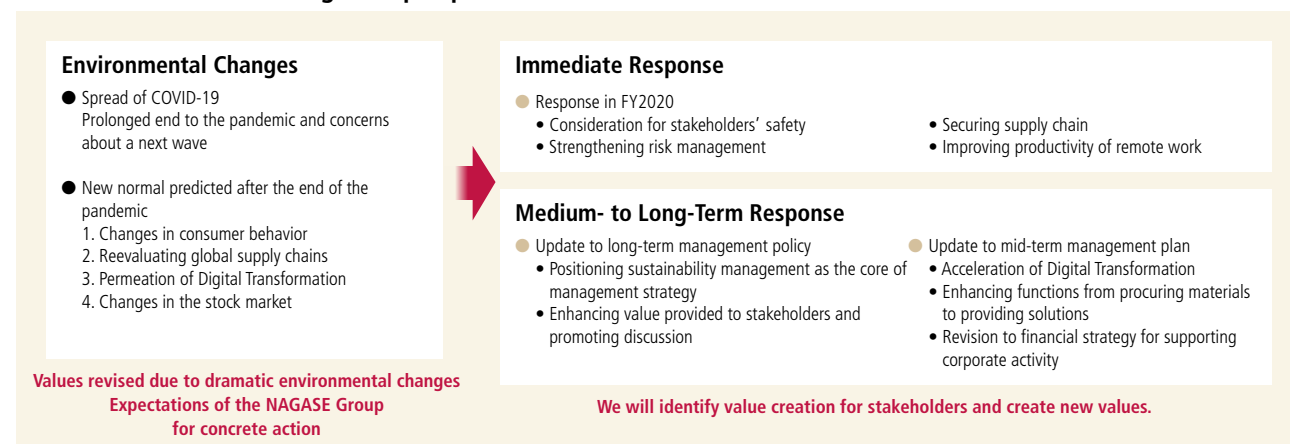


Leverage Group functions to achieve the quantitative and qualitative targets



● For a New Paradigm in the Post-Coronavirus World

We will accept the dramatic environmental changes as an opportunity for reform, and work on creating new value for stakeholders from a long-term perspective.



● Progress of KGI and KPI

KGI (Key Goal Indicator): Goal and index

KGI	FY2018	FY2019	FY2020 (planned)	FY2020 (goal)
Consolidated Net Sales	807.7 billion yen	799.5 billion yen	754.0 billion yen	1.0 trillion yen or more
Consolidated Operating Income	25.2 billion yen	19.1 billion yen	15.0 billion yen	30.0 billion yen or more
ROE	6.6%	4.9%	4.0%	6.0% or more

KPI (Key Performance Indicator): Factor index to achieve KGI

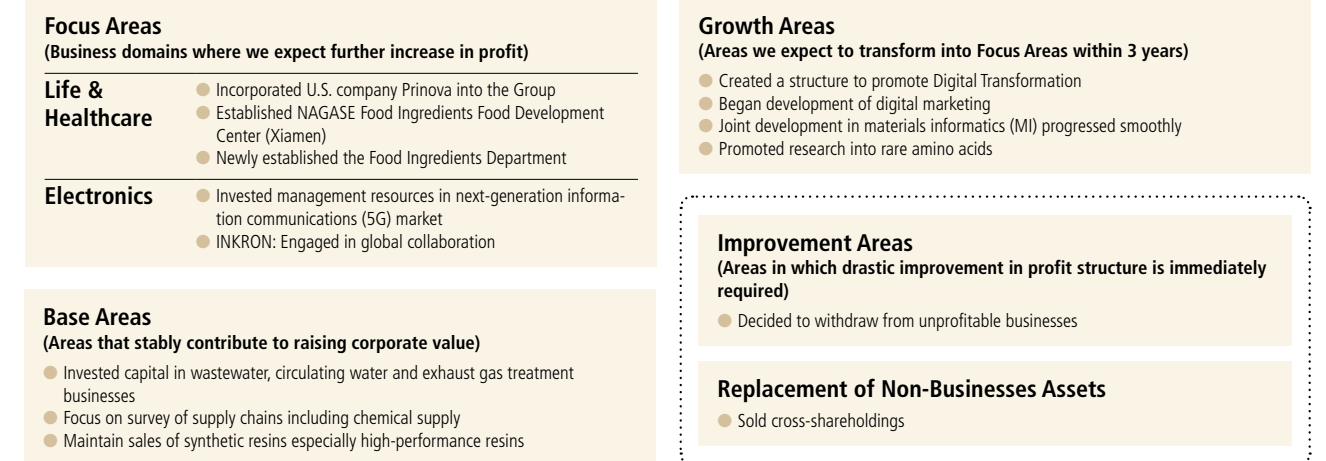
*1 The figures in this chart are all simple management accounting data, which is different from the figures disclosed on the consolidated financial statements.

*2 Total over five years

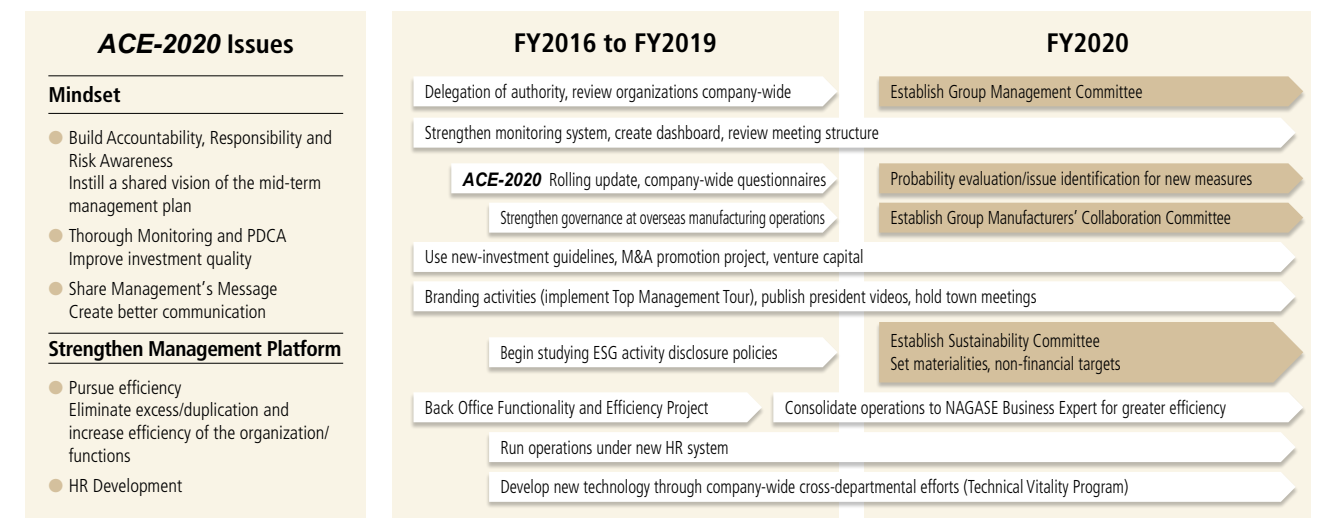
Reform/Strategy	Measures	KPI (Index)	FY2018	FY2019	FY2020 (planned)	FY2020 (goal)
Profit Structure Reform Indicator	Increase Focused Business (Portfolio Optimization)	Operating Income in Focus Area*1	12.6 billion yen	13.6 billion yen	15.3 billion yen	16.9 billion yen
		Growing Investment Distribution Ratio in Focus Area	82%	96%	64%	35%
	Accelerate Globalization (Expand and Strengthen Profit Structure)	Overseas Group Sales*1	405.3 billion yen	406.7 billion yen	462.8 billion yen	600.0 billion yen
		Sales Growth Rate in the Americas	118%	191%	340%	170%
Corporate Culture Reform Indicators	Increase Manufacturing Profitability (Expand and Strengthen Profit Structure)	Operating Income from Manufacturing*1	11.6 billion yen	11.0 billion yen	11.4 billion yen	14.4 billion yen
		Break-Even Point Sales Ratio*1	76%	77%	77%	73%
Financial Strategy Indicator	Pursue Efficiency (Strengthen Management Platform)	Consolidated Selling, General and Administrative Ratio	9.9%	10.7%	12.2%	9.4%
	Investment	Growth Investment*2	32.4 billion yen	110.8 billion yen	128.0 billion yen	100.0 billion yen
	Financial Structure	Rating (R&I)	A	A	A or more	A or more

● Reform Profit Structure (Fiscal year ended March 31, 2020)

Categorize businesses and implement strategies in each domain/Replace assets and redistribute resources



● Reform Corporate Culture: Mindset/Strengthen Management Platform



Feature: New Developments in the Food Ingredients Business

Prinova, a company engaged in the sale and processing of U.S. food ingredients and which possesses a global network, was joined to the NAGASE Group in 2019, propelling NAGASE's overseas expansion of the food ingredients business in a major way. A new Food Ingredients Department was launched in April 2020. We will pursue synergy between Group companies such as Nagase ChemteX Corporation, which has processed enzymes for food ingredients, and Hayashibara Co., Ltd., which became a subsidiary in 2012, and accelerate business development.

Market

Focus Field in Food Ingredient Markets

The NAGASE Group is focused on the global food ingredient market. Around the world, there are growing needs for reliability of foods as well as a safe, healthy and abundant life. The NAGASE Group will work to address these needs. The Prinova Group, which became a member of the NAGASE Group in August 2019, holds the key to business development. Just like the NAGASE Group, Prinova is a hybrid company that wields both

trading and manufacturing functions. NAGASE will continue to handle diverse food ingredients through Prinova's global network, but first it will aim to expand the sports and lifestyle nutrition businesses in which Prinova has a substantial market share. NAGASE will also expand business in the processed food segments of baked goods, dairy products and processed meat through initiatives such as development of applications.

Target Food Ingredient Markets of the NAGASE Group



Strategy

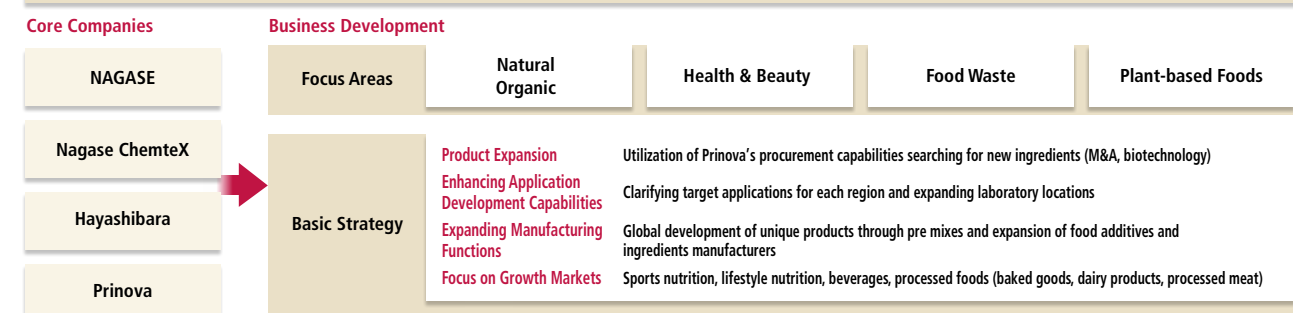
Business of Strategy for the Food Ingredients

The NAGASE Group's food ingredients business aims to contribute to people's healthy and abundant lifestyles through food. To that end, the

NAGASE Group will offer a wide variety of solutions using its procurement, R&D, manufacturing, processing and application development functions.

Overview of Strategy

To contribute to people's healthy and abundant lifestyles through food, the NAGASE Group will provide a wide variety of solutions using its procurement, R&D, manufacturing, processing and application development functions on a global scale.



Prinova's Contribution to NAGASE Group

In August 2019, the NAGASE Group welcomed Prinova to its Group as a new step toward overseas expansion of the food ingredients business.



● Impact on Business Portfolio

Through the acquisition of Prinova, Europe and the U.S. and Life & Healthcare segments will become more important within the NAGASE Group's overall business portfolio.

Only five months of sales figures have been consolidated in the fiscal year ended March 31, 2020, so the numbers still appear small. However, the percentage of sales occupied by the Americas in particular is growing, followed by Europe, which will also become a significant contributor. In sales by business segment, the importance of the Life & Healthcare segment, a focus area, will also increase significantly.

The NAGASE Group has established the Life & Healthcare segment as one of the focus areas in its mid-term management plan ACE-2020. We view this recent acquisition as an incredibly important and effective move to extend the food ingredients business, which will serve as the core of the management plan, expand overseas sales and build a business foundation in Europe and the U.S.

● Overview of Prinova

Prinova is based in Chicago, and has approximately 1,000 employees. The company has a history of more than 40 years, having been founded in 1978.



Prinova performs various operations from compounds to contract manufacturing. It also boasts a strong ability to develop flavors made by its flavorists.

● Overview of Prinova Group, LLC

Company Name: Prinova Group, LLC
Headquarters: Illinois, USA
Establishment: 1978

● Business Scale (fiscal year ended December 31, 2019)

Sales: Approximately ¥82.0 billion
Operating Income: Approximately ¥4 billion

Number of Employees: Approximately 819

● Factories

U.S. (4), U.K. (1), China (1)

● Sales Locations

12 countries, including the U.S. and U.K.

● Product Lines

Food ingredients (Vitamins, amino acids, etc.)

Flavorings, premixes and contract work

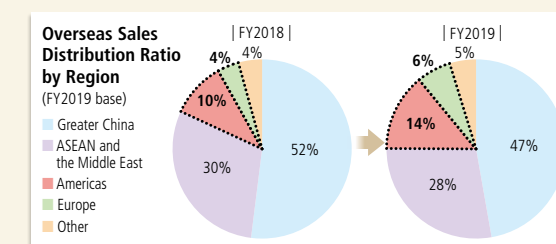
Manufactured goods (Sports nutrition)

● Business

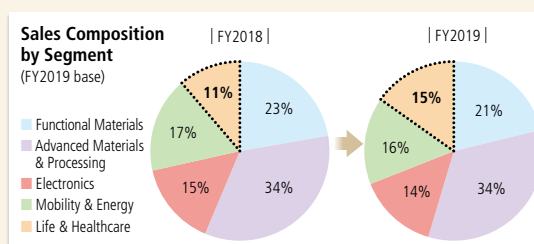
Sale of food ingredients and flavorings,

manufacturing and processing of

premixes, contracted manufacturing



Note: Five months of sales consolidated in FY2019



Note: Five months of sales consolidated in FY2019

Prinova Accelerating group synergies in Europe, the U.S., and Asia



Donald K. Thorp
President

Prinova has a wide customer network throughout the food industry, and our value added services are key to the supply chain of our customers. Prinova's core competency is its industry knowledge and market expertise. It can be ingredient sourcing, R&D for blends & flavors or experience and relationships in the sports nutrition segment. This helps differentiate Prinova from its competitors.

The greatest opportunity that Prinova can utilize NAGASE's strength would be their global network. There are geographic

locations that NAGASE is currently operating that can be leveraged by existing Prinova operations to create synergies and cost savings.

Additionally, NAGASE's R&D network is also very impressive, we need to figure out how to use this expertise globally. Prinova has a very hard working and entrepreneurial culture that empowers employees to work effectively across different functional areas. We encourage our leaders to be proactive and to come up with ideas that lead to efficiencies and growth of our customers.

Action

Target Food Ingredients Markets of the NAGASE Group

1. Expansion of Food Additive Lineup

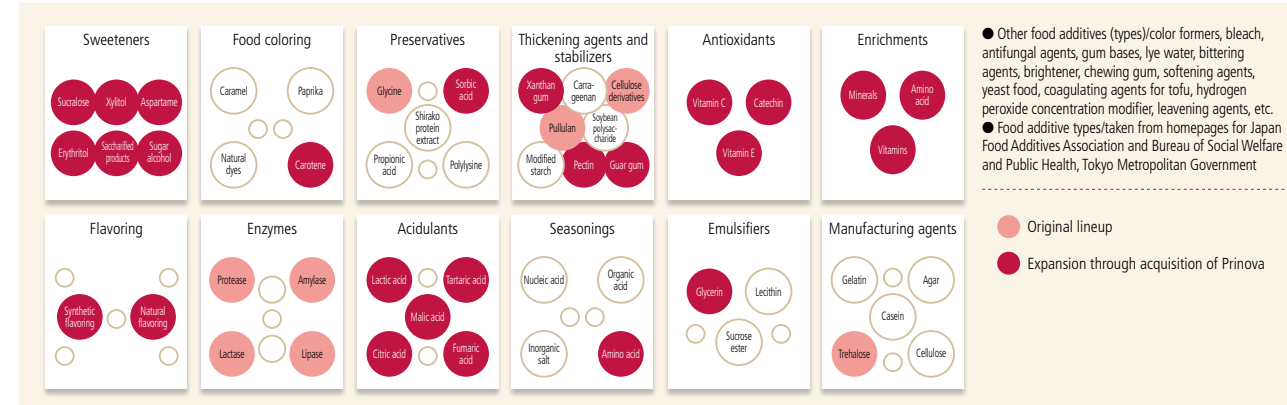
Through Prinova's participation in the NAGASE Group, our food additive lineup will be largely expanded, allowing for even greater business opportunities in the near future.

Up until now, the NAGASE Group has developed business in fields such as enzymes, manufacturing agents, preservatives, thickening agent and stabilizer mainly in Japan through collaboration with Nagase

ChemteX and Hayashibara. The domestic food additive market is said to be roughly ¥300 billion. Yet globally, the market is expanding to roughly ¥4.7 trillion. Moving forward, we will accelerate business in the global food additive markets, including those markets in which Prinova is already developing.

Food Additive Market Overseas: ¥4.7 trillion Domestic: ¥300 billion

(Source: IHS Markit)



2. Global Expansion of Premixes

The premix market, which supplies blended food ingredients, is currently said to be around ¥160 billion. Further global expansion is anticipated, as the market is expected to reach ¥230 billion in 2027.

At the NAGASE Group, for now we will focus on the nutrition business, including sports nutrition, with a focus on Prinova, and aim to expand our market share. In terms of each region, we intend to expand

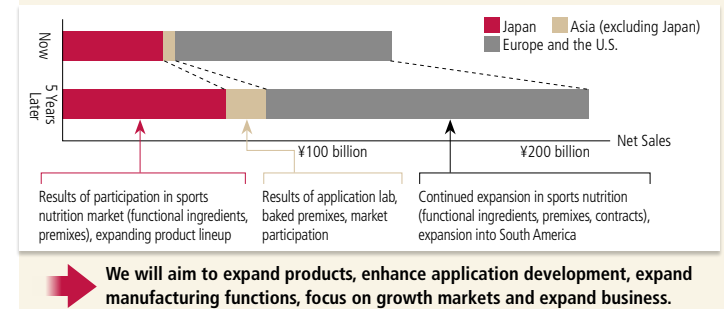
business in Latin America, China, and Southeast Asia. Following that, we will develop premixes with processed foods such as baked goods in China and Southeast Asia.

With regard to sports nutrition, we are also taking initial steps in the Japanese market. Moving forward, we will develop Japan's sports nutrition market in collaboration with Hayashibara and Nagase ChemteX.

3. Outlook of the Food Ingredients Business

Recent sales for the NAGASE Group's food ingredients business are nearing ¥130 billion (Estimated scale for the fiscal year ending March 31, 2021). However, in the next five years we intend to expand our business scope by expanding products, enhancing application development, expanding manufacturing functions, and focusing on growth markets.

Outlook of NAGASE's Food Ingredients Business



Food Ingredients Business: A Core Company that Holds the Next Key to Growth

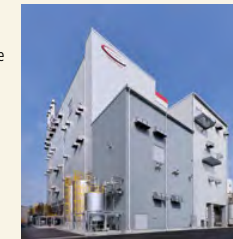
Hayashibara Co., Ltd.

We will continue to work on inventive development of new materials using our well-honed biotechnology capabilities and increase our presence in the global market.

Hayashibara Co., Ltd., which became a member of the NAGASE Group in 2012, provides ingredients for food, cosmetics, pharmaceuticals, health foods, and functional dyes as a core business in the Group's life sciences field.

Our core technologies are microorganism screening technology, substance production technology using microorganisms and enzymes, and technologies for discovering functions of materials. We will continue working hard to develop new materials while

● **Company Profile**
Company Name: Hayashibara Co., Ltd.
Headquarters: Okayama, Okayama Prefecture
Established: 1932
● **Business Scale (fiscal year ended March 31, 2020)**
Sales: ¥25.0 billion
Operating Income: ¥4.9 billion
Number of employees: 652
● **Manufacturing and Development Locations**
Okayama Plant I, Okayama Plant II, Okayama Functional Saccharide Plant, Fujita Plant, Fujita Pharmaceutical Plant, Fujisaki Institute, L'Plaza (as of March 2020)



Naoki Yasuba
President and CEO

refining our core technologies. We produce unique functional carbohydrates using enzymes created by microorganisms. We then supply these carbohydrates as ingredients for foods, cosmetics, and pharmaceuticals in a wide range of markets in Japan and overseas, which has cemented our position as the world's leading brand of functional carbohydrates.

There is growing awareness of social issues such as climate change and food shortages. Amidst this, we sensed rapidly increasing expectations and demands to solve social issues through business activities in research development, manufacturing and dealings with business partners in the fiscal year ended March 31, 2020.

We will seize the momentum of the post-coronavirus era and share in the NAGASE Group's management philosophy of maintaining the highest standards of integrity. At the same time, we will continue working on research development and growth with "care" as our keyword to signify a compassionate and sustainable business.

Food Ingredients Business

We uniquely develop, manufacture and sell food ingredients and health food ingredients with high added value.

Main product: TREHA™
TREHA™ is a low-sweetness food ingredient with a clean finish. It has a wide range of functions, including prevention of starch retrogradation, protein denaturation, and freshness keeping. Because it retains good flavor and texture for a long time, it is used in Japan and overseas in a wide range of fields, such as processed foods, beverages, and food services including restaurants, catering, and delis.



Cosmetic and Pharmaceutical Material Business

We develop and manufacture unique high-value-added cosmetic and pharmaceutical ingredients.

Main product: AA2G™
AA2G™ is produced by the enzymatic binding of glucose to vitamin C. This enzymatic conversion makes AA2G™ stable when incorporated into cosmetics. This maintains its activity and provides resistance to discoloration and odors. When applied to the skin, AA2G™ is degraded by a natural enzyme to release vitamin C, resulting in cosmetics that promote brighter healthier looking skin. It is used in Japan and around the world.

Functional Dye Business

We develop and manufacture a wide variety of functional dyes as an organic synthesis specialist.

Main product: Dyes for the life sciences
Some functional dyes are known for having medicinal and/or bioactive functions. In addition, some dyes are used as cell staining dyes and have fluorescent properties. We are developing new medical and pharmaceutical applications using these functions.

CitraPeak™, a New Product Made Possible by Group Synergy

Glucosyl Hesperidin, which is manufactured and sold by Hayashibara, has been proven to improve blood flow, which is why in Japan it is mainly used as a supplement to treat cold sensitivity. This effect was combined with the knowledge that Prinova accumulated in the field of sports nutrition to create CitraPeak™, a sports nutrition ingredient that increases body heat and enhances performance by ingesting it prior to exercise. Development was launched in the U.S. in late 2019.



Developed at Overseas Application Laboratory

In 2019, the NAGASE Group established a laboratory in Xiamen, China as a base to globally develop its food ingredients business. Then in 2020, it established a laboratory in Singapore as a base to provide solutions using the NAGASE Group's food ingredients. We develop recipes and applications to meet the unique needs of each region and advance business around the world.



Feature: Initiatives for Next-Generation Businesses

The NAGASE Group constantly strives to provide value that spurs innovations for comfortable lifestyles for future generations. We “Identify, Develop and Expand” technologies needed in the future. In this feature, we introduce the businesses the NAGASE Group has been focusing on for the next generation.

Case 1

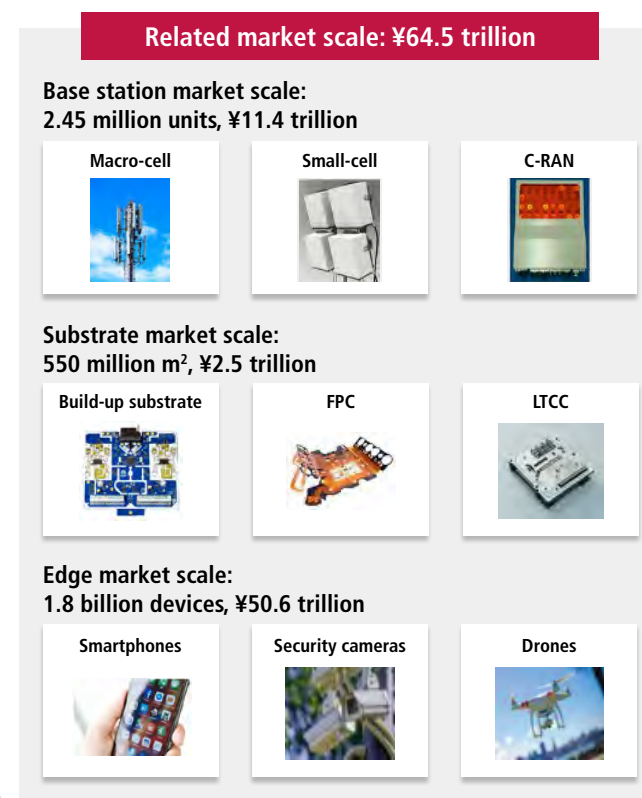
Taking on Challenges in Next-Generation ICT Business

While data volume is increasing exponentially over information communications infrastructure due to IoT, the transition to 5G will bring ultra-fast speed, ultra-low latency and multiple simultaneous connections. 5G technology is an essential part of smart cities that deploy cutting-edge technologies, such as IoT and AI. Aiming to realize a sustainable world where people live with peace of mind, the NAGASE Group views growth in 5G-related business as a critically important business domain.

● New Markets Created by Smart Cities

Smart cities are communities that strive to achieve comfortable lifestyles while addressing future issues, such as environmental problems and declining birthrates in an aging population, embedding IoT, which connects things to the internet, into infrastructure and people’s lifestyles. IT and communications infrastructure, Industrial infrastructure, Transportation infrastructure and housing infrastructure all play central roles in smart cities. The NAGASE Group’s businesses can provide the various materials and technologies necessary for building this infrastructure, such as substrates used in mobile communications base stations, smartphones and other devices, as well as materials for antennas. The market for these communications-related materials is forecast to grow to ¥64.5 trillion by 2025.

Source: Fuji Chimera Research Institute, Inc.



● Strategy

The NAGASE Group’s strategy for the next-generation information communications business specifically aims to develop business in two ways.

The first is to expand the business of materials, processes or equipment for substrates in new base stations or various types of edge devices, including smartphones, security cameras and drones, due to development of new materials or processes.

The second, as an exit strategy, for example NAGASE could deliver energy-related products like rechargeable batteries and services for the homes and buildings that form the foundation of smart cities to contribute to realizing a more abundant society.

● Leveraging Group Synergies

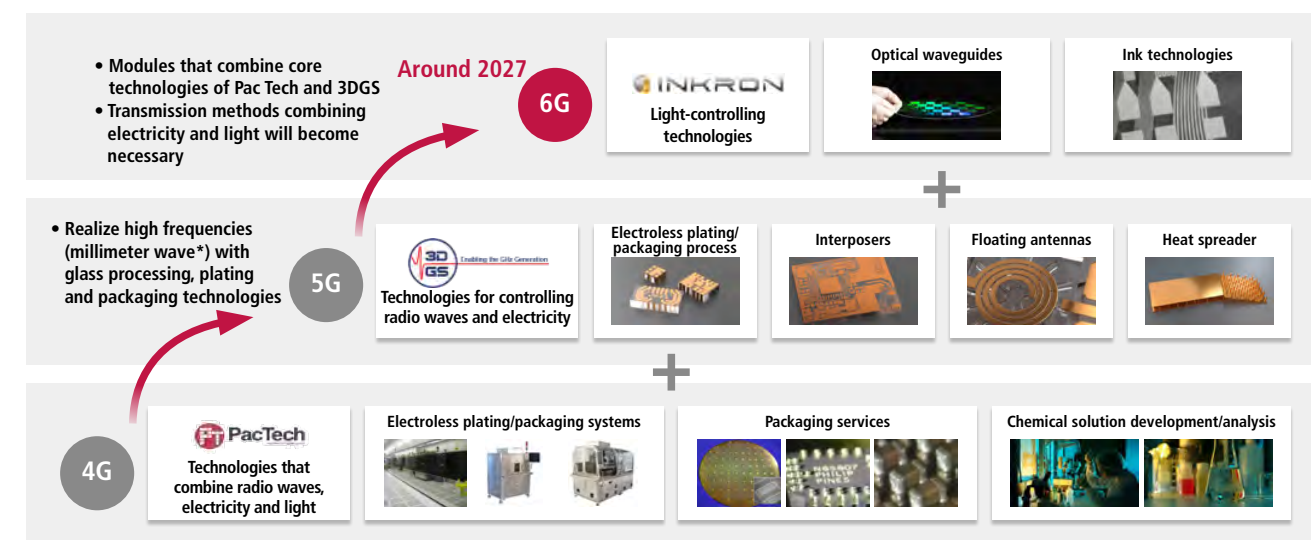
The NAGASE Group will develop business by leveraging the comprehensive strengths of Group companies around the world that excel in their own fields of 5G-related parts, materials and technologies, the breadth of which covers low dielectric materials, circuit formation technology, glass substrates, and glass passive components, which are essential for high-speed data transmission in 2025, when 5G will have permeated society and the contours of smart cities take shape.

Through M&A and internal close communication among group companies to date, the NAGASE Group has strengthened its relationship and will make synergy for developing materials in the information communications business. We believe a major key to future business

expansion will be collaboration among our subsidiaries Pac Tech-Packaging Technologies GmbH (Pac-Tech), a company in Germany with strengths in laser bonding technology and fine processing technologies; Finland-based Inkron Oy (INKRON), which excels in technologies that combine radio waves, electricity and light; and also partner 3D Glass Solutions, Inc. (3DGS) in the U.S., which has core technologies in 3D glass processing.

The NAGASE Group will develop core technologies while anticipating the major transition brought by 6G (6th generation mobile communications systems expected to be realized around 2027) technology in the future.

Core Technologies for 6G



* Millimeter waves are the fastest radio waves. Light transmits data faster than millimeter waves.

Aiming to Develop New Markets by Leveraging the NAGASE Group’s Diverse Management Resources

Takahiro Okumura
Executive Officer



To accelerate expansion of our 5G business, we invested in 3DGS (US) in 2018. 3DGS excels in 3D microfabrication with photosensitive glass, and its promising technologies will be expected useful in the development of base stations and communications modules.

The NAGASE Group’s R&D in next-generation information and communications is progressing with effective utilization of these diverse management resources spread across the world, Nagase ChemteX (Japan) and Engineered Materials Systems (US) specializing in for low dielectric materials for devices, Pac

Tech (Germany) specializing in circuit fabrication on silicon and glass substrates, Inkron (Finland) specializing in next-generation optical materials for 6G technology, and other several group companies in Asia. Moreover, we’re in alliance with chemical makers for material development by utilizing another expert function as the trading company.

On April 1, 2020, we launched the Advanced Information and Communications Project Team to come up with cross-organizational projects to drive the creation of new businesses among NAGASE group.

Case 2

NVC Office Creating the Core of NAGASE's Future Businesses

Started in April 2017, the New Value Creation (NVC) Office's mission is to spur innovation in the NAGASE Group and create new value, as its name states, that will become the core of future businesses through

collaboration across business divisions. The NAGASE Group intends to create new businesses and new value the world has not seen before.

Chemical
& bioData
science

● Position of the NVC Office in the NAGASE Group

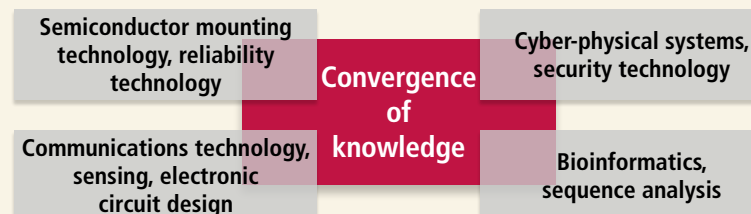
Before it created the NVC Office, the NAGASE Group had been a founding member of the IBM Research Frontiers Institute (RFI), a fundamental IT research consortium launched by IBM in the U.S. with the objective of facilitating R&D among companies from different sectors. The NVC Office was the culmination of ideas within the NAGASE Group that it needs an organization for disseminating information within the Group and to train human resources to create innovations across business divisions.

The primary role of the NVC Office is to create new businesses over timeframes of 5–10 years. With the slogan "Bio-Inspired Technologies," the NVC Office aims to create value with new ideas not seen before.

The driving force behind the NVC Office is the convergence of knowledge. Currently, it has four employees with engineering Ph.Ds in

different fields of expertise. These four people bring their experiences in R&D at private-sector companies to a variety of discussions while respecting one another's opinions. Through these discussions, various business ideas emerge.

Four Ph.D. Engineers' Fields of Expertise



NAGASE Technical Vitality Program in its Second Year

Yasumitsu Orii

GM, NVC Office and
Executive Officer

The NAGASE Technical Vitality Program has entered its second year of activities for the technology community, taking a bottom-up approach to innovation in the NAGASE Group.

These cross-divisional activities are independently undertaken by various on-site employees on a voluntary basis. In its first fiscal year, the program had 50 participants who split into five working groups (WG), comprising next-generation wireless communications, additive manufacturing, materials informatics, health tech and business reforms through Digital Transformation

(DX). Employees from different backgrounds came together to pursue these activities, which lead to free-thinking ideas that span across the organization.

These activities have steadily produced results. The materials informatics WG was promoted to the corporate level, and in the second year, new WG were launched for next-generation sensors and biomimetics. The seeds of next-generation businesses are beginning to bud and grow.

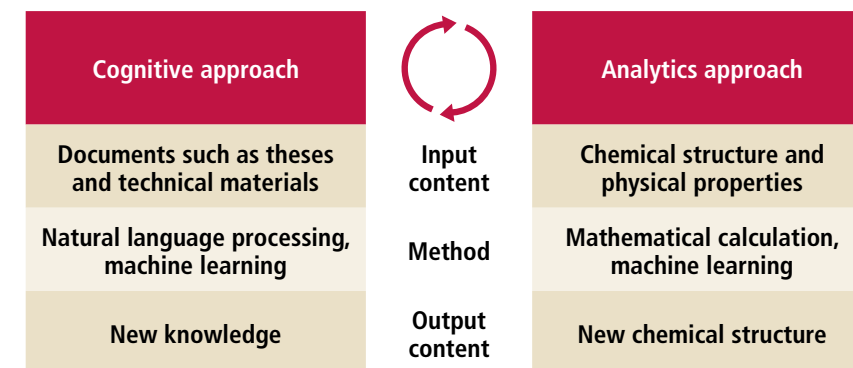
● Project

Launching Materials Informatics

Materials Informatics (MI) is a field of technology for developing new materials by combining the latest data processing technologies with materials science and we are currently moving ahead on joint development with IBM.

The NAGASE Group, which has a strong presence in the chemical field, also has overwhelming expertise in materials. It is the NAGASE Group's belief that using this knowledge in combination with engines equipped with the latest AI could contribute significantly to rationalizing new substance and new material development.

The Group's Nagase ChemteX and Hayashibara are already moving ahead on verification of this initiative and there are great expectations of the results. Following verification within the Group, we plan to start providing services to chemicals and biomaterials manufacturers.



Axonerve™ an Algorithmic Search Engine IP

Axonerve™ is a data search algorithm IP developed by NAGASE based on an idea from domestic research organizations. NAGASE developed this IP core for FPGA (Field-Programmable Gate Arrays) and is expanding its IP core licensing business.

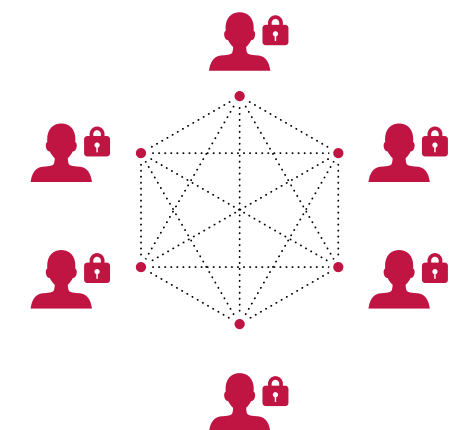
FPGAs are devices whose circuit configurations can be easily programmed. With this advantage, we will be developing a new market for acceleration of network virtualization and high-speed data processing for the 5G communication and data center application.



Blockchain System Development

Growing numbers of companies are exposed to new risks with the passage of time, such as the music or media industries exposed to the dangers of the copyright business or the medical or food industries where there are strong requirements for product traceability.

Under these circumstances, the NAGASE Group turned its focus to realizing highly reliable transactions through distributed ledgers enabled by blockchains for secure and traceable value exchange functions. This started a movement as a new undertaking in the NAGASE Group's DX that will preserve existing businesses and create further new businesses. The Blockchain Promotion Team was launched as a cross-divisional project in February 2020 and has started discussions on future commercialization.



4 Our Sustainability Management

Integrity in business activities

Positive relations with society

Consideration for the environment

Basic Policy

In its response to sustainability-related issues, the NAGASE Group starts with the spirit of integrity in the NAGASE Management Philosophy and its vision for society to realize a sustainable world where people live with peace of mind. We are aware that we can achieve sustainable growth by carrying on with corporate activities that help solve issues in society and the environment. NAGASE proactively addresses sustainability issues based on its Policy for Sustainability Activities.

1. Integrity in Business Activities

- We shall conduct our corporate activities in compliance with all applicable national and regional laws and regulations, and in keeping with societal norms and common sense.
- We shall strive to prevent corruption of all kinds and maintain healthy and proper relations with our partners and government entities.
- We shall strive to provide safe, high-quality products and services, and seek to maintain and improve the value to our customers and business partners.
- We shall safeguard the benefit to the consumer through maintaining and promoting fair and free competition.
- We shall strive toward rigorous management and protection of information about our customers and our company.

2. Positive Relations with Society

- We respect human rights and do not permit any sort of discriminatory conduct, and do not accept infringements of human rights such as forced labor or child labor.
- We respect the cultures and practices of national and regional societies, and maintain positive relations with society.
- We shall strive to ensure health, safety, and appropriate communication with our diverse stakeholders.
- We shall constantly pay detailed attention to sustainability among our suppliers, and shall work to make corrections should there be any doubt to their sustainability.
- We shall proactively disclose corporate information as appropriate.

3. Consideration for the Environment

- We shall comply with national and regional environmental regulations.
- We shall contribute to the maintenance of the global environment, including limiting climate change, preventing contamination and promoting reduction in the environmental footprint of our business activities through suppression of greenhouse gas emissions and energy consumption.
- We shall, through environmentally conscious products and services, provide information to our customers about appropriate product usage, recycling, and disposal methods.
- We shall contribute broadly to society through environmental conservation activities in various countries and regions.
- We recognize the importance of biodiversity and shall strive to conserve ecosystems.

