



**Osaka Head Office:**

1-1-17, Shinmachi, Nishi-ku, Osaka City,  
Osaka 550-8668, Japan  
Tel: (81) 6-6535-2114

**Tokyo Head Office:**

Tokiwabashi Tower, 2-6-4 Otemachi, Chiyoda-ku,  
Tokyo 100-8142, Japan  
Tel: (81) 3-3665-3021

**Nagoya Branch Office:**

3-14-18, Marunouchi, Naka-ku, Nagoya City,  
Aichi 460-8560, Japan  
Tel: (81) 52-963-5615

<https://www.nagase.com/>



# Integrated Report 2023

## Delivering next.



**Purpose and Values**

The value of NAGASE's existence, and the value that we provide to society

**Messages from the CEO and the CFO**

Competitive advantage, long-term business prospects, and financial strategy

**Progress on Management Plan**

Value generation in focus areas

**Interview with the Outside Directors**

Strengthening our organization to realize our vision of the future

**Message from the Officer in Charge of Sales**

Business Portfolio Reform

**Financial Highlights  
Non-Financial Highlights**

Financial and Non-financial Management Performance

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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.

**Referenced Guidelines:**

- The International Integrated Reporting Framework developed by the International Integrated Reporting Council (IIRC)
- Ministry of Economy, Trade and Industry's Guidance for Collaborative Value Creation

**Period Covered:** April 2022–March 2023 (FY2022). Some information after March 2023 is also included.

**Organizations Covered:** Nagase & Co., Ltd. and the NAGASE Group

**About the Front Cover**

The color scheme used on the front cover has NAGASE Red playing a central role. Nagase Red derives from a natural dye, safflower, which was one of NAGASE's key products when the Company was founded in 1832. This color thus represents NAGASE's roots. The pattern of diverse triangular shapes represents NAGASE's present as "Business Designer" which combines diverse functions—including that of a trading company, manufacturing, processing, and R&D—to deliver added value to society. Finally, the children emphasize our responsibility and commitment to the future, which we cannot afford to forget when developing our business.

Our Group slogan expresses NAGASE's value proposition, "Identify, Develop and Expand". Step by step, by stacking "next" on top of "next" together with our partners, we create a better future.

NAGASE Group Slogan

**Delivering next.**

Over a period of more than 190 years, NAGASE has constantly maintained the highest standards of integrity, delivering the products and services that are needed by our customers, and by society as a whole.

What we have built up over that time is the trust that our partners and society place in us.

Going forward, besides working to solve the problems of today, the NAGASE Group will be delivering “next” by addressing the new problems affecting society and the whole of humanity through the provision of new materials.

“The Earth is borrowed from future generations.”

To help realize a sustainable future society, NAGASE will continue to steadily enhance the trust that people place in us, working together with partners throughout the world to build a future where people can live with peace of mind.

**NAGASE's  
Management Philosophy**

誠実正道

**Maintaining the highest standards of integrity**

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's History of Value Creation



## 1832-

### Founding

The NAGASE Group traces its roots to 1832 when founder Denbei Nagase established Urokogataya, a dyestuffs wholesale business that handled safflower, *funori* seaweed and starches in Nishijin, Kyoto. Later on, we established a foothold in the chemical industry by starting to handle synthetic dyes in addition to natural dyes.



Founder Denbei Nagase



General Electric Co. (GE)

## 1901-

### Forging Ties with Leading Overseas Manufacturers

Entering the 1900s, the NAGASE Group started doing business with overseas manufacturers to pursue the possibilities of chemicals. As it expanded its import business, NAGASE established an office in Lyon, France in 1901. That spurred the expansion of partnerships with overseas manufacturers, including Basel Chemical Co. of Switzerland, as well as Eastman Kodak Co. (now Kodak) and DuPont of the U.S. While importing state-of-the-art products from overseas, including technology not yet available in Japan, and making great strides as a trading company specializing in chemical products, the NAGASE Group delivered new value.