Note: Information about sustainability management is also available on our website. <https://www.nagase.co.jp/english/sustainability/>

The NAGASE Group's Process for Identifying Materiality (Priority Issues)

When identifying priority issues, the NAGASE Group screened for issues in its operations while analyzing the external business environment based on an awareness of the goals and targets of the SDGs that are shared by the planet and people. From among these issues, management identified issues of particularly high priority to both the NAGASE Group's businesses and its stakeholders. We identified our stakeholders and the value we intend to provide based on the society that the NAGASE Group envisions in the NAGASE Vision, and the results of an analysis of risks and opportunities arising from changes in the external environment.

In the next mid-term management plan beginning in fiscal 2021, key performance indicators (KPI) will be set along with medium- and long-term targets for these priority issues. In addition, we aim to sustain growth through constructive dialogue with our stakeholders, disclosing our progress toward these goals.

Fiscal 2019

- Identify prominent issues (SDGs, issues from analysis of external environment)
- Identify stakeholders and value we wish to provide
- Analyze risks and opportunities in the external environment
- Analyze our vision for society and the future

Fiscal 2020

- Analyze importance to stakeholders and NAGASE
- Set mid-term targets and KPIs
- Determine materiality through the Board of Directors

5 Our Destination

NAGASE's Goals

NAGASE Groups Vision for the Future



A sustainable world where people live with peace of mind

The NAGASE Group's vision for society is to realize a sustainable world where people live with peace of mind, as described in the NAGASE Vision. All of our corporate activities aim to realize this vision, while contributing to value propositions for everyone. To achieve this vision, we will seek to engage more deeply in dialogues with our stakeholders, and reflect everyone's opinions in our corporate activities, to take us one step closer to realizing the type of society that we should aim to be.



For Employees

Value Proposition

- Work environments that are safe and facilitate work, where all employees can positively and enjoyably engage in work with motivation
- A corporate group that employees and their families are proud of

Communication

- Disseminate information through the intranet and Group newsletters
- Training and seminars
- Employee awareness surveys and interviews
- Hold labor management meetings
- Conduct inner branding activities (Top Management Tours), stream videos of the president message, hold town hall meetings

For Business Partners

Value Proposition

- Deepen our understanding of partners and build cooperative relationships with them to pursue a wide range of possibilities
- Solutions for social issues that the entire value chain should undertake

Communication

- Disseminate information through integrated reports, official company website and social media
- Clarify basic aims for sustainability
- Set up channel for receiving inquiries
- Exchange information at conferences, etc.

For Society and Consumers

Value Proposition

- Ethical management that complies with laws and regulations
- Business activities that respect the rights, health and well-being of people in the supply chain
- Products and services to realize a sustainable world where people live with peace of mind

Communication

- Programs that give back to society and volunteer activities
- Dialogue with local residents
- Support for the Nagase Science and Technology Foundation
- Assistance for the Grand Contest on Chemistry for High School Students
- Operating assistance for the Hayashibara Museum of Art

For Shareholders

Value Proposition

- Foster trust and reassurance with highly transparent management structure and timely and accurate information disclosure
- Improve both social and economic value, maximize corporate value by constantly creating new businesses

Communication

- Shareholders' Meeting
- Conferences/briefings for institutional investors and analysts
- Publish information through disclosure documents, press releases, integrated reports, shareholder newsletters and the official company website
- Provide information to ESG investors
- Individual meetings and overseas roadshows

Our Board

Our Board (As of June 22, 2020)



Note: Number of shares held based on available information on April 30, 2020

Directors

Representative Director and Chairman

Hiroshi Nagase

Number of Shares Held: 1,354,361

Director and Vice Chairman

Reiji Nagase

Number of Shares Held: 91,731

Representative Director, President and CEO

Kenji Asakura

Number of Shares Held: 19,827

Representative Director and Managing Executive Officer

In Charge of Overall Sales

Ichiro Wakabayashi

Number of Shares Held: 11,493

Director and Executive Officer

In Charge of Overall Administration and Affiliated Companies

Masaya Ikemoto

Number of Shares Held: 7,419

Outside Director

Nobumasa Kemori

Number of Shares Held: 2,598

- 1980 Joined Sumitomo Metal Mining Co., Ltd.
- 2006 Managing Executive Officer and Director, Sumitomo Metal Mining Co., Ltd.
- 2007 Representative Director and President, Sumitomo Metal Mining Co., Ltd.
- 2013 Representative Director and Chairman, Sumitomo Metal Mining Co., Ltd.
- 2016 Director and Chairman, Sumitomo Metal Mining Co., Ltd. Director, NAGASE & CO., LTD.
- 2017 Executive Adviser, Sumitomo Metal Mining Co., Ltd.

Outside Director

Takahiko Ijichi

Number of Shares Held: 0

- 1976 Joined Toyota Motor Co., Ltd. (currently Toyota Motor Corporation)
- 2004 Managing Officer of Toyota Motor Corporation
- 2008 Senior Managing Director of Toyota Motor Corporation
- 2011 Director and Senior Managing Officer of Toyota Motor Corporation
- 2013 President of Towa Real Estate Co., Ltd.
- 2015 Executive Vice President and Member of the Board of Directors of Toyota Motor Corporation
- 2016 Retired Adviser of Towa Real Estate Co., Ltd.
- 2017 Senior Adviser of Toyota Motor Corporation Representative Director and Chairman of the Board of Aioi Nissay Dowa Insurance Co., Ltd.
- 2018 Retired Senior Adviser of Toyota Motor Corporation
- 2019 Retired Representative Director and Chairman of the Board of Aioi Nissay Dowa Insurance Co., Ltd.
- 2020 Director, NAGASE & CO., LTD.

Outside Director

Ritsuko Nonomiya

Number of Shares Held: 0

- 1987 Joined Peat, Marwick, Mitchell & Company (currently KPMG LLP)
- 1997 Partner of KPMG Corporate Finance K.K.
- 2000 Joined UBS Warburg Japan (currently UBS Securities Japan Co., Ltd.)
- 2005 M&A Advisor and Managing Director of UBS Warburg Japan
- 2008 Senior Vice President and Business Development Leader of GE Capital Asia Pacific Ltd.
- 2013 Senior Executive Officer and Business Development Leader of GE Capital Japan, GE Japan Inc. Managing Director, GCA Savian Corporation (currently GCA Corporation)
- 2015 Member of Executive Management Japan/Asia, GCA Savian Corporation
- 2017 Director, GCA Corporation
- 2020 Director, NAGASE & CO., LTD.

Audit & Supervisory Board Members

Note: Number of shares held based on available information on April 30, 2020

Outside Audit & Supervisory Board Member



Nobuyuki Shirafuji

Number of Shares Held: 1,211

- 1984 Joined The Sumitomo Bank, Ltd. (currently Sumitomo Mitsui Banking Corporation)
- 2003 Deputy General Manager of Global Corporate Investment Dept. (London) Sumitomo Mitsui Banking Corporation and Sumitomo Mitsui Banking Corporation Europe Limited
- 2006 General Manager of Credit Dept., Europe, Middle East and Africa Division (London) of Sumitomo Mitsui Banking Corporation and Sumitomo Mitsui Banking Corporation Europe Limited
- 2013 General Manager of Credit Review Dept. of Sumitomo Mitsui Banking Corporation
- 2016 Retired from Sumitomo Mitsui Banking Corporation Audit & Supervisory Board Member, NAGASE & CO., LTD.

Audit & Supervisory Board Member



Masanori Furukawa

Number of Shares Held: 7,079

Audit & Supervisory Board Member



Mitsuru Kanno

Number of Shares Held: 7,230

Outside Audit & Supervisory Board Member



Gan Matsui

Number of Shares Held: 754

- 1980 Prosecutor, Tokyo District Public Prosecutors Office
- 1990 Prosecutor, Tokyo District Public Prosecutors Office (Special Investigative Squad)
- 2005 Director, Special Trial Department, Tokyo District Public Prosecutors Office
- 2010 Assistant Public Prosecutor, Osaka High Public Prosecutors Office
- 2012 Chief, Criminal Investigations, Supreme Public Prosecutors Office
- 2014 Chief Prosecutor, Yokohama District Public Prosecutors Office
- 2015 Superintending Prosecutor, Fukuoka High Public Prosecutors Office
- 2016 Japan Federation of Bar Associations (Member, Tokyo Bar Association) Yaesu Sogo Law Office
- 2018 Audit & Supervisory Board Member, NAGASE & CO., LTD.

Executive Officers

Naoki Yasuba

Managing Executive Officer
Hayashibara Co., Ltd.
Nagase R&D Center

Takanori Yamauchi

Managing Executive Officer
Nagase Business Expert Co., Ltd.

Satoru Fujii

Managing Executive Officer
Nagase ChemteX Corporation

Masatoshi Kamada

Executive Officer
CEO, Greater China
CEO, Nagase (China) Co., Ltd.

Yasuhiro Mihara

Executive Officer
GM, Corporate Planning Department

Takahiro Okumura

Executive Officer
Energy Business Office
New Value Creation Office
CEO, Europe

Kusuo Ota

Executive Officer
GM, Colors & Advanced Processing
Department
Nagase Application Workshop

Hiroyuki Ueshima

Executive Officer
GM, Mobility Solutions Department
Nagoya Branch

Koichi Sagawa

Executive Officer
GM, Polymer Global Account
Department

Akira Takami

Executive Officer
GM, Audit Office

Takayuki Masuda

Executive Officer
CEO, Americas
CEO, Nagase Holdings America
Corporation

Yasumitsu Orii

Executive Officer
GM, New Value Creation Office

Ryuichi Uchida

Executive Officer
GM, Global Marketing Office

Takeshi Takada

Executive Officer
GM, Electronics Department

Noriaki Arashima

Executive Officer
GM, Specialty Chemicals Department

Noriyoshi Yamaoka

Executive Officer
GM, Human Resources & General Affairs
Division

Yoshihisa Shimizu

Executive Officer
GM, Finance & Accounting Division

Interview with the Outside Directors

In June 2020, Mr. Takahiko Ijichi and Ms. Ritsuko Nonomiya were newly appointed as outside directors, bringing the total number of outside directors to three, including Mr. Nobumasa Kemori. The three directors gathered to talk about the attractive aspects of the NAGASE Group and its value propositions.



Outside Director **Nobumasa Kemori**

Outside Director **Takahiko Ijichi**

Outside Director **Ritsuko Nonomiya**



Nobumasa Kemori

“In the interest of diversity, NAGASE’s outside directors are now having gender diversity, advancing its corporate governance structure further.”

What is your impression of how the Board of Directors operates at NAGASE?

Kemori In the four years I have served as outside director, I have developed two major impressions of the Board of Directors. The first is the free-spirited discussions at meetings. At a majority of Board of Directors meetings, inside board members must listen carefully to the opinions of outside board members without interjecting with their own opinions. In this context, I like how Board of Directors meetings at NAGASE have become venues for open discussion in both directions, with some members also voicing counterarguments to the opinions of outside board members on occasion. The second impression is the steady pace of change, even though it is not that quick. Four years ago, the ratio of outside directors was 20%. In 2019, the ratio was roughly 30%, with five inside directors and two outside directors. In 2020, the number of outside directors increased to three people, gradually increasing the ratio to nearly 40%. In the interest of diversity, NAGASE’s outside directors are now having gender diversity, advancing its corporate

governance structure further.

In my interactions with management to date, I have taken a basic stance of posing questions from perspectives that differ from the inside directors. Until 2019, there were two outside directors, and we had opportunities to comment on issues outside our field of expertise. Now that the number of outside directors has increased to three, I can let the other two outside directors focus on their fields of expertise, and I am able to happily focus on my own field. I think that Board of Directors meetings can be improved by cutting down on time spent making comments for the sake of just saying something, and spending more time on discussions about long-term topics, such as investment policies and financial aims.

As an outside director of NAGASE, what roles do you fulfill?

Ijichi For many years, my work at Toyota Motor Corporation was related to financial control and personnel labor management, so I believe the Board of Directors at NAGASE expects me to bring this field of expertise to the table. In accounting work, it is important to perceive the

risks and opportunities behind the numbers. For example, if the management and workers on a project are rushing in blindly, I tend to be restrained in what I say, but if they are reluctant, it’s sometimes crucial for me to drive things forward. I am grateful for this opportunity to serve as an outside director, and will do my utmost in this role while leveraging my past experience.

When I was working at Toyota Motor Corporation, I learned that trust among people is the most important thing for a company. Mutual understanding is the root of this trust. As an outside director, I believe I must first gain a deep understanding of the corporate culture that is behind the decisions made by management. Only then will I begin to comment about issues that draw my attention from an outsider’s perspective.

Nonomiya I went to high school, college and graduate school in the U.S., and my first job was also in the U.S. Using this extensive experience overseas, I have worked in an advisory role for M&A deals. As the number of acquisitions of foreign firms by Japanese companies increases, I have specialized in cross-border deals over the



Takahiko Ijichi

past few years, and will strongly support NAGASE in this area.

I have mainly provided M&A advice to companies from a third-party standpoint, and will continue to voice my opinions from an objective standpoint at the Board of Directors meetings. I aim to contribute to the development of NAGASE in any way I can.

What makes the NAGASE Group attractive?

Nonomiya One attractive aspect of NAGASE is its corporate culture. Employees of different ages and positions share the same philosophy. While being a company proud of its old traditions, NAGASE has an open atmosphere where employees can have conversations with a sprinkling of humor, giving me the impression of a sense of unity and dignity in the workforce. Employees may not realize this, but looking in from the outside, I see a rock-solid corporate culture at NAGASE that I have grown fond of.

In terms of the unique value that only NAGASE can provide, I believe it is derived from

“I expect NAGASE to develop challengeable businesses, and increase corporate value while helping to find solutions for social issues.”



Ritsuko Nonomiya

“I believe NAGASE’s business model has significant potential for having manufacturing operations along with specialized trading company functions.”

its business model as a Japanese-style trading company, and a specialized trading company at that, while also having manufacturing operations. NAGASE’s business model in itself is high added value. I believe there is great potential waiting to be tapped in this business model.

Ijichi NAGASE has been able to continue growing for about 200 years, which in itself is a major accomplishment, but to have done that, there must have been some sort of value. I believe this value is its pervasive management philosophy that “we recognize our responsibility to society and offer beneficial products and services while maintaining the highest standards of integrity.” This shared value system has been passed down through the generations, from employee to employee. I am also impressed with the caliber and talents of management. In a world being affected by the COVID-19 pandemic, I expect NAGASE to continue work on groundbreaking chemical reactions as a leading Business Designer. I expect NAGASE to develop challengeable business, and increase corporate value while helping to find solutions for social issues.

Kemori I am drawn most to the part of the management philosophy that aims to improve the

well-being of employees. NAGASE takes care of its employees, and that is why they trust the Company. This translates into more capable human resources. NAGASE has a global network as a trading company, while also maintaining the mindset of a manufacturing company. The combination of these elements is what makes NAGASE so appealing, in my opinion.

The mid-term management plan ACE-2020 initially set bold targets while drawing out the Company’s long-term growth strategy for 2032, the 200th year since its founding. I believe it has become harder to achieve these targets and growth strategies with the way the world economy is today. One of my convictions in business is that targets are meaningless unless they are achieved, and I think NAGASE should reassess its strategies based on a cold, hard look at its own performance. On the other hand, management made a decision to spend a fairly large amount, given its business scale, on the acquisition of a majority stake in Prinova Group, LLC. I thought it is wonderful that NAGASE is a company able to make such important business decisions.

Corporate Governance

Basic Approach

The NAGASE Management Philosophy recognizes its responsibility to society and offers beneficial products and services while maintaining the highest standards of integrity. Through our growth, we will contribute to society and enrich the lives of our employees. Based on this philosophy, NAGASE strives to increase corporate value over the medium to long term in line with the NAGASE Vision, its promise to stakeholders.

We believe that rapid decision-making and execution, management soundness and prevention of corruption, and ensuring transparency are essential for us to accomplish these initiatives and strengthen corporate governance.

Note: Our latest Corporate Governance Report is available on our website.
<https://www.nagase.co.jp/english/assets/files/tekijikaiji/20200709.pdf>

Governance Summary

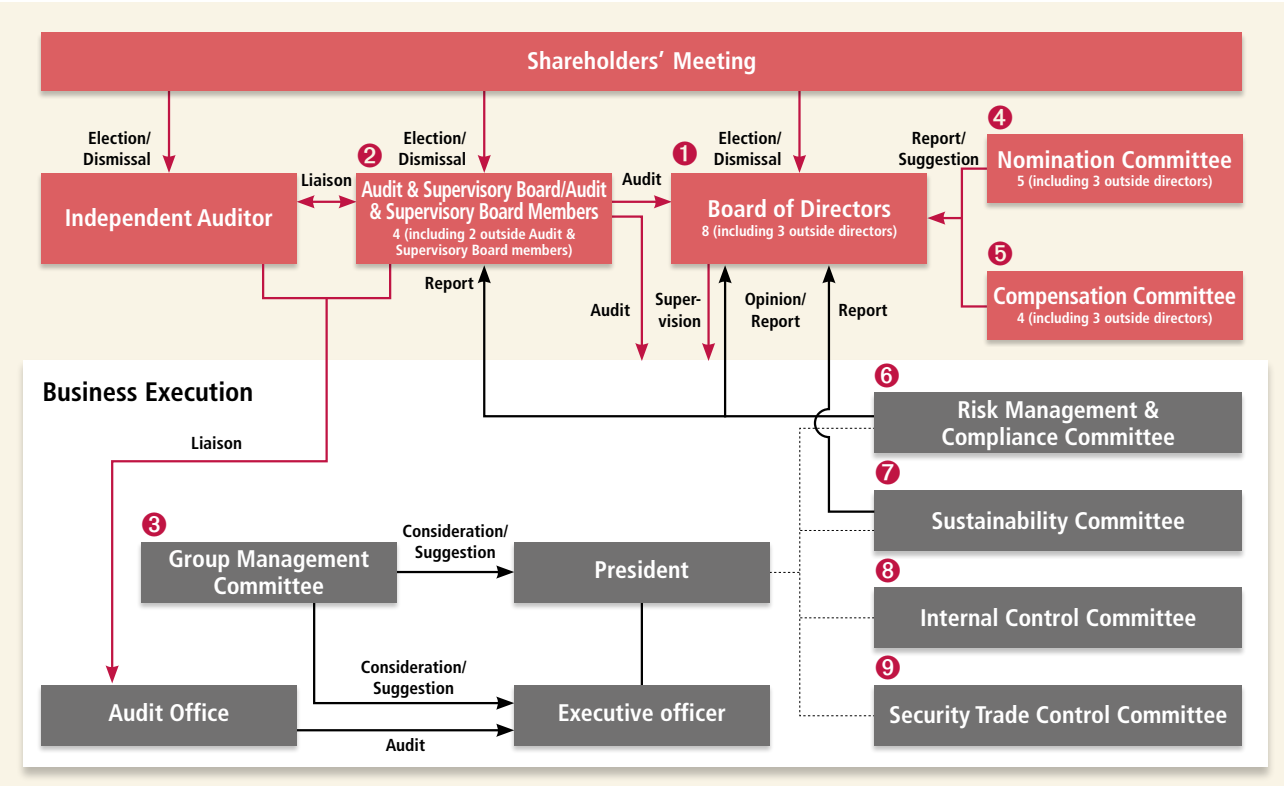
Institutional Format Company with Board of Directors Audit and Supervisory Board members	The current format is the most rational for the Company, with audit and oversight functions from multiple perspectives, including external views, working effectively.	Number of Directors 8	The number of directors has been reduced from 20 in 2000 to 8 positions in 2020, enabling faster decision-making.
Separation of Management and Business Execution Executive officer system	An executive officer system was introduced in 2001 to accelerate decision-making and enhance business execution.	Outside Directors 3	The first outside director was appointed in 2004. Now, there are three outside directors, including one woman, for a ratio of over 33% of the total number.
Outside Audit & Supervisory Board Members 2	Outside Audit & Supervisory Board members have been appointed since 1994. There are currently two appointed. Two of the four auditors are outside Audit & Supervisory Board members.	Director Compensation Compensation Committee	Established in 2010, of the four members of this committee, three are outside directors. The committee debates the fairness of compensation levels and systems.
Board Member Appointment Nomination Committee	Established in 2018, outside directors and Audit & Supervisory Board members form a majority on this committee, which debates proposals for nominating directors and executive officers and succession plans.	Compliance/ Risk Management Risk Management & Compliance Committee	The Compliance Committee was launched in 2001 and converted to the Risk Management & Compliance Committee in 2008.
Internal Control Internal Control Committee	The Internal Controls Promotion Committee was renamed the Internal Control Committee in 2009.	Sustainability Sustainability Committee	Created in 2020, this committee is chaired by the President and comprised of executive officers and senior management from Group companies.

Compliance with the Corporate Governance Code (As of July 1, 2020)

NAGASE has aggressively reinforced Group governance in the spirit of the Corporate Governance Code. In June 2020, the Company appointed a female director, and now more than one-third of members on the Board of Directors are independent outside directors, ensuring diversity and an appropriate size for the Board of Directors. With these changes, NAGASE now

complies with Principle 4.11 “Preconditions for Board and Kansayaku Board Effectiveness” in the Corporate Governance Code. We will continue to strengthen the governance structure and monitor its operation, with the aim of providing sustained value to all stakeholders.

Corporate Governance System



- 1 Board of Directors**

The Board of Directors is clearly positioned as the body in charge of making decisions on management policies and strategies, and it supervises the execution of operations. Holding a regular monthly meeting, the Board of Directors makes important decisions, tracks business performance and formulates measures.
- 2 Audit & Supervisory Board/Audit & Supervisory Board Members**

In accordance with audit policy and audit plans set at Audit & Supervisory Board meetings, Audit & Supervisory Board members conduct audits of the execution of duties of directors by attending important meetings, such as Board of Directors meetings, and receiving reports solicited from subsidiaries on an as-needed basis.
- 3 Group Management Committee**

The Group Management Committee comprises executive officers appointed by the Board of Directors, and in principle, meets regularly twice a month to discuss management strategies, investment projects, and other important matters, and to support management decision-making. This committee serves as an advisory body that discusses matters resolved by the Board of Directors.
- 4 Nomination Committee**

The Nomination Committee, which consists of 5 individuals (a majority of outside directors), deliberates on appointment proposals for directors and executive officers and succession plans for the Chief Executive Officer. It then provides reports and recommendations to the Board of Directors with the aim of ensuring objectivity and transparency in nominations of NAGASE's top management.
- 5 Compensation Committee**

The Compensation Committee, which consists of 4 individuals (a majority of outside directors), ensures the objectivity and transparency of the decision-making process regarding compensation of directors and executive officers, by screening the appropriateness of every compensation level and the compensation system to report and make recommendations to the Board of Directors.
- 6 Risk Management & Compliance Committee**

The Risk Management & Compliance Committee establishes and strengthens risk management and compliance systems that cover not only legal compliance but also corporate ethics.
- 7 Sustainability Committee**

The Sustainability Committee is chaired by the President and comprises executive officers and senior management of Group companies. This committee formulates policies for promoting sustainability throughout the Group, establishes and maintains the promotion system, monitors measures and policies, and conducts educational activities within the Group.
- 8 Internal Control Committee**

The committee deliberates on the basic policies for the internal control system, builds frameworks established by the internal control system, and monitors the management of the frameworks to ensure the appropriateness of business operations.
- 9 Security Trade Control Committee**

The Security Trade Control Committee thoroughly complies with export-related laws and regulations in relation to foreign currency exchange and foreign trade for its trading of cargoes and technologies covered by such laws and regulations.

 Compensation Committee Members 	 Nomination Committee Members
Chair Kenji Asakura (Representative Director, President and CEO)	Chair Kenji Asakura (Representative Director, President and CEO)
Members Nobumasa Kemori (Outside Director)	Members Hiroshi Nagase (Representative Director and Chairman)
Takahiko Ijichi (Outside Director)	Nobumasa Kemori (Outside Director)
Ritsuko Nonomiya (Outside Director)	Takahiko Ijichi (Outside Director)
	Gan Matsui (Outside Audit & Supervisory Board Member)

● Compensation

NAGASE CO., LTD. has established a policy for determining overall board member compensation and methods for calculating the actual amounts. Our basic policy is to ensure compensation is appropriate for the role and scope of responsibilities for each board member and motivates them to sustainably enhance corporate value. In line with this policy, board member compensation (excluding outside directors and Audit & Supervisory Board members) consists of a fixed basic salary commensurate with the position and performance incentives (bonuses). Performance incentives (bonuses) reflect individual performance based on

the Goal Management System after a basic payment amount is decided, based on Company earnings for the period in question.

Compensation for outside directors and Audit & Supervisory Board members consists only of a fixed basic salary calculated to reflect their work duties. In addition, NAGASE CO., LTD. established the Compensation Committee, a majority of whom are outside directors. This committee deliberates on the validity of compensation standards and systems, reporting to and advising the Board of Directors. This ensures improved objectivity and transparency in the compensation decision-making process.

Total Compensation by Type of Board Member, Total by Type of Compensation, and Number of Eligible Board Members (Fiscal 2019)

Title	Total Compensation (Millions of yen)	Total Compensation by Type (Millions of yen)				Number of Eligible Directors
		Basic Compensation	Stock Options	Bonus	Retirement Benefits	
Directors (excluding outside directors)	237	208	—	29	—	8
Audit & Supervisory Board Members (excluding outside Audit & Supervisory Board members)	45	45	—	—	—	3
Outside Directors and Audit & Supervisory Board Members	53	53	—	—	—	4

Important Matters Regarding Employee Bonuses for Employees Also Serving as Directors

Total Compensation (Millions of yen)	Number of Eligible Directors	Comments
13	2	Paid in an amount equivalent to employee bonus.

Compensation by Type

Compensation Type	Compensation Content	Fixed/ Variable	Payment Method
Basic salary	• A fixed salary is paid commensurate with each director's position.	Fixed	Cash
Performance incentives (bonuses)	• A basic payment amount is decided in line with performance for the period. • Incentives reflect individual evaluations based on the Goal Management System.	Variable (by fiscal year)	

● Outside Directors

NAGASE has three outside directors, Mr. Nobumasa Kemori, Mr. Takahiko Ijichi and Ms. Ritsuko Nonomiya. All three are independent outside directors based on the definition set forth by the Financial Instruments Exchange.

Reason for Appointment of Outside Directors, Concurrent Titles/Responsibilities, and Number of Shares Held in the Company

Name	Reason for Appointment	Concurrent Titles/Responsibilities
Nobumasa Kemori	Nobumasa Kemori has been involved in the management of Sumitomo Metal Mining Co., Ltd. for many years and possesses advanced knowledge and extensive experience regarding corporate management. He will use this knowledge and experience to make proposals concerning the Company's overall management from a perspective of familiarity with industry and is expected to enhance the Company's corporate governance.	Executive Adviser, Sumitomo Metal Mining Co., Ltd. Outside Director, JFE Holdings, Inc. Outside Director, Sumitomo Realty & Development Co., Ltd.
Takahiko Ijichi	Takahiko Ijichi has been involved in the management of Toyota Motor Corporation for many years and possesses advanced knowledge and extensive experience regarding corporate management. He will use this knowledge and experience to make proposals concerning the Company's overall management, including manufacturing activities performed by the Company in both Japan and overseas, and is expected to enhance the Company's corporate governance.	Outside Director, COMANY INC.
Ritsuko Nonomiya	Ritsuko Nonomiya has accumulated business experience, including accounting, in the KPMG Group and has engaged in M&A and business development in the UBS Group and the GE Group. Thus, she has advanced knowledge mainly in the fields of finance and accounting and also possesses sufficient knowledge and experience regarding corporate management. She will use this knowledge and experience to make proposals concerning the Company's overall management and is expected to enhance the Company's corporate governance.	Director, GCA Corporation Director, GCA Advisors, LLC External Audit & Supervisory Board Member, Shiseido Company, Limited

Note: Policies and standards for independence regarding outside directors are disclosed in NAGASE's securities reports.

● Board of Directors Effectiveness Evaluation

The Company analyzes and evaluates the effectiveness of the Board of Directors, believing in the importance of improving board effectiveness on an ongoing basis. Accordingly, the Company conducts surveys of all directors and Audit & Supervisory Board members. Based on these results, the Company has confirmed that its Board of Directors functions effectively, conducting appropriate and timely deliberations and decision-making.

Additionally, in response to the issue of needing to augment deliberations of management strategies and important matters, an issue identified in last year's evaluation of the Board of Directors, we carried out a review of matters determined by the Board of Directors (delegation of

authority), and made improvements so that adequate time is set aside for the deliberation of important matters.

At the same time, we confirmed there is a need to improve discussions regarding medium- to long-term management plans and company-wide strategies, from the standpoint of further improving effectiveness. Continuing to take a medium- to long-term perspective, we also acknowledged there is a need to examine ways to achieve a composition on the Board of Directors that is diverse and an appropriate size. The Company intends to continue initiatives for improving Board of Director effectiveness.

● Outside Audit & Supervisory Board Members

NAGASE has two outside Audit & Supervisory Board members, Mr. Nobuyuki Shirafuji and Mr. Gan Matsui. Both are independent members based on the definition set forth by the Financial Instruments Exchange.

Reason for Appointment of Outside Directors, Concurrent Titles/Responsibilities, and Number of Shares Held in the Company

Name	Reason for Appointment	Concurrent Titles/Responsibilities
Nobuyuki Shirafuji	Nobuyuki Shirafuji possesses a wide range of knowledge based on his many years of overseas experience in financial institutions. He also has many years of experience in credit and audit departments, possessing considerable knowledge regarding finance and accounting. Accordingly, we believe he will properly perform his duties as an outside Audit & Supervisory Board member.	N/A
Gan Matsui	Gan Matsui has a wealth of experience in legal circles and considerable knowledge of compliance and governance. Accordingly, we believe he will properly perform his duties as an outside Audit & Supervisory Board member.	Attorney, Yaesu Sogo Law Office Outside Audit & Supervisory Board Member, Orient Corporation Outside Audit & Supervisory Board Member, Totetsu Kogyo Co., Ltd. Outside Director and Audit and Supervisory Committee Member, GLOBERIDE, Inc. Outside Director, Dentsu Group Inc.

Note: Policies and standards for independence regarding outside Audit & Supervisory Board members are disclosed in NAGASE's securities reports.

● Audit System

| Status of Audit by Audit & Supervisory Board Members |

The Audit & Supervisory Board comprises three full-time members (one of whom is an outside member) and one part-time member (who is an outside member). The Audit & Supervisory Board meets once a month in principle and as necessary to discuss matters. In fiscal 2019, it held 16 meetings. Each Audit & Supervisory Board member conducts auditing activities and reports audit results to the other members. The Audit & Supervisory Board exchanges a wide range of opinions and information when forming audit opinions. Full-time members conduct auditing activities in line with the Audit & Supervisory Board's audit policies and plans. They attend Board of Directors meetings and other important meetings, review important accounting documents, and audit the performance of directors' duties through hearings from directors, executive officers, and operational departments, including the Audit Office. In addition, full-time members also serve as corporate auditors of major subsidiaries and monitor the status and construction of internal control systems in corporate groups. This is done through on-site audits of domestic and overseas subsidiaries and information exchanges with corporate auditors of affiliates. While independent auditors perform on-site audits of subsidiaries and on-site asset inspections, Audit & Supervisory members monitor and verify whether independent auditors maintain an independent position and appropriate audits are being performed. The part-time member attends meetings of the Board of Directors and the Audit & Supervisory Board, discusses matters with the representative directors, outside directors and independent auditors, and communicates seamlessly and promptly with the full-time members to

provide opinions and advice from an objective viewpoint based on specialized knowledge. In addition, after the end of a fiscal year, the Audit & Supervisory Board conducts an annual auditing activity review of the Audit & Supervisory Board's audit policies and plans. The results of the review are reflected in audit plans in the following fiscal years to enhance the effectiveness of the Audit & Supervisory Board.

| Status of Audit by Internal Auditors |

The Audit Office is in charge of internal audits, including audits to assess the appropriateness and efficiency of the Company's business activities, including those of subsidiaries, based on internal auditing rules. The Audit Office is staffed by 11 employees, including certified internal auditors (CIA), qualified internal auditors (QIA), and other individuals who possess specialized knowledge in internal audits. In addition, in line with the internal control over the financial reporting system, the Audit Office evaluates internal controls as an independent internal auditor and provides reports regarding the status of internal controls to directors, the Audit & Supervisory Board, and independent auditors, as appropriate.

| Status of Audit by the Independent Auditor |

Independent audits are performed in a fair and impartial manner by the following specified limited liability partners.

Certified Public Accountants		Auditing Firm
Specified limited liability partners	Yoshifumi Mitsuki	Ernst & Young
Managing partners	Yasuhiro Takada	ShinNihon LLC

Note: Neither of the certified public accountants, who have executed the aforementioned duties, have performed audits continuously for more than seven years.

● Policies Related to Information Disclosure

Pursuant to the NAGASE Group Compliance Behavior Standards, the NAGASE Group engages in ongoing communications with society and its stakeholders through timely disclosure of truly important information over appropriate channels. We are mindful that all corporate activities remain within the bounds of socially accepted norms.

This basic philosophy guides us as we conduct timely, appropriate, and fair disclosure of information through investor relations activities, public relations programs, and websites for our shareholders and investors to improve management transparency and accountability.

Major Investor Relations Activities during Fiscal 2019

Activity	No. of Events	Details
Results briefings for institutional investors and analysts	Two times	Briefings on results, forecasts and other topics (fiscal year-end and interim)
Individual meetings with domestic and overseas institutional investors	About 100 times	Individually held for institutional investors
Briefings for individual investors	Five times	Held for each branch office of securities firms
Overseas roadshows	One time	Overseas institutional investors are given direct access to the President and directors

Compliance

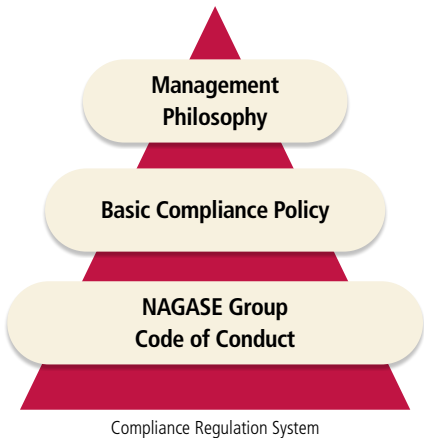
Basic Approach

The NAGASE Management Philosophy recognizes our responsibility to society and offers beneficial products and services while maintaining the highest standards of integrity. We hold dear the observation of laws and regulations, and steadfastly adhere to strict internal rules while following socially accepted norms and ethics. Restrictions from laws and regulations have become more borderless, complex, and stringent. Our thorough approach to compliance is in tune with the constantly changing times. Respecting compliance in every action that we take as a company, and being an organization that can detect issues early and take corrective action, implementing measures for improvement and rectifying these issues swiftly and decisively will allow us to gain credibility and trust with our stakeholders. We endeavor to continue to strengthen our credibility and trust in our day-to-day business activities.

Compliance Regulation System and Operation

In charge of overseeing risk management and compliance, the Risk Management & Compliance Committee formulates the NAGASE Group Basic Compliance Policy to ensure corporate activities are strictly in line with the NAGASE Group Code of Conduct.

Should an illegal act or other issue be discovered at NAGASE & CO., LTD. or a Group company, such should be reported immediately to the Risk Management & Compliance Committee, which shall report promptly to the Board of Directors and the Audit & Supervisory Board. In addition, the Company has introduced a compliance hotline whereby directors, officers, employees and others, including those from Group companies, can report or discuss issues directly.



Basic Compliance Policy Overview

1. Comply with applicable laws and regulations; conform to internal rules

2. Eliminate anti-social elements

3. Provide useful products and services
4. Respect employee personality and individuality

5. Disclose information

6. Protect the global environment

7. Responsibilities to top management

Note: The Basic Compliance Policy is also available on our website. <https://www.nagase.co.jp/english/sustainability/governance/compliance/>

Fair Business Practice Initiatives

Under its Code of Conduct, the NAGASE Group is ensuring strict compliance with laws, regulations, and rules as well as internal regulations and rules.

The risk of cartel enforcement, particularly surcharges, under the Antimonopoly Act can have a major impact on a business. Accordingly, the NAGASE Group actively conducts education activities, mainly for our manufacturing companies, to ensure there is no involvement in unfair trade. We intend to strengthen our approach to the prevention of bribery of foreign public officials with respect to Japan’s Unfair Competition Prevention Act. To ensure strict compliance with anticorruption measures, we are also educating employees worldwide regarding bribery prevention regulations, reflecting considerations of extraterritorial application of the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act.

Education Activities (Fiscal 2019)

	Targets	Content
June 2019	Nagase Medicals Co., Ltd. Nagase Logistics Co., Ltd.	General compliance and harassment training Compliance training
July–September 2019	NAGASE & CO., LTD.	Harassment training
September 2019	Nagase (Taiwan) Co., Ltd.	Compliance training
October 2019	Six companies in Greater China Nagase Beauty Care Co., Ltd.	Compliance training Compliance training
November 2019	Nagase Filter Co., Ltd.	Compliance and harassment training
December 2019	Nagase Beauty Care Co., Ltd.	Compliance and harassment training
January 2020	Nagase Plastics Co., Ltd.	Compliance and harassment training
February 2020	Hayashibara Co., Ltd.	Compliance training
March 2020	Nagase ChemteX Corporation	Compliance training

Security Trade Controls

Trade is the foundation of the NAGASE Group’s activities. To conduct appropriate trade in line with laws and regulations as a member of international society, the Security Trade Control Committee works to understand the export control situation, follow the latest revisions to the Foreign Exchange and Foreign Trade Control Law, and ascertain a detailed picture of export controls across the entire Group, while formulating related Group policies. The Item Compliance Management Council is in charge of directing and educating each business division and Group company in matters and statute updates determined by the Security Trade Control Committee. It is the responsibility of the Item Compliance Management Council to protect the Company and affiliates against the risk of illegal acts.

Specific Import-Export Management Framework

Information about our export products, technologies, and overseas customers is stored in and managed via our proprietary Product Management System. We confirm whether certain products or technologies are subject to restriction under the rules of the Foreign Exchange and Foreign Trade Control Law and the U.S. Export Administration

Regulatory Compliance in Products

The safe handling of chemicals is an important foundation underpinning the NAGASE Group’s businesses. At NAGASE, we continue to improve product-related compliance and centralized information management, including management of chemical products. All the products we deal in are subject to our management system. This allows us to comply properly with any laws or regulations that affect our products.

Specific Compliance Framework

The NAGASE Group monitors related laws for the chemical components and regulated effects of new products we plan to introduce to the market. We register each chemical component to ensure compliance with every country’s laws and regulations that cover particular components. Information related to these products is registered in the aforementioned Product Management System database in an effort to centralize the Group’s management of said information. By joining relevant industry organizations, we have access to the latest information regarding chemical regulations. We endeavor to pass on accurate information to relevant parties in part through our use of chemSHERPA, a tool for sharing information on chemical substances contained in products across the supply chain.

Responding to Global Chemical Laws and Regulations

The Strategic Approach to International Chemical Management (SAICM) adopted at the 2002 World Summit on Sustainable Development—also known as the Johannesburg Summit—is aimed at ensuring that, by 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health. In accordance with this policy, the entire world is adopting stricter and standardized regulations concerning chemical management. Accordingly, we anticipate global regulatory trends related to chemical management, working with our overseas subsidiaries to educate, provide instructions, and adopt product management systems. In this way, we facilitate the global management of information related to chemical substances to provide accurate, up-to-date information to our business partners.

Regulations. Only those products approved by the Item Compliance Management Section are put into the system as products allowed for export. Going one step beyond mere adherence to the law, we define policies for the entire NAGASE Group associated with security trade controls that, as a rule, prohibit trade of products that are military-related items or that have military applications.

Efforts to Promote Personnel Development

The practical business of security trade controls changes every year. To keep pace with developments, the NAGASE Group encourages its employees—primarily those involved in export operations—to become Security Trade Control Associates by taking the exam offered by the Center for Information on Security Trade Controls (CISTEC).

Qualified Security Trade Control Associates (Cumulative)

Fiscal year ended March 31, 2018	890
Fiscal year ended March 31, 2019	947
Fiscal year ended March 31, 2020	982

Measures in Various Countries to Implement SAICM

Region/Country	Inventory	GHS
Japan	Chemical Substance Control Law	Industrial Safety and Health Act
United States	TSCA	HCS (OSHA)
EU	REACH	CLP
China	China REACH	Regulations on the Safe Management of Hazardous Chemicals
South Korea	K-REACH	Occupational Safety and Health Act
Taiwan	Toxic and Concerned Chemical Substance Control Act	Occupational Safety and Health Act
ASEAN	Under development in each country	Under development in each country

Inventory: Existing chemical substance lists in each country
GHS: Globally Harmonized System of Classification and Labeling of Chemicals

The Group’s Approved Operations and Products

Manufacture of poisonous and deleterious substances	Handling of stimulants raw materials
Import of poisonous and deleterious substances	Manufacture and sale of Class II medical devices
General sale of poisonous and deleterious substances	Sale of high-pressure gas (type 1)
Manufacture of pharmaceuticals Categories: packaging, labeling, storage	Sale of high-pressure gas (type 2) Sale of agrochemicals
Sale of pharmaceuticals	Sale of fertilizers
Manufacture of veterinary pharmaceuticals Categories: packaging, labeling, storage	Import of animal feed Sale of animal feed
Wholesale of veterinary pharmaceuticals	Import of feed additives
Export of narcotics, etc.	Sale of feed additives
Import of narcotics, etc.	Sale of liquor
Wholesale and retail of specified narcotics, etc.	Import of alcohol
Export of psychotropics	Sale of alcohol
Import of psychotropics	Wholesale of salt
Export of stimulants raw materials	Specified sale of salt (import/export)
Import of stimulants raw materials	Construction (installation of machinery and equipment)

Risk Management

Basic Approach

The NAGASE Group has both trading house and manufacturing functions and operates multifaceted global businesses, exposing itself to various risks associated with the unique features of its businesses. We therefore need to realize sustainable growth while minimizing harm from emerging risks. Each relevant department has accurately assessed the internal and external risks related to business activities and enacted countermeasures to improve the situation.

Note: Specifically, we established the Risk Management & Compliance Committee to monitor risk management and compliance. We have defined its functions and authority, and it operates under a framework with clear roles and responsibilities.

Internal Controls

Under the NAGASE Management Philosophy to maintain the highest standards of integrity, the NAGASE Group established an internal control system to build a stable and sustainable corporate foundation for the Group with the aim of enhancing corporate value through corporate activities. The Internal Control Committee, the main entity for

advancing internal controls, is a committee voluntarily set up for the purpose of strengthening corporate governance. The committee discusses the basic policy of the internal control system, monitors the construction and operation of frameworks defined under the internal control system and ensures the propriety of operations.

Note: The basic policy related to internal controls is available on our website. https://www.nagase.co.jp/english/sustainability/governance/corporate_governance/

Business Crisis Management

We established the Crisis Management Guidelines to prepare for a business crisis that could disrupt business continuity. The guidelines aim to build a system that can swiftly and appropriately launch on-site first responses as well as a Group-wide organizational response, encompassing

an assessment of the real situation, status reports, action guidance, and more. Another aim is to raise awareness of this system. In an emergency, we will strive to maintain the stability of our business operations and minimize stakeholder losses under the Crisis Management Guidelines.

Product Safety and Quality Control

The NAGASE Group considers product safety and quality control a major social responsibility to provide customers with safe products and build a safe and secure society. According to the NAGASE Group Product Safety Principles, we strive to ensure the safety of products through Group-wide rules and education. In addition, the Transaction

Risk Management Section of Risk Management Division provides management of vendors and manufacturing contractors, and the Group Manufacturing Company Liaison Committee, within the Corporate Planning Department, provides support to Group manufacturing companies and internal education.

Note: The Product Safety Principles are available on our website. <https://www.nagase.co.jp/english/sustainability/governance/compliance>

Initiatives by Food-Related Businesses in NAGASE Group Companies

Nagase ChemteX Corporation

Nagase ChemteX's Fukuchiyama Plant, which manufactures food additives and health food ingredients, manages everything from the acceptance of raw materials and manufacturing to quality assurance and product delivery. These practices comply with ISO 9001, Food Additive Good Manufacturing Practices, and FSSC 22000, which is an international standard for food safety that we acquired in fiscal 2019.



Nagase ChemteX's Fukuchiyama Plant

Hayashibara Co., Ltd.

In addition to company-wide ISO 9001 certification, Hayashibara has acquired FSSC 22000 certification for its mainstay product TREHA™. In addition, Hayashibara follows applicable GMPs for its active pharmaceutical ingredients, and pharmaceutical excipients in the management of everything from the acceptance of raw materials and manufacturing to quality assurance and product delivery.



Hayashibara's Okayama Functional Saccharide Plant

Crisis Prevention and Business Continuity Planning

Each NAGASE Group company has taken steps to mitigate such risks as those related to natural disasters that could have an impact on the continuity of business activities as well as the safety and lives of employees. NAGASE has enacted measures for crisis prevention to protect human life and assets as well as business continuity plans (BCPs) to

ensure steady operations. As for crisis prevention activities, we annually conduct one drill that coordinates our major domestic bases of Tokyo, Nagoya, and Osaka, checking the first responses during times of crisis. As for BCPs, each department has formulated a recovery plan to assure delivery to major business partners.

Initiatives to Prevent Risk of COVID-19 Infections

In light of the risks stemming from the recent COVID-19 pandemic, the NAGASE Group created the COVID-19 Countermeasure Headquarters, headed by the President, to swiftly enact effective measures to counter the risk of further spread. The following initiatives are being taken to continue operations.

(1) Maintain the health of Group employees

Starting in February 2020, NAGASE has encouraged staff stationed overseas and their families to stay safe, prohibiting commutes to workplaces in Japan and overseas. The Company closed down its offices in Japan when the national and local governments issued shelter-in-place policies, and made teleworking the norm for its employees. After the state of emergency was lifted, the Company has encouraged its employees to work on staggered schedules or from home, to wear masks, use hand sanitizer and avoid the "3Cs"

of closed spaces, crowded places and close-contact settings as much as possible. Through such preventive measures, we continue to ensure the health and safety of our employees.

(2) Communicate with business partners

The Company prohibited overseas business travel, restricted domestic business trips, and moved meetings and negotiations online with web conferencing software, while canceling or postponing events, and reassessing the format of gatherings.

(3) Initiatives to minimize impact on business operations

The Company is striving for business continuity by setting up satellite offices, shifting work around with various systems, creating environments that enable teleworking and continuing operations at Group manufacturing companies while putting safety first.

Response to Environment-Related Risks

Response to Climate Change Risk |

Climate change has come to impose a profound impact on the environment, society, the lives of the general public, and the activities of companies. Expectations are rising on the roles the private sector must play. And the NAGASE Group recognizes the need to take measures against climate change to continue business operations. Going forward, we believe that we must explore the methods for setting and managing climate change scenarios.

Response to Water Risk |

The Sustainable Development Goals (SDGs) established and promoted by the United Nations include securing a stable supply of water and richer lifestyle, including access to water, for all people. In light of this SDG, the NAGASE Group makes concerted efforts to more efficiently use water, reduce water usage, use appropriate amounts of water, thoroughly reuse water, and recycle water in its business activities.

Responsible Supply Chains

Basic Approach

The NAGASE Group provides diverse products and services around the world in line with its vision of realizing a sustainable world where people live with peace of mind. Securing a sustainable supply chain is a priority issue for the NAGASE Group. We strive to make the Group's supply chain one that is responsible and considerate of issues such as human rights, the labor environment (exclusion of child labor, forced labor, and discrimination, as well as avoidance of conflict between labor and management), health and safety, and the global environment (effective use of energy resources, climate change, and biodiversity). Furthermore, the NAGASE Group strives to manage risks that could impede the construction and maintenance of a responsible supply chain. In accordance with the Group's Code of Conduct, employees are tasked with developing and providing products and services that provide utility to our society in consideration of human rights and of the safety of said products and services. Important risks discovered in the supply chain are shared within the Risk Management & Compliance Committee, where countermeasures are discussed.

Respect for Human Rights in Procurement Activities

The NAGASE Group will act in accordance with our basic policy for responsible supply chains and in consideration of our Code of Conduct so as to prevent infringement of human rights, including inhumane or discriminatory treatment, forced labor, and child labor.

We will continue to work with our business partners to further promote globally a vibrant culture respecting human rights in all activities across our supply chain.

Creating Environmental Value

Basic Approach

At the NAGASE Group, we believe that a sustainable global environment is a prerequisite for a sustainable world where people live with peace of mind. Currently, changes in the global environment are pressuring companies and individuals to make big decisions. Amidst such changes, the NAGASE Group helps realize a sustainable society by actively working to solve environmental problems, by for instance promoting a low-carbon society, realizing a recycling society, preventing pollution, preserving biodiversity, and efficiently using water.

Environmental Policy

1. Comply with all environmental laws, regulations and other rules

We will observe all environmental laws, municipal bylaws, environmental regulations and other rules as we conduct our business activities.

2. Develop businesses that give full consideration to environmental issues

We will conduct our business activities in full awareness of the need to preserve ecosystems and protect the environment, and we will make every possible effort to give full consideration to the environment within the limits of technological and economic feasibility.

3. Fulfill our responsibilities as a good corporate citizen

As a good corporate citizen, we will work together with public

institutions, industries, and local communities to promote environmental conservation measures that are suitable for the NAGASE Group.

4. Establishment of environmental management systems and continuous improvement

The NAGASE Group has set environmental targets to achieve our environmental policies. Furthermore, we have established and operate an environmental management system, striving for continuous improvement.

5. Disclose and make the relevant parties fully aware of our Environmental Policy

We will disclose our Environmental Policy to the public and make all who work for the NAGASE Group fully aware of its contents.

Note: The NAGASE Group Environmental Policy is available on our website. <https://www.nagase.co.jp/english/csr/environment/policy/>

Environmental Management Structure and Activities

Structure

The Risk Management & Compliance Committee (Environmental ISO Management General Secretariat) provides advice and support for acquiring certification for ISO 14001, an international standard for environmental management systems. Today, NAGASE & CO., LTD. operates an environmental ISO organization that includes six other Group companies, which will continue activities to improve environmental management systems going forward. We publish information on Group companies that have obtained ISO 14001 certification on our website.

Note: Information about ISO 14001-certified companies is available on our website. <https://www.nagase.co.jp/english/sustainability/environment/management-system/>

Activities

We incorporate environmental management activities into our daily business activities. Specific activities include (1) promoting environmental businesses, (2) pursuing energy-efficient activities, and (3) improving operational efficiencies.

One example of our environmental businesses is using our environmental and energy technologies to develop and grow related businesses. We are building a system to quickly roll out products and services toward creating recycling-oriented and low-carbon societies.

One example of energy-efficient activities is the Nagase Energy Calculation Online System, or NECO System. We began operating this system in August 2008. The NECO System uses logistics voucher data to calculate domestic cargo transport volumes, helping reduce our environmental footprint through logistical efficiency. In addition to calculating the

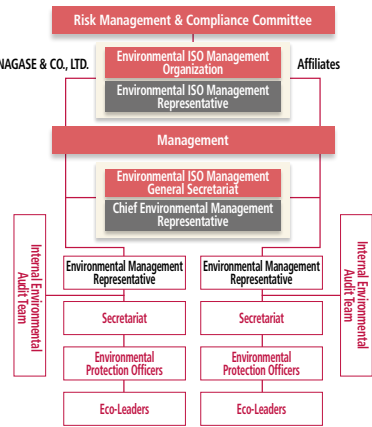
Company's annual cargo transport volume and CO₂ emissions, the system analyzes optimal transport routes to reduce CO₂, aiding our efforts to reduce energy used in transportation.

We are also taking action in our company headquarters building to conserve energy and resources. In line with the Revised Act on the

Rational Use of Energy, NAGASE & CO., LTD. has been designated as a specified corporation to report data and plans by the Ministry of Economy, Trade and Industry. Consequently, since fiscal 2011, we have compiled data on the amount of energy consumed at every facility, formulating medium- and long-term energy reduction plans and submitting regular reports to the Ministry of Economy, Trade and Industry.

We adopted and operate a building energy management system (BEMS) at our Tokyo head office building, Nagoya branch office, and NAGASE Global HR Development Center. We automated controls and energy conservation operations during peak usage times particularly in the summer to keep environmental settings within target levels.

Environmental Management Activities



Environmental Performance Data

Paper Usage

(Tokyo Head Office, Osaka Head Office, Nagoya Branch Office)

	Fiscal 2017	Fiscal 2018	Fiscal 2019
Paper Usage (1,000 sheets)	4,603	4,585	4,382
Paper Usage (t)	19.7	19.6	18.7

Waste and Recycling

	Fiscal 2017	Fiscal 2018	Fiscal 2019
Waste (t)	194	193	172
Recycling (t)	156	158	139
Recycling (Ratio)	80.6%	81.8%	81.0%

Participating Companies: NAGASE & CO., LTD.

Period: April 2017 to March 2020

Note: With regard to addressing climate change, mitigating water-related risks, and protecting biodiversity, please see our website. https://www.nagase.co.jp/english/sustainability/environment/performance_data/

Electricity Usage

(Tokyo Head Office, Osaka Head Office, Nagoya Branch Office, Nagase Parking, Nagase R&D Center, Nagase Application Workshop, NHRD)

	Fiscal 2017	Fiscal 2018	Fiscal 2019
Electricity Usage (kWh)	6,068,534	5,825,310	5,774,358

CO₂ Output (Adjusted Emissions Factor)

	Fiscal 2017	Fiscal 2018	Fiscal 2019
CO ₂ Output (t-CO ₂)	2,940	2,733	2,386

CO₂ Output from Logistics Activities

	Fiscal 2017	Fiscal 2018	Fiscal 2019
CO ₂ Output (t-CO ₂)	2,044	2,268	2,201

Engaging with External Initiatives

We will analyze our own risks and opportunities and tie those to creating new value through external evaluation agencies such as CDP, EcoVadis, Sedex, and RSPO.



Feature:

Working to Solve Environmental Problems

In “creating environmental value,” what is the NAGASE Group uniquely positioned to do?

Interview with the Environmental Solutions Team

Amid heightened awareness about environmental issues, the NAGASE Group established the Environmental Solutions Team in March 2020 to deliver value on the environmental front to our business partners. Three of the team's members spoke about its initiatives.

Q1 Please explain the team's role.

Yoshida: Environmental, social and governance (ESG) investment is accelerating as environmental regulations become stricter in various countries. Addressing environmental issues going forward will definitely play a major role in companies' survival. That led us to spotlight our customers' manufacturing sites where numerous issues pertaining to the environment exist, and establish the team to promote business that contributes to enhancing enterprise value.

The team's objective is to take the process from getting close to our business partners' manufacturing sites to discovering issues pertaining to things like wastewater and exhaust gas, solving them, and delivering value and make it into a business.

Q2 What is happening now at business partners' manufacturing sites?

Kumazaki: Regarding wastewater and exhaust gas treatment, procedures are often based on the experience of the person in charge of the site. There are cases where treatment methods are not efficient and technical skills have not been effectively passed on, which brings



(From left in photo)
Kiyomi Yoshida
Ryo Inoue
Shuji Kumazaki
Specialty Chemicals Department
NAGASE & CO., LTD.

about problems with results and costs. Also, there are customers who look to raise environmental value by applying their own regulations that are stricter than chemical laws and regulations. Since issues that can be resolved simply through the sale of chemicals are also limited, we are now being called upon to provide an array of environmental solutions to our customers.

Inoue: Of course, our determination alone isn't enough to resonate with customers. That requires returns on investments with a view to balancing both economic value and environmental value.

Yoshida: Sustainable relationships with business partners will also tie to the NAGASE Group's growth. Going forward, I think we should also address our business partners' management issues head on, standing by to assist them after thoroughly conveying our thoughts on the issues.

Q3 How will you approach environmental issues moving ahead?

Inoue: The NAGASE Group's strength is its total capabilities. We have customers in a wide range of industries and various areas in Japan and overseas. We will leverage this diverse, global network to address environmental issues.

Kumazaki: I think the addition of Aience Limited, which is engaged in the wastewater and exhaust gas treatment business, to the Group in January 2020 will enable us to increase solution options in the future.

Yoshida: Under the NAGASE Vision to help realize a sustainable world where people live with peace of mind, we will collaborate within the Group and cooperate with partner companies as necessary to solve our customers' issues.

Innovation

| Human Resource Development |

Basic Approach

The NAGASE Group will solve various social issues through innovation and help realize a sustainable society. Diversity is vital for developing human resources that create innovation and nimbly responding to changes in the environment. It is an important part of our overall corporate strategy. In addition, R&D and cross-departmental organizations such as the Nagase R&D Center, New Value Creation Office, and Nagase Application Workshop will advance activities that lead to solutions for social issues and innovation.

● Training and Supporting Our Human Resources

The NAGASE Group believes that human resource development strengthens the business foundations supporting the Group’s growth. We hold Group-wide training by job title and sponsor ongoing training for local staff overseas, engaging in global unified human resource development programs that bring the comprehensive functions of the NAGASE Group to bear.

HR development programs form the foundation of our corporate activities. These programs consist of an organized combination of on-the-job and off-the-job training. On-the-job training lets employees experience real-world work in a variety of roles to gain new knowledge and skills. Off-the-job training also involves training and gaining skills

through both formal lectures and self-directed learning.

The NAGASE Group promotes on-the-job training, while at the same time ensuring employees are able to obtain knowledge and skills for their continued growth. These programs include rank-specific training for young and mid-rank staff, training for managers, and position-specific training to ensure employees have the necessary knowledge and skills to perform their work. We have emphasized the following three points among our various development policies. We will continue to revise Group education and training programs according to changes in the external business environment and NAGASE Group strategy.

Strengthening Management Capabilities and Operating Skills and Fostering Globally Proficient Personnel

1. Promote globalization

- Assign employees to overseas entities
- Send employees to overseas business school
- Provide cross-cultural training
- Offer English language training support
- Provide training sponsored by head office to overseas national staff members

2. Train managers

Improving awareness in competitive environments (send employees to business school or MBA basic training, etc.)

3. Instill shared values

- Provide shared value workshops in rank-specific training
- Offer shared value workshops for managers
- Conduct surveys regarding shared value

Note: Information regarding the Group’s HR development programs is available on our website. <https://www.nagase.co.jp/english/csr/employees-relations/>

Human Resource Development and Training System

Program	Overview
Overseas Training	Training at overseas Group companies and other entities
Open Recruitment	Internal recruitment for employees to move to open positions within their department
Free Agent (FA)	Internal application system for employees to petition to transfer to their preferred department
Certification Bonus	Provides bonus payment for acquisition of Company-recognized public certifications

Number of Participants in Main Training Programs

	Fiscal 2017	Fiscal 2018	Fiscal 2019
Rank-Specific Training (Overseas Training)	547 (15)	711 (14)	695 (13)
Selective Training	7	6	27
Business Leadership Program for Overseas National Staff	33	29	38

● Stance on Diversity

The NAGASE Group believes that diversity is an important part of overall corporate strategy. To nimbly respond to changes in the environment, we need to ensure we have human resources with a wide variety of ideas and perspectives, both in Japan and overseas. Having a diverse

range of employees encourages more dynamic discussions and leads to new ideas that become the source of competitive advantage in the market. This in turn leads to the growth of both the NAGASE Group and each individual employee.

Themes for Diversity Promotion

1. Internal education

- ① Periodic messages from top management and broadcasts of related information
- ② Instill the NAGASE Management Philosophy, NAGASE Vision, and NAGASE Way deeply into NAGASE Group employees

2. Diversity in organizations and individuals

- ③ Improve global communications

- ④ Support employees’ career development
- ⑤ Continue employing non-Japanese people and women as main career track staff and improve our corporate culture

3. Develop good places to work

- ⑥ Instill awareness and activate initiatives for continuity and productivity improvements
- ⑦ Support employees who are dealing with home care or other challenges

Discussions among Employees who Have Various Backgrounds

Frank Exchanges of Opinions

Sharing New, Value-Added Ideas

New Proposals to Customers

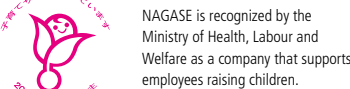
Company Growth and Contribution to Society

● Empowering Women in the Workplace

The NAGASE Group believes empowering female employees to be an important initiative for promoting diversity. We have been actively leveraging the power of our female workforce in business, by hiring more women in core roles, promoting more women to management, and expanding their career opportunities.

We are also focused on fostering an environment where women can promote work-life balance and continue their career, by enhancing the support for employees with child-rearing and caregiving needs.

Although the number of women in management has improved, it is still an ongoing challenge for us to achieve further increases. The proportion of women among all employees is also low, so we will continue to improve the situation by increasing the number of female employees in periodic recruitment.



● Hiring People with Disabilities

The NAGASE Group strives to create a work environment where everyone can thrive together, regardless of whether they have a disability or not. We respect the capabilities of each employee, and foster an environment where they can excel with reasonable accommodation for disabilities.

● Posting National Staff to Core Positions

The Group is expanding its business in various countries and regions around the globe. Based on the basic approach of respecting the diversity of employees’ ideas and perspectives, we are posting outstanding national staff to core positions in accordance with the needs of each country, region, and company.

| R&D Activities |

To harness the Group’s total capabilities and create new businesses, the NAGASE Group conducts R&D activities with the aim of developing new technologies and new products and conveying technological information based on marketing activities.

Established in 2017, the New Value Creation (NVC) Office’s objective is to propel the Group’s innovation and create new value looking to changing trends such as AI and IoT, thereby forming a core for businesses that are entirely new to the Group.

In addition, the Nagase R&D Center promotes development of fundamental technology and topic planning in the Group’s bio-related business.

► For more about the NVC Office, see P34–35. ► For more about the Nagase R&D Center and Nagase Application Workshop, see P5.

Moreover, the Nagase Application Workshop (NAW) utilizes specialized technical staff and equipment to handle operations spanning from evaluating, analyzing, and developing applications for raw materials in the plastics and coating materials fields to developing formulas for final products using those raw materials. It also combines our business partners’ and Group manufacturing companies’ materials and processing techniques and proposes solutions matching market needs as ascertained by marketing functions leveraging Group networks.

Creating Social Value

| Respect for Human Rights |

Basic Approach

As a corporate group doing business around the globe, the NAGASE Group respects the history, culture, and customs of every region, and we do not engage in harassment or discrimination based on race, religion, gender, age, sexual orientation, disability or nationality. Specifically, the Group established a Code of Conduct to thoroughly ensure respect for human rights and respect for individuality. In the event of an incident of discrimination, the Group will take immediate steps to investigate the situation, acting to help the affected individual(s) and to prevent any recurrence.

● Respect for Employee Personality and Individuality/Human Rights Education

Our Code of Conduct stipulates the points to the right regarding respect for employee personality and individuality. It is available in Japanese, English, and Chinese through our corporate intranet, and all Group employees in Japan and overseas are required to comply with it.



● Labor Management Relations

The Group supports the Universal Declaration of Human Rights and the OECD Guidelines for Multinational Enterprises and guarantees the basic labor rights of its employees. Our labor union has the three rights of labor (the right to organize, the right to collective bargaining, and the right to collective action).

The labor union and management hold Labor Management Committee meetings periodically to discuss and resolve issues regarding working conditions, work environments, etc. We are also working on building a good relationship between the labor union and management at overseas affiliate companies in accordance with each country's labor laws and regulations.

● Measures to Prevent Harassment

The NAGASE Group Code of Conduct, a behavioral guideline for all Group employees and officers, prohibits harassment, and we shall take resolute steps, including disciplinary action, against any person who is found to have conducted harassing behavior.

Furthermore, the NAGASE Group is continually engaged in initiatives in this area, including obligatory harassment prevention training for

management. The Group shall address issues of harassment in the workplace. We shall not explicitly or implicitly allow any such behavior. We will promptly investigate reports of discrimination, offering aid to victims, and taking steps (including disciplinary measures) to prevent discrimination in the future.

| Vibrant Work Environments |

● Approach to Occupational Health and Safety

Respect for the individual is a key tenant in all of the NAGASE Group's business activities. We regard occupational health and safety as a key prerequisite for advancing business activities and by working proactively

on that front, we are making ongoing improvements and creating a safe, upbeat, and comfortable work environment.

Basic Occupational Health and Safety Policy

1. The NAGASE Group and each of its employees work together to ensure a safety-first work environment without any accidents or incidents.
2. We shall strive to eliminate the seeds of injury and illness from the workplace in building an environment where employees may work assured of their health and safety. We focus particularly on prevention against global health phenomena such as HIV/AIDS, tuberculosis, and malaria.
3. We shall comply with all laws and regulations related to occupational health and safety, as well as any concurring requirements.
4. This policy shall form the target for activity development and execution, with regular reviews to continuously improve the methods and results of our activities.
5. We shall invest management resources appropriately based on resolutions of the Board of Directors in order to effectively leverage occupational health and safety management systems.

● Health and Productivity Management

The Group believes that the most important measure for achieving health and productivity management is ensuring the physical and mental wellness of our employees, which constitute Group assets, as well as their families. To this end, we formulated and unveiled the NAGASE Health Declaration in 2018 in support of improving the health of Group employees. We are currently promoting initiatives in line with the declaration.



Policies and Specific Initiatives

- **Supporting Physical Health**
 - Health examinations (regular physical exams, lifestyle disease exams, periodic checkups, medical exams for overseas assignees, including employees returning temporarily or permanently)
 - Specific health checkup and specific health guidance
 - Cancer examinations
 - Mail-in cancer examinations
 - Dental checkups
 - Influenza vaccinations
 - Medical treatment and work-balance support
 - Support for women's health
 - Distribution/access to household medicines
 - Family health counseling
 - Access to Best Doctors service
- **Supporting Mental Health**
 - Mental health counseling
 - Mental health training
 - Support for return to work after an absence
 - Stress checks
 - **Health Promotion**
 - NAGASE club activities
 - In-house massage rooms
 - Walking events
 - No Smoking Day
 - Smoking cessation support
 - Encourage the use of recreational facilities
 - Measures to reduce excessive work hours
 - No Overtime Day (weekly)
 - Publish overtime hours by department

● Measures toward Work Style Reforms

To increase the productivity of the Group as a whole, we believe it is important to ensure each employee makes the most of their work hours with priority on productivity and efficiency, and to achieve work-life balance. Based on this idea, we are promoting discussions and taking initiatives aimed at achieving work style reforms.

For example, the monthly meeting of the Employee-Management Health Committee includes discussions related to flexible work schedules, encouraging paid time off, and reducing overtime. The committee uses results of workplace surveys as a basis for employee-management talks regarding creating a more enjoyable workplace environment.

Our Benefit Programs and Initiatives for Creating a Comfortable Workplace

Program	Overview
Time Off for Spouse's Childbirth	Time off to be present at spouse's childbirth
Flextime (for R&D employees)	Employees can choose when to start and finish work, depending on individual business needs
Time Off for Refreshing and Recharging	Time off given to employees who have worked 15 full continuous years to refresh and recharge

Social Contribution Activities

Basic Approach

The NAGASE Management Philosophy reminds us that we are a member of society and that, through our growth, we will contribute to society and enrich the lives of our employees. We will contribute to a better society through the combination of business activities and social contribution activities under this banner.

● Nagase Science and Technology Foundation

To help advance science and technology in Japan, we established the Nagase Science and Technology Foundation in 1989 and made it a public interest foundation in 2011. The foundation strives to advance science and technology by supporting research and development in the fields of organic chemistry and biochemistry with the aim of contributing to socioeconomic progress. The foundation has provided assistance to over 530 research projects with total grants exceeding ¥1,310 million to date including fiscal 2020.



● Hayashibara Museum of Art

NAGASE Group company Hayashibara Co., Ltd. provides operational support for the Hayashibara Museum of Art. The museum houses a collection of Japanese and other East Asian paintings, crafts, and other items. The museum also exhibits furnishings inherited from the estate of the feudal Ikeda clan of the Okayama Domain. The goal of the museum is to contribute to research of cultural assets and improve the culture of the region and Japan. It does this by preserving works of art, conducting research on them, and allowing the general public to enjoy them through unique exhibitions and other events.



● Supporting Para-Sports

We support the activities of the non-profit Japan Blind Marathon Association. In addition, NAGASE employs athlete Shinya Wada, a bronze medalist at the 2012 London Paralympics in track and field (5,000 m).



● Supporting the 53rd International Chemistry Olympiad in Japan

We are supporting the 53rd International Chemistry Olympiad to be held in Japan in 2021 with the aim of developing future global leaders of the chemistry and materials industries. Around 300 high school students from about 70 countries and regions will take part. We are helping sponsor the games with the main purpose of creating a brighter future through chemistry.



● Participation in the Living Architecture Museum Festival

NAGASE & CO., LTD.'s Osaka head office is a registered cityscape resource of Osaka City. Every year, NAGASE participates in the Living Architecture Museum Festival in Osaka, thereby helping the city's promotion attract people. We are also participating in the movement to light up buildings in blue to express respect and gratitude to healthcare professionals battling the COVID-19 pandemic.



● Sponsor of the Grand Contest on Chemistry for High School Students

This contest is organized by Osaka City University, Nagoya City University, Yokohama City University, and the Yomiuri Shimbun. It encourages academic research activities being undertaken by high school and technical college students (third grade and under), cultivating scientific creativity as high school students have a great time conducting research on their own volition. We are a sponsor of this program that supports education with an eye to developing personnel that can actively participate in science fields in the future.



Feature: Sustainability of Our Manufacturing Business

Interview with the Group Manufacturers' Collaboration Committee

The Group Manufacturers' Collaboration Committee (hereinafter MCC) aims to bolster the foundation of all of the manufacturing companies in the NAGASE Group. The Secretariat Head Kenji Yamamoto from Nagase ChemteX, Secretariat members Koichi Nishi from Hayashibara Co., Ltd. and Kei Kitano from NAGASE & CO., LTD. spoke about its initiatives.

Q1 Please explain the MCC's role.

Yamamoto: The MCC was launched in July 2019 to encourage autonomous growth at each of the NAGASE Group's 12 domestic manufacturing companies while they share information among themselves concerning health and safety, quality, and the environment as well as to promote enhancement of enterprise value and sustainable growth for the Group overall. The committee's head and members visit all of the relevant companies, conduct surveys, and establish Group policies based on analysis of the results. Moving ahead, we will set targets and plans based on the policies and advance activities by establishing KPIs and monitoring. In addition, we are building platforms for sharing information among the 12 companies. For example, we have started working to enable posting and sharing of information regarding close calls at factories.

Kitano: We have already started up a subcommittee concerning reducing costs for utilities such as electricity and gas, and are working to obtain discounts through joint purchasing. We begin by discussing things with those in charge at each company and gaining an understanding of each company's operations including by visiting factories, and are getting an array of pointers on information sharing and collaboration.

Q2 Please explain the Group's policies on health and safety, quality, and the environment.

Nishi: In setting Group policies, we took the process of gathering and then consolidating information from the 12 companies. Each of the companies has its own respective philosophy and some have industry-specific policies. However, most of the companies have a philosophy that is similar in spirit with NAGASE's in regards to "maintaining the highest standards of integrity." In addition, their policies on health and safety, quality, and the

environment are nearly the same, so we didn't have a hard time making adjustments.
Kitano: Since all of the companies' ideas had common ground, we were able to integrate them seamlessly. While they are not new ideas, I feel that we did a good job in putting together policies that really nail down the basics.
Yamamoto: When we visited each company again to explain our proposed policies after formulating them, gaining their understanding also went smoothly. I think establishing the policies was meaningful in that it set one direction for the entire Group's manufacturing activities and clarified what should be done.

Q3 Please tell us your ideas about future activities.

Yamamoto: There is a lot to learn from each company's various initiatives. Incorporating those good points in the future will likely also become an important pillar for activities. As a result of accelerating subcommittee activities in addition to sharing information, we will move forward with initiatives that serve to boost the 12 companies' total capabilities.
Nishi: As each company's business format differs, the MCC's activities can bring about awareness of an array of things. I think that expanding the NAGASE Group's overall profit while putting that awareness to use will enable us to see a new landscape that is not yet visible now. In the future, that may very well also lead to bolstering of the NAGASE Group's internal branding.
Kitano: There is a wide variety of manufacturing companies in the NAGASE Group and cooperation among the companies gives rise to valuable personal connections. Those networks are a part of the entire Group's value and there is no reason not to use them. I think that concentrating on building a foundation for manufacturing that enables worksite-oriented, self-sustained operations while further deepening sharing of that value will contribute to the NAGASE Group's sustainable growth and enhancement of its enterprise value.

Common Policies for NAGASE Group Manufacturing (Outline)

Health and Safety Policy	Quality Policy	Environmental Policy
1. Work to eliminate accidents and disasters	1. Practice safe and secure manufacturing and provision of services	1. Fulfill our responsibilities as a good corporate citizen
2. Establish safe and secure worksites	2. Enhance customer satisfaction	2. Develop businesses that give full consideration to environmental issues
3. Comply with laws and requirements	3. Comply with laws and requirements	3. Comply with all environmental laws, regulations and other rules
4. Promote educational activities	4. Set targets, conduct reviews, and make ongoing improvements	4. Establish environmental management systems and make continuous improvements
5. Disclose and make the relevant parties fully aware of our Health and Safety Policy	5. Disclose and make the relevant parties fully aware of our Quality Policy	5. Disclose and make the relevant parties fully aware of our Environmental Policy

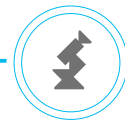
List of Businesses

Segment Name	Main Items Handled by Each Segment	Customer Industries
<div><div></div><div>Functional Materials Segment »P60</div><div>Primary products sold to the paints, inks, plastics, urethane foam, organic synthetics, surfactants, semiconductor and other industries include paint and ink raw materials, urethane raw materials, auxiliary materials, plastic raw materials, plastic additives, raw materials for industrial oil solutions, surfactant raw materials, fluorochemicals, encapsulant raw materials, silicone raw materials and others.</div></div>	<div><div>Coating Raw Materials</div><div></div><div>Deals in a variety of paint and ink raw materials, including coating raw materials used in automobile bodies and other applications.</div></div> <div><div>Denafilter™</div><div></div><div>Manufacture and sale of Denafilter™, which is used to remove impurities from raw materials during the manufacturing process for products such as LCD panels.</div></div>	<div><div>Performance Chemicals</div><div>Paints, inks, urethane</div></div> <div><div>Specialty Chemicals</div><div>Petrochemicals, plastics, electronic materials, semiconductors, industrial oil, surfactants, organic synthetics, etc.</div></div>
<div><div></div><div>Advanced Materials & Processing Segment »P62</div><div>Sales of products for the pigments, inks, paper manufacturing, labels, and fiber processing industries, as well as the plastic raw materials, plastic molding, film and sheet products, construction, cosmetics, medical devices, semiconductor cleaning equipment and other industries. Key products include dyestuffs, pigments, functional dyes, digital printing-related products, 3D printing-related materials, thermoplastic resins, thermosetting resins, automotive repair paints, conductive coatings, fluororesin parts, inorganic materials, synthetic plastic materials, plastic molding machines, molds and others.</div></div>	<div><div>Color Formers</div><div></div><div>Production and global sales of color formers (leuco dyes) used in thermal paper and thermal film applications, including tickets and receipts.</div></div> <div><div>Engineering Plastics</div><div></div><div>Sales of a wide range of functional resins used in office equipment, electric and electronic products, etc.</div></div>	<div><div>Colors & Advanced Processing</div><div>Paper manufacturing, thermal paper, printing, print processing materials, office equipment, electronic equipment, 3D printing, packaging, cosmetics, hygiene products, medical products, home appliances, sheet and film products, liquid crystal, semiconductor components, colorants, dyestuffs, pigments, inks, paints, resins, and fiber processing</div></div> <div><div>Polymer Global Account</div><div>Office equipment, games, electronics, consumer electronics, home appliances, building & construction, and packaging</div></div>
<div><div></div><div>Electronics Segment »P64</div><div>Sales of high-performance epoxy resins, semiconductor materials and equipment, precision abrasives and various functional components to the semiconductor, display and other electronics components and devices industries and the electronic equipment industry.</div></div>	<div><div>High-performance Materials</div><div></div><div>Manufacture and sales of high-performance materials used in the electronic components and optical display device fields essential to next-generation transportation services and communications infrastructure.</div></div> <div><div>Semiconductor-related Products</div><div></div><div>Providing encapsulants for semiconductors, photolithography materials, manufacturing equipment and wafer bumping services.</div></div>	<div><div>Electronics</div><div>Electronic components, semiconductors, heavy electric machinery, displays, silicon wafers, LED lighting, automotive, aircraft, environment and energy</div></div>
<div><div></div><div>Mobility & Energy Segment »P66</div><div>Primarily selling products such as synthetic plastics, precision insert molded parts, surface materials, decorative film, optical film, various sensor devices, battery materials, photovoltaic batteries, rechargeable battery-related materials for the mobility interior and exterior, electric components, CASE-related and energy industries.</div></div>	<div><div>Car Electronics</div><div></div><div>Offering solutions for new materials, components and technologies for next-generation environmental applications.</div></div> <div><div>Home Energy Management Systems</div><div></div><div>Sale of home energy management systems (HEMS) using storage batteries and photovoltaic panels.</div></div>	<div><div>Mobility Solutions</div><div>Automobiles, trains, aircraft, mobility, social infrastructure</div></div> <div><div>Energy</div><div>Batteries, photovoltaic power generation, automobiles, electric components, construction, distribution, lighting, commercial facilities, public facilities, etc.</div></div>
<div><div></div><div>Life & Healthcare Segment »P68</div><div>Sales of raw materials for pharmaceuticals, cosmetics, in-vitro diagnostic reagents, enzymes, food ingredients, food additives, sports nutrition, premixes, additives, agricultural chemicals for pharmaceutical, cosmetics and food industries. The segment also sells cosmetics, health foods and beauty foods for consumers. Furthermore, radiation measurement service is provided to nuclear facilities, hospitals and research institutions.</div></div>	<div><div>Cosmetics Materials</div><div></div><div>Manufacture and sale of cosmetics ingredients and products.</div></div> <div><div>Food Ingredients</div><div></div><div>Manufacture and sale of food materials, sports nutrition and health food ingredients, such as functional saccharides and enzymes.</div></div>	<div><div>Life & Healthcare Products</div><div>Pharmaceuticals, medical, diagnostic drug, fragrance, toiletries and healthcare industries</div></div> <div><div>Food Ingredients</div><div>Food products, health food products, agriculture, fisheries, and livestock industries and related fields</div></div>

Breakdown of Key Indicators by Segment

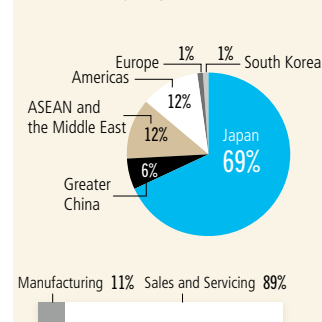
	Net Sales (Billions of yen)	Operating Income (Billions of yen)	Total Assets (Billions of yen)	Employees (Consolidated)	R&D Expenses (Millions of yen)	Capital Investment (Millions of Yen)
	169.3	5.3	76.9	679	471	436
	267.0	8.5	135.5	1,572	936	1,845
	115.1	5.3	58.8	1,569	1,749	3,235
	126.0	1.8	48.6	357	119	241
	0.4*	(5.9)*	171.4	1,984	2,242	6,035
	121.5	3.9	120.2*	1,046*	614*	1,034*
Total »	799.5	19.1	611.4	7,207	6,133	12,829

* Others/Group-wide: Includes businesses not included in reported segments and eliminated inter-segment transactions, etc.