## 1970-

### Enhancing Functions as a Manufacturer

Since its founding, the NAGASE Group has engaged in diverse operations. In 1970, it established Nagase-CIBA Ltd. (now Nagase ChemteX Corporation) as a joint venture with Ciba for manufacturing epoxy resins. The following year, it established Engineering Plastics, Ltd. in a 50-50 joint venture with GE. It also built several new plants as part of steps to strengthen and expand its manufacturing, processing, and other functions as a manufacturer.



Panoramic view of Ciba in 1893



Nagase Bio-Innovation Center

## 1990-

### Demonstrating Superior R&D Capabilities

From the 1990s, the NAGASE Group began enhancing its R&D functions in earnest. In 1990, it established the Nagase R&D Center (now the Nagase Bio-Innovation Center) as a base for R&D into bio-related materials. In the 2000s, it established Nagase ChemteX (Wuxi) Corporation in China as an epoxy resin plant for Nagase ChemteX Corporation. It also made Pac Tech-Packaging Technologies GmbH of Germany a subsidiary. In 2007, it opened the Nagase Application Workshop, an open innovation laboratory, in a push to also secure an advantage in R&D functions.

## 2010-

### Gearing Up the Food Ingredients Business

In the 2010s, biotechnology also started to gain more attention. In 2012, the NAGASE Group made the biotechnology specialist Hayashibara Co., Ltd. a subsidiary to strengthen its food ingredients business. In 2019, it made Prinova Group LLC, a U.S.-based company that sells and processes food ingredients and has a global sales network, a subsidiary. By generating synergies among the new Group companies, NAGASE brought its food ingredients business into full swing and global development.



Prinova Group LLC



## 2020-

### Promoting Sustainability

Following on from the establishment of the Sustainability Committee and the formulation of the Sustainability Basic Policy in 2020, the Group set non-financial targets in the Medium-term Management Plan ACE 2.0. The Group aims to help solve social and environmental issues to realize the sustainable growth of both the Group itself and society as a whole. In April 2023, Hayashibara Co., Ltd. was merged with the biochemical products division of Nagase ChemteX Corporation, thereby realizing a further strengthening of the Group's biotech business. The NAGASE Group is building up the Group's foundations in order to contribute toward the realization of a sustainable society.

Fiscal year ended March 31, 1967  
(non-consolidated)

Net sales: **¥65.0** billion  
Total assets: ¥27.5 billion  
Operating income: ¥1.8 billion

Fiscal year ended March 31, 1987  
(non-consolidated)

Net sales: **¥430.5** billion  
Total assets: ¥193.6 billion  
Operating income: ¥6.4 billion

Fiscal year ended March 31, 2007  
(consolidated)

Net sales: **¥701.3** billion  
Total assets: ¥422.8 billion  
Operating income: ¥21.6 billion

Fiscal year ended March 31, 2023  
(consolidated)

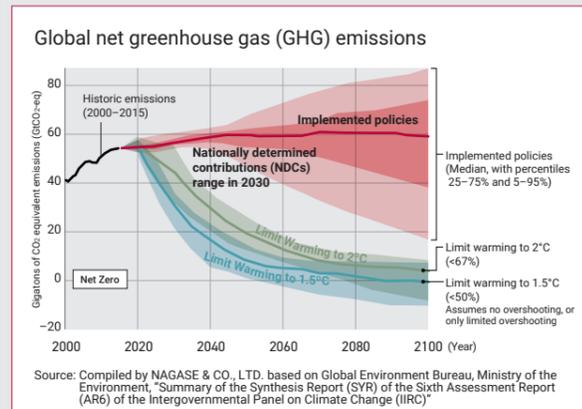
Net sales: **¥912.8** billion  
Total assets: ¥762.6 billion  
Operating income: ¥33.3 billion

# The External Business Environment Affecting NAGASE

When formulating the Medium-Term Management Plan ACE 2.0 which was announced in May 2021, the NAGASE Group performed analysis of the external business environment. The most important issues affecting NAGASE and its stakeholders were identified as: climate change and resource shortages, industrial reorganization, technological innovation, and demographic changes. Viewing these changes in the external environment as new business opportunities, NAGASE will be working to contribute toward the resolution of global environmental and social issues.