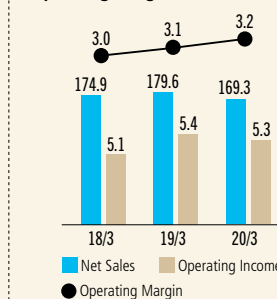


Functional Materials Segment

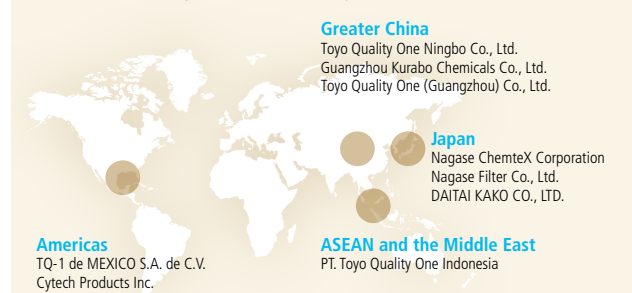
Net Sales by Region and Field



Net Sales, Operating Income (billions of yen) and Operating Margin (%)



Main Manufacturing Bases (Includes equity affiliates)



Performance Chemicals Business

Strengths

- Strong presence in the paint, ink and urethane industries (large market share, borderless global network)
- Technical knowledge and proposal capabilities, and the ability to respond organizationally based on an intimate knowledge of global market trends

Medium-term Issues

- Breaking away from a business structure centered on domestic markets (more aggressive expansion of overseas business)
- Development of sustainable products based around the environment, bioscience, and high performance

Efforts will center primarily on proposing and expanding sustainable products



Tamotsu Isobe

GM, Performance Chemicals Department

The Performance Chemicals Department is engaged in profit structure reforms in two areas—breaking away from the traditional business of raw material sales, and working to globalize the business. In the former, we are launching products closer to the downstream, such as Pat!naLock®, our new reactive paint. In the latter, we are focusing not simply on growing overseas sales, but on offering materials with even higher functional characteristics. The NAGASE Group's unique functions, as demonstrated through the Nagase R&D Center, the Nagase Application Workshop (NAW) and our Coating Laboratory in India*, will provide a significant advantage in these efforts.

Reforms to our corporate culture are leading to an emphasis on smoother communication and enhanced risk management. The department's next move will be in sustainability. We will be promoting proposals for and expansion of sustainable materials in areas such as biodegradable products, with a focus on keywords such as "environment," "bio," and "high function."

The Digital Transformation (DX) trend in the chemical industry has yet to make much of an impact on the paint, ink and urethane industries, but is beginning to threaten the traditional raw material sales business. Going forward, we will work to move ahead of other companies in building a digital platform, streamlining marketing, and acquiring even more business.

* Officially called the Nagase Coating Laboratory Mumbai.

Topics

Combating Infrastructure Decay with New Pat!naLock™ Reactive Paint

Pat!naLock™ is a new, innovative reactive paint that prevents corrosion by forming a dense, protective layer of rust on the surface of iron and steel material through reactions with oxygen in the air. Because it is expected to protect structures from destructive rust that leads to decay, it is being widely adopted in power companies, communications companies and plant engineering equipment, which will face difficulty in securing adequate labor in the future.



Speciality Chemicals Business

Strengths

- Business developed around core technologies including composites, chemical synthesis and polymer technologies
- Unique technology-oriented sales and innovation capabilities

Medium-term Issues

- Development of new business through investment and business alliances
- Use of digital technology, enhancing eco-friendly products and services

Seize business opportunities in anticipation of "post-corona" changes



Noriaki Arashima

Executive Officer
GM, Speciality Chemicals Department

Our business fields operate near the upstream, where we supply materials in a wide variety of areas, from general products to high-function/high-value-added products (specialty products). The business environment is seeing the advance of DX (Digital Transformation) and the commodification of information, and market mechanisms are beginning to change as the brokerage function of trading companies becomes unnecessary and business shifts to direct transactions. Given these conditions, our value as a company will heavily involve how well we can provide our business partners with deep customer experiences.

What we view as issues going forward are fostering a sense of crisis as part of reforming our corporate culture, and reforming our profit structure through the creation of new businesses. For several years now we have been engaged in efforts to build an intellectual property-driven manufacturing business model rooted in academic knowledge, aiming for business that will contribute to enhancing environmental value. In terms of the environment, there is a particular increase in needs in the areas of wastewater and emissions, and we will focus on customer proposals in those areas.

We expect the post-corona era to bring a reassessment of supply chains. In China, an overconcentration in the upstream (manufacturing) can in some cases invite confusion through the suspension of plant operations and geopolitical risks; an important issue is thus how to offer customers proposals for risk diversification to ensure stable supply. Meanwhile, great strides are being made in work style reforms, which we see as offering business opportunities in related ICT* materials.

* 5G- and 6G-related base materials.

Topics

Launching an Antifoaming Agent Self-Diagnostic Website

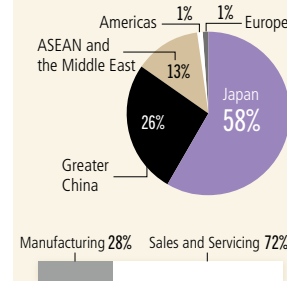
NAGASE carries a large number of silicone antifoaming agents that help solve the problem of foaming in a wide range of industries, with a track record of dealing with a variety of customers. With that background, in March 2020 we launched a "Silicone antifoaming agent self-diagnostic" website designed to offer customers the optimal antifoaming agent for their needs by having them answer a few questions. Our goal is to provide a platform that will assist customers in collecting information and making comparisons.



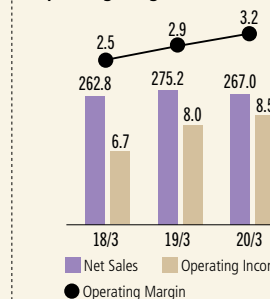


Advanced Materials & Processing Segment

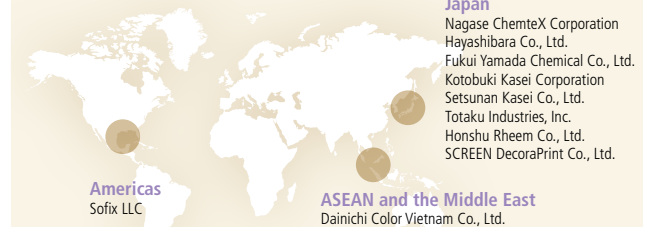
Net Sales by Region and Field



Net Sales, Operating Income (billions of yen) and Operating Margin (%)



Main Manufacturing Bases (Includes equity affiliates)



Colors & Advanced Processing Business

Strengths

- Ability to offer various proposals of technologies, products, analyses and services by utilizing our Group companies and the Nagase R&D Center and Nagase Application Workshop (NAW)
- Very long business relationship and network of precious business partners and customers across a world wide range of industries

Medium-term Issues

- Developing new business opportunities in global market through our core trading activity
- Using our "Trading + α " function to improve our ability for solution of our business partners' issues

Unique business models designed by NAGASE



Kuso Ota

Executive Officer
GM, Colors & Advanced Processing Department

The department comprises four main product groups, including digital printing supply, colors and additives, functional film materials, and polymer products, along with a Planning Office.

In addition to the trade friction between the U.S. and China, all fields have been impacted by COVID-19, and we expect conditions to remain difficult in the current fiscal year.

We have staked out a midstream position that connects upstream seeds with downstream needs, putting us in an optimal position to identify the seeds of new business. We hope to tie these into "Trading + α ," NAGASE's unique business model, by identifying, developing and expanding those businesses.

In the development phase, we will employ our ideas and ingenuity, linking them to NAGASE's strengths. If we can impress upon our staff the importance of this work, and allow them each to build the necessary experience, we can ensure everyone's participation in the "Identify, Develop, Expand" cycle. In turn, we expect this will lead to the changes in our profit structure and corporate culture that are the goal of ACE-2020, our mid-term management plan.

The world "with" and "after" the coronavirus is expected to bring an increase in new business opportunities through a variety of changes in the industries involving the department, including the hygiene, antibacterial, digital and environmental fields. Moving forward with a business model focused on keywords such as "ESG," "DX" and "ROIC," we will work steadily to contribute to the profit of both our business partners and the NAGASE Group.

| Topics |

Developing Low-endotoxin Products

Endotoxins are toxic substances which, on entering the body, can cause fevers, multiple organ failure and other issues. While there has long been a need for ways to remove these endotoxins, high refining costs have been an issue. Through a joint development project with Kumamoto University, Nagase ChemteX Corporation has established a unique endotoxin removal technology, and has developed both a low-endotoxin gelatin and a polysaccharide pullulan (see photo). We will be developing a variety of refining businesses utilizing this endotoxin removal technology as part of our participation in the medical field.



Polymer Global Account Business

Strengths

- A wide-reaching base of operations in the Asia-Pacific region
- Strong partnerships with global companies

Medium-term Issues

- Industry reorganization
- Technical innovation and response to digitalization

Utilize our global network to offer optimal proposals



Koichi Sagawa

Executive Officer
GM, Polymer Global Account Department

The department, which is primarily responsible for sales of plastics, operates primarily in the Asia-Pacific area, centered on Greater China and ASEAN. Problems between the U.S. and China that began in 2018, along with the impact of COVID-19, have spurred customers to reevaluate their supply chains. We plan to treat these changes as an opportunity, working with our talented national staff rooted in the region, with their experience and expert knowledge, to strengthen collaboration through our global network, which is our strength, and respond quickly to customer moves. We will also be proactive in offering proposals freed from conventional methods, in line with rapidly advancing technical innovation and the shift toward digitalization. In doing so, we recognize the importance of truly understanding our customers' needs, and whether we can tie that understanding to our ability to offer attractive solutions.

At the same time, we see the need to reduce environmental impact as a business opportunity. As global awareness of environmental problems increases, it will bring more opportunities in eco-friendly materials and business that utilizes them. We will work aggressively to advance efforts in biodegradable plastics, biomass plastics and mono-materials. As these moves multiply, the chemical industry will see a growing polarization between commodity and high-performance products, which we expect will bring further restructuring. We believe this will require us to reshuffle our portfolio as we keep an eye on trends.

In reforming our profit structure, efforts will utilize the technical capabilities of our Group manufacturing companies, continuing to focus on expanding on Denapolymer™, a unique, niche product as we work to enhance profits.

| Topics |

Denapolymer™ Meets Exacting Customer Demands

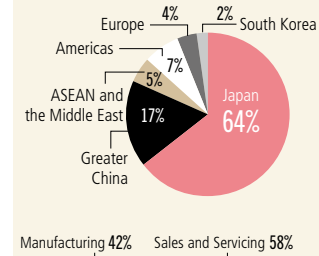
NAGASE combined its unique information gathering expertise with Group manufacturer Setsunan Kasei's plastic resin compounding technologies to promote Denapolymer™, a proprietary brand that Setsunan Kasei developed and manufactures. This product can meet requests and fulfill niche customer demands that present challenges to major resin manufacturers. We are also working to create a record of success for unique products, including functional masterbatches, eco-friendly resins and the HS80 Series of high-sliding polyethylene. Especially this HS80 Series realizes sheets and films with enhanced sliding properties and impact strength.



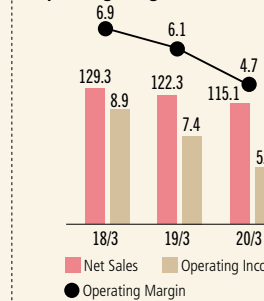


Electronics Segment

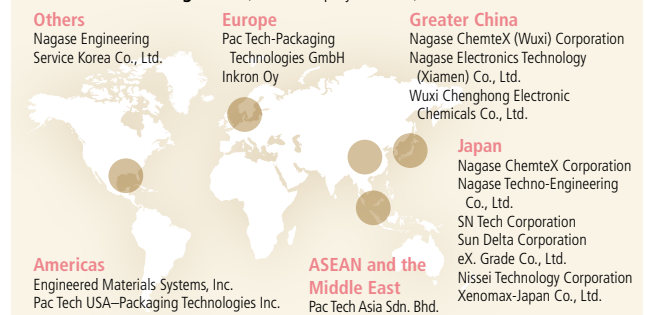
Net Sales by Region and Field



Net Sales, Operating Income (billions of yen) and Operating Margin (%)



Main Manufacturing Bases (Includes equity affiliates)



Electronics Business

Strengths

- Ability to offer complete solutions to customer needs
- A global network of development and manufacturing sites with unique technology

Medium-term Issues

- Addressing changing customer needs
- Creating sustainable business

Win by leveraging our strong areas in leading-edge technology fields



Takeshi Takada

Executive Officer
GM, Electronics Department

The Electronics Department provides complete solutions to business partners seeking high performance and functionality, fully leveraging the twin advantages of our trading company functions as well as manufacturing and development.

In the trading function, we not only provide functional materials for next-generation applications, but are moving ahead to create a sustainable business by building a new business model utilizing IoT technology. In the manufacturing and development function, we are expanding our global offering of advanced semiconductor packaging technology using liquid epoxy encapsulating materials developed by Nagase ChemteX Corporation, a core manufacturing company of the NAGASE Group, and precision processing technology using high-purity chemicals.

The electronics industry is easily affected by external risks, and in the short term will continue to see challenging business conditions. We take these changes as an opportunity to bring together the practical abilities of our trading function and the inventiveness of our manufacturing and development function, providing new value and services with the goal of building a strong business.

Utilizing our connections within the industry, and through ongoing dialogue with our business partners, we are moving beyond selling individual products and working to deepen our offerings in processes and technology. We are also exploring new business opportunities, focusing on solving issues in pre- and post-manufacturing processes and on areas that offer continuity with our existing business.

Outlook for Conditions Surrounding the Electronics Business

The operating climate for electronics-related businesses is severe, and while photolithography materials, electronic components, and epoxy resin products used in semiconductors all performed well in fiscal 2020, sales of display-related materials were sluggish. In fiscal 2021, we expect modified epoxy resins for mobile devices and heavy electrical machinery to be on par with the previous year, given the uncertain state of the market going forward, conditions overall will continue to be difficult. That said, the market for next-generation telecommunications (5G) is expected to grow, and will continue to be an area of focus for us.



Topics

Xenomax-Japan Co., Ltd. Begins Supplying High-heat-resistant Polyimide Film



Xenomax-Japan Co., Ltd., established as a joint venture with Toyobo Co., Ltd., completed construction of its head office plant and began shipping products in 2019. XENOMAX® polyimide film offers among the best dimensional stability performance in the world, with a stable coefficient of thermal expansion (CTE) in environments ranging from room temperature to as high as 500°C. Toyobo created this film by making the most of its highly heat-resistant polymer synthesis and film manufacturing technologies. The film can be adjusted to fit customer production lines up to G6 (1500 x 1850 mm) in size and applied to glass. It is being made available for use in next-generation devices including electronic paper, mini and micro LED, as well as for sensor base materials and semiconductors.

New Initiatives at Inkron Oy



Photo: EVG

● Collaboration with EV Group, maker of semiconductor manufacturing equipment

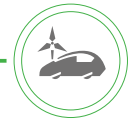
Inkron Oy of Finland, a NAGASE Group company, began a collaboration with EV Group ("EVG") of Australia, a maker of semiconductor manufacturing equipment, in the development and production of optical devices for augmented reality (AR) and mixed reality (MR) applications among other things. EVG provides products for the semiconductor and nanotechnology markets, and has the world's most advanced technology for Nanoimprint Lithography (NIL) used in transferring semiconductor chip circuit patterns. Through the combination of high-refractive-index materials developed by INKRON and EVG's advanced NIL system, we aim to advance the development of new optical materials, and offer solutions that will aid manufacturers of optical devices in expanding production and in the development of next-generation optical devices.

● Four-way collaboration to develop components for next-generation wearable displays

INKRON has begun product development in a four-way collaboration with industrial glass manufacturer SCHOTT (Germany), WaveOptics (England), a manufacturer of optical components, as well as EVG. The work is aimed at developing a 300 mm glass wafer process that will enable mass production of optical waveguides that serve as a component in AR and MR wearable displays. Production will bring together the technical capabilities of the four companies, including INKRON's high-refractive-index nanoimprint coating material, high-refractive-index glass from SCHOTT, waveguide structure technology from WaveOptics and EVG's NIL technology. This product will reduce production costs and be able to meet ultra-high-precision standards. It is expected to serve as a base for next-generation AR and MR devices.

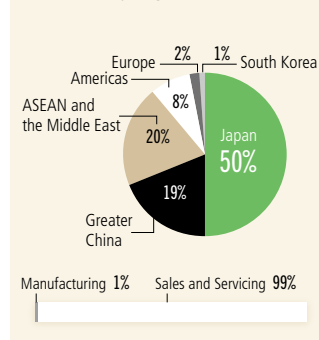


Photo: SCHOTT AG

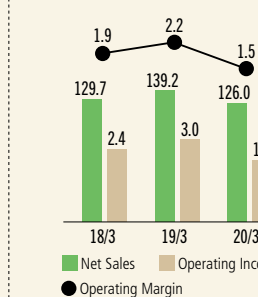


Mobility & Energy Segment

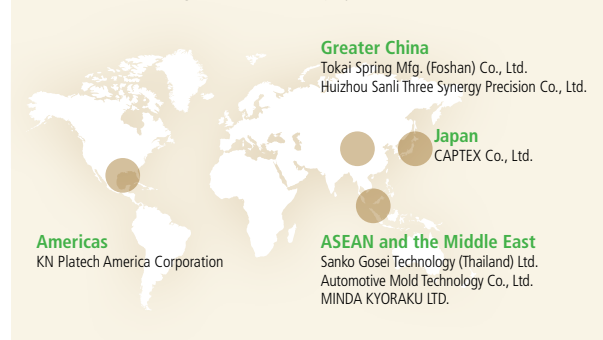
Net Sales by Region and Field



Net Sales, Operating Income (billions of yen) and Operating Margin (%)



Main Manufacturing Bases (Includes equity affiliates)



Mobility Solutions Business

Strengths

- A broad portfolio of products, from general purpose materials to products custom-made to meet the needs of our business partners
- The ability to utilize our global network to discover high-function materials, products and technologies, and to build a supply chain that can offer a stable supply of those items
- Solid relationships of trust with the technology development divisions of our business partners

Medium-term Issues

- Expansion of eco-friendly business (Development of new materials, technologies and services in anticipation of next-generation mobility)
- Offering a complete range of solutions involving mobility

Diverse solutions for all mobility needs



Hiroyuki Ueshima

Executive Officer
GM, Mobility Solutions Department

In addition to a global drop in automobile production starting in the second half of fiscal 2019, we were also affected by COVID-19, resulting in a difficult profit environment.

Given the poor prospects going forward for a major expansion in automobile production worldwide, the Mobility Solutions Department will continue working to enhance profitability with a focus on two areas: expansion of coverage (new areas, new non-Japanese-owned customers, strengthening of sales in new mobility markets and improved density (an expanded portfolio of products supplied to each automobile, expansion of commercial rights to CASE*-related products, where future growth is expected).

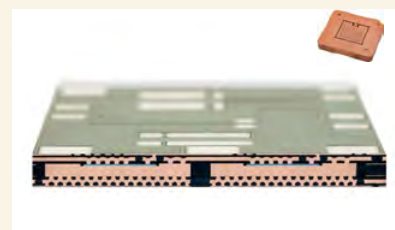
With the aim of realizing a low-carbon society, the department is also emphasizing the promotion of materials that involve lower environmental impact, electric-powered and weight-saving solutions; development of software, sensor devices and services for autonomous driving to improve safety; and providing interior and exterior materials and display-related components that offer a comfortable space. Through the global expansion of solutions for every area of mobility where people, things and data intersect—not only automobiles but aircraft, drones, factory automation, and ships as well—we will contribute to the creation of a blissful mobility society.

* CASE: An acronym for Connected, Autonomous, Shared and Services and Electrification.

Topics

Distribution Agreement Signed with German Printed Circuit Board Manufacturer

NAGASE has signed a distribution agreement for Japan with Schweizer Electronic AG ("Schweizer"), a German manufacturer of high-quality printed circuit boards. Schweizer products lead to improved performance and more compact, light-weight designs. As a result, in the automobile industry they are being considered for deployment in EV and HEV power control components and automated driving sensors, and NAGASE plans to offer and sell them to domestic manufacturers of automotive parts and industrial electrical equipment.



Energy Business

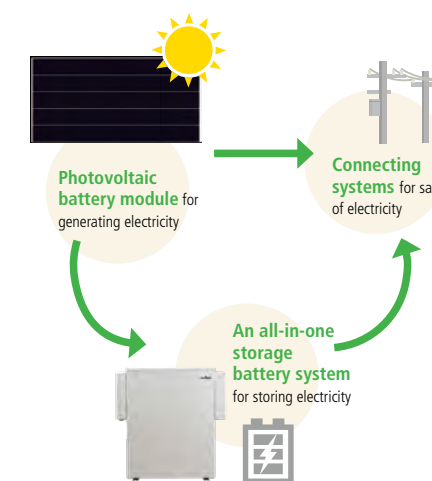
Strengths

- Ability to offer energy management systems centered on lithium-ion storage batteries and photovoltaic (PV) panels
- Ability to offer end-to-end proposals (encompassing planning, development, design, production, field engineering and post-sales maintenance)
- Utilization of Group sales channels

Medium-term Issues

- Creation and expansion of new energy businesses utilizing our proprietary sales and after-market networks

Creation of a solution-based business



The Energy Business Office handles products such as lithium-ion batteries, photovoltaic power generation modules, energy management systems (EMS) and optical wireless communication devices. Based on our vision of contributing to the creation of infrastructure for a smart society, our goal is to achieve innovation in the areas of residential, industrial, transportation and IT/communications infrastructure.

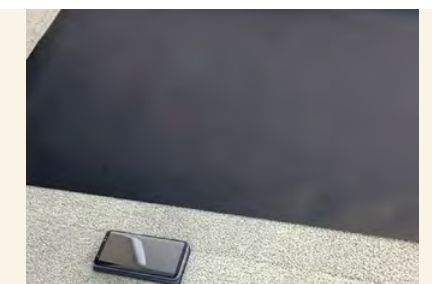
Going forward, energy supply, centered on electricity, will shift from a centralized to a decentralized model. That will increase demand for our products while also giving greater importance to the role of adjusting the balance of supply and demand, a business in which we will also be involved.

We are also focusing on business through our engineering subsidiary CAPTEX Co., Ltd., which is responsible for storage battery systems from the upstream through to the downstream. Lithium-ion batteries, essential to adjusting energy supply and demand, are increasingly being provided by inexpensive overseas manufacturers, and CAPTEX plays an important role in ensuring the safety of those products we handle. We have also begun working on ways to reuse used photovoltaic modules and lithium-ion batteries, an issue seen as a growing problem for society going forward. We will strive to go beyond a simple buy-sell model, creating a solution-based business that includes the development of LED optical wireless communications technology, a new method of communication that offers rich security features.

Topics

Investing in Developing Next-Generation Lithium-ion Batteries

In April 2020, we participated in an investment in APB Corporation, which develops and manufactures the All Polymer Battery. This is a type of next-generation lithium-ion battery which achieves higher reliability in emergencies and greater density when compared to conventional lithium-ion batteries. Because the technology allows cells to be scaled up in size, and the battery offers a high degree of flexibility in shape and size, it is expected to be adopted in a variety of fields and applications. We are also taking into consideration the future recyclability of this battery due to its innovative material and manufacturing technology.



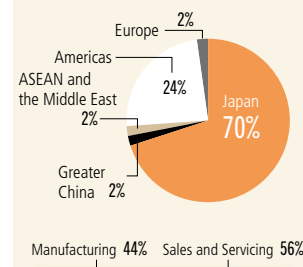
Sheet-type All Polymer Battery

© APB Corporation

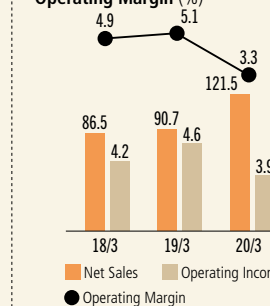


Life & Healthcare Segment

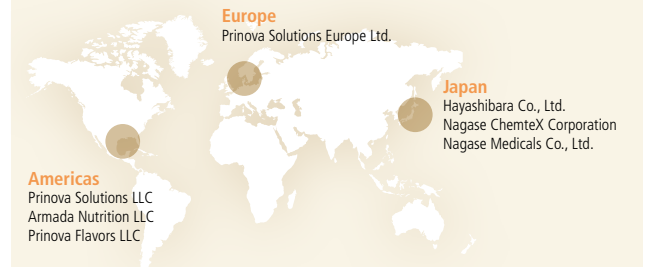
Net Sales by Region and Field



Net Sales, Operating Income (billions of yen) and Operating Margin (%)



Main Manufacturing Bases (Includes equity affiliates)



Life & Healthcare Products Business

Strengths

- Function of development proposal in the medical and pharmaceutical fields
- Proposal ability in compliance with pharmaceutical laws and regulations. (Pharmaceutical and Medical Act, etc.)

Medium-term Issues

- Expansion in the medical field, utilizing Medical Business Acceleration Team (MBAT).
- Investing in, developing and expanding companies based on unique technology in the fields of medical and pharmaceuticals

Aggressive product development with active investments in the medical and pharmaceutical fields



Yoshihiro Shimizu

GM, Life & Healthcare Products Department

Since the start of ACE-2020, the Mid-term Management Plan, the cosmetic business has performed steadily, driven in part by robust inbound demand from China and the rest of Asia. Since then, however, China-related demand has reached a peak, and COVID-19 has also begun to have an impact. We will respond to these changes by introducing new active ingredients that can be adapted to a wide range of cosmetic products. Expectations are particularly high for Glucosyl Naringin, an aging care cosmetic material manufactured by Hayashibara Co., Ltd. Marketing began in March 2020, and going forward the product will be made available worldwide.

One area that has begun contributing to profit structure reform is the generic pharmaceuticals business. While we currently focus on small molecule drugs, the question is whether we can shift to medium to large molecule drugs that will increasingly gain the attention of the pharmaceutical industry. Through our collaboration with Karydo TherapeutiX, Inc., we have also begun offering a service that uses AI to predict pharmaceutical efficacies and side effects. We also established MBAT, Medical Business Acceleration Team (specializing in image-related technologies), within our department as we expected the medical field to be one of our next targets for business growth.

In reform of our corporate culture, we are already moving ahead with efforts to nurture a culture that takes on challenges, centered on our junior and mid-level employees.

Strengths

- Possesses comprehensive capabilities to offer proposals, not only in materials, but also manufacturing, processing and application proposals and regulatory functions
- A global manufacturing and sales network through Prinova

Medium-term Issues

- Development of new functional materials that can contribute to people's lives through deeper cultivation of business in the bio field
- Creating synergies between Prinova's business and NAGASE's food business such as Hayashibara

Leveraging materials from Group companies to bring synergies to the pursuit of business



Koichiro Kojima

GM, Food Ingredients Department

Established on April 1, 2020, the Food Ingredients Department is now developing the business of providing food additives and food ingredients to the food products industry that was previously the responsibility of the Food Material Department of the Life & Healthcare Products Department.

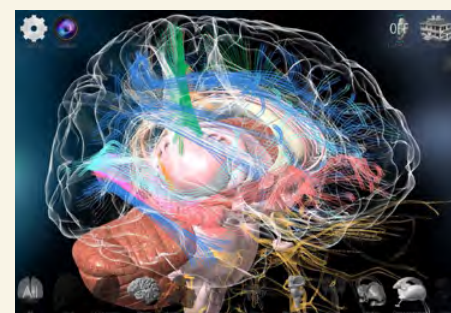
The NAGASE Group's food ingredients business started with the sale of enzymes through Nagase ChemteX Corporation. Later, we added functional saccharides from Hayashibara Co., Ltd., and in 2019 we acquired Prinova, whose strength lies in their expertise in handling and compounding vitamins and amino acids. The Food Ingredients Department was established to strengthen global expansion in line with these moves. Our business opportunity lies not with simply selling materials, but with a growing market that includes processing. While additives are sometimes shunned, we will work to develop those that lead to added value based on evidence of their effectiveness. We also look forward to expanding into sports nutrition through Prinova.

Going forward, we will continue to leverage the unique materials offered by NAGASE Group companies, using synergy to boost market demand. Other efforts we are considering include using the superior function of Hayashibara's TREHA® in preserving flavor to address the food loss issue, and contributing to achieving the SDGs through the shift from animal-based to plant-based food products.

| Topics |

Alliance with Kompath Inc., a Medical Device Development Venture

In May 2020, NAGASE entered into an agreement for a capital and business alliance with IT startup Kompath Inc., which has set up a joint development structure with the University of Tokyo Hospital. This alliance with Kompath, which is working to develop medical image processing and AI applications based on patented technology originally developed at the University of Tokyo, is intended to enable us to provide products and services that reflect the needs of those on the medical front lines. Our goal is to create innovation in the medical industry through the use of state-of-the-art technologies and contribute to better quality of life for patients.



| Topics |

Sports Nutrition Webinar Held

In May 2020, we held a webinar (a web-based seminar) on the topic of "Sports nutrition development trends and proposals for next-generation products." In addition to introducing Prinova, a leader in sports nutrition newly added to the NAGASE Group, the webinar also introduced cutting-edge trends in the U.S. and the Group's unique materials and services. A total of 117 individuals, including those in charge of development at food processing manufacturers, participated.



Regional Strategy

Note: Employees in the consolidated corporate group as of March 31, 2020

Built on a foundation of chemistry, the NAGASE Group is engaged in global business across a wide spectrum of industries. Utilizing wide-ranging expertise accumulated through that network and experience, we provide a fine-tuned response to the needs of each country and region.

Greater China

Base established: 1971/Number of employees: 1,095

Organizing Key Group Resources under “One China”

Amid rapid changes to industrial structure and technological advances in China, we have organized and consolidated the NAGASE Group’s key resources (human resources and data) under the slogan of “One China.” These had previously been dispersed across China’s different regions. We set four focus businesses consisting of semiconductors, mobility, electronics, and life and health. We will continue dynamically growing our businesses through active investment.

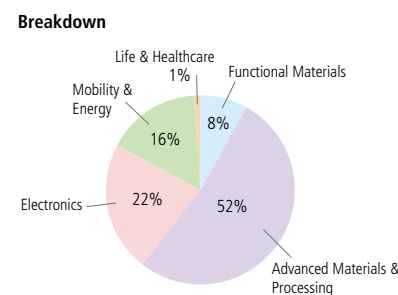
- Main Businesses**
- **Semiconductors** Leveraging the supply chain’s information gathering expertise and the local human resources, we are leading the expansion of Chinese businesses through win-win relationships as an overseas manufacturing business consultant.
 - **Mobility** We will help develop smart mobility in China by quickly responding to technological advances in the industry and providing value-added products and services.
 - **Electronics** In such fields as next-generation displays, 5G, and car electronics, we create high-value-added local communication businesses by uncovering needs using our strengths and providing solutions.

Topics The NAGASE Group has established the NAGASE Food Ingredients Food Development Center (Xiamen) in Amoy, Fujian Province, China. It will serve as a facility for developing recipes using the food ingredients of the NAGASE Group, including Hayashibara, and as a base for communications through presentations and seminars with customers. The center is aimed at expanding the presence of the NAGASE Group in the Chinese food industry in Fujian Province and other regions.



Representative:
Masatoshi Kamada
Executive Officer
Greater China CEO
Nagase (China) Co., Ltd. CEO

Net Sales/187.5 billion yen (FY2020)



ASEAN and the Middle East

Base established: 1975/Number of employees: 742

Promoting Business with a Diverse, Multi-national Staff

This business encompasses an area stretching from Australia in the east to Turkey in the west, and is centered primarily on plastics and automotive-related businesses. While historically the region has had few local companies leading key industries compared to other regions, major companies that cut across industries have begun to appear in each country. Through our ongoing efforts to develop a diverse national staff and through their leadership, we are working to bring high added value to existing business fields, and to promote the development of regionally relevant business through incursions into local companies.

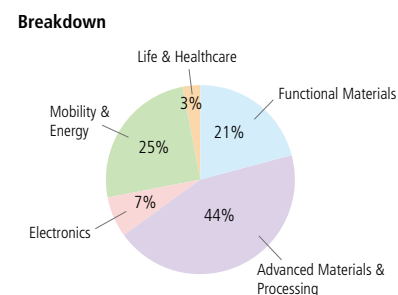
- Main Businesses**
- **Plastics** We are working to expand our base through alliances with Greater China, while exploring ways to build a sustainable business by addressing ESG and other issues.
 - **Mobility** We will promote a shift to high-value-added products and services related to EVs and CASE.
 - **Food Ingredients** We will pursue regional strategies through M&A and other means, while strengthening our ability to solve client problems using our application lab function and diverse products.

Topics In July 2020, the NAGASE Group opened its Regional Innovation Center in Singapore’s Science Park to serve as a base for providing solutions to customers in the regional food business. The facility is expected to provide a variety of functions, including recipe proposals based around products from Group companies, new application development, customer problem-solving, staff education and seminars for customers.



Representative:
Eiroku Oki
ASEAN and India CEO
Regional Operating Centre Leader

Net Sales/110.6 billion yen (FY2020)



Europe

Base established: 1980/Number of employees: 258

Using REACH as an Opportunity to Find Seeds of New Business

Europe has enacted its new REACH regulation on chemicals. The strict regulation of chemical imports based on REACH holds the promise of new business opportunities. Taking advantage of the strong technical capabilities of Group manufacturing companies and other Japanese suppliers, we will work to replace our portfolio of products with high-performance, low-environmental-impact offerings.

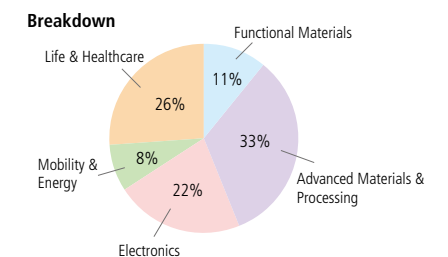
- Main Businesses**
- **Pharmaceuticals** We will focus on exporting pharmaceutical raw materials from Europe to Japan.
 - **Chemicals** Advancing efforts to replace high-environmental-impact products with biochemicals.
 - **Mobility** Expanding sales of batteries and optical components for EVs.

Topics In business in Europe across all industries, efforts to reduce environmental impact—including eco-friendly, biodegradable products and curbs on CO₂ emissions—are gradually becoming mandatory requirements. Products that do not meet these demands will not be accepted no matter how cheaply priced, and we will be working to develop and expand products in line with these market changes.



Representative:
Takahiro Okumura
Executive Officer
Energy Business Office
New Value Creation Office
Europe CEO

Net Sales/24.6 billion yen (FY2020)



Americas

Base established: 1971/Number of employees: 1,151

Aiming to Contribute to the Entire Group through the Creation of Synergies

Nagase Holdings America Corporation was established in 2019, and we are accelerating our efforts to strengthen governance and reform our profit structure. We are not only reevaluating our business portfolio and working to expand and streamline our organic business, but to create new businesses that will lead to regionally driven, medium- to long-term growth. By creating synergies through the networks of Prinova, which became a subsidiary in fiscal 2019, and by leveraging the R&D capabilities of IFC, we are striving to expand our business.

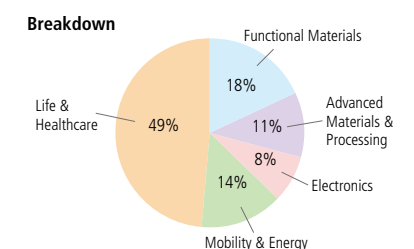
- Main Businesses**
- **Pharmaceuticals** We will utilize the NAGASE Group network to contribute to realizing a sustainable world where people live with peace of mind.
 - **Mobility** We will offer high-value-added services in response to changes in market conditions.

Topics A Global Marketing Group has been set up within Nagase Holdings America Corporation, and will work with the Global Marketing Office in Japan to promote Digital Transformation (DX). We are working to expand business through the use of digital marketing, for instance, and also aim to provide comprehensive services that maximize customer experience value.



Representative:
Takayuki Masuda
Executive Officer
Americas CEO
Nagase Holdings America Corporation CEO

Net Sales/55.4 billion yen (FY2020)



South Korea

Base established: 1985/Number of employees: 38

Identify and Invest in Sustainable Growth Fields

Based on sales of materials and components to leading South Korean industries, we are utilizing our Group network to support the overseas expansion of unique products from South Korean companies supporting that value chain. In the midst of global competition, we will identify and invest resources in fields where sustainable growth can be expected.

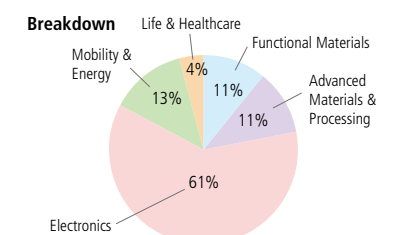
- Main Businesses**
- **Electronics** We will focus on fields in which South Korea is globally competitive, centering on semiconductors.
 - **Businesses Related to South Korean Products** We will shift from a technology-driven approach in South Korea toward global expansion.

Topics Nagase Engineering Service Korea, which manufactures and sells chemical management systems for the semiconductor and display industries in South Korea, has seen strong sales of its equipment to domestic semiconductor manufacturers and display makers overseas, delivering the best results since the company was founded.



Representative:
Kenji Sakai
Nagase Korea Corporation CEO and COO

Net Sales/18.9 billion yen (FY2020)



11-Year Financial Highlights

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years Ended March 31)

		2010/3	2011/3	2012/3	2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3	2020/3
Mid-Term Management Plan		“CHANGE” 11			Change-S2014			ACE-2020				
		Investment Amount: ¥107.4 billion			Investment Amount: ¥41.1 billion			Investment Amount: ¥13.7 billion	Investment Amount: ¥129.1 billion			
Performance (Accounting Fiscal Year)												
Net Sales (Millions of yen)		¥603,949	¥ 660,213	¥631,854	¥666,272	¥ 723,212	¥ 759,713	¥ 742,194	¥ 722,384	¥ 783,933	¥ 807,755	¥ 799,559
Segments	Functional Materials (formerly Chemicals)	237,124	253,290	177,126	167,017	169,973	168,238	157,149	153,546	174,922	179,627	169,318
	Advanced Materials & Processing (formerly Plastics)	192,569	222,100	217,929	214,214	239,224	254,165	255,505	242,609	262,831	275,203	267,078
	Electronics	117,591	133,640	110,495	125,014	137,026	149,947	127,926	127,722	129,324	122,319	115,123
	Mobility & Energy (formerly Automotive & Energy)	—	—	76,113	83,068	99,441	109,851	115,351	112,956	129,708	139,235	126,000
	Life & Healthcare (formerly Life Sciences)	55,542	50,247	49,170	76,116	76,810	76,609	85,571	84,904	86,517	90,794	121,545
	Others	1,121	934	1,018	841	737	900	689	644	629	574	492
Region	Domestic	360,382	389,379	366,369	361,971	372,939	374,208	363,038	369,365	395,428	412,617	402,390
	Overseas	243,567	270,833	265,484	304,301	350,272	385,505	379,155	353,019	388,504	395,137	397,169
Gross Profit		65,415	73,008	71,628	82,583	88,936	91,991	91,663	91,503	102,675	105,441	104,901
Operating Income		13,128	18,732	13,427	15,578	15,789	18,153	18,024	15,030	24,118	25,226	19,167
Profit Attributable to Owners of the Parent		7,537	12,823	8,570	14,182	11,663	11,318	12,316	10,331	17,175	20,136	15,144
Financial Condition:												
Total Assets		¥368,088	¥ 375,336	¥450,842	¥486,747	¥ 498,141	¥ 546,525	¥ 512,081	¥ 530,775	¥ 569,456	¥ 567,346	¥ 611,477
Equity Capital		195,344	201,516	204,706	228,505	246,723	281,398	273,963	290,217	303,636	307,674	305,322
Interest-Bearing Debt		21,886	27,125	88,710	98,425	92,828	98,493	87,560	82,046	86,173	85,620	135,974
Per Share Data: (Yen)												
Net Income (Basic)		¥ 58.64	¥ 99.76	¥ 66.69	¥ 111.31	¥ 91.86	¥ 89.10	¥ 96.96	¥ 81.65	¥ 136.34	¥ 161.30	¥ 122.12
Net Assets		1,519.61	1,568.04	1,592.87	1,803.31	1,942.20	2,215.18	2,156.67	2,301.10	2,424.97	2,481.01	2,462.04
Cash Dividends		16	22	24	26	28	30	32	33	40	42	44
Payout Ratio (%)		27.3	22.1	36.0	23.4	30.5	33.7	33.0	40.4	29.3	26.0	36.0
Shareholders’ Equity Dividend Rate (%)		1.08	1.42	1.52	1.52	1.50	1.44	1.46	1.48	1.69	1.71	1.78
Ratios: (%)												
Overseas Sales to Net Sales		40.3	41.0	42.0	45.7	48.4	50.7	51.1	48.9	49.6	48.9	49.7
Manufacturing Ratio (Operating Income)		35.4	29.0	31.3	37.3	23.5	27.8	24.3	39.5	34.2	33.5	40.8
Operating Margin (Operating Income/Net Sales)		2.2	2.8	2.1	2.3	2.2	2.4	2.4	2.1	3.1	3.1	2.4
Return on Equity (ROE)		4.0	6.5	4.2	6.5	4.9	4.3	4.4	3.7	5.8	6.6	4.9
Net Worth Ratio		53.1	53.7	45.4	46.9	49.5	51.5	53.5	54.7	53.3	54.2	49.9
Debt Equity Ratio (Times)		0.11	0.13	0.43	0.43	0.38	0.35	0.32	0.28	0.28	0.28	0.45

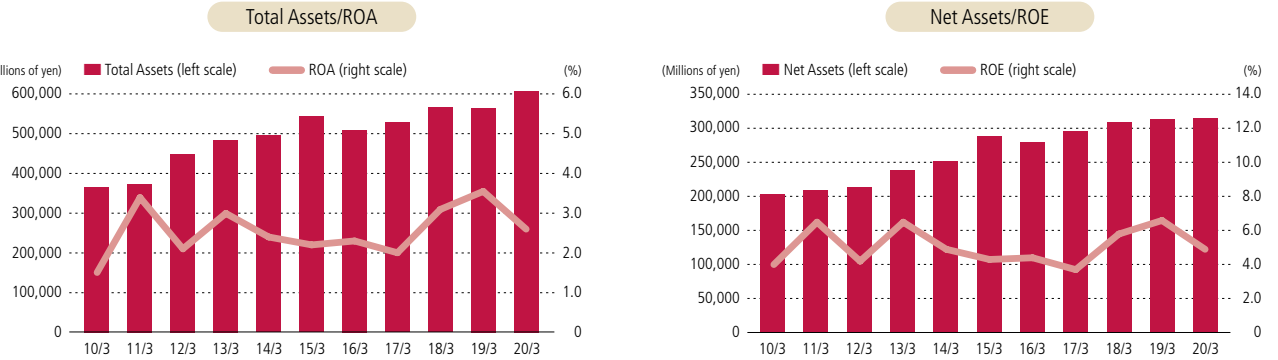
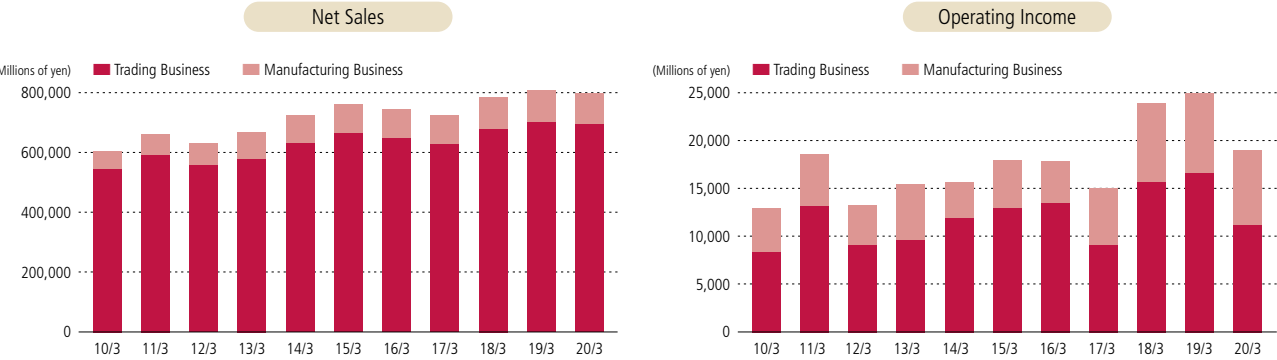
(Note 1) At the beginning of fiscal 2009, the Company moved its information and functional materials businesses handling materials related to insulating materials and fluoroplastic-related materials from the Electronics segment to the Chemicals segment. Businesses handling surface detection machines for functional films and sheets have been moved under the Plastics segment.

(Note 2) At the beginning of fiscal 2012, the NAGASE Group reorganized its then existing four product-based business segments into five business segments (Functional Materials, Advanced Materials & Processing, Electronics, Automotive & Energy, and Life & Healthcare) to more fully reflect the respective positions of each business in the value chain. For comparative purposes, fiscal 2011 figures have been calculated using the new business segments. The Colors & Imaging Department formerly under the Chemicals segment has been moved under the Advanced Materials & Processing segment. The Automotive & Energy segment was organized out of the Automotive Solutions Department (belonging to the Plastics segment) and the Energy Business Office, which was launched as an integrated entity from the Environment & Energy Office (under Others) and the Energy Device Office.

(Note 3) At the beginning of fiscal 2013, abrasives sales business for semiconductors and HDDs was moved to the Electronics segment from the Functional Materials segment, and the raw materials sales business for the cosmetics industry were moved from the Functional Materials segment to the Life & Healthcare segment. Actual fiscal 2012 results have been adjusted to enable comparison with fiscal 2013.

(Note 4) The Partial Amendments to Accounting Standard for Tax Effect Accounting (ASBJ Statement No. 28 issued February 16, 2018) were applied from April 1, 2019. Following this change, deferred tax assets are now presented under “Investments and other assets,” and deferred tax liabilities are presented under “Long-term liabilities.”

(Note 5) From April 1, 2019, the name of the Automotive & Energy segment has been changed to the Mobility & Energy segment.



Six-Year Summary

NAGASE & CO., LTD. and Consolidated Subsidiaries (Fiscal years ended March 31, 2015–2020)

	(Millions of yen)						Thousands of U.S. Dollars (Note 1)
	2015	2016	2017	2018	2019	2020	2020
For the Fiscal Year:							
Net Sales	¥759,713	¥742,194	722,384	¥783,933	¥807,755	¥799,559	\$7,346,862
Domestic	374,208	363,038	369,365	395,428	412,617	402,390	3,697,418
Overseas	385,505	379,155	353,019	388,504	395,137	397,168	3,649,435
Gross Profit	91,991	91,663	91,503	102,675	105,441	104,901	963,898
Operating Income	18,153	18,024	15,030	24,118	25,226	19,167	176,119
Income before Income Taxes and Non-Controlling Interests	18,989	15,239	16,100	24,049	28,204	24,200	222,365
Profit Attributable to Owners of the Parent	11,318	12,316	10,331	17,175	20,136	15,144	139,153
As of the Fiscal Year-End:							
Total Assets	¥546,525	¥512,081	¥530,775	¥569,456	¥567,346	¥611,477	\$5,618,644
Net Assets	287,500	279,149	295,198	308,804	312,609	313,243	2,878,278
Interest-Bearing Debt	98,493	87,560	82,046	86,173	85,620	135,974	1,249,417
Share Price (Yen/Dollars)	1,573	1,237	1,551	1,805	1,589	1,279	11.75
Market Value	200,413	157,604	197,610	229,971	202,451	165,248	1,518,405
Number of Shares Issued and Outstanding (Thousands of Shares)	127,408	127,408	127,408	127,408	127,408	127,408	—
Number of Shareholders	6,781	7,338	10,394	11,357	12,788	22,306	—
Number of Employees	6,259	6,267	6,241	6,312	6,143	7,207	—

	(Yen)						U.S. Dollars (Note 1)
Per Share Data							
Profit Attributable to Owners of the Parent	¥ 89.10	¥ 96.96	¥ 81.65	¥ 136.34	¥ 161.30	¥ 122.12	\$ 1.12
Net Assets	2,215.18	2,156.67	2,301.10	2,424.97	2,481.01	2,462.04	22.62
Cash Dividends	30.00	32.00	33.00	40.00	42.00	44.00	0.40
Ratios							
Operating Margin (Operating Income/Net Sales) (%)	2.4	2.4	2.1	3.1	3.1	2.4	—
Ratio of Profit before Income Taxes and Non-Controlling Interests to Net Sales (%)	2.5	2.1	2.2	3.1	3.5	3.0	—
Return on Sales (ROS) (%)	1.5	1.7	1.4	2.2	2.5	1.9	—
Total Assets Turnover (Times)	1.5	1.4	1.4	1.4	1.4	1.4	—
Return on Assets (ROA) (%)	2.2	2.3	2.0	3.1	3.5	2.6	—
Return on Equity (ROE) (%)	4.3	4.4	3.7	5.8	6.6	4.9	—
Shareholders' Equity Ratio (%)	51.5	53.5	54.7	53.3	54.2	49.9	—
Debt to Equity Ratio (Times)	0.35	0.32	0.28	0.28	0.28	0.45	—
Current Ratio (%)	187.0	200.1	192.9	183.1	181.2	189.3	—
Interest Coverage Ratio (Times) (Note: 2)	17.86	18.69	16.31	20.02	15.99	15.86	—

Note: 1. U.S. dollar amounts have been translated from yen, for convenience only, at the rate of ¥108.83=U.S. \$1.00, the approximate rate of exchange prevailing on March 31, 2020.
Note: 2. Interest coverage ratio is calculated as (operating income + interest income + dividend income) / interest expense.

Management’s Discussion and Analysis of Operations and Finances

Business Lines and Scope of Consolidation

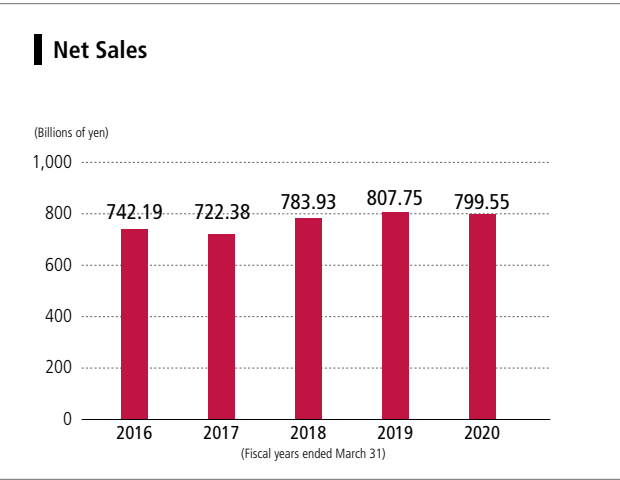
The NAGASE Group is led by NAGASE & CO., LTD. (the “Company” or “NAGASE”). The Company and its consolidated subsidiaries (collectively, the “NAGASE Group”) imports and exports a diverse array of products and engages in domestic transactions. In addition, the NAGASE Group manufactures and sells products and provides services. These businesses are conducted by 124 affiliated companies consisting of 91 subsidiaries and 33 affiliates. The NAGASE scope of consolidation includes 81 companies, as well as 25 affiliates accounted for by the equity method.

Overview of Consolidated Results

Net sales

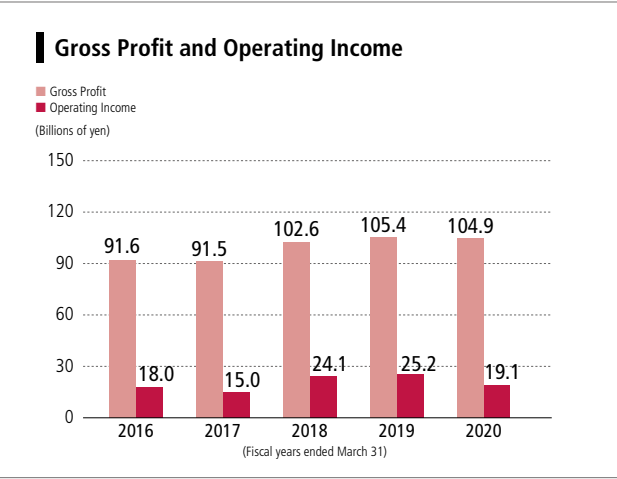
The Japanese economy was affected by the impact of a slowdown in the global economy during the fiscal year ended March 31, 2020, as manufacturing and capital investment decreased despite continued improvement in the employment environment. In the global economy, corporate earnings in the United States were a driving force, but as the Chinese economy went into a slowdown as U.S.-China trade frictions became prolonged, the situation rapidly deteriorated due to the spread of COVID-19 from the fourth quarter.

In this environment, the Company recorded domestic sales of ¥402.39 billion (–2.5% year on year) for the consolidated fiscal year. Overseas sales amounted to ¥397.16 billion (+0.5%). In total, the Company recorded ¥799.55 billion in net sales (–1.0%).



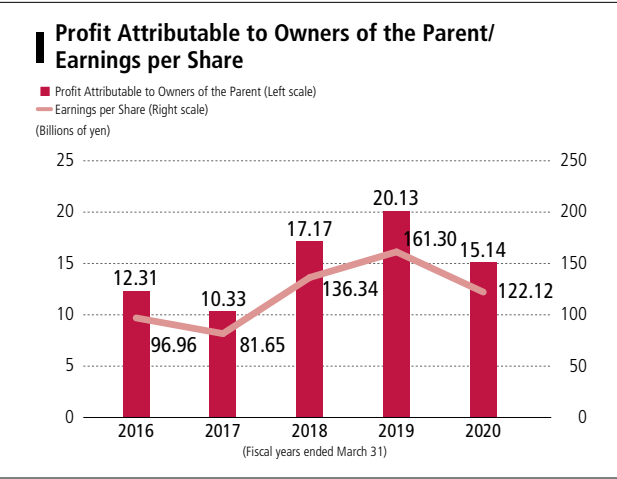
Gross Profit and Profit Attributable to Owners of the Parent

Regarding profits, the Company recorded gross profit of ¥104.90 billion (–0.5%), operating income of ¥19.16 billion (–24.0%), and ordinary income of ¥19.08 billion (–28.4%).



The Company recorded profit before income taxes of ¥24.2 billion (–14.2% year on year) with a ratio of profit before income taxes to net sales of 3.0%, which was a 0.5 percentage point decrease compared to the prior fiscal year.

As a result, profit attributable to owners of the parent amounted to ¥15.14 billion (–24.8%). Return on sales decreased by 0.6 percentage points to 1.9%. Earnings per share was ¥122.12, compared to ¥161.30 in the prior year.



Results by Business Segment

Functional Materials		
	(Millions of yen)	
Fiscal years ended March 31	2019	2020
Net Sales	¥179,627	¥169,318
Segment Income	5,494	5,364
Segment Assets	87,158	76,936
Depreciation and Amortization	444	413
Amortization of Goodwill	110	107
Goodwill	2,012	1,864
Investments in Equity Affiliates	2,398	1,895
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	314	436

The Functional Materials segment recorded lower sales in the domestic and overseas markets.

The Performance Chemicals business recorded lower sales as a whole, mainly due to a decrease in automotive production in Japan and overseas and decreases in sales of coating raw materials and urethane materials.

The Specialty Chemicals business recorded lower sales as a whole compared to the prior fiscal year due to decreases in sales of electronics chemicals for the semiconductor and other related electronics industries and raw materials for industrial oil solutions.

As a result, the Functional Materials segment recorded sales of ¥169.31 billion, a ¥10.3 billion (−5.7%) decrease compared to the prior fiscal year. Operating income for the segment was ¥5.36 billion, a decrease of ¥130 million (−2.4%).

Advanced Materials & Processing		
	(Millions of yen)	
Fiscal years ended March 31	2019	2020
Net Sales	¥275,203	¥267,078
Segment Income	8,093	8,526
Segment Assets	135,403	135,541
Depreciation and Amortization	692	754
Amortization of Goodwill	—	—
Goodwill	—	2,962
Investments in Equity Affiliates	1,545	1,722
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	1,542	1,845

The Advanced Materials & Processing segment recorded slightly lower sales in the domestic market and lower sales in overseas markets.

The Colors & Advanced Processing business recorded higher sales as a whole, driven by growth in sales of digital print processing materials both in Japan and overseas, despite reduced sales in Japan of plastic resins for industrial and packaging applications and conductive materials.

The Polymer Global Account business mainly sells plastics to the office equipment, appliance, and video game device markets. The sales of those business were lower overall due to decreases in sales in Japan, Greater China, and ASEAN.

As a result, the Advanced Materials & Processing segment recorded sales of ¥267.07 billion, an ¥8.12 billion (−3.0%) decrease compared to the prior fiscal year. Operating income grew ¥430 million (+5.3%), reaching ¥8.52 billion for the year due to improvements in profitability among domestic manufacturing subsidiaries.

Electronics		
	(Millions of yen)	
Fiscal years ended March 31	2019	2020
Net Sales	¥122,319	¥115,123
Segment Income	7,400	5,396
Segment Assets	65,022	58,879
Depreciation and Amortization	2,511	2,372
Amortization of Goodwill	136	132
Goodwill	1,218	484
Investments in Equity Affiliates	3,765	3,906
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	3,201	3,235

The Electronics segment recorded lower sales as a whole despite increases in sales in photolithography materials, electronic components for mobile devices and formulated epoxy resins for the semiconductor industry, which could not offset decreases in sales of precision processing-related, equipment-related, and display-related materials used in connection with intermediate processing in semiconductors and other applications.

As a result, sales for the segment amounted to ¥115.12 billion, which was a ¥7.19 billion (−5.9%) decrease. Operating income fell ¥2.0 billion (−27.1%) to ¥5.39 billion for the year due in part to the worsening of profitability at an overseas manufacturing subsidiary.

Mobility & Energy		
	(Millions of yen)	
Fiscal years ended March 31	2019	2020
Net Sales	¥139,235	¥126,000
Segment Income	3,051	1,890
Segment Assets	56,747	48,687
Depreciation and Amortization	211	204
Amortization of Goodwill	—	—
Goodwill	—	—
Investments in Equity Affiliates	1,253	1,242
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	329	241

The Mobility Solutions business recorded lower sales in Japan and overseas, with slightly lower sales of car electronics-related components in Japan and decreases in sales in the resins business in Japan and overseas.

As a result, sales for the segment amounted to ¥126.0 billion, which was a ¥13.23 billion (−9.5%) decrease compared to the prior fiscal year. Segment operating income decreased ¥1.16 billion (−38.1%) to ¥1.89 billion for the year.

Note: As of April 1, 2019, the Automotive & Energy Segment has been renamed the Mobility & Energy Segment.

Life & Healthcare		
	(Millions of yen)	
Fiscal years ended March 31	2019	2020
Net Sales	¥90,794	¥121,545
Segment Income	4,648	3,973
Segment Assets	97,627	171,461
Depreciation and Amortization	3,801	4,571
Amortization of Goodwill	1,569	1,796
Goodwill	20,636	29,935
Investments in Equity Affiliates	2,769	3,064
Increase in Property, Plant, and Equipment and Intangible Fixed Assets	3,206	6,035

The Life & Healthcare segment recorded significantly higher sales due to a large increase in overseas sales and despite slightly lower sales in the domestic market.

Sales of TREHA™ and other products in the food ingredients field in the Life & Healthcare Products business were slightly lower in Japan and increased overseas. Overseas sales increased significantly after adding sales from the Prinova Group, which was newly acquired in the second quarter of the consolidated fiscal year. Sales of AA2G™ to customers in the skin care and toiletries sectors were higher due to strong sales overseas, mainly in Europe, and despite lower sales in Japan. In the medical and pharmaceutical field, sales of pharmaceutical raw materials and intermediates and sales of medical materials were higher than the prior fiscal year, despite a decrease in sales in the formulation business. As a result, the business recorded higher sales compared to the prior year.

The Beauty Care Products business, which includes sales of cosmetics and health foods, recorded lower sales, driven down due to weak performance across all product categories.

As a result, sales for the segment amounted to ¥121.54 billion, which was a ¥30.75 billion (+33.9%) increase compared to the prior fiscal year. The amount the Prinova Group could contribute to profits during the fiscal year was limited due to factors such as the temporary costs associated with business combination. Furthermore, operating income fell ¥670 million (−14.5%), reaching ¥3.97 billion as a result of deteriorating profitability in some domestic manufacturing subsidiaries.

Others

No special matters to disclose.

Financial Condition

Summary of Consolidated Cash Flows

Cash and cash equivalents (Cash) increased ¥6.45 billion (+14.7%) compared to the end of the prior consolidated fiscal year, amounting to ¥50.47 billion. Cash from operating activities amounted to ¥33.07 billion, while cash used in investing activities came to ¥49.2 billion and cash provided by financing activities, taking into account exchange rate changes, amounted to ¥24.33 billion.

■ Cash Flows from Operating Activities

Cash provided by operating activities for the fiscal year ended March 31, 2020 amounted to ¥33.07 billion. This was mainly due to income before income taxes amounting to ¥24.2 billion and cash from a decrease in working capital amounting to ¥8.94 billion despite recording ¥7.03 billion in income taxes paid.

■ Cash Flows from Investing Activities

Cash used in investing activities for the fiscal year ended March 31, 2020 amounted to ¥49.2 billion. This result was mainly due to ¥44.69 billion from acquisition of subsidiary shares owing to changes in scope of consolidation and ¥12.37 billion in purchases of tangible and intangible fixed assets, as opposed to ¥10.27 billion in proceeds from sales of investments in securities.

■ Cash Flows from Financing Activities

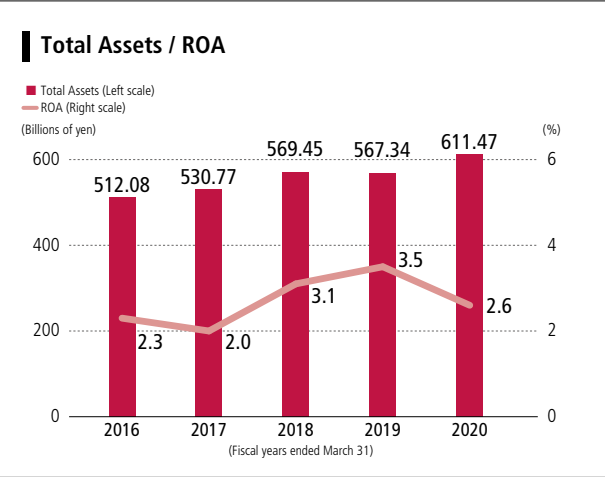
Cash from financing activities for the fiscal year ended March 31, 2020 amounted to ¥24.33 billion. This result was mainly due to ¥25.45 billion in proceeds from long-term loans, ¥20.0 billion in proceeds from issuance of bonds, and a net increase of ¥18.0 billion in commercial paper. These increases exceeded a ¥21.33 billion decrease in short-term loans and outlays of ¥10.0 billion in redemption of bonds.

Cash Flow Summary					
	(Millions of yen)				
Fiscal years ended March 31	2016	2017	2018	2019	2020
Cash Flows from Operating Activities	¥ 29,376	¥ 14,527	¥ 21,013	¥17,375	¥ 33,074
Cash Flows from Investing Activities	(12,600)	(6,518)	(14,442)	(7,325)	(49,208)
Cash Flows from Financing Activities	(12,822)	(10,592)	(3,161)	(8,909)	24,334

Summary of the Consolidated Balance Sheet

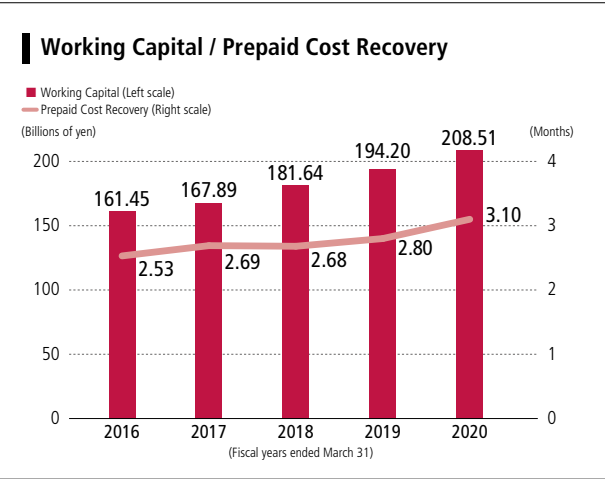
Assets

As of March 31, 2020, current assets amounted to ¥379.33 billion. This represents an increase of ¥13.51 billion compared to the end of the prior consolidated fiscal year, mainly due to an increase in assets related to the new consolidation of subsidiaries, despite decreases in notes and accounts receivable, inventories, etc. among existing NAGASE Group companies. Non-current assets amounted to ¥232.13 billion, up ¥30.62 billion from the end of the prior consolidated fiscal year. This increase was mainly due to an increase of assets and the recording of goodwill and other intangible assets related to the new consolidation of subsidiaries, despite a decrease in investments in securities stemming from the sale of certain shares owned by the Company and lower fair values of shares owned. As a result, total assets increased ¥44.13 billion compared to the end of the prior consolidated fiscal year to ¥611.47 billion.



Liabilities

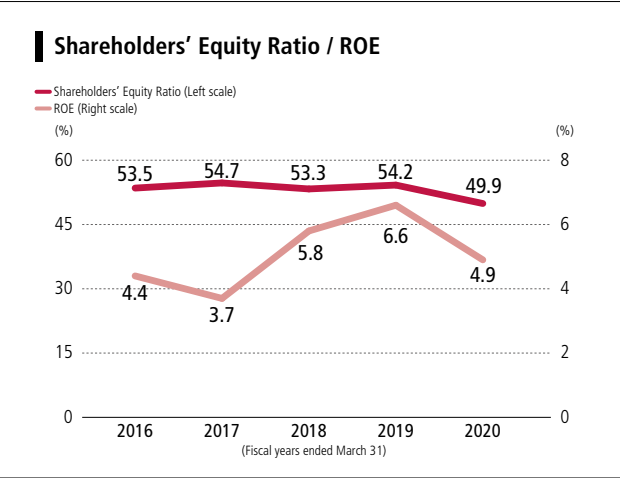
Liabilities amounted to ¥298.23 billion, an increase of ¥43.49 billion compared to the end of the prior consolidated fiscal year. This increase was mainly due to increases in commercial paper, long-term loans, and bonds.



Net Assets

Net assets amounted to ¥313.24 billion, up ¥630 million compared to the end of the prior consolidated fiscal year. While the Company recorded decreases in net unrealized holding gain on securities it was offset by profit attributable to owners of the parent amounting to ¥15.14 billion.

As a result, the Company recorded a shareholders' equity ratio of 49.9%, 4.3 percentage points lower than the end of the prior consolidated fiscal year.



Capital Investment

During the consolidated fiscal year, the NAGASE Group recorded ¥12.82 billion in capital investment (including purchases of intangible fixed assets). This amount included ¥3.25 billion in capital investment at the new pullulan and enzyme wing of the Okayama No. 2 Plant of Hayashibara Co., Ltd. (Life & Healthcare Segment). The NAGASE Group used cash on hand and funds procured from external sources for capital investments.

A breakdown of capital investment by segment is as follows.

Reportable Segments	(Millions of yen)
Functional Materials	¥ 436
Advanced Materials & Processing	1,845
Electronics	3,235
Mobility & Energy	241
Life & Healthcare	6,035
Others	1,034
Total	12,829

Research and Development Expenses

The NAGASE Group develops new technologies and products originating from our marketing activities. We also engage in research and development activities for the purpose of communicating technological information. These activities bring the comprehensive power of the NAGASE Group to bear in creating new businesses.

The New Value Creation (NVC) Office promotes innovation within the NAGASE Group and creates new value that anticipates changing trends, including AI, IoT and ICT, with the aim of creating business cores that the NAGASE Group has not had to date. It is working on materials informatics to become a new material development tool; low latency requirements and data processing needed for 5G; Axonerve, a solution for server acceleration to

reduce system power consumption; and advancing development of block chain system development securing hitherto unseen traceability using such means as image and odor sensors.

To realize a sustainable society, the Nagase R&D Center leverages unique core technologies (actinomycete breeding and fermentation technology, NSTePP® (See Note)) and fundamental technologies for highly efficient production of rare animal-derived useful substances and plants that are currently difficult to synthesize in the aim for process innovation (=unavailable made available). Fermentation methods have the feature of being safe, secure and kinder on the environment compared to conventional extraction and chemo-synthesis methods. We are currently pressing forward with examination of fermentation production using UV-absorbing substances derived from algae (mycosporin-like amino acids), rare antioxidant amino acids (ergothioneine) contained in mushrooms and barley, and functional substances from bio-dyes peculiar to actinomycetes. We are moving forward on development in the hope these useful substances may be widely used as functional foods, cosmetics, and industrial products. Each year we apply for and register many patents related to fundamental and peripheral technologies. In this way, the Center will leverage original technologies and make its mission leading the NAGASE Group's future business and creating the buds for new business.

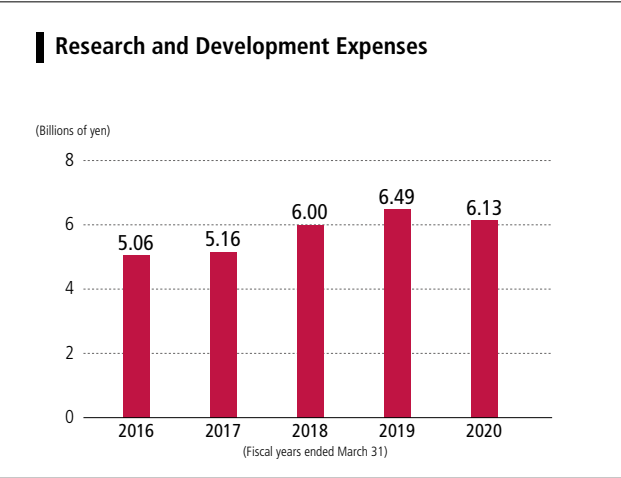
Note: Abbreviation of Nagase Streptomyces Technology for Protein/Precious Products, a NAGASE registered trademark in Japan.

The Nagase Application Workshop (NAW) houses specialized technical staff and equipment for the evaluation and analysis of raw materials within the fields of plastics and coating materials, the development of applications, and the development of formulas composed of these raw materials to be used in end products. NAW combines the materials and processing techniques possessed by our partners and NAGASE Group manufacturing companies and proposes solutions in response to market needs captured via our marketing function, which leverages the NAGASE Group's network. In this, NAW supports the NAGASE Group's unique trading differentiation strategy and takes action with the aim of exercising its free thinking only capable in a laboratory operated by a trading company to contribute to development of sustainable new business.

Nagase ChemteX is focused on launching new businesses in the biomaterial field. In particular, we are moving forward on development of low-endotoxin materials where needs are increasing in the medical materials and medical device fields. We have already started providing samples of such products as low-endotoxin pullulan, using a refined version of pullulan product from Hayashibara Co., Ltd. Our Harima Plant has been newly set up as a pilot plant with the objective of producing samples for provision, and to test whether it can handle a low-endotoxin material production process. Going forward, we will bolster the product lineup and move ahead on creating products with high added value ahead of full-scale commercialization.

Inkron Oy develops and manufactures functional materials for semiconductors and electrical devices using its unique siloxane synthesis technology. It has made particular progress on development of optical components for next-generation augmented reality (AR) and mixed reality (MR) devices for wearable displays and formed a partnership with a glass substrate manufacturer, nanoimprint (NIL) device manufacturer and diffraction waveguide design company to provide innovative solutions using NIL construction methods. Through nanoparticle dispersion technology accumulated over many years at Nagase ChemteX, mass production technology, a quality control system and complementary synergies, Inkron Oy contributes to customer innovation by providing a global supply of advanced materials used for next-generation devices.

Hayashibara Co., Ltd. is conducting research and development activities in a wide variety of areas encompassing fields such as foods, cosmetics, pharmaceuticals and medical treatment though to agriculture and industry in the belief that saccharides including TREHA® and pullulan should be widely used. Focus products Fibryxa® and Hayashibara Hesperidin® S are gaining increasing recognition among consumers and we are bolstering their deployment among more foods with functional claims and engaging in development activities for new applications. In regard to new materials, Glucosyl Naringin, materials for anti-aging cosmetics, were launched onto the market. Continuing on, we are also searching for new enzyme-producing bacteria from microorganisms and pressing forward with R&D into products that can be created using unique enzymes. Furthermore, ahead of commercializing functional saccharides that will become a main next-generation product we are considering production methods involving new materials and advancing activities such as market analysis, proposing potential use methods and applications, development all while taking into consideration patent and intellectual property strategies. As research and development activities in functional dyes, we are leveraging our abundant functional dye library and continuing development activities for the growing pharmaceutical and in-vitro diagnostics in the life sciences field in addition to the commercial field of photo and printing plates. The total amount spent on R&D in the consolidated fiscal year was ¥6.13 billion.



Outlook for the Year Ending March 31, 2021

The outlook for the environment encompassing the NAGASE Group in the fiscal year ending March 31, 2021 is a significant deterioration in the global economy following the worldwide spread of COVID-19.

Under these circumstances, the upcoming fiscal year would have been the final year of the medium-term management plan **ACE-2020**, therefore implementing the various policies in **ACE-2020** will become the basis of activities. Management strategy will change as appropriate in response to dealing with COVID-19 and customers, markets and the external environment changes projected following convergence of the pandemic.

The outlook for business performance is as determined below, based on the assumption that the impact of COVID-19 will broadly head toward recovery in the second half of the fiscal year.

Significant increases in revenue and profits are projected in the Life & Healthcare segment with contributions by the Prinova Group acquired in the second quarter of the consolidated fiscal year will be recorded over the full

year for the coming fiscal year and strong sales of the Prinova Group’s vitamins and amino acids, mainly in Europe and the Americas. Other segments, particularly the Mobility & Energy and Functional Materials segments, which have a high ratio of business involving the automotive industry, are forecast to have considerably reduced revenue and reduced profits due to the impact of the spread of COVID-19. In addition to reduced revenue, the Advanced Materials & Processing segment is expected to have a considerable decrease in profits due to the deteriorating profitability of the digital print processing materials business due to the decline in market prices.

Regarding the outlook for the fiscal year ending March 31, 2021, we have calculated figures based on certain assumptions made on the latest information available and through rational judgment, but actual results may differ significantly depending on various factors such as the timing of convergence of COVID-19, economic trends domestically and overseas or exchange rate movements.

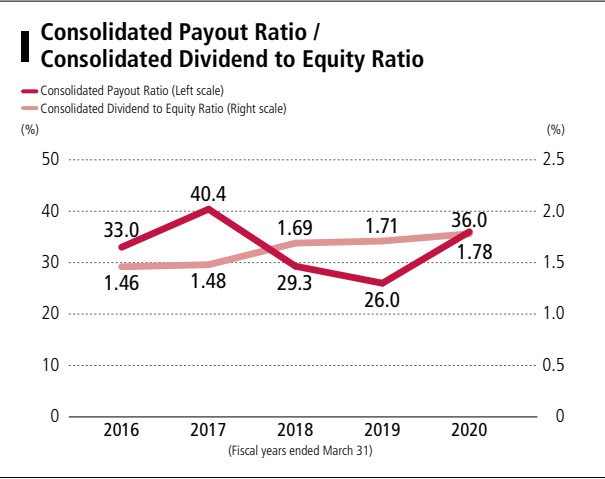
(Announced on May 14, 2020)		(Millions of yen)		
	Net sales	Operating income	Ordinary income	Profit attributable to owners of the parent
Year ending March 31, 2021 (Projected)	¥754,000	¥15,000	¥15,500	¥12,500
Year ended March 31, 2020 (Actual)	799,559	19,167	19,083	15,144
Change	−5.7%	−21.7%	−18.8%	−17.5%

Profit Sharing Policy

■ Dividend Policy

Our basic policy is to continue paying a stable dividend to our shareholders in line with our consolidated results as we improve our earnings power and management structure. We look to improve per-share dividends based on considerations of the consolidated payout ratio and consolidated dividend to equity ratio. We also plan to use funds from internal reserves effectively in our business activities and to build a stronger management function.

We announced a year-end dividend of ¥22 per share for the fiscal year ended March 31, 2020. As a result, the scheduled full-year cash dividend amounted to ¥44 per share, including an interim dividend.



The Company’s Articles of Incorporation stipulate that an interim dividend can be paid in accordance with Article 454, Paragraph 5 of the Companies Act. As a result, a dividend is paid twice each fiscal year, comprising an interim dividend based on a resolution by the Board of Directors and a year-end dividend based on a resolution of the General Shareholders’ Meeting.

Operating and Other Risks

The NAGASE Group is engaged in trading, marketing, research and development, manufacturing and processing in six business segments across the world: Functional Materials, Advanced Materials & Processing, Electronics, Mobility & Energy, Life & Healthcare, and Others. The nature of these businesses entails various risks that may have a material effect on investment decisions. We provide a discussion of the major risks below.

Any forward-looking statements are based on management decisions as of the end of the consolidated fiscal year.