With the trend toward decarbonization accelerating throughout the world, business enterprises are expected to reduce emissions throughout the value chain. At the same time, as the global population continues to increase and the conflict in Ukraine drags on, problems relating to energy supply and food resources are becoming more serious.



## Opportunities

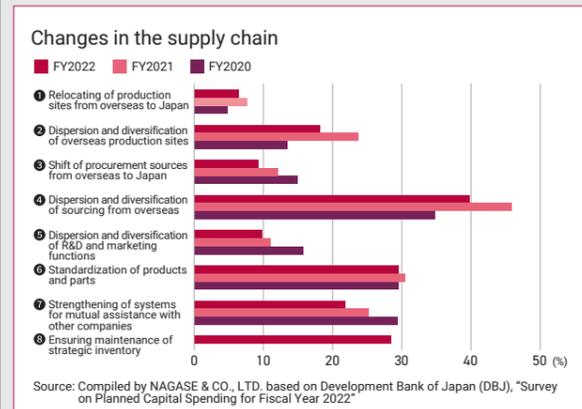
NAGASE is working to create new markets that can help to solve society's problems, by making effective use of the technological knowhow that only the NAGASE Group possesses, including industry-leading data, knowledge and biotechnology, and decarbonization solutions.

## Examples

- The NAGASE Group's bio-related technologies > For more details, see P. 29-30
- Plastic usage reduction through TIMELESS® gas control technology > For more details, see P. 33
- Carbon footprint (CFP) calculation consulting for the cosmetics and pharmaceuticals industries > For more details, see P. 42
- Forest credit and value creation for local communities and the forestry sector > For more details, see P. 42



The industrial structure continues to be transformed, due to the competitive environment, changing customer trends, and deregulation. New trends are emerging as a result of developments such as increasingly vigorous open innovation, and the range of business partners available for NAGASE for collaboration is expanding.



## Opportunities

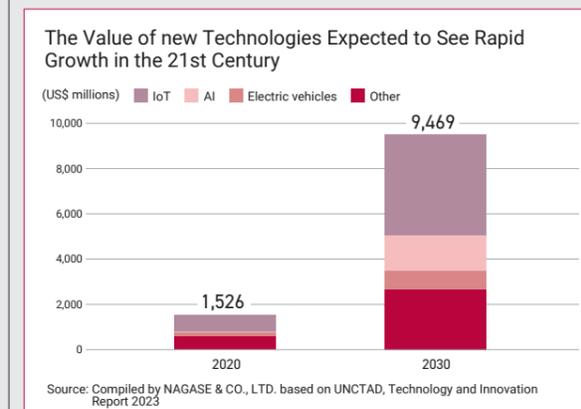
At a time when customers are consolidating their purchasing with fewer suppliers and overhauling their transaction processes, the NAGASE Group is winning high plaudits within the sector for its technology, knowhow, and problem-solving capabilities. By adopting a proactive stance toward sustainability and investment in digitalization, NAGASE is accelerating the process of providing new value.

## Examples

- AI-supported joint logistics matching services for chemical products > For more details, see P. 34
- The NAGASE Group's individual businesses by segments > For more details, see P. 61-67



With the global competitive environment becoming increasingly challenging, it is getting more difficult to sustain growth with existing business models. In addition, the COVID-19 pandemic accelerated the revolution in digital technology, and companies have needed to explore new business opportunities.



## Opportunities

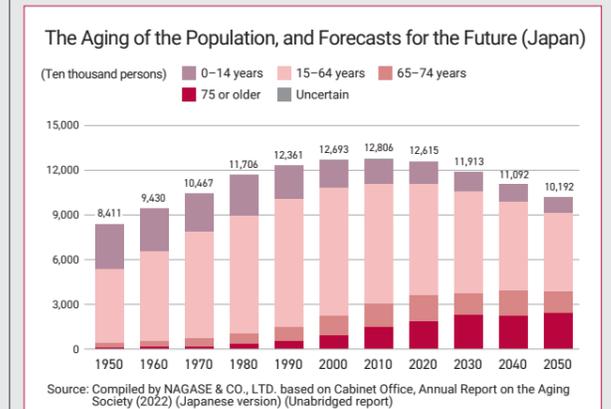
NAGASE is proceeding with technology innovation that leverages its strengths, including the integration of materials with digital transformation (DX), development of the semiconductor market, and the development of cloud-based management for chemical product documentation, demand for which is high in the relevant industries.