(1) Overall Operating Risk

The NAGASE Group is engaged in activities that rely on the use of chemicals across a wide spectrum of products and services through our Functional Materials, Advanced Materials & Processing, Electronics, Mobility & Energy and Life & Healthcare businesses. These products and services include dyes/pigments, coating materials/inks, surfactants, OA, electrical equipment, home electronics, automobiles, LCDs, semiconductors, and pharmaceutical/medical applications. Accordingly, significant changes in the domestic or international commercial chemicals industries could affect the NAGASE Group’s earnings and financial condition.

(2) Product Market Conditions

The NAGASE Group handles extensive petrochemicals manufactured from naphtha in our Functional Materials, Advanced Materials & Processing, and Mobility & Energy segments. Raw materials markets and demand-supply balance are two factors that result in unique market circumstances for each of our products. Fluctuations in these factors could affect our revenues and profits in related product lines. Also, some products manufactured by the NAGASE Group use raw materials derived from grains. Raw materials costs fluctuate widely due to changes in grain market prices; we may not be able to pass on increased raw materials costs through higher sales prices, which could affect our profits in related product lines.

(3) Impact of Fluctuations in Foreign Currency Exchange Rates

The NAGASE Group conducts import/export as well as non-trade business transactions denominated in foreign currencies. Fluctuations in currency markets have a significant impact when prices are converted to yen. While the NAGASE Group executes exchange contract hedges for these transactions to minimize exchange rate risk to the greatest extent possible, currency exchange rate fluctuations could have a significant impact on NAGASE Group earnings and financial conditions. The NAGASE Group owns foreign-domiciled corporations whose financial statements are prepared using local currencies. The conversion of these currencies to Japanese yen for consolidated reporting purposes entails currency conversion risk due to fluctuating exchange rates.

(4) Impact of Fluctuations in Interest Rates

The NAGASE Group obtains funds for operating and investing activities through loans from financial institutions; some of these loans are interest-bearing debt including variable interest terms. The NAGASE Group reduces interest rate fluctuation risk related to variable interest loans by utilizing interest-rate swap contracts. NAGASE Group earnings and financial conditions may be affected by future interest rate trends.

Interest rate fluctuations cause variations in discount rates used for retirement benefit obligations and plan asset investment income, having an impact on NAGASE Group business performance and financial position.

(5) Risks Involved in Operating Overseas

A significant and increasing percentage of NAGASE Group sales and production takes place overseas in locations such as Greater China, ASEAN, the Americas, and Europe. While NAGASE Group management keeps a close eye on local trends and conditions to respond appropriately, unforeseen events stemming from local government regulations, business customs, or other influences could have an impact on NAGASE Group business performance and financial condition.

(6) Impact of Changes in Stock Prices

The NAGASE Group maintains a portfolio of marketable securities, primarily equity shares of companies doing business with the NAGASE Group. These equity investments are subject to share price fluctuation risks. As a matter of policy, the NAGASE Group reduces risk by continuously reviewing and reorganizing its shareholdings. However, changes in share prices could have an impact on NAGASE Group earnings and financial condition. A decline in share prices could damage the value of pension plan assets managed by the Group, increasing retirement benefit costs and thereby reducing Group profits.

(7) Counterparty Credit Risk

The NAGASE Group extends credit to domestic and overseas purchasers in connection with various transactions. As a matter of policy, the NAGASE Group reduces credit risk by obtaining guarantees, collateral, and insurance, etc. according to the financial condition of the purchaser. Although the NAGASE Group strives to ensure stable, uninterrupted product procurement, financial weakness or bankruptcies among suppliers or others could damage the Group’s ability to procure goods. Such circumstances could have an impact on the Group’s earnings and financial condition.

(8) Risk of Investments

The NAGASE Group engages in investment activities to establish new companies, to invest in equipment at manufacturing subsidiaries, and to acquire other business entities. These types of investment activities involve certain risks, including the risk of failing to recover investments in cases where the Company is not able to record profits at initially planned levels, the risk that additional funding may be required, and the risk that the NAGASE Group will not be able to withdraw from investments according to the desired timing and method. Decisions to invest in new businesses are made after a careful study of the viability of business plans and profitability. At the same time, the NAGASE Group regularly monitors the performance of existing investments. However, even these management initiatives cannot completely negate potential investment risk, and such risk may have an impact on NAGASE Group earnings and financial condition.

(9) Risk of Asset Impairment

The NAGASE Group owns non-current assets such as business assets in manufacturing subsidiaries and goodwill. These assets entail the risk of impairment loss if asset value declines. The NAGASE Group records impairment losses when deemed necessary. However, even greater impairment losses may be incurred as a result of deteriorating business profits or other factors in the future, which may have an impact on NAGASE Group business performance and financial condition.

(10) Product Quality Risk

The NAGASE Group operates the Nagase R&D Center and manufacturing subsidiaries to offer high-value-added products to our customers. We pay detailed attention to the quality of the technologies and products that bear the name of NAGASE and our affiliates. We also bear manufacturers’ liability for imported products, products manufactured on a contract basis, etc. Accordingly, the NAGASE Group treats these products with the same attention to detail and quality as if they were made in our own facilities. However, product defects could result in cessation of sales and/or product recalls, exposing the NAGASE Group to liability for damages, which could have an impact on NAGASE Group earnings and financial conditions.

(11) Risks Related to Product Laws

The NAGASE Group imports, exports, and sells domestically mainly chemicals and other products for a broad range of uses. To maintain international peace and safety, the chemicals and other items we export are subject to different laws, including the Foreign Exchange and Foreign Trade Control Law and the Export Trade Control Order. Imports and domestic sales are subject to the Chemical Substances Control Law and other related statutes, as well as similar regulations in foreign jurisdictions. To ensure compliance, the NAGASE Group has established internal Security Trade Control Regulations and Chemical/Product Control Regulations. However, a violation of such laws and statutes could result in restrictions on NAGASE Group business activities, having an impact on NAGASE Group earnings and financial condition.

(12) Risks of Natural Disasters

The NAGASE Group has put emergency response systems in place, including the creation of a business contingency plan, the adoption of safety confirmation systems, setting up infrastructure to work from home, the creation of a disaster-response manual, earthquake-response measures, disaster-response training, and other measures to deal with natural disasters. However, as we conduct business across a great number of countries and regions, we are exposed to the risk of major natural disasters, COVID-19, H1N1 influenza and other communicable diseases, and other emergencies that could disrupt our supply chain. Such disruptions could prevent us from selling our products or damage the manufacturing capabilities of important NAGASE Group facilities. Such interruptions would result in opportunity loss, and could have a significant impact on NAGASE Group earnings and financial condition.

Consolidated Balance Sheet

NAGASE & CO., LTD. and Consolidated Subsidiaries (March 31, 2020 and 2019)

ASSETS	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Current assets:			
Cash and time deposits (Notes 18 and 25)	¥ 51,408	¥ 44,068	\$ 472,370
Notes and accounts receivable (Note 18)	221,116	230,459	2,031,756
Inventories (Notes 6 and 7)	95,685	81,003	879,215
Other current assets	11,859	10,651	108,968
Less allowance for doubtful accounts	(732)	(355)	(6,726)
Total current assets	379,337	365,827	3,485,592
Property, plant and equipment, at cost (Notes 8 and 9):			
Land (Note 22)	21,092	20,456	193,807
Buildings and structures	61,970	57,846	569,420
Machinery, equipment and vehicles	87,555	82,397	804,512
Leased assets	1,559	247	14,325
Construction in progress	7,855	3,784	72,177
	180,035	164,732	1,654,277
Less accumulated depreciation	(105,725)	(98,264)	(971,469)
Property, plant and equipment, net (Note 26)	74,309	66,467	682,799
Investments and other assets:			
Investments in securities (Notes 10 and 18):			
Unconsolidated subsidiaries and affiliates	9,661	9,556	88,771
Other	66,463	80,706	610,705
	76,124	90,263	699,476
Long-term loans receivable	391	243	3,593
Goodwill (Note 26)	35,246	23,866	323,863
Technology-based assets	9,064	10,639	83,286
Retirement benefit asset (Note 13)	1,754	109	16,117
Deferred tax assets (Note 14)	2,085	2,290	19,158
Other assets (Note 9)	33,254	7,732	305,559
Less allowance for doubtful accounts	(91)	(92)	(836)
Total investments and other assets	157,830	135,051	1,450,243
Total assets (Note 26)	¥611,477	¥567,346	\$5,618,644

LIABILITIES AND NET ASSETS	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Current liabilities:			
Notes and accounts payable (Note 18)	¥108,285	¥117,256	\$ 994,992
Short-term loans (Notes 11 and 18)	30,590	34,964	281,081
Current portion of long-term loans and finance lease obligations (Notes 3, 11, 18 and 22)	1,345	972	12,359
Commercial papers (Notes 11 and 18)	30,000	12,000	275,659
Current portion of bonds (Notes 11 and 18)	—	10,000	—
Accrued income taxes (Note 14)	4,625	3,594	42,497
Accrued expenses	5,101	3,005	46,871
Accrued bonuses for employees	5,123	5,355	47,073
Accrued bonuses for directors and executive officers	170	287	1,562
Other current liabilities	15,190	14,429	139,575
Total current liabilities	200,434	201,866	1,841,716
Long-term liabilities:			
Bonds (Notes 11 and 18)	30,000	10,000	275,659
Long-term loans and finance lease obligations (Notes 3, 11, and 18)	44,038	17,683	404,649
Deferred tax liabilities (Note 14)	9,280	12,075	85,271
Retirement benefit liability (Note 13)	13,677	12,461	125,673
Other long-term liabilities	804	650	7,388
Total long-term liabilities	97,800	52,870	898,649
Contingent liabilities (Note 23)			
Net assets:			
Shareholders' equity (Note 15):			
Common stock:			
Authorized — 346,980,000 shares			
Issued — 127,408,285 shares in 2020 and 2019	9,699	9,699	89,121
Capital surplus	10,646	10,647	97,822
Retained earnings (Notes 24 and 28)	257,067	247,617	2,362,097
Treasury stock, at cost (Note 16) — 3,396,695 shares in 2020 and 3,396,352 shares in 2019	(5,071)	(5,070)	(46,596)
Total shareholders' equity	272,342	262,892	2,502,453
Accumulated other comprehensive income:			
Net unrealized holding gain on securities (Note 10)	32,618	41,857	299,715
Deferred gain (loss) on hedges (Note 19)	3	(7)	28
Translation adjustments	1,051	3,224	9,657
Retirement benefit liability adjustments (Note 13)	(694)	(292)	(6,377)
Total accumulated other comprehensive income	32,979	44,781	303,032
Non-controlling interests	7,921	4,934	72,783
Total net assets	313,243	312,609	2,878,278
Total liabilities and net assets	¥611,477	¥567,346	\$5,618,644

See notes to consolidated financial statements.

Consolidated Statement of Income

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2020 and 2019)

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Net sales (Note 26)	¥799,559	¥807,755	\$7,346,862
Cost of sales (Note 7)	694,657	702,313	6,382,955
Gross profit	104,901	105,441	963,898
Selling, general and administrative expenses (Notes 20 and 21)	85,734	80,215	787,779
Operating income (Note 26)	19,167	25,226	176,119
Other income (expenses):			
Interest and dividend income	2,322	1,994	21,336
Interest expense	(1,355)	(1,702)	(12,451)
Equity in earnings of affiliates	—	538	—
Equity in losses of affiliates	(538)	—	(4,943)
Gain on sales of shares of subsidiaries and affiliates	—	6	—
Gain on sales of investments in securities (Note 10)	9,723	4,355	89,341
Loss on devaluation of investments in securities (Note 10)	(1,028)	(208)	(9,446)
Gain on sales of property, plant and equipment	21	282	193
Loss on sales of property, plant and equipment	(46)	(78)	(423)
Loss on disposal of property, plant and equipment	(204)	(275)	(1,874)
Loss on impairment of fixed assets (Notes 9 and 26)	(3,116)	(2,294)	(28,632)
Loss on reduction of property, plant and equipment	—	(205)	—
Subsidy income	52	205	478
Loss on discontinued operation	—	(194)	—
Other, net (Note 3)	(796)	556	(7,314)
Profit before income taxes	24,200	28,204	222,365
Income taxes (Note 14):			
Current	7,395	6,400	67,950
Deferred	1,288	1,395	11,835
Profit	15,515	20,408	142,562
Profit attributable to:			
Non-controlling interests	(371)	(271)	3,409
Owners of parent	¥ 15,144	¥ 20,136	\$ 139,153

See notes to consolidated financial statements.

Consolidated Statement of Comprehensive Income

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2020 and 2019)

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Profit	¥ 15,515	¥20,408	\$ 142,562
Other comprehensive loss (Note 12):			
Net unrealized holding loss on securities	(9,231)	(8,907)	(84,820)
Deferred gain on hedges	11	7	101
Translation adjustments	(1,973)	298	(18,129)
Retirement benefit liability adjustments	(402)	25	(3,694)
Share of other comprehensive loss of affiliates accounted for by the equity method	(339)	(29)	(3,115)
	(11,935)	(8,604)	(109,666)
Comprehensive income	¥ 3,579	¥11,803	\$ 32,886
Total comprehensive income attributable to:			
Owners of parent	¥ 3,380	¥11,640	\$ 31,058
Non-controlling interests	199	163	1,829

See notes to consolidated financial statements.

Consolidated Statement of Changes in Net Assets

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2020 and 2019)

	Millions of yen											
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Net unrealized holding gain on securities	Deferred (loss) gain on hedges	Translation adjustments	Retirement benefit liability adjustments (Note 13)	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at April 1, 2018	¥9,699	¥11,158	¥232,534	¥(3,114)	¥250,278	¥50,773	¥(15)	¥ 2,917	¥(317)	¥ 53,358	¥5,168	¥308,804
Profit attributable to owners of parent	—	—	20,136	—	20,136	—	—	—	—	—	—	20,136
Cash dividends	—	—	(5,133)	—	(5,133)	—	—	—	—	—	—	(5,133)
Purchases of treasury stock	—	—	—	(1,956)	(1,956)	—	—	—	—	—	—	(1,956)
Changes in parent's ownership interest due to transactions with non-controlling interests	—	(500)	—	—	(500)	—	—	—	—	—	—	(500)
(Decrease) increase in retained earnings resulting from changes in scope of consolidation	—	(11)	79	—	68	—	—	—	—	—	—	68
Other changes	—	—	—	—	—	(8,916)	7	307	25	(8,576)	(233)	(8,810)
Balance at April 1, 2019	9,699	10,647	247,617	(5,070)	262,892	41,857	(7)	3,224	(292)	44,781	4,934	312,609
Profit attributable to owners of parent	—	—	15,144	—	15,144	—	—	—	—	—	—	15,144
Cash dividends	—	—	(5,704)	—	(5,704)	—	—	—	—	—	—	(5,704)
Purchases of treasury stock	—	—	—	(0)	(0)	—	—	—	—	—	—	(0)
Changes in parent's ownership interest due to transactions with non-controlling interests	—	(0)	—	—	(0)	—	—	—	—	—	—	(0)
Decrease in retained earnings resulting from changes in scope of consolidation	—	—	(93)	—	(93)	—	—	—	—	—	—	(93)
Increase in retained earnings resulting from changes in scope of equity method	—	—	103	—	103	—	—	—	—	—	—	103
Other changes	—	—	—	—	—	(9,238)	11	(2,172)	(402)	(11,802)	2,986	(8,815)
Balance at March 31, 2020	¥9,699	¥10,646	¥257,067	¥(5,071)	¥272,342	¥32,618	¥ 3	¥ 1,051	¥(694)	¥ 32,979	¥7,921	¥313,243

	Thousands of U.S. dollars (Note 1)											
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Net unrealized holding gain on securities	Deferred (loss) gain on hedges	Translation adjustments	Retirement benefit liability adjustments (Note 13)	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at April 1, 2019	\$89,121	\$97,831	\$2,275,264	\$(46,586)	\$2,415,621	\$384,609	\$ (64)	\$ 29,624	\$(2,683)	\$ 411,477	\$45,337	\$2,872,452
Profit attributable to owners of parent	—	—	139,153	—	139,153	—	—	—	—	—	—	139,153
Cash dividends	—	—	(52,412)	—	(52,412)	—	—	—	—	—	—	(52,412)
Purchases of treasury stock	—	—	—	(0)	(0)	—	—	—	—	—	—	(0)
Changes in parent's ownership interest due to transactions with non-controlling interests	—	(0)	—	—	(0)	—	—	—	—	—	—	(0)
Decrease in retained earnings resulting from changes in scope of consolidation	—	—	(855)	—	(855)	—	—	—	—	—	—	(855)
Increase in retained earnings resulting from changes in scope of equity method	—	—	946	—	946	—	—	—	—	—	—	946
Other changes	—	—	—	—	—	(84,885)	101	(19,958)	(3,694)	(108,444)	27,437	(80,998)
Balance at March 31, 2020	\$89,121	\$97,822	\$2,362,097	\$(46,596)	\$2,502,453	\$299,715	\$ 28	\$ 9,657	\$(6,377)	\$ 303,032	\$72,783	\$2,878,278

See notes to consolidated financial statements.

Consolidated Statement of Cash Flows

NAGASE & CO., LTD. and Consolidated Subsidiaries (Years ended March 31, 2020 and 2019)

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2020	2019	2020
Operating activities:			
Profit before income taxes	¥ 24,200	¥ 28,204	\$ 222,365
Adjustments to reconcile profit before income taxes to net cash provided by operating activities:			
Depreciation and amortization other than amortization of goodwill	10,089	9,329	92,704
Amortization of goodwill	2,037	1,815	18,717
Loss on impairment of fixed assets	3,116	2,294	28,632
Subsidy income	(52)	(205)	(478)
Loss on reduction of property, plant and equipment	—	205	—
Loss on discontinued operation	—	194	—
Increase (decrease) in retirement benefit liability	645	(2,023)	5,927
Increase in retirement benefit asset	(1,645)	(109)	(15,115)
Interest and dividend income	(2,322)	(1,994)	(21,336)
Interest expense	1,355	1,702	12,451
Exchange (gain) loss, net	(121)	295	(1,112)
Gain on sales of investments in securities, investments in capital, shares of subsidiaries and affiliates, and investments in capital of subsidiaries and affiliates, net	(9,723)	(4,359)	(89,341)
Changes in operating assets and liabilities:			
Notes and accounts receivable	19,452	(4,477)	178,737
Inventories	3,187	(7,157)	29,284
Notes and accounts payable	(13,689)	(894)	(125,783)
Other, net	2,244	(1,421)	20,619
Subtotal	38,773	21,399	356,271
Interest and dividends received	2,714	2,520	24,938
Interest paid	(1,382)	(1,670)	(12,699)
Income taxes paid	(7,031)	(4,874)	(64,605)
Net cash provided by operating activities	33,074	17,375	303,905
Investing activities:			
Purchases of property, plant and equipment	(11,909)	(10,253)	(109,428)
Proceeds from sales of property, plant and equipment	87	917	799
Purchases of intangible fixed assets included in other assets	(464)	(505)	(4,264)
Purchases of investments in securities	(1,635)	(2,555)	(15,023)
Proceeds from sales of investments in securities	10,278	5,479	94,441
Purchases of investments in capital	(54)	(96)	(496)
Purchase of shares of subsidiaries resulting in change in scope of consolidation (Note 25)	(44,691)	—	(410,650)
Decrease (increase) in short-term loans receivable included in other current assets, net	404	(807)	3,712
(Increase) decrease in time deposits, net	(887)	392	(8,150)
Subsidy income	52	205	478
Other, net	(388)	(102)	(3,565)
Net cash used in investing activities	(49,208)	(7,325)	(452,155)
Financing activities:			
(Decrease) increase in short-term loans, net	(21,332)	2,771	(196,012)
Increase in commercial papers, net	18,000	7,000	165,396
Proceeds from long-term loans	25,454	582	233,888
Repayments of long-term loans	(1,131)	(11,175)	(10,392)
Proceeds from issuance of bonds	20,000	—	183,773
Redemption of bonds	(10,000)	—	(91,886)
Purchase of treasury stock	0	(1,956)	0
Cash dividends paid	(5,704)	(5,133)	(52,412)
Cash dividends paid to non-controlling interests	(219)	(398)	(2,012)
Payments for purchases of shares of subsidiaries not resulting in change in scope of consolidation	—	(498)	—
Other, net	(730)	(99)	(6,708)
Net cash provided by (used in) financing activities	24,334	(8,909)	223,596
Effect of exchange rate changes on cash and cash equivalents	(1,882)	100	(17,293)
Net increase in cash and cash equivalents	6,317	1,240	58,045
Cash and cash equivalents at beginning of the year	44,017	42,857	404,456
Decrease in cash and cash equivalents resulting from exclusion of subsidiaries from consolidation	—	(80)	—
Increase in cash and cash equivalents resulting from inclusion of subsidiary in consolidation	136	—	1,250
Cash and cash equivalents at end of the year (Note 25)	¥ 50,471	¥ 44,017	\$ 463,760

See notes to consolidated financial statements.

Notes to Consolidated Financial Statements

NAGASE & CO., LTD. and Consolidated Subsidiaries (March 31, 2020)

1. BASIS OF PREPARATION

The accompanying consolidated financial statements of NAGASE & CO., LTD. (the “Company”) and consolidated subsidiaries are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards, and have been compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Act of Japan.

In preparing the accompanying consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a format which is more familiar to readers outside Japan.

Certain amounts in the prior year’s consolidated financial statements have been reclassified to conform to the current year’s presentation. Such reclassifications had no effect on consolidated profit or net assets.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and companies that it controls directly or indirectly. Affiliates over which the Company exercises significant influence in terms of their operating and financial policies have been accounted for by the equity method. All significant intercompany balances and transactions have been eliminated in consolidation.

Certain subsidiaries were excluded from the scope of consolidation because the effect of their sales, net profit or loss, total assets and retained earnings on the accompanying consolidated financial statements was immaterial. The unconsolidated subsidiaries and affiliates not accounted for by the entity method were excluded from the scope of application of the equity method, because their profit or loss and retained earnings attributable to the Company’s interest were not material to the consolidated financial statements.

33 of the Company’s subsidiaries have a December 31 year end, which is different from that of the Company. The financial statements of 12 subsidiaries have been included in consolidation based on a provisional statement of accounts for a full fiscal year ending March 31. As for the other 21 subsidiaries, adjustments have been made for any significant intercompany transactions that took place during the period between the year end of these subsidiaries and the year end of the Company.

Unrealized intercompany gains among the Company and the consolidated subsidiaries have been entirely eliminated and the portion attributable to non-controlling interests has been charged to non-controlling interests.

(b) Foreign Currency Translation

All monetary assets and liabilities denominated in foreign currencies are translated into yen at the rates of exchange in effect at the balance sheet date, except that receivables and payables hedged by qualified foreign currency forward exchange contracts are translated at the corresponding contract rates. All other assets and liabilities denominated in foreign currencies are translated at their historical rates. Gain or loss on each translation is credited or charged to income.

Revenue and expense items arising from transactions denominated in foreign currencies are generally translated into yen at the rates in effect at the respective transaction dates. Foreign exchange gain or loss is credited or charged to income in the period in which such gain or loss is recognized for financial reporting purposes.

The balance sheet accounts of the overseas consolidated subsidiaries are translated into yen at the rates of exchange in effect at the balance sheet date, except that the components of net assets excluding non-controlling interests, net unrealized holding gain on securities, and deferred gain or loss on hedges are translated at their historical exchange rates. Revenue and

The U.S. dollar amounts in the accompanying consolidated financial statements have been translated from yen amounts solely for the convenience of the reader, as a matter of arithmetic computation only, at ¥108.83 = U.S.\$1.00, the rate of exchange prevailing on March 31, 2020. This translation should not be construed as a representation that the yen amounts have been, could have been, or could in the future be, converted into U.S. dollars at the above or any other rate.

As permitted by the Financial Instruments and Exchange Act of Japan, amounts of less than one million yen for the years ended March 31, 2020 and 2019 have been omitted. Consequently, the totals shown in the accompanying consolidated financial statements for the years ended March 31, 2020 and 2019 (both in yen and in U.S. dollars) do not necessarily agree with the sum of the individual amounts.

expense accounts are translated at the average rates of exchange in effect during the year. Adjustments resulting from translating financial statements whose accounts are denominated in foreign currencies are not included in the determination of net income but are reported as “Translation adjustments” as a component of accumulated other comprehensive income or loss in the accompanying consolidated balance sheets.

(c) Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, demand deposits, and short-term investments which are readily convertible to cash and subject to an insignificant risk of any change in their value, which were purchased with an original maturity of three months or less.

(d) Inventories

Inventories are stated at the lower of cost or net selling value, cost being determined primarily by the moving-average method.

(e) Investments in Securities

Securities are classified into three categories: trading securities, held-to-maturity debt securities or other securities. Trading securities, consisting of debt and marketable equity securities, are stated at fair value. Gain and loss, both realized and unrealized, are credited or charged to income. Held-to-maturity debt securities are stated at their amortized cost. Marketable securities classified as other securities are carried at fair value with any changes in unrealized holding gain or loss, net of the applicable income taxes, reported as a separate component of accumulated other comprehensive income or loss. Non-marketable securities classified as other securities are carried at cost determined by the moving-average method.

(f) Property, Plant and Equipment and Depreciation (except for leased assets)

Property, plant and equipment are stated at cost.

Depreciation of property, plant and equipment is calculated by the straight-line method based on the estimated useful lives of the respective assets.

The estimated useful lives of the principal assets are as follows:		
Buildings		
(other than structures attached to the buildings)	15 to 50 years	
Machinery and equipment	2 to 20 years	

(g) Intangible Assets (except for leased assets)

Technology-based assets recognized upon acquisition are amortized on a straight-line basis over 13 to 17 years.

Costs incurred for computer software obtained for internal use are capitalized and amortized on a straight-line basis over an estimated useful life of 5 years.

(h) Goodwill

Goodwill is amortized over a period not exceeding 20 years on a straight-line basis. When immaterial, goodwill is charged to income as incurred.

(i) Leased Assets

Leased assets under finance lease contracts which do not transfer ownership to the lessee are depreciated to a residual value of zero by the straight-line method over the respective lease terms.

(j) Allowance for Doubtful Accounts

The Company and its consolidated subsidiaries provide allowances for doubtful accounts based on their historical experience of bad debts on ordinary receivables plus an additional estimate of probable specific doubtful accounts from customers experiencing financial difficulties.

(k) Income Taxes

Income taxes are calculated based on taxable income and charged to income on an accrual basis. Deferred tax assets and liabilities are computed based on the temporary differences between the financial reporting and the tax bases of the assets and liabilities that will result in taxable or deductible amounts in the future. Computations of deferred tax assets and liabilities are based on the tax rates which have been enacted as of the balance sheet date. The Company and certain domestic consolidated subsidiaries have adopted the consolidated taxation system (the Company is the taxable entity), which allows companies to make tax payments on the combined profits of the parent company and its wholly owned domestic subsidiaries.

(l) Accrued Bonuses for Employees

Accrued bonuses for employees are provided based on the estimated amount of bonuses to be paid to employees in the following fiscal year which is attributable to the current fiscal year.

(m) Accrued Bonuses for Directors and Executive Officers

Accrued bonuses for directors and executive officers are provided based on the estimated amount of bonuses to be paid to directors and executive officers in the following fiscal year which is attributable to the current fiscal year.

(n) Retirement Benefit Liability

Retirement benefit liability is provided based on the amount of the retirement benefit obligation less estimated pension plan assets at the end of the fiscal year. The estimated benefit is attributed to each period based on the plan’s benefit formula.

Prior service cost is charged to income in the fiscal year in which such cost is recognized for financial reporting purposes. Actuarial differences are principally credited or charged to income in the fiscal year following the fiscal year in which such differences are recognized for financial reporting purposes.

(o) Derivatives and Hedging Activities

Derivatives positions are carried at fair value with any changes in unrealized gain or loss charged or credited to income, except for those which meet the criteria for deferral hedge accounting under which unrealized gain or loss is deferred as a component of net assets. Foreign currency receivables and payables hedged by qualified foreign currency forward exchange contracts are translated at the corresponding foreign exchange contract rates (“allocation method”). Interest-rate swaps which meet certain conditions are accounted

for as if the interest rates applied to the swaps had originally applied to the underlying loans.

Derivative financial instruments are utilized principally in order to manage the risk arising from adverse fluctuation in foreign currency exchange rates and interest-rate swaps are also utilized to mitigate the risk of fluctuation in interest rates on loans. Hedging instruments are foreign currency forward exchange contracts, foreign currency deposits, foreign currency loans and interest-rate swaps. Hedged items are foreign currency receivables and payables, forecast transactions and interest rates on loans from financial institutions.

The Company and its consolidated subsidiaries (collectively, the “Group”) manage derivative transactions in accordance with internal management rules. Under these rules, the Group conducts foreign currency forward exchange contracts within a range of actual demand of accounts receivable, accounts payable and actual transactions in foreign currencies. Execution and management of interest-rate swaps are based on internal management rules and hedged items of interest-rate swaps are identified by individual contracts.

The Company and certain consolidated subsidiaries assess the effectiveness of the hedging activities based on a comparison of the accumulated fluctuations of the hedged items and those of the hedging instruments in the period from the start of the hedging activities to the assessment date. However, with regard to interest-rate swaps which meet certain conditions, the evaluation of effectiveness is omitted.

(p) Research and Development Costs

Research and development costs are charged to income when incurred.

(q) Distributions of Retained Earnings

Dividends and other distributions of retained earnings are approved by the shareholders at a meeting held subsequent to the end of the fiscal year to which such distributions are applicable. The accompanying consolidated financial statements do not, however, reflect the applicable distributions of retained earnings as approved by the shareholders subsequent to the fiscal year end. (Refer to Note 28.)

(r) Application of Tax Effect Accounting for Transition from Consolidated Taxation System to Group Tax Sharing System

The Company and certain domestic consolidated subsidiaries have calculated the amounts of deferred tax assets and deferred tax liabilities in accordance with the provisions of tax laws in Japan prior to the amendments based on the treatments stipulated in Paragraph 3 of “Practical Solution on the Treatment of Tax Effect Accounting for the Transition from the Consolidated Taxation System to the Group Tax Sharing System” (Accounting Standards Board of Japan (“ASBJ”) Practical Issues Task Force No. 39, March 31, 2020) instead of applying the provision of Paragraph 44 of “Implementation Guidance on Tax Effect Accounting” (ASBJ Guidance No. 28, February 16, 2018), regarding the transition to group tax sharing system provided for in “Act for Partial Amendment of the Income Tax Act, etc.” (Act No. 8 of 2020), and items for which the non-consolidated taxation system has been reviewed in line with the transition to the group tax sharing system.

3. ACCOUNTING CHANGES

(a) Change in Accounting Method for Leases

Certain overseas subsidiaries have applied IFRS 16 “Leases” from the beginning of the current fiscal year. The effect of this change on the consolidated financial statements as of March 31, 2020 and for the year then ended was immaterial.

(b) Change in Accounting Method for Bond Issuance Costs

In the past, bond issuance costs were recorded as deferred assets and amortized using the interest method over the redemption period of the bonds; however, starting from the current fiscal year, the Company recognizes the full amount of bond issuance costs as expenses when incurred.

4. ACCOUNTING STANDARDS ISSUED BUT NOT YET EFFECTIVE

Accounting Standard and Implementation Guidance for Revenue Recognition

“Accounting Standard for Revenue Recognition”

(ASBJ Statement No. 29)

“Implementation Guidance on Accounting Standard for Revenue Recognition” (ASBJ Guidance No. 30)

“Implementation Guidance on Disclosures about Fair Value of Financial Instruments” (ASBJ Guidance No. 19, issued on July 4, 2019)

(a) Overview

The International Accounting Standards Board (hereinafter referred to as the “IASB”) and the Financial Accounting Standards Board (hereinafter referred to as the “FASB”) in the United States co-developed comprehensive accounting standards for revenue recognition and issued “Revenue from Contracts with Customers” (IFRS 15 by the IASB and Topic 606 by the FASB) in May 2014. The ASBJ developed comprehensive accounting standards on revenue recognition and issued them in conjunction with the implementation guidance based on fact that IFRS 15 is applied from fiscal years starting on or after January 1, 2018 and Topic 606 is applied from fiscal years starting after December 15, 2017.

As the basic policy in developing accounting standards for revenue recognition, the ASBJ defined the accounting standard starting with incorporating the basic principle of IFRS 15 from a standpoint of comparability between financial statements, which is one benefit of ensuring consistency with IFRS 15. Furthermore, the ASBJ added alternative accounting treatment without impairing comparability when there are matters to be considered related to accounting practices, etc. common in Japan.

(b) Scheduled date of adoption

The Company expects to adopt the accounting standard and implementation guidance from the beginning of the fiscal year ending March 31, 2022.

(c) Impact of the adoption of accounting standard and implementation guidance

The Company is currently evaluating the effect of the adoption of the accounting standard and the implementation guidance on its consolidated financial statements.

Accounting Standards for Fair Value Measurement, etc.

“Accounting Standard for Fair Value Measurement”

(ASBJ Statement No. 30, issued on July 4, 2019)

“Accounting Standard for Measurement of Inventories”

(ASBJ Statement No. 9, revised on July 4, 2019)

“Accounting Standard for Financial Instruments”

(ASBJ Statement No. 10, revised on July 4, 2019)

“Implementation Guidance on Accounting Standard for Fair Value Measurement” (ASBJ Guidance No. 31, issued on July 4, 2019)

“Implementation Guidance on Disclosures about Fair Value of Financial Instruments” (ASBJ Guidance No. 19, issued on July 4, 2019)

This change was made for the purpose of promoting business efficiency and maintaining a sound financial structure considering the new bond issuance costs incurred in connection with the business acquisition during the current fiscal year.

As a result, profit before income taxes and profit decreased by ¥118 million and ¥83 million, respectively, from the corresponding amounts that would have been recorded under the previous method.

As the effect of this change on the consolidated financial statements as of March 31, 2020 and for the year then ended was immaterial, this change has not been applied retrospectively.

(a) Overview

The ASBJ promoted an initiative to enhance comparability of the requirements between the Japanese generally accepted accounting standards and International Financial Reporting Standards, primarily with regard to guidance on the fair values of financial instruments and their disclosures, and issued “Accounting Standard for Fair Value Measurement,” etc., based on the fact that the IASB and the FASB have prescribed almost the similar detailed guidance (IFRS 13 “Fair Value Measurement” issued by IASB and Accounting Standard Codification Topic 820 “Fair Value Measurement” issued by FASB).

The ASBJ’s fundamental policies adopted for developing “Accounting Standard for Fair Value Measurement,” etc. are, in principle, to implement all the requirements of IFRS 13 from the viewpoint of enhancing the comparability of the financial statements of domestic and overseas companies by prescribing unified measurement methods, but also to prescribe exceptional treatments for individual matters so that comparability would not be impaired in consideration of accounting practices that have conventionally been adopted in Japan.

(b) Scheduled date of adoption

The Company expects to adopt the accounting standards from the beginning of the fiscal year ending March 31, 2022.

(c) Impact of the adoption of accounting standard and implementation guidance

The Company is currently evaluating the effect of the adoption of the accounting standard and the implementation guidance on its consolidated financial statements.

Accounting Standard for Disclosure of Accounting Estimates “Accounting Standard for Disclosure of Accounting Estimates” (ASBJ Statement No. 31, issued on March 31, 2020)

(a) Overview

The International Accounting Standards Board (“IASB”) issued International Accounting Standard 1, “Presentation of Financial Statements,” (“IAS 1”) in 2003, and Paragraph 125 of this accounting standard requires disclosures of key sources of estimation uncertainty. As such information is required for the convenience of users of financial statements in Japan, the ASBJ issued “Accounting Standard for Disclosure of Accounting Estimates.” The ASBJ presents the principles and the purposes of disclosure of key sources of estimation uncertainty, and the items to be disclosed should be determined by management in a way that helps users of the financial statements understand the judgments applied. The nature and extent of the information to be disclosed will vary according to the nature of the assumptions and the other circumstances. This accounting standard was developed based on Paragraph 125 of “Presentation of Financial Statements.”

(b) Scheduled date of adoption

The Company expects to adopt the accounting standard from the end of the fiscal year ending March 31, 2021.

Accounting Standard for Accounting Policy Disclosures, Accounting Changes and Error Corrections

“Accounting Standard for Accounting Policy Disclosures, Accounting Changes and Error Correction” (ASBJ Statement No. 24, revised on March 31, 2020)

(a) Overview

The ASBJ has amended certain accounting standards, and issued “Accounting Standard for Accounting Policy Disclosures, Accounting Changes and Error Correction” to reflect recommendations for enhancing footnote information

related to accounting principles and procedures if the related accounting standards are not definitive.

In addition, Paragraph 1-2 of annotations on generally accepted accounting principles continues to be effective when enhancing footnote information in notes regarding accounting principles and procedures adopted if the related accounting standards are not definitive, in order not to conflict with current accounting practices where related accounting standards are definitive.

(b) Scheduled date of adoption

The Company expects to adopt the accounting standard from the end of the fiscal year ending March 31, 2021.

5. ADDITIONAL INFORMATION

Effects of COVID-19 Pandemic When Making Accounting Estimates

The Group made accounting estimates related to impairment loss on non-current assets and recoverability of deferred tax assets, etc., based on information available at the time the consolidated financial statements were prepared.

Regarding the impact of the novel coronavirus disease (COVID-19), the Group’s accounting estimates reflect the assumption that the impact will largely ease in the second half of the fiscal year ending March 31, 2021.

However, there are many uncertain factors regarding the impact of COVID-19 and it may affect the financial condition and operating performance of the Group in subsequent fiscal years.

6. INVENTORIES

Inventories at March 31, 2020 and 2019 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Merchandise and finished goods	¥86,166	¥74,471	\$791,749
Work in process	1,789	1,847	16,438
Raw materials and supplies	7,730	4,683	71,028
Total	¥95,685	¥81,003	\$879,215

7. LOSS ON DEVALUATION OF INVENTORIES INCLUDED IN COST OF SALES

The balance of inventories at the end of the year is the amount after writing down book values due to decline in profitability and following loss on devaluation of inventories is included in cost of sales for the year ended March 31, 2020 and 2019:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Loss on devaluation of inventories included in cost of sales	¥1,310	¥791	12,037

8. REDUCTIONS IN ACQUISITION COSTS DUE TO SUBSIDIES

The amounts of subsidies received from the Japanese national government and deducted from the acquisition costs of property, plant and equipment at March 31, 2020 and 2019 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Land	¥ 190	¥ 190	\$ 1,746
Buildings and structures	530	528	4,870
Machinery, equipment and vehicles	652	637	5,991
Total	¥1,373	¥1,356	\$12,616

9. LOSS ON IMPAIRMENT OF FIXED ASSETS

Loss on impairment of fixed assets for the years ended March 31, 2020 and 2019 was as follows:

Major use	Classification	Area	Millions of yen	Thousands of U.S. dollars
			2020	2020
Business-use assets for processing of thin glass panels	Buildings and structures, machinery, equipment and vehicles, and intangible assets included in other assets	Fujian, China	¥1,639	\$15,060
Business-use assets for manufacturing and selling of pharmaceutical products	Buildings and structures, machinery, equipment and vehicles	Kinki	903	8,297
Goodwill related to siloxane materials production and development business	Goodwill	Helsinki, Finland	570	5,238
Business-use assets for manufacturing and selling of rechargeable battery systems	Machinery, equipment and vehicles	Tokai	2	18
Idle assets	Land	Kinki	2	18
Total			¥3,116	\$28,632

Major use	Classification	Area	Millions of yen
			2019
Business-use assets for manufacturing and selling of pharmaceutical products	Buildings and structures, machinery, equipment and vehicles	Kinki	¥1,999
Business-use assets for processing and selling of plastic materials	Buildings and structures, machinery, equipment and vehicles, and intangible assets included in other assets	Kinki	217
Business-use assets for manufacturing and selling of rechargeable battery systems	Machinery, equipment and vehicles	Tokai	22
Business-use assets for manufacturing of plastic resins products	Machinery, equipment and vehicles, and intangible assets included in other assets	Jiangsu, China	4
Idle assets	Land, machinery, equipment and vehicles	Kinki	50
Total			¥2,294

The Company and its consolidated subsidiaries group fixed assets for business use principally based on its business management segment. They also group fixed assets to be disposed of and idle assets at each asset individually as smallest cash-generating units.

For the year ended March 31, 2020, due to decreasing profitability, the carrying values of certain fixed assets for business use were reduced to their recoverable amounts. With respect to goodwill related to the siloxane materials production and development business, the Company has made progress strengthening the foundation of development of optical component materials for the wearables market, but the financial results have not been as good as projected in the initial business plan. The Company wrote down the book value of these assets to their recoverable amounts, recording a loss on impairment of goodwill. As to idle assets, due to a declining fair value, the carrying fair values were reduced to their recoverable amounts.

The recoverable amounts were measured at net selling value or value in use. The recoverable amounts for business-use assets for processing of thin glass panels were measured at net selling value. The recoverable amounts for

business-use assets for manufacturing and selling of pharmaceutical products were measured at value in use based on the present value of the future cash flow with a discount rate of 0.2%. Goodwill related to the siloxane materials production and development business was measured based on value in use. Net selling value was calculated based on the appraisal value published by the tax authorities or the real estate appraisers, or estimated sales value.

For the year ended March 31, 2019, due to decreasing profitability, the carrying values of certain fixed assets for business use were reduced to their recoverable amounts. As to idle assets, due to a declining fair value, the carrying fair values were reduced to their recoverable amounts.

The recoverable amounts were measured at net selling value or value in use. The recoverable amounts for business-use assets for manufacturing and selling of pharmaceutical products were measured at value in use, on the present value of the future cash flow with a discount rate of 0.2%. Net selling value was calculated based on the appraisal value published by the tax authorities or the real estate appraisers, or estimated sales value.

10. INVESTMENTS IN SECURITIES

(a) Marketable securities classified as other securities at March 31, 2020 and 2019 are summarized as follows:

	Millions of yen					
	2020			2019		
	Carrying value	Acquisition costs	Unrealized gain (loss)	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:						
Equity securities	¥58,734	¥12,090	¥46,643	¥75,476	¥16,060	¥59,415
Securities whose carrying value does not exceed their acquisition costs:						
Equity securities	3,997	4,330	(333)	514	590	(75)
Total	¥62,731	¥16,421	¥46,310	¥75,991	¥16,651	¥59,339

	Thousands of U.S. dollars					
	2020			2019		
	Carrying value	Acquisition costs	Unrealized gain (loss)	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:						
Equity securities	\$539,686	\$111,091	\$428,586	\$754,760	\$160,600	\$594,150
Securities whose carrying value does not exceed their acquisition costs:						
Equity securities	36,727	39,787	(3,060)	514	590	(75)
Total	\$576,413	\$150,887	\$425,526	\$755,274	\$161,190	\$594,084

"Acquisition costs" in the above table represent the carrying value after recognizing impairment losses.

(b) Securities classified as other securities for which market value was not determinable and not included in the table (a) at March 31, 2020 and 2019 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
	Carrying value	Carrying value	Carrying value
Market value not determinable:			
Unlisted equity securities	¥3,731	¥4,714	\$34,283
Total	¥3,731	¥4,714	\$34,283

(c) Proceeds from sales of, and gross realized gain and loss on, other securities for the years ended March 31, 2020 and 2019 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Proceeds from sales	¥10,419	¥5,432	\$95,736
Gain on sales	9,723	4,355	89,341
Loss on sales	—	2	—

(d) A breakdown of loss on devaluation of investments in securities for the years ended March 31, 2020 and 2019 is summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Loss on devaluation of investments in securities*			
Securities classified as other securities	¥1,023	¥201	\$9,400
Unconsolidated subsidiaries and affiliates	5	7	46
Total loss on devaluation of investments in securities	¥1,028	¥208	\$9,446

* Loss on devaluation of investments in securities is recorded on securities with market value whose market value at the end of the fiscal year has declined by 50% or more from its acquisition cost, or whose market value has declined by 30% or more but less than 50% based on the amount deemed unrecoverable.

In addition, loss on devaluation of investments in securities is recorded on securities for which it is extremely difficult to determine the market value by writing down the carrying value to fair value when the decline in fair value is deemed to be unrecoverable considering the financial position of the issuers, etc., of the securities.

11. SHORT-TERM LOANS, BONDS, LONG-TERM LOANS, COMMERCIAL PAPERS AND FINANCE LEASE OBLIGATIONS

Short-term loans at March 31, 2020 and 2019 principally represented loans and commercial papers in the form of deeds at weighted-average annual interest rates of 1.95% and 3.11% per annum, respectively.

Long-term loans, bonds and finance lease obligations at March 31, 2020 and 2019 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Unsecured loans from banks and insurance companies, payable in Yen, U.S. dollars, Euros, RMB, and HK dollars due through 2026, at rates from 0.13% to 10.00%	¥43,898	¥ 18,526	\$403,363
Unsecured bonds in Yen, due 2019, at a rate of 0.753%	—	10,000	—
Unsecured bonds in Yen, due 2022, at a rate of 0.539%	10,000	10,000	91,886
Unsecured bonds in Yen, due 2024, at a rate of 0.150%	10,000	—	91,886
Unsecured bonds in Yen, due 2029, at a rate of 0.290%	10,000	—	91,886
Lease obligations	1,485	129	13,645
	75,384	38,655	692,677
Less current portion	(1,345)	(10,972)	(12,359)
Total	¥74,038	¥ 27,683	\$680,309

The aggregate annual maturities of bonds, long-term loans and finance lease obligations subsequent to March 31, 2020 are summarized as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2021	¥ 1,345	\$ 12,359
2022	13,172	121,033
2023	19,133	175,806
2024	1,259	11,569
2025	15,095	138,703
2026 and thereafter	25,377	233,180
Total	¥75,384	\$692,677

In order to achieve more efficient and flexible financing, the Company has concluded line-of-credit agreements with certain financial institutions. The status of these lines of credit at March 31, 2020 and 2019 is as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Lines of credit	¥20,000	¥10,000	\$183,773
Credit utilized	—	—	—

12. OTHER COMPREHENSIVE LOSS

Reclassification adjustments and tax effects allocated to each component of other comprehensive loss for the years ended March 31, 2020 and 2019 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Net unrealized holding loss on securities:			
Amount arising during the year	¥ (3,391)	¥ (8,348)	\$ (31,159)
Reclassification adjustments for gains and losses realized in the statement of income	(9,706)	(4,168)	(89,185)
Amount before tax effect	(13,097)	(12,516)	(120,344)
Tax effect	3,865	3,609	35,514
Net unrealized holding loss on securities	(9,231)	(8,907)	(84,820)
Deferred gain on hedges:			
Amount arising during the year	42	36	386
Reclassification adjustments for gains and losses realized in the statement of income	(25)	(24)	(230)
Amount before tax effect	16	11	147
Tax effect	(4)	(3)	(37)
Deferred gain on hedges	11	7	101
Translation adjustments:			
Amount arising during the year	(1,973)	298	(18,129)
Reclassification adjustments for gains and losses realized in the statement of income	—	—	—
Amount before tax effect	(1,973)	298	(18,129)
Tax effect	—	—	—
Translation adjustments	(1,973)	298	(18,129)
Retirement benefit liability adjustments:			
Amount arising during the year	(879)	(304)	(8,077)
Reclassification adjustments for gains and losses realized in the statement of income	300	341	2,757
Amount before tax effect	(578)	36	(5,311)
Tax effect	175	(10)	1,608
Retirement benefit liability adjustments	(402)	25	(3,694)
Share of other comprehensive loss of affiliates accounted for by the equity method:			
Amount arising during the year	(339)	(29)	(3,115)
Total other comprehensive loss	¥(11,935)	¥ (8,604)	\$ (109,666)

13. RETIREMENT BENEFIT PLANS

(a) Outline of retirement benefit plans for employees

The Company and its domestic consolidated subsidiaries have defined benefit plans, i.e., defined benefit pension plans and lump-sum payment plans. Certain overseas consolidated subsidiaries also have defined benefit plans. Also, the Company and certain consolidated subsidiaries have defined contribution pension plans. In addition to the retirement benefit plans described above, the Company and its consolidated subsidiaries pay additional retirement benefits under certain conditions.

(b) Defined benefit plans

The changes in the retirement benefit obligation for the years ended March 31, 2020 and 2019 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Balance at the beginning of the year	¥34,440	¥34,031	\$316,457
Service cost	1,336	1,473	12,276
Interest cost	225	252	2,067
Actuarial differences	262	224	2,407
Retirement benefits paid	(1,383)	(1,542)	(12,708)
Changes in retirement benefit plans	(644)	—	(5,917)
Other	(8)	0	(74)
Balance at the end of the year	¥34,228	¥34,440	\$314,509

The changes in plan assets for the years ended March 31, 2020 and 2019 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Balance at the beginning of the year	¥22,088	¥19,513	\$202,959
Expected return on plan assets	436	395	4,006
Actuarial differences	(616)	(80)	(5,660)
Contributions by the Company and its consolidated subsidiaries	1,699	3,055	15,612
Retirement benefits paid	(692)	(792)	(6,359)
Changes in retirement benefit plans	(609)	—	(5,596)
Other	0	(2)	0
Balance at the end of the year	¥22,305	¥22,088	\$204,953

The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheets as of March 31, 2020 and 2019 for the Company's and the consolidated subsidiaries' defined benefit plans:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Funded retirement benefit obligation	¥ 21,188	¥ 22,525	\$ 194,689
Plan assets at fair value	(22,305)	(22,088)	(204,953)
	(1,117)	436	(10,264)
Unfunded retirement benefit obligation	13,040	11,915	119,820
Net retirement benefit liability in the balance sheet	11,922	12,351	109,547
Retirement benefit liability	13,677	12,461	125,673
Retirement benefit asset	(1,754)	(109)	(16,117)
Net retirement benefit liability in the balance sheet	¥ 11,922	¥ 12,351	\$ 109,547

The components of retirement benefit expenses for the years ended March 31, 2020 and 2019 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Service cost	¥1,336	¥1,473	\$12,276
Interest cost	225	252	2,067
Expected return on plan assets	(436)	(395)	(4,006)
Amortization of actuarial differences	300	341	2,757
Retirement benefit expense	¥1,426	¥1,671	\$13,103

Actuarial differences included in other comprehensive loss (before tax effect) for the years ended March 31, 2020 and 2019 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Actuarial differences	¥(578)	¥36	\$(5,311)

Unrecognized actuarial differences included in accumulated other comprehensive income (before tax effect) as of March 31, 2020 and 2019 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Unrecognized actuarial differences	¥(990)	¥(411)	\$(9,097)

The allocation of plan assets, by major category, as a percentage of total plan assets at fair value as of March 31, 2020 and 2019 is as follows:

	2020	2019
Bonds	63%	60%
Equity securities	16	18
Alternative investments*	16	15
Other	5	7
Total	100%	100%

* "Alternative investments" consist of insurance-linked securities and private REITs.

The expected long-term rate of return on plan assets is determined as a result of consideration of both the portfolio allocation at present and in the future, and expected long-term rate of return from multiple plan assets at present and in the future.
The assumptions used in accounting for the above plans were as follows:

	2020	2019
Discount rate	0.8%	0.8%
Expected long-term rate of return on plan assets	2.0%	2.0%

(c) Defined contribution plans

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Contributions to defined contribution plans by the Company and its consolidated subsidiaries	¥457	¥287	\$4,199

14. INCOME TAXES

Income taxes applicable to the Company and its domestic consolidated subsidiaries consist of corporation, inhabitants’ and enterprise taxes, which, in the aggregate, resulted in statutory tax rates of approximately 30.6% for the years ended March 31, 2020 and 2019.
The effective tax rates reflected in the accompanying consolidated statements of income for the years ended March 31, 2020 and 2019 differ from the statutory tax rates for the following reasons:

	2020	2019
Statutory tax rates	30.6%	30.6%
Adjustments for:		
Expenses not deductible for income tax purposes	1.8	2.0
Dividends and other income deductible for income tax purposes	(8.4)	(9.3)
Net adjustment resulting from elimination of dividend income upon consolidation	7.5	8.9
Different tax rates applied at overseas subsidiaries	(1.7)	(3.1)
Tax credit	(1.4)	(1.8)
Amortization of goodwill	2.7	2.0
Loss on impairment of goodwill	0.7	—
Valuation allowance	3.4	(1.9)
Other, net	0.7	0.2
Effective tax rates	35.9%	27.6%

The significant components of the Company's and its consolidated subsidiaries’ deferred tax assets and liabilities at March 31, 2020 and 2019 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Deferred tax assets:			
Accrued bonuses for employees	¥ 1,311	¥ 1,448	\$ 12,046
Allowance for doubtful accounts	180	88	1,654
Unrealized gain on inventories	540	477	4,962
Accrued enterprise taxes	301	283	2,766
Tax loss carryforwards	2,829	3,245	25,995
Retirement benefit liability	3,610	3,697	33,171
Investments in securities	1,271	973	11,679
Loss on impairment of fixed assets	2,160	1,653	19,847
Tax goodwill	2,107	4,214	19,360
Other	3,486	2,747	32,032
Gross deferred tax assets	17,801	18,829	163,567
Valuation allowance	(4,910)	(4,601)	(45,116)
Total deferred tax assets	¥ 12,891	¥ 14,227	\$ 118,451
Deferred tax liabilities:			
Technology-based assets	¥ (2,760)	¥ (3,240)	\$ (25,361)
Deferred capital gain on property	(1,226)	(1,233)	(11,265)
Reserve for special depreciation	(204)	(251)	(1,874)
Undistributed earnings of subsidiaries and affiliates	(558)	(655)	(5,127)
Revaluation of land	(290)	(290)	(2,665)
Net unrealized holding gain on securities	(13,753)	(17,627)	(126,371)
Other	(1,291)	(713)	(11,863)
Total deferred tax liabilities	(20,085)	(24,013)	(184,554)
Net deferred tax liabilities	¥ (7,194)	¥ (9,785)	\$ (66,103)

15. SHAREHOLDERS’ EQUITY

The Corporation Law of Japan (the “Law”) provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) be transferred to the capital reserve and the legal reserve, respectively, until the sum of the capital reserve and the legal reserve equals 25% of the capital stock account.
Such distributions can be made at any time by resolution of the shareholders, or by the Board of Directors if certain conditions are met.

The Company’s capital reserve included in capital surplus at March 31, 2020 amounted to ¥9,634 million (\$88,523 thousand). In addition, the Company’s legal reserve included in retained earnings at March 31, 2020 amounted to ¥2,424 million (\$22,273 thousand).
Under the Law, upon the issuance and sale of new shares of common stock, the entire amount of the proceeds is required to be accounted for as common stock, although a company may, by resolution of the Board of Directors, account for an amount not exceeding 50% of the proceeds of the sale of new shares as additional paid-in capital.

Movements in common stock during the years ended March 31, 2020 and 2019 are summarized as follows:

	Number of shares			
	2020			
	April 1, 2019	Increase	Decrease	March 31, 2020
Common stock	127,408,285	—	—	127,408,285
	2019			
	April 1, 2018	Increase	Decrease	March 31, 2019
Common stock	127,408,285	—	—	127,408,285

16.TREASURY STOCK

Movements in treasury stock during the years ended March 31, 2020 and 2019 are summarized as follows:

	Number of shares			
	2020			
	April 1, 2019	Increase	Decrease	March 31, 2020
Treasury stock	3,396,352	343	—	3,396,695
	2019			
	April 1, 2018	Increase	Decrease	March 31, 2019
Treasury stock	2,195,966	1,200,386	—	3,396,352

The increase in treasury stock consists of 343 shares resulting from the purchase of shares less than one voting unit for the year ended March 31, 2020.

The increase in treasury stock consists of 1,200,000 shares resulting

from the purchases of treasury stock by resolution of the Board of Directors and 386 shares resulting from the purchase of shares less than one voting unit for the year ended March 31, 2019.

17.BUSINESS COMBINATION

(Business combination through acquisition)

(1) Outline of business combination

- (i)

Name and business description of the acquiree
Name of the acquiree:
Prinova Group, LLC (hereinafter, “Prinova”)
Business description:
Sales of food ingredients, processing and contract manufacturing
- (ii)

Main reason for the business combination
Prinova, one of the leading distributors of food ingredients and provider of integrated solutions for global food, beverage and well-ness brands, will serve as a strategic base for further expanding NAGASE’s food business in the United States and Europe. Going forward, NAGASE expects to expand market presence by providing further added value to consumers in North America, Europe and Asia, though synergies created by combining Prinova’s vertically integrated capabilities of ingredients procurement, processing and contract manufacturing, and the strong R&D expertise of NAGASE’s Group company Hayashibara, which specializes in manufacturing functional food products.
This transaction marks a key milestone for NAGASE in realizing its mid-term management strategy (**ACE-2020**) as it focuses on reforming its profit structure, representing a major step towards significantly expanding sales and market presence in North America and globally in the lifestyle and healthcare space. Prinova will continue to be led by the current management maintaining its facilities, brands and practices, reporting to the board of NAGASE to work towards further maximizing synergies within the Group.
- (iii)

Date of the business combination:
August 6, 2019
- (iv)

Legal form of the business combination:
Acquisition of equity interests for cash consideration
- (v)

Name of the company after combination:
There is no change in the name of the company after the combination
- (vi)

Ratio of equity interests acquired:
93.3%

- (vii)

Main basis for determining the acquirer
Nagase Holdings America Corporation (“NHAC”), a wholly-owned subsidiary of the Company, is regarded as the acquiring company since NHAC acquired equity interests of Prinova for a cash consideration.

- (2)

Period for which the operating results of the acquiree are included in the consolidated financial statements
From August 6, 2019 to December 31, 2019
The consolidated financial statements are prepared based on the figures of the financial statements of the said subsidiary because the difference between the fiscal year-end date of the acquiree and the consolidated closing date is not greater than three months.

		Millions of U.S. dollars	Millions of yen
Consideration for acquisition	Cash	422	44,747
Acquisition cost		422	44,747

- (3)

Acquisition cost of the acquiree and breakdown by type of consideration

The above amounts in yen have been translated at the exchange rate as of August 6, 2019, which is the acquisition date.
In addition to the cash payment of US\$422 million in consideration for acquiring equity, cash loans of US\$174 million are provided to the acquiree for debt repayment.

- (4)

Description and amount of major acquisition-related costs
Advisory expenses and others:
¥796 million

- (5)

Amount of goodwill arising from the business combination, reason for the goodwill, and amortization method and period
(i) Amount of goodwill arising from the business combination:
US\$101 million (¥10,747 million)
(ii) Reason for the goodwill:
Goodwill arose mainly from future excess earnings power expected from future business development.
(iii) Amortization method and period:
Straight-line method over 20 years

(6) Amounts of assets acquired and liabilities assumed on the date of business combination, and the major breakdown

	Millions of U.S. dollars	Millions of yen
Current assets	\$329	¥34,884
Non-current assets	272	28,879
Total assets	\$602	¥63,764
Current liabilities	\$248	¥26,348
Non-current liabilities	9	988
Total liabilities	\$258	¥27,336

(7) Amounts allocated to intangible fixed assets other than goodwill and the amortization period

Type	Amount		Amortization period
	Millions of U.S. dollars	Millions of yen	
Trademarks	62	6,584	20 years
Customer-related assets	172	18,267	19 years

18.FINANCIAL INSTRUMENTS

- (a)

Policy for financial instruments
The Group invests excess funds in highly secure and short-term financial assets, whose principal is guaranteed to be recoverable. With regard to financing policy, short-term working funds are raised by bank borrowings or issuance of commercial papers and long-term funds are raised by bank borrowings and the issuance of bonds. The policy for derivative transactions is that those are utilized to mitigate the fluctuation risk related to foreign currency exchange rates arising from the receivables and payables denominated in foreign currencies, and fluctuation risk related to interest rates with respect to loans payable, and derivative transactions are not carried out for speculative purposes.
- (b)

Types of financial instruments, related risk and risk management for financial instruments
Receivables such as trade notes and accounts receivable are exposed to customers’ credit risks. With regard to this risk, the Group manages the settlement date by each customer, and establishes credit limits by each customer based on the Group’s internal credit rating policy and monitors outstanding balances. The Group establishes system under which the credit status by each customer is reviewed at least once a year and the sales limit amount updated as necessary.
In the cases of notes and accounts receivable or payable denominated in foreign currencies, foreign currency forward exchange contracts are used to hedge the risk of fluctuation. However, for foreign currency transactions

(8) Approximate amount of impact on the consolidated statement of income for the current fiscal year assuming that the business combination was completed on the first day of the current fiscal year, and the calculation method

Net sales	¥50,106 million
Operating income	¥865 million

- (Method of calculating the approximate amount)

The approximate amount of impact is the difference between
(i) the amounts of net sales and information on profit or loss calculated assuming that the acquisition of equity interests was completed on the first day of the current fiscal year and (ii) the amounts of net sales and information on profit or loss on the consolidated statement of income. In addition, amortization is calculated by assuming other intangible assets recognized in the business combination arose on the first day of the current fiscal year.
The approximate amount of the impact has not received audit certification.

- denominated in the same currency involving either payables or receivables, foreign currency forward exchange contracts are used solely for the netted position.
Investments in securities are subject to market price fluctuation risk. However, these are mainly equity securities of other companies with which the Group has business relationships. The Group regularly monitors both their fair value and the financial condition of the issuer. The Group also reviews as needed the condition of its holdings with concern to the status of business and financial transactions.
Short-term loans are raised primarily in connection with business activities. Long-term loans and bonds are taken out principally for the purpose of making capital spending, investments and financing. Loans with variable interest rates are subject to the risk of fluctuating interest rates. However, to reduce such risk, the Group utilizes derivatives (interest-rate swap transactions) as a hedging instrument.
Derivatives include foreign currency forward exchange contracts to manage fluctuation risk in foreign currency exchange rates and interest-rate swaps to manage fluctuation risk of interest rates related to the interest payments for bank loans.
In addition, notes and accounts payable and bank loans are exposed to liquidity risk. However, the Group manages such risk by monitoring the balance of inflow and outflow of cash and establishing liquidity on hand in excess of half of the amount of monthly net sales.

(c) Fair value of financial instruments

The carrying value of financial instruments on the consolidated balance sheets, fair value and the differences as of March 31, 2020 and 2019, are shown in the following table. Financial instruments for which fair value is deemed extremely difficult to determine are not included.

	Millions of yen		
	2020		
	Carrying value	Fair value	Difference
Assets:			
Cash and time deposits	¥ 51,408	¥ 51,408	¥ —
Notes and accounts receivable	221,116	221,116	—
Investments in securities			
Other securities	62,731	62,731	—
Total assets	¥335,256	¥335,256	¥ —
Liabilities:			
Notes and accounts payable	¥108,285	¥108,285	¥ —
Short-term loans	30,590	30,590	—
Current portion of long-term loans	1,277	1,277	—
Commercial papers	30,000	30,000	—
Bonds	30,000	29,879	(121)
Long-term loans	42,621	42,671	50
Total liabilities	¥242,774	¥242,703	¥ (70)
Derivatives*:			
Not subject to hedge accounting	¥ 99	¥ 99	¥ —
Subject to hedge accounting	(0)	(0)	—
Total derivative transactions	¥ 98	¥ 98	¥ —

	Millions of yen		
	2019		
	Carrying value	Fair value	Difference
Assets:			
Cash and time deposits	¥ 44,068	¥ 44,068	¥ —
Notes and accounts receivable	230,459	230,459	—
Investments in securities			
Other securities	75,991	75,991	—
Total assets	¥350,519	¥350,519	¥ —
Liabilities:			
Notes and accounts payable	¥117,256	¥117,256	¥ —
Short-term loans	34,964	34,964	—
Current portion of long-term loans	949	949	—
Commercial papers	12,000	12,000	—
Current portion of bonds	10,000	10,012	12
Bonds	10,000	10,110	110
Long-term loans	17,577	17,664	87
Total liabilities	¥202,747	¥202,957	¥209
Derivatives*:			
Not subject to hedge accounting	¥ (30)	¥ (30)	¥ —
Subject to hedge accounting	(12)	(12)	—
Total derivative transactions	¥ (43)	¥ (43)	¥ —

	Thousands of U.S. dollars		
	2020		
	Carrying value	Fair value	Difference
Assets:			
Cash and time deposits	\$ 472,370	\$ 472,370	\$ —
Notes and accounts receivable	2,031,756	2,031,756	—
Investments in securities			
Other securities	576,413	576,413	—
Total assets	\$3,080,548	\$3,080,548	\$ —
Liabilities:			
Notes and accounts payable	\$ 994,992	\$ 994,992	\$ —
Short-term loans	281,081	281,081	—
Current portion of long-term loans	11,734	11,734	—
Commercial papers	275,659	275,659	—
Bonds	275,659	274,547	(1,112)
Long-term loans	391,629	392,089	459
Total liabilities	\$2,230,764	\$2,230,111	\$ (643)
Derivatives*:			
Not subject to hedge accounting	\$ 910	\$ 910	\$ —
Subject to hedge accounting	(0)	(0)	—
Total derivative transactions	\$ (900)	\$ (900)	\$ —

* Receivables and payables arising from derivative transactions are presented as a net value with the amount in parentheses representing a net liability position.

The calculation methods of fair values of financial instruments and securities and derivative transactions are as follows:

Cash and time deposits

Their carrying value approximates the fair value.

Notes and accounts receivable

The fair value of notes and accounts receivable is based on their present values discounted by the interest rate determined taking into account the remaining period to maturity for each receivable classified by settlement date.

Investments in securities

The fair value of investments in securities is based on quoted market prices. Please refer to Note 10 regarding information on securities by holding purpose.

Notes and accounts payable

The fair value of notes and accounts payable is based on their present values discounted by the interest rate determined taking into account the remaining period to maturity for each payable classified by settlement date.

Short-term loans, current portion of long-term loans and commercial papers

Since these items are settled in a short period of time, their carrying value approximates the fair value.

Bonds

The fair value of bonds is based on the market price.

Long-term loans

The fair value of long-term loans with fixed interest rates is based on the present value of the total of principal and interest discounted by the interest rate to be applied assuming new loans under similar conditions to existing loans are made. Floating interest rates for long-term loans are hedged by interest-rate swap agreements and accounted for as loans with fixed interest rates. The fair value of those long-term loans is based on the present value of the total of principals, interests and net cash flows of swap agreements discounted by the interest rates, estimated reasonably, applicable to new loans under similar conditions.

Derivative transactions

Please refer to Note 19.

The carrying value of financial instruments without determinable market value at March 31, 2020 and 2019 is presented as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Unlisted equity securities	¥ 3,731	¥ 4,714	\$ 34,283
Investments in unconsolidated subsidiaries and affiliates	9,661	9,556	88,771
Total	¥13,392	¥14,271	\$123,054

The redemption schedule for time deposits and notes and accounts receivable with maturity dates at March 31, 2020 is summarized as follows:

	Millions of yen	
	Within 1 year	Over 1 year and less than 5 years
Time deposits	¥ 51,338	¥—
Notes and accounts receivable	221,116	—
Total	¥272,454	¥—

	Thousands of U.S. dollars	
	Within 1 year	Over 1 year and less than 5 years
Time deposits	\$ 471,727	\$—
Notes and accounts receivable	2,031,756	—
Total	\$2,503,482	\$—

With respect to the redemption schedule of bonds, long-term loans and finance lease obligations, please refer to Note 11.

19.DERIVATIVES AND HEDGING ACTIVITIES

The currency-related derivatives positions outstanding for which hedge accounting has not been applied at March 31, 2020 and 2019 are as follows:

			Millions of yen		
			2020		
Classification	Transaction	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
Over-the-counter transactions	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	¥ 5,486	¥—	¥ 23	¥ 23
	Yen	2,177	—	49	49
	Euro	6,824	—	45	45
	RMB	891	—	7	7
	Others	146	—	2	2
	Buying:				
	U.S. dollars	1,297	—	(25)	(25)
	Yen	799	—	(2)	(2)
	Euro	47	—	0	0
	Others	68	—	(1)	(1)
	Total		¥17,738	¥—	¥ 99

			Millions of yen		
			2019		
Classification	Transaction	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
Over-the-counter transactions	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	¥ 4,802	¥—	¥(21)	¥(21)
	Yen	1,851	—	(15)	(15)
	Euro	775	—	12	12
	RMB	957	—	(18)	(18)
	Others	130	—	(2)	(2)
	Buying:				
	U.S. dollars	1,591	—	2	2
	Yen	1,009	—	8	8
	Euro	96	—	1	1
	Others	129	—	2	2
	Total		¥11,342	¥—	¥(30)

		Thousands of U.S. dollars			
		2020			
Classification	Transaction	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
Over-the-counter transactions	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	\$ 50,409	\$—	\$ 211	\$ 211
	Yen	20,004	—	450	450
	Euro	62,703	—	413	413
	RMB	8,187	—	64	64
	Others	1,342	—	18	18
	Buying:				
	U.S. dollars	11,918	—	(230)	(230)
	Yen	7,342	—	(18)	(18)
	Euro	432	—	0	0
	Others	625	—	(9)	(9)
	Total		\$162,988	\$—	\$ 910

The fair value of foreign currency forward exchange contracts is mainly computed using the prices provided by counterparty financial institutions.

The currency-related derivatives positions outstanding for which hedge accounting has been applied at March 31, 2020 and 2019 are as follows:

			Millions of yen		
			2020		
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Deferral hedge accounting	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	Accounts receivable	¥ 12	¥—	¥ 0
	Euro		138	—	0
	RMB		241	—	2
	Others		94	—	1
	Buying:				
	U.S. dollars	Accounts payable	73	—	(0)
	Euro		132	—	(0)
	RMB		103	—	(1)
	Others		165	—	(2)
Allocation method for foreign currency forward exchange contracts (Note 2(o))	Foreign currency forward exchange contracts:				
	Selling:				
	Euro	Accounts receivable	3	—	(*)
	Others		0	—	(*)
	Buying:				
	Euro	Accounts payable	118	—	(*)
	THB		82	—	(*)
Others	38		—	(*)	
Total			¥1,204	¥—	¥(0)

		Millions of yen			
		2019			
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Deferral hedge accounting	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	Accounts receivable	¥ 16	¥ —	¥ (0)
	Euro		191	—	3
	RMB		759	—	(14)
	Others		17	—	(0)
	Buying:				
	U.S. dollars	Accounts payable	200	—	0
	Euro		72	—	(1)
	RMB		56	10	(0)
	Others		9	—	0
	Allocation method for foreign currency forward exchange contracts (Note 2(o))	Foreign currency forward exchange contracts:			
Selling:					
Euro		Accounts receivable	56	—	(*)
Others			4	—	(*)
Buying:					
Euro		Accounts payable	85	—	(*)
THB			47	—	(*)
Others			23	—	(*)
Total			¥1,540	¥10	¥(12)

			Thousands of U.S. dollars		
			2020		
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Deferral hedge accounting	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	Accounts receivable	\$ 110	\$—	\$ 0
	Euro		1,268	—	0
	RMB		2,214	—	18
	Others		864	—	9
	Buying:				
	U.S. dollars	Accounts payable	671	—	(0)
	Euro		1,213	—	(0)
	RMB		946	—	(9)
	Others		1,516	—	(18)
	Allocation method for foreign currency forward exchange contracts (Note 2(o))	Foreign currency forward exchange contracts:			
Selling:					
Euro		Accounts receivable	28	—	(*)
Others			0	—	(*)
Buying:					
Euro		Accounts payable	1,084	—	(*)
THB			753	—	(*)
Others			349	—	(*)
Total			\$11,063	\$—	\$ (0)

The fair value of foreign currency forward exchange contracts is mainly computed using the prices provided by counterparty financial institutions.

(*): The fair value of foreign currency forward exchange contracts that qualify for the allocation method is included in the fair value of the underlying accounts receivable and payable.

The interest-related derivatives positions outstanding for which hedge accounting has been applied at March 31, 2020 and 2019 are as follows.

		Millions of yen			
		2020			
Method for hedge accounting	Transaction	Hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Swap rates applied to underlying long-term loans	Interest-rate swap transactions (pay-fixed, receive-variable)	Long-term loans	¥8,000	¥8,000	(**)
		Millions of yen			
		2019			
Method for hedge accounting	Transaction	Hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Swap rates applied to underlying long-term loans	Interest-rate swap transactions (pay-fixed, receive-variable)	Long-term loans	¥8,000	¥8,000	(**)
		Thousands of U.S. dollars			
		2020			
Method for hedge accounting	Transaction	Hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
Swap rates applied to underlying long-term loans	Interest-rate swap transactions (pay-fixed, receive-variable)	Long-term loans	\$73,509	\$73,509	(**)

(**): Since interest-rate swap agreements are accounted for as if the interest rates applied to the swaps had originally applied to the underlying long-term loans, their fair values were included in the fair value of the long-term loans.

20. RESEARCH AND DEVELOPMENT COSTS

Research and development costs included in selling, general and administrative expenses for the years ended March 31, 2020 and 2019 totaled ¥6,133 million (\$56,354 thousand) and ¥6,493 million, respectively.

21. OPERATING LEASES

Future minimum lease payments subsequent to March 31, 2020 under noncancelable operating leases are as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2021	¥ 908	\$ 8,343
2022 and thereafter	4,563	41,928
Total	¥5,472	\$50,280

22. PLEDGED ASSETS

Pledged assets at March 31, 2020 and 2019 are as follows:

			Thousands of U.S. dollars
			</

Secured liabilities at March 31, 2020 and 2019 are as follows:

		Millions of yen		Thousands of U.S. dollars
		2020	2019	2020
Current portion of long-term loans		¥—	¥7	\$—

23. CONTINGENT LIABILITIES

At March 31, 2020, the Company and its consolidated subsidiaries were contingently liable as guarantors of loans of customers and other in the aggregate amount of ¥291 million (\$2,674 thousand), and as guarantors of loans of employees in the amount of ¥0 million (\$0 thousand).

In addition, at March 31, 2020, the Company and its consolidated subsidiaries had contingent liabilities arising from notes discounted with banks and notes endorsed in the amount of ¥151 million (\$1,387 thousand).

24. AMOUNTS PER SHARE

Amounts per share at March 31, 2020 and 2019 and for the years then ended are as follows:

	Yen		U.S. dollars
	2020	2019	2020
Profit attributable to owners of parent:			
Basic	¥ 122.12	¥ 161.30	\$ 1.12
Diluted	—	—	—
Net assets	2,462.04	2,481.01	22.62
Cash dividends applicable to the year	44.00	42.00	0.40

Basic profit attributable to owners of parent per share has been computed based on the profit attributable to owners of parent available for distribution to the shareholders of common stock and the weighted-average number of shares of common stock outstanding during the year.

Diluted profit attributable to owners of parent per share for the years ended March 31, 2020 and 2019 has not been presented because no potentially dilutive shares of common stock were outstanding.

Net assets per share have been computed based on the number of shares of common stock outstanding at the year end.

Cash dividends per share represent the cash dividends proposed by the Board of Directors as applicable to the respective years together with the interim cash dividends paid.

The financial data used in the computation of basic profit attributable to owners of parent per share for the years ended March 31, 2020 and 2019 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Profit attributable to owners of parent	¥15,144	¥20,136	\$139,153
Profit available for distribution to shareholders of common stock	15,144	20,136	139,153
Weighted-average number of shares	124,011,793	124,842,824	

25. CASH AND TIME DEPOSITS

(a) A reconciliation of cash and time deposits in the accompanying consolidated balance sheets at March 31, 2020 and 2019 and cash and cash equivalents in the accompanying consolidated statements of cash flows for the years then ended is as follows:

	Millions of yen		Thousands of U.S. dollars
	2020	2019	2020
Cash and time deposits	¥51,408	¥44,068	\$472,370
Time deposits with maturities of more than three months	(936)	(51)	(8,601)
Cash and cash equivalents	¥50,471	¥44,017	\$463,760

(b) Summary of assets and liabilities of consolidated subsidiaries, which were initially consolidated as a result of acquisition of equity interests during the year ended March 31, 2020

1) Prinova Group, LLC

The following is a summary of assets and liabilities at the time of initial consolidation of 18 subsidiaries in total, including Prinova Group, LLC and its subsidiaries, which were newly included in the scope of consolidation as a result of the acquisition of equity interests of Prinova Group, LLC during the year ended March 31, 2020, and related acquisition costs and net disbursement for the acquisition.

	Millions of yen	Thousands of U.S. dollars
Current assets	¥ 34,884	\$ 320,537
Non-current assets	28,879	265,359
Goodwill	10,747	98,750
Current liabilities	(26,348)	(242,102)
Non-current liabilities	(988)	(9,078)
Non-controlling interests	(2,427)	(22,301)
Acquisition cost of equity interests	44,747	411,164
Cash and cash equivalents	(2,043)	(18,772)
Purchase of shares of subsidiaries resulting in change in scope of consolidation	¥ 42,703	\$ 392,383

2) INTERFACIAL CONSULTANTS LLC

The following is the summary of assets and liabilities at the time of initial consolidation of two subsidiaries in total, including INTERFACIAL CONSULTANTS LLC and its affiliate, which were newly included in the scope of consolidation as a result of acquisition of equity interests of INTERFACIAL CONSULTANTS LLC during the year ended March 31, 2020, and related acquisition costs and net disbursement for the acquisition.

	Millions of yen	Thousands of U.S. dollars
Current assets	¥ 2,548	\$ 23,413
Non-current assets	1,306	12,000
Goodwill	2,882	26,482
Current liabilities	(493)	(4,530)
Non-current liabilities	(1,361)	(12,506)
Non-controlling interests	(499)	(4,585)
Acquisition cost of equity interests	4,382	40,265
Cash and cash equivalents	(2,394)	(21,998)
Purchase of shares of subsidiaries resulting in change in scope of consolidation	¥ 1,987	\$ 18,258

26. SEGMENT INFORMATION

(a) Overview of reportable segments

The reportable segments of the Company comprise those entities for which obtaining separate financial reports is possible and that are subject to regular review by the Board of Directors, which decides upon the distribution of management resources and assesses their performance.

Reflecting the respective positions of each business in the value chain, as well as identifying the most closely aligned industries, the Company defines five segment categories: Functional Materials (located at the top of the value chain), Advanced Materials & Processing (located in the next stage of the value chain), Electronics, Mobility & Energy, and Life & Healthcare (functioning within the corresponding industries).

Effective the fiscal year ended March 31, 2020, the name of the former *Automotive & Energy Segment* was changed to the *Mobility & Energy Segment*.

The following describes the major products and services handled by each reportable segment.

The Functional Materials segment is engaged in the sales of materials for paints/inks, urethane materials and auxiliary materials, plastic materials, plastic additives, industrial oil solutions, water processing raw materials, surfactant raw materials, fluorochemicals, encapsulant materials, 5G materials, silicone materials, environmental products, and more for the paints/inks, resins, urethane foam, organic synthesis, surfactants, semiconductor, communications equipment, water processing, metalworking, and other industries.

The Advanced Materials & Processing segment is engaged in the sales of dyestuffs, pigments, functional pigments, digital print processing products, 3D printing products, thermoplastic resins, thermosetting resins, automobile refinish paints, conductive coatings, synthetic rubber, inorganic materials, plastics products, resin molding tools/dies, and more for the pigment/additive, digital print processing material, fiber processing, raw resin material, resin molding, 3D printing, functional film and sheet, construction, and other industries.

The Electronics segment is engaged in the sales of high-function epoxy resins, semiconductor assembly materials and devices, electronic precision abrasives, pre-processing materials and devices for semiconductors and LCDs, low-temperature/vacuum equipment, display panel components, LEDs, and more for the heavy electrical, semiconductor, hard disk drive, electronic components, on-board equipment, display, touch panel, and other industries.

The Mobility & Energy segment is engaged in the sales of plastic products in general, silicone materials, functional coatings, structural materials, resin molding tools and dies, interior and exterior materials and components, decorative films and components, on-board display components, EV/HEV components, sensor components, solar cells, secondary battery components, and more for the mobility, mobility-related, storage battery, and energy industries.

The Life & Healthcare segment is engaged in the sales of pharmaceutical/agricultural chemicals and materials, research products, in vitro diagnostics, enzymes, food additives, food ingredients, sports nutrition products, nutrient premixes, additives for cosmetics, feeds, and surfactants for the pharmaceutical, food and beverage, cosmetics, agricultural, toiletries, and health care industries. The segment offers radiation measurement as one of its main services. In addition, this segment sells cosmetics, health foods, and beauty foods directly to consumers.

(c) Information on net sales, income or loss, assets and other items for each reportable segment

Information by reportable segments for the year ended March 31, 2020 is as follows:

Millions of yen										
2020										
Reportable Segments										
	Functional Materials	Advanced Materials & Processing	Electronics	Mobility & Energy	Life & Healthcare	Total	Others	Total	Corporate	Consolidated
Sales to customers	¥169,318	¥267,078	¥115,123	¥126,000	¥121,545	¥799,066	¥ 492	¥799,559	¥ —	¥799,559
Intersegment sales and transfers	1,867	2,180	1,816	2,849	480	9,194	5,374	14,568	—	—
Net sales	171,186	269,259	116,940	128,849	122,025	808,260	5,867	814,128	—	799,559
Segment income	5,364	8,526	5,396	1,890	3,973	25,151	180	25,331	(6,603)	19,167
Segment assets	76,936	135,541	58,879	48,687	171,461	491,506	4,699	496,205	152,181	611,477
Other items										
Depreciation and amortization other than amortization of goodwill	413	754	2,372	204	4,571	8,316	208	8,525	1,563	10,089
Amortization of goodwill	107	—	132	—	1,796	2,037	—	2,037	—	2,037
Unamortized balance of goodwill	1,864	2,962	484	—	29,935	35,246	—	35,246	—	35,246
Investments in affiliates accounted for by the equity method	1,895	1,722	3,906	1,242	3,064	11,831	—	11,831	—	11,829
Increase in property, plant and equipment, net and intangible assets	436	1,845	3,235	241	6,035	11,794	24	11,818	1,010	12,829

Millions of yen										
2019										
Reportable Segments										
	Functional Materials	Advanced Materials & Processing	Electronics	Mobility & Energy	Life & Healthcare	Total	Others	Total	Corporate	Consolidated
Sales to customers	¥179,627	¥275,203	¥122,319	¥139,235	¥90,794	¥807,181	¥ 574	¥807,755	¥ —	¥807,755
Intersegment sales and transfers	2,992	2,357	1,749	2,773	399	10,272	5,459	15,731	—	—
Net sales	182,620	277,561	124,069	142,009	91,194	817,454	6,033	823,487	—	807,755
Segment income	5,494	8,093	7,400	3,051	4,648	28,689	284	28,973	(4,253)	25,226
Segment assets	87,158	135,403	65,022	56,747	97,627	441,960	4,833	446,794	141,205	567,346
Other items										
Depreciation and amortization other than amortization of goodwill	444	692	2,511	211	3,801	7,660	211	7,872	1,457	9,329
Amortization of goodwill	110	—	136	—	1,569	1,815	—	1,815	—	1,815
Unamortized balance of goodwill	2,012	—	1,218	—	20,636	23,866	—	23,866	—	23,866
Investments in affiliates accounted for by the equity method	2,398	1,545	3,765	1,253	2,769	11,733	—	11,733	—	11,680
Increase in property, plant and equipment, net and intangible assets	314	1,542	3,201	329	3,206	8,594	130	8,725	1,887	10,612

(b) Calculation methods of net sales, income or loss, assets, and other items by reportable segments

The accounting policies of reportable segments are generally identical to those described in Note 2. Reportable segment income corresponds to operating income in the consolidated statements of income. Intersegment internal income and transfers are determined based on the values of transactions at actual market prices.

Thousands of U.S. dollars										
2020										
Reportable Segments										
	Functional Materials	Advanced Materials & Processing	Electronics	Mobility & Energy	Life & Healthcare	Total	Others	Total	Corporate	Consolidated
Sales to customers	\$1,555,803	\$2,454,084	\$1,057,824	\$1,157,769	\$1,116,834	\$7,342,332	\$ 4,521	\$7,346,862	\$ —	\$7,346,862
Intersegment sales and transfers	17,155	20,031	16,687	26,178	4,411	84,480	49,380	133,860	—	—
Net sales	1,572,967	2,474,125	1,074,520	1,183,947	1,121,244	7,426,812	53,910	7,480,731	—	7,346,862
Segment income	49,288	78,342	49,582	17,367	36,506	231,104	1,654	232,758	(60,673)	176,119
Segment assets	706,937	1,245,438	541,018	447,367	1,575,494	4,516,273	43,177	4,559,451	1,398,337	5,618,644
Other items										
Depreciation and amortization other than amortization of goodwill	3,795	6,928	21,795	1,874	42,001	76,413	1,911	78,333	14,362	92,704
Amortization of goodwill	983	—	1,213	—	16,503	18,717	—	18,717	—	18,717
Unamortized balance of goodwill	17,128	27,217	4,447	—	275,062	323,863	—	323,863	—	323,863
Investments in affiliates accounted for by the equity method	17,412	15,823	35,891	11,412	28,154	108,711	—	108,711	—	108,692
Increase in property, plant and equipment, net and intangible assets	4,006	16,953	29,725	2,214	55,453	108,371	221	108,591	9,281	117,881

(d) Geographical information

Net sales by country or region for the years ended March 31, 2020 and 2019 are summarized as follows:

Millions of yen			Thousands of U.S. dollars
	2020	2019	2020
Japan	¥402,390	¥412,617	\$3,697,418
Greater China	187,554	205,408	1,723,367
ASEAN	110,642	118,113	1,016,650
Americas	55,420	39,451	509,235
Europe	24,610	15,272	226,133
Other	18,939	16,892	174,024
Total	¥799,559	¥807,755	\$7,346,862

- Notes:
1. Net sales are categorized by country or region based on the locations of customers.
 2. Country or region is determined by geographical proximity.
 3. Major countries in each region
(1) Greater China China, Hong Kong, and Taiwan
(2) ASEAN Thailand, and Vietnam
(3) Americas U.S.A., and Mexico
(4) Europe Germany
(5) Other Korea

Property, plant and equipment by country or region as of March 31, 2020 and 2019 are summarized as follows:

Millions of yen			Thousands of U.S. dollars
	2020	2019	2020
Japan	¥64,301	¥60,344	\$590,839
Other	10,008	6,123	91,960
Total	¥74,309	¥66,467	\$682,799

Independent Auditor’s Report

(e) Information on loss on impairment of fixed assets per reportable segments

Loss on impairment of fixed assets for the years ended March 31, 2020 and 2019 is as follows:

Millions of yen								
2020								
Reportable Segments								
	Functional Materials	Advanced Materials & Processing	Electronics	Mobility & Energy	Life & Healthcare	Total	Others	Eliminations or corporate
Loss on impairment of fixed assets	¥—	¥—	¥2,209	¥2	¥903	¥3,114	¥—	¥2
								¥3,116
Millions of yen								
2019								
Reportable Segments								
	Functional Materials	Advanced Materials & Processing	Electronics	Mobility & Energy	Life & Healthcare	Total	Others	Eliminations or corporate
Loss on impairment of fixed assets	¥—	¥221	¥—	¥58	¥1,999	¥2,279	¥—	¥15
								¥2,294
Thousands of U.S. dollars								
2020								
Reportable Segments								
	Functional Materials	Advanced Materials & Processing	Electronics	Mobility & Energy	Life & Healthcare	Total	Others	Eliminations or corporate
Loss on impairment of fixed assets	\$—	\$—	\$20,298	\$18	\$8,297	\$28,613	\$—	\$18
								\$28,632

27. RELATED PARTY TRANSACTION

A consolidated subsidiary of the Company recorded the following transaction with a related party for the year ended March 31, 2020:

Name of related party	Relationship with the related party	Description of the transaction	Account	Millions of yen	Thousands of U.S. dollars
315 Fullerton LLC*	A director of a consolidated subsidiary of the Company owns a majority of the voting rights of the company.	Rental of real estate**	Rent payment for real estate	¥22	\$202
Total				¥22	\$202

* Mr. Donald K. Thorp, a director of Prinova Group, LLC, which is a consolidated subsidiary of the Company, owns 77% of the voting rights.
** Rent is determined taking the transactions in the neighboring area into consideration.

28. SUBSEQUENT EVENTS

The following distribution of retained earnings of the Company, which has not been reflected in the accompanying consolidated financial statements for the year ended March 31, 2020, was approved at a meeting of the shareholders held on June 22, 2020:

	Millions of yen	Thousands of U.S. dollars
Cash dividends (¥22.0 = U.S.\$0.20 per share)	¥2,728	\$25,067



Independent Auditor’s Report

The Board of Directors
NAGASE & CO., LTD.

Opinion

We have audited the accompanying consolidated financial statements of NAGASE & CO., LTD. and its subsidiaries (the Group), which comprise the consolidated balance sheet as at March 31, 2020, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended, and notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at March 31, 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management, the Corporate Auditor and the Board of Corporate Auditors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group’s ability to continue as a going concern and disclosing, as required by accounting principles generally accepted in Japan, matters related to going concern.

The Corporate Auditor and the Board of Corporate Auditors are responsible for overseeing the Group’s financial reporting process.

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Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- Consider internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances for our risk assessments, while the purpose of the audit of the consolidated financial statements is not expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation in accordance with accounting principles generally accepted in Japan.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Corporate Auditor and the Board of Corporate Auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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We also provide the Corporate Auditor and the Board of Corporate Auditors with a statement that we have complied with the ethical requirements regarding independence that are relevant to our audit of the financial statements in Japan, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Conflicts of Interest

We have no interest in the Group which should be disclosed in accordance with the Certified Public Accountants Act.

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2020 are presented solely for convenience. Our audit also included the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.

Ernst & Young ShinNihon LLC
Tokyo, Japan
June 23, 2020

三ツ木 最文 
Yoshifumi Mitsugi
Designated Engagement Partner
Certified Public Accountant

高田 康弘 
Yasuhiro Takata
Designated Engagement Partner
Certified Public Accountant

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Consolidated Subsidiaries, Affiliates and Offices

● Consolidated subsidiary

● Company accounted for under the equity method

As of April 2020

Category	Company name	Description of business	Location	Year of establishment
Japan				
Manufacturing and Processing				
●	Nagase ChemteX Corporation	Research, manufacture, and sale of enzymes, fermented products, pharmaceutical intermediates, disinfecting agents, functional polymers, epichlorohydrin derivatives, electronics materials, etc.	Osaka Pref.	1970
●	Hayashibara Co., Ltd.	Development, manufacture, and sale of food raw materials, pharmaceutical raw materials, cosmetics raw materials, health foods raw materials, functional dyes, etc.	Okayama Pref.	1932
●	DAITAI KAKO CO., LTD.	Manufacture and sale of special pattern paint, polyester resin-related products and FRP waterproof/anticorrosion-related products	Osaka Pref.	1949
●	Nagase Filter Co., Ltd.	Planning, production, processing, quality testing and sale of metal filters	Osaka Pref.	2006
●	Fukui Yamada Chemical Co., Ltd.	Manufacture of color former	Fukui Pref.	1985
●	Kotobuki Kasei Corporation	Molding, processing and sale of plastic products	Tochigi Pref.	1972
●	Totaku Industries, Inc.	Manufacture and sale of plastic products	Osaka Pref.	1952
●	Setsunan Kasei Co., Ltd.	Coloring and sale of plastics	Osaka Pref.	1966
●	Nagase Techno-Engineering Co., Ltd.	Manufacture, sale and maintenance of low-temperature vacuum equipment, systems for chemical supply management and recycling processes, inspection systems, and the peripheral equipment for each of these	Tokyo Pref.	1989
●	CAPTEX Co., Ltd.	Manufacture and development of battery power source controllers, battery power sources and power source peripheral equipment	Aichi Pref.	2004
●	Nagase Medicals Co., Ltd.	Manufacture and sale of pharmaceuticals, animal drugs, health foods, and cosmetics	Hyogo Pref.	1972
●	Honshu Rheem Co., Ltd.	Manufacture and sale of fiber drums, import and sale of food processing machines and materials	Kanagawa Pref.	1968
●	eX. Grade Co., Ltd.	Development, manufacture and sale of components for electronic equipment	Osaka Pref.	2003
●	SN Tech Corporation	Manufacture of developer, recycling business	Osaka Pref.	2008
●	Xenomax-Japan Co., Ltd.	Manufacture and sales of high heat-resistant polyimide film XENOMAX®	Fukui Pref.	2018
●	Sun Delta Corporation	Development of applications for synthetic plastic products and manufacture and sale of processed products	Tokyo Pref.	2005
●	Nissei Technology Corporation	Design, development, and manufacture of ultra-precision plastic lenses and optical units; manufacture of precision mechanical components and units	Hyogo Pref.	1953
●	Toyo Beauty Supply Corporation	Contract manufacture of cosmetics and health foods	Tokyo Pref.	1964
●	SCREEN DecoraPrint Co., Ltd.	Contract manufacturer of decorative printing	Kyoto Pref.	2019
	Aience Inc.	Development and construction of drainage and exhaust treatment systems	Osaka Pref.	2020
Sales and Servicing				
●	Nagase Chemical Co., Ltd.	Sale of dyestuffs, industrial chemicals, chemicals for manufacturing paper, plastics and machinery	Tokyo Pref.	1995
●	Nagase Chemspec Co., Ltd.	Sale and technical servicing of chemicals	Tokyo Pref.	1976
●	Nagase Plastics Co., Ltd.	Sale of raw materials for plastics and plastic products	Osaka Pref.	1975
●	Nagase Techno Service Co., Ltd.	Sales of kitting/logistics services, online catalog sales, recordable media, and RFID	Chiba Pref.	1991
●	Nagase Elex Co., Ltd.	Sale of raw materials for plastics and plastic products	Tokyo Pref.	1979
●	Nagase Abrasive Materials Co., Ltd.	Sale of abrasives, inorganic materials and related equipment	Osaka Pref.	1955
●	Nishinihon Nagase Co., Ltd.	Sale of dyestuffs, auxiliaries, industrial chemicals and plastics	Fukuoka Pref.	1969
●	Nagase Sanbio Co., Ltd.	Sales of medicine for agriculture and additives for fertilizers, feed and food	Tokyo Pref.	1987

Category	Company name	Description of business	Location	Year of establishment
●	Nagase Beauty Care Co., Ltd.	Sale of cosmetics and health foods	Tokyo Pref.	1991
●	Nagase Business Expert Co., Ltd.	Import/export and receivables/payables administration; shared services for receipts/disbursements	Tokyo Pref.	1996
●	Nagase Logistics Co., Ltd.	Warehousing and distribution	Hyogo Pref.	1982
●	Nagase Information Development, Ltd.	Software development and maintenance	Tokyo Pref.	1987
●	Nagase-OG Colors & Chemicals Co., Ltd.	Purchasing and information services related to dyes, industrial chemicals, etc.	Osaka Pref.	2012
●	Nagase Landauer, Ltd.	Radiation measuring services	Ibaraki Pref.	1974
	Nagase Logistics Support Co., Ltd.	An exclusive stevedore for Nagase Logistics Co., Ltd.	Hyogo Pref.	1954
	Choko Co., Ltd.	Insurance agency	Osaka Pref.	1971
Greater China and South Korea				
Manufacturing and Processing				
●	Nagase ChemteX (Wuxi) Corporation	Plastic manufacture and sale of adhesives and high-tech chemical products for electronics, technology services	China	2002
●	Nagase Engineering Service Korea Co., Ltd.	Equipment maintenance service and engineering	South Korea	1997
●	Nagase Electronics Technology (Xiamen) Co., Ltd.	Chemical etching of liquid crystal glass panel units	China	2010
●	Guangzhou Kurabo Chemicals Co., Ltd.	Manufacture of molded urethane products for automobiles	China	2001
●	Toyo Quality One (Guangzhou) Co., Ltd.	Research and development, manufacturing, processing, sale, technology consulting, and after-sale service for major automotive parts	China	2004
●	Toyo Quality One Ningbo Co., Ltd.	Manufacture and sale of polyurethane foam	China	1993
●	Wuxi Chenghong Electronic Chemicals Co., Ltd.	Research, development, manufacture, and sales of electronics chemicals including semiconductors and flat panel displays (FPDs)	China	2013
●	Tokai Spring Mfg. (Foshan) Co., Ltd.	Development, manufacture, and sale of precision press products, spring, and standard molds	China	2005
	ON Textile Chemicals (Shanghai) Co., LTD.	Manufacture, sales, and export/import of textile-related products, dyeing processing agents	China	2003
	Mianyang Chenghong Electronic Chemicals Co., Ltd.	Research/development, manufacture and sales of electronics chemicals including of semiconductors and flat panel displays (FPDs)	China	2017
	Huizhou Sanli Three Synergy Precision Co., Ltd.	Manufacture of precision metal insert molding parts for automotive, new energy and power industries	China	2018
Sales and Servicing				
●	Nagase (China) Co., Ltd.	Investment, trade, import/export, processing, logistics, R&D, IT development, and various services	China	2019
●	Nagase (Hong Kong) Ltd.	Import/export, domestic sales, marketing	China	1971
●	Guangzhou Nagase Trading Co., Ltd.	Import/export, domestic sales, marketing	China	2002
	Wuhan Branch Office/Chongqing Branch Office		China	
	Zhengzhou Branch Office/Shenzhen Branch Office		China	
●	Shanghai Nagase Trading Co., Ltd.	Import/export, domestic sales, marketing	China	1997
●	Tianjin Nagase International Trading Co., Ltd.	Import/export, domestic sales, marketing	China	2003
	Dalian Branch Office/Qingdao Branch Office		China	
	Changchun Branch Office		China	
●	Nagase (Taiwan) Co., Ltd.	Import/export, domestic sales, marketing	Taiwan	1988
●	Nagase Korea Corporation	General import/export trading, retailing/wholesaling, import/export trade agency	South Korea	2001
	Datai (Shanghai) Chemical Trading Co., Ltd.	Sales of paints	China	2013
●	Nagase Wahlee Plastics Corporation	Sale of resins and related products	Taiwan	1990
	Taichung Office		Taiwan	
	Gangshan Office		Taiwan	
●	NWP International Trading (Shenzhen) Co., Ltd.	Sale of plastic products in South China	China	2004
	Dongguan Branch Office		China	
	Guangzhou Branch Office		China	
	Xiamen Branch Office		China	

Consolidated Subsidiaries, Affiliates and Offices

Category	Company name	Description of business	Location	Year of establishment
●	Shanghai Hua Chang Trading Co., Ltd.	Sale of resins and related products	China	1998
	Suzhou Branch Office/Ningbo Branch Office		China	
	Chengdu Branch Office/Chongqing Branch Office		China	
	Nanjing Branch		China	
	ON Colors & Chemicals (Shanghai) Co., Ltd.	Sales of textile-related products, dyeing processing agents, related equipment; export/import and technology consulting, technological development of dyeing processing	China	2002
	NW Consultant Service (Shenzhen) Ltd.	Print quality management consultant	China	2008
	Nagase C&G Technology (Shanghai) Co., Ltd.	Construction and maintenance of chemical supply and management equipment	China	2006
ASEAN and the Middle East				
Manufacturing and Processing				
●	Pac Tech Asia Sdn. Bhd.	Manufacture and sale of semiconductor manufacturing equipment, semiconductor wafer bumping contract manufacturing	Malaysia	2006
●	PT. Toyo Quality One Indonesia	Manufacture of flame lamination products	Indonesia	2008
●	Dainichi Color Vietnam Co., Ltd.	Manufacture and sale of color masterbatch blend for plastic	Vietnam	2006
●	Sanko Gosei Technology (Thailand) Ltd.	Manufacture of automobile components	Thailand	1994
●	Automotive Mold Technology Co., Ltd.	Manufacture of automotive molds and dies	Thailand	2000
●	MINDA KYORAKU LTD.	Manufacture of blow-formed automobile components	India	2011
●	Nafuko Co., Ltd.	Manufacture, import/export, and sale of packaging materials and related equipment	Thailand	1996
Sales and Servicing				
●	Nagase Singapore (Pte) Ltd.	Import/export, domestic sales, marketing	Singapore	1975
	Australia Branch		Australia	
	Bangladesh Liaison Office		Bangladesh	
	Middle East Representative Office		United Arab Emirates	
	Turkey (Izmir) Branch Office		Turkey	
	Vietnam Representative Office Branch		Vietnam	
●	Nagase (Thailand) Co., Ltd.	Import/export, domestic sales, marketing	Thailand	1989
	Eastern Office		Thailand	
	Yangon Branch		Myanmar	
	Pakistan Liaison Office		Pakistan	
●	Nagase (Malaysia) Sdn. Bhd.	Import/export, domestic sales, marketing	Malaysia	1981
	Johor Bahru Office		Malaysia	
	Penang Office		Malaysia	
●	PT. Nagase Impor-Ekspor Indonesia	Import/export, domestic sales, marketing	Indonesia	1998
	Surabaya Branch		Indonesia	
●	Nagase Philippines Corporation	Import/export, domestic sales, marketing	Philippines	1997
●	Nagase Philippines International Services Corporation	Domestic sales, import/export	Philippines	2005
	Makati Office		Philippines	
	Cebu Office		Philippines	
●	Nagase Vietnam Co., Ltd.	Import/export, domestic sales, marketing	Vietnam	2008
	Ho Chi Minh City Branch		Vietnam	
	Danang Branch		Vietnam	
●	Nagase India Private Ltd.	Import/export, domestic sales, marketing	India	2006
	North India Branch (Gurgaon)		India	
	South India Branch (Chennai)		India	
	PT. Indonesia Mold Technology	Design changes and maintenance for large-scale plastic automobile component molds	Indonesia	2015

Category	Company name	Description of business	Location	Year of establishment
Americas				
Manufacturing and Processing				
●	Sofix LLC	Manufacture and sale of color formers	America	1990
●	Engineered Materials Systems, Inc.	Research and development, manufacture, and sales of materials for commercial adhesives, conductive adhesives	America	1993
●	Pac Tech USA-Packaging Technologies Inc.	Semiconductor wafer bumping, manufacture and sale of semiconductor manufacturing equipment	America	2001
●	Infinite Material Solutions, LLC	Development and manufacture of water-soluble support materials for 3D printing	America	2018
●	Interfacial Consultants LLC	Contract products, manufacturing process development, composite substrate, manufacturing of various masterbatches	America	2014
●	Prinova Solutions LLC	Manufacture and processing of premix products	America	2011
●	Armada Nutrition LLC	Contracted manufacture of sports nutrition products	America	2015
●	Prinova Flavors LLC	Flavor manufacturing	America	2009
●	TQ-1 de MEXICO S.A. de C.V.	Manufacture and sale of urethane for automotive seat pads and automotive laminated frames and sale of automotive ethane foam	Mexico	2012
●	Cytech Products Inc.	Manufacture and sales of mold release agents for polyurethane resins, thermal paper additives and emulsion dispersing element	America	1988
●	3D Glass Solutions, Inc.	Development, manufacture, and sale of processed 3D glass products and contracting of 3D glass processing	America	2016
●	KN Platech America Corporation	Manufacture and sale of blow-formed plastic molding components and products	America	2010
Sales and Servicing				
●	Nagase Holdings America Corporation	Regional management, investment and asset management, professional service provided	America	2019
●	Nagase America LLC	Import/export, domestic sales, marketing	America	1971
	Michigan Branch		America	
	California Branch		America	
●	Fitz Chem LLC	Sales of raw materials for paints, inks, adhesives, resin compounds, personal care products	America	1985
●	Nagase Enterprise Mexico S.A. de C.V.	Import/export sales, intermediate trade, market development, information collection	Mexico	2010
	Mexico City Branch		Mexico	
●	Prinova US LLC	Sales and processing of food ingredients	America	1978
	Nagase do Brasil Comércio de Produtos Químicos Ltda.	Import/export sales, intermediate trade, market development, information collection	Brazil	2012
Europe				
Manufacturing and Processing				
●	Pac Tech-Packaging Technologies GmbH	Semiconductor wafer bumping, manufacture and sale of semiconductor manufacturing equipment	Germany	1995
●	Inkron Oy	Development, manufacture of functional materials for semiconductors and electronic devices	Finland	2013
	Prinova Solutions Europe Ltd.	Manufacture and processing of premix products	England	2017
Sales and Servicing				
●	Nagase (Europa) GmbH	Import/export, domestic sales, marketing	Germany	1980
	Hungarian Branch		Hungary	
	London Branch		England	
	Lyon Branch		France	
●	Prinova Europe Ltd.	Sales and processing of food ingredients	England	2002

History of the NAGASE Group

1832 (Founded) to around 1930

Built Strong Relationships with Leading Overseas Manufacturers

The history of the NAGASE Group began when Denbei Nagase founded Urokogataya, a dyestuffs wholesale business that handled safflower, funori seaweed and starches in Nishijin, Kyoto in 1832.

As NAGASE expanded its dye import business, a major turning point came in 1901 with the establishment of the Company's office in Lyon, France. This overseas expansion was a pioneering step for a Japanese company at the time, and served as a foothold for major business advancements for the NAGASE Group. NAGASE built a strong relationship with Basel Chemical Co. of Switzerland (at that time called Ciba) and through partnerships with leading overseas manufacturers such as Eastman Kodak Co. (now Kodak), DuPont, and UCC (now Dow Chemical), imported cutting-edge products—including technology not yet available in Japan—from overseas, expanding its fields of business. To this day, this has provided an unshakeable foundation for the NAGASE Group's dramatic growth as a chemical trading firm.



First generation: Denbei Nagase

Panoramic view of Ciba in 1893

| Social Background |

In its early days, the NAGASE Group traversed turbulent times that shook history, including the Sino-Japanese War (1894–1895), the Russo-Japanese War (1904–1905), the First World War (1914–1918) and the Great Kanto Earthquake (1923). The depression that followed the First World War cast a particularly large shadow on the Company's mainstream dye market, but this was also when the idea of developing a new pillar for profit in anticipation of the next generation began to gain momentum. That aspiration was evident as the NAGASE Group began importing raw film stock from Eastman Kodak, an entirely new field of business for the Company.

1908 to around 1990

Expanding Networks Inside and Outside Japan

As the textile industry prospered between the end of the Meiji period and through the Taisho period, the NAGASE Group began putting in place a sales network in Japan and overseas. It opened its Tokyo sales office in 1908, followed by a London office in 1913. It entered the American market with the opening of its New York office in 1915. That was followed by the dissolution of the Company as a sole proprietorship and its incorporation as Nagase Shoten Company in 1917. The name was changed again to Nagase & Co., Ltd. in 1943, but air raids on the mainland during the Second World War caused enormous damage, and many of the Company's employees lost their lives on the battlefield.

After the war, the Company devoted all of its efforts to reviving its dealings with leading overseas manufacturers, and moved aggressively to expand in Asia, Europe and North America. In 1968, it entered into a distribution agreement with General Electric (GE), which carried a high-heat-resistant plastic (engineering plastic). Behind that agreement was a strong connection with Jack Welch, who later headed GE. These kinds of networks dramatically increased awareness of the NAGASE Group in Asia, China and elsewhere overseas.



General Electric Co.

| Social Background |

The NAGASE Group, which had continued to expand during the boom brought about by the First World War, faced a major test during the Second World War. Even after Japan's post-war restart, the entire country was plagued by shortages of food and goods, as well as severe inflation and financial chaos brought on by a controlled economy. Nearly a decade after the war, however, the Japanese economy began showing remarkable growth, exemplified by the booms of the 1950s and 1960s, and entered an age of high economic growth. It was during this period that the NAGASE Group supported Japan's post-war growth by establishing a strong foundation in Japan and strengthening its expansion overseas.



The Osaka head office following the Second World War

We will look at the historical turning points, and the business the Group developed by anticipating the evolution of industry and technology, and bringing flexibility to its efforts to “Identify, Develop and Expand” new businesses.

1970 to around 2010

Demonstrating Advantages in Manufacturing, Processing and R&D Functions

Since its founding, the NAGASE Group has gone beyond the boundaries of a trading company by also focusing on manufacturing and processing. In 1970 it established Nagase-CIBA Ltd. through a joint venture with Ciba, and the following year also established Engineering Plastics, Ltd. in a 50-50 joint venture with GE. It also moved to strengthen its manufacturing and processing capabilities by constructing a number of new plants.

The Company later faced another turning point in the 1980s as development of new materials using innovative technology, aimed at next-generation growth, grew increasingly important. In 1990, it established the Nagase R&D Center as a base for R&D into bio-related materials, and launched its Electronic Systems and Materials Division in 1995. The 2000s saw the birth of a new Nagase ChemteX Corporation, the establishment of Nagase ChemteX (Wuxi) Corporation in China, the acquisition of the stock of Pac Tech-Packaging Technologies GmbH of Germany, and the launch of the Nagase Application Workshop, as the Company moved to secure an advantage in manufacturing and R&D functions.



Nagase R&D Center

Certificate of Appreciation from the semiconductor industry

| Social Background |

As Japan's high economic growth began to weaken, and after two successive oil shocks, Japan had the world's largest trade surplus going into the 1980s. America's “twin deficits” grew increasingly serious, and the 1985 Plaza Accord brought a rapid strengthening of the yen. In diplomacy, a number of major events took place in succession, including the thawing of U.S.-Russian tensions and the collapse of the Cold War, all of which brought dramatic changes to the business environment. This period also saw the rise of the information and communications industry, along with the evolution of electronic technology. The growth of the NAGASE Group was supported by the increasing strength of its R&D capabilities in responding to successive generations.



2010 Onward

New Challenges as a “Business Designer”

As the 2010s approached, great progress was seen in ICT, while at the same time the focus on bio technology increased dramatically. To boost its bio-related business, in 2012, the NAGASE Group made Hayashibara Co., Ltd., a company that manufactures and sells TREHA™ and other food ingredients, a wholly owned subsidiary, and has worked to expand its business by creating synergies with that acquisition.

In 2015, the NAGASE Group launched a new structure led by its first president to come from outside the founding family, and also established the Company's long-term management policy in anticipation of NAGASE's 200th anniversary. The following year, the Company launched ACE-2020, its mid-term management plan, which was scheduled for completion in fiscal 2020. In 2019, NAGASE acquired Prinova of the U.S., a functional food ingredients company, marking NAGASE's full-scale entry into the food ingredients business. In 2020, it established a Sustainability Committee, with the goal of making sustainability a strategic pillar as the Group works toward sustained growth.



Hayashibara

Prinova

| Social Background |

Today, the world faces many environmental and social issues. The year 2015 saw the appearance of the Sustainable Development Goals (SDGs), and as the corporate sector is increasingly expected to work toward resolving those issues, investors and the public at large have turned their attention to companies' own ESG activities. The NAGASE Group philosophy calls for us to maintain the highest standards of integrity. Now, more than ever, we reaffirm the meaning and significance of these words, as we work to create new value and thus contribute to the Group's growth, to society, and to improved benefits for our employees.

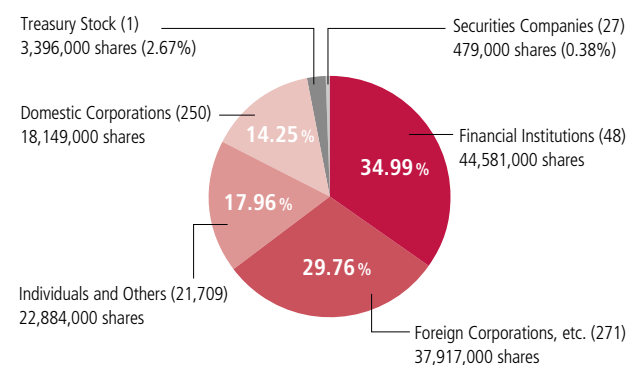


Investor Information

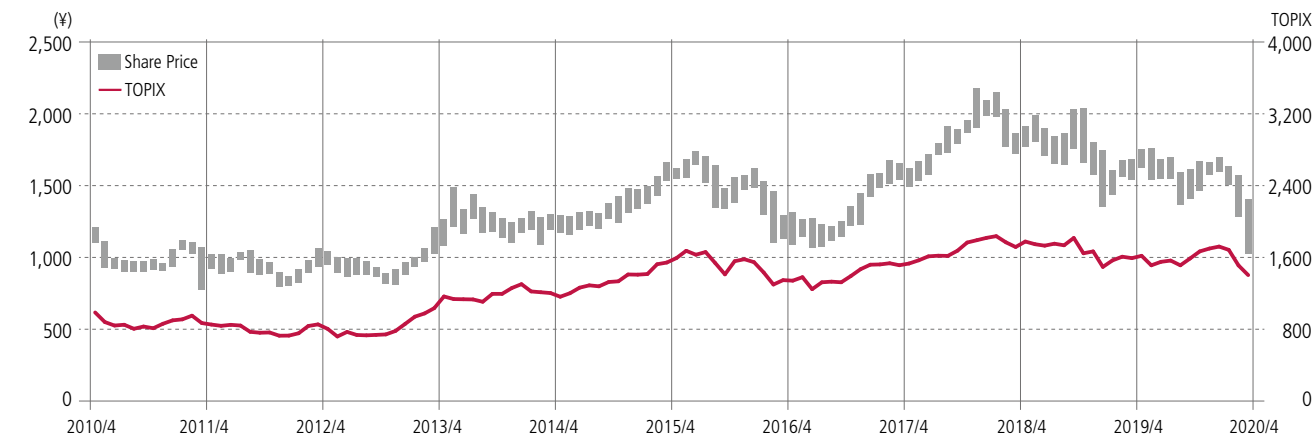
(As of March 31, 2020)

Stock Exchange	Tokyo (First Section)
Code	8012
Stock Status	The total number of shares issuable 346,980,000 shares Issued Number of Shares 127,408,285 shares
Number of Shareholders	22,306

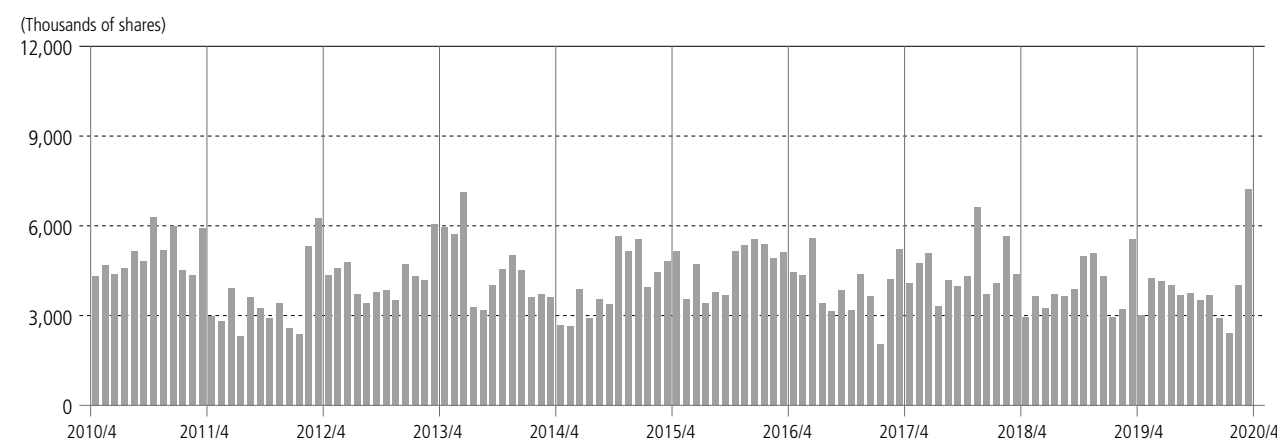
Composition of Shareholders



Monthly Share Price Range of NAGASE



Monthly Trading Volume



Principal Shareholders

Name	Number of Shares Held (Thousands)	Percentage of Total Shares Outstanding (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	8,191	6.61
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	5,922	4.78
Sumitomo Mitsui Trust Bank, Limited	5,776	4.66
Japan Trustee Services Bank, Ltd. (Trust Account)	5,676	4.58
Sumitomo Mitsui Banking Corporation	4,377	3.53
Nippon Life Insurance Company	3,589	2.89
Reiko Nagase	3,533	2.85
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	3,080	2.48
Nagase Shunzo Co., Ltd.	2,688	2.17
Nagase Employee's Stockholding	2,643	2.13

Note: Percentage of total shares outstanding was computed excluding treasury stock (3,396 thousand shares).

Corporate Information

(As of March 31, 2020)

Overview

Company Name	NAGASE & CO., LTD.
Founded	June 18, 1832
Establishment	December 9, 1917
Capital	¥9,699 million
Employees	909 (Consolidated: 7,207)
Main Business	Import/export and domestic sales of chemicals, plastics, electronics materials, cosmetics and health foods
Main Banks	Sumitomo Mitsui Banking Corporation, MUFG Bank, Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited
Main Offices	Osaka Head Office: 1-1-17, Shinmachi, Nishi-ku, Osaka City, Osaka 550-8668 Tel: (81) 6-6535-2114
	Tokyo Head Office: 5-1, Nihonbashi-Kobunacho, Chuo-ku, Tokyo 103-8355 Tel: (81) 3-3665-3021
	Nagoya Branch Office: 3-14-18, Marunouchi, Naka-ku, Nagoya City, Aichi 460-8560 Tel: (81) 52-963-5615
	Nagase R&D Center: Kobe High Tech Park, 2-2-3, Murotani, Nishi-ku, Kobe City, Hyogo 651-2241 Tel: (81) 78-992-3162
	Nagase Application Workshop: 2-4-45, Higashi Tsukaguchicho, Amagasaki City, Hyogo 661-0011 Tel: (81) 6-4961-6730



Osaka Head Office Tokyo Head Office

Organization (As of June 2020)