## Examples

- The NAGASE Group's semiconductor-related businesses > For more details, see P. 32
- The NAGASE Group's DX initiatives > see P. 45-46



According to the United Nations' State of World Population 2023 report, the world's population reached 8 billion people in 2022. Population structure is changing due to rising lifespans, particularly in the developed nations, and due to declining birthrates.



## Opportunities

NAGASE is leveraging its extensive networks and strong product development capabilities to secure new business opportunities deriving from increased lifespans and rising health consciousness.

## Examples

- The NAGASE Group's food materials business > For more details, see P. 31
- The NAGASE Group's life and healthcare related businesses > For more details, see P. 75-76

## NAGASE's Strengths

The key source of strength that the NAGASE Group has cultivated, and which has supported its sustained growth and been the foundation for its value creation, is six types of capital: financial, human, intellectual, manufactured, social and relationship, and natural. By integrating these different forms of capital, Nagase the NAGASE Group is addressing various social problems through its businesses.

Management capital

### Financial capital

Financial soundness and strict financial discipline

- Shareholders' equity: 309 billion yen (FYE March 31, 2023)
- Growth investments: 150 billion yen (5-year target in the ACE 2.0 Medium-term Management Plan)
- **R&I: "A" rating**
- **Issuance of Sustainability Linked Bonds: 10 billion yen (FY2022)**

### Human capital

Business Designers that integrate the NAGASE Group's diverse functions to solve problems

- **NAGASE's 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.
- **Consolidated Number of Employees 7,220**

### Intellectual capital

Leveraging knowhow across a wide range of fields to create new business in collaboration with partners

- Creating innovation through biotechnological expertise (Nagase Bio-Innovation Center)
- Evaluating and analyzing new technologies and material, and driving the development of new applications, as a development partner for our customers (Nagase Application Workshop)
- Promoting innovation within the Nagase Group, and building core businesses for the future (Future Co-creation Office)
- **Submitting joint patent applications with over 200 partners from industry, government and the university sector, including start-ups, over the past 20 years**

### Manufactured capital

Increasing value-added through enhanced productivity, technical innovation, and group synergy

- Establishment of the Group Manufacturing Management Innovation Office (2022)
- **A total of 45 manufacturing sites in 15 countries and regions (as of March 31, 2023)**

### Social and relationship capital

Partnerships and supply-chains built on trust

- **Approximately 18,000 partner companies**
- **A global network of 108 business locations in 25 countries and regions (as of March 31, 2023)**

### Natural capital

Initiatives aimed at enhancing the sustainability of the global environment

- **Energy use 238,059MWh (Fiscal year ended March 31, 2023)**
- **Total water intake 3,673ML (Fiscal year ended March 31, 2023)**

## NAGASE's unique functions

By combining our capacities as a trading company with our unique capacities in manufacturing, processing, R&D, business investment, and DX, NAGASE functions as a "business designer," delivering sustainable value to society while developing our unique businesses.



# Ideal Future

**NAGASE's Ideal Future**  
—What We Envision for the Future, and How We Aim to Achieve It

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# Value Creation Process

## — Solving Manufacturing Challenges through Materials

By making effective use of our management resources (i.e., the strengths, functions and business areas that we have cultivated), and by addressing the issues affecting our customers, industry and society as a whole, the NAGASE Group solves manufacturing challenges through materials. We aim to achieve our vision of “realizing a sustainable world where people live with peace of mind” not only by generating ‘economic value’ but also fostering new ‘social value.’ By returning this value to the society of the future, we are striving to achieve this vision.”



**Functions**

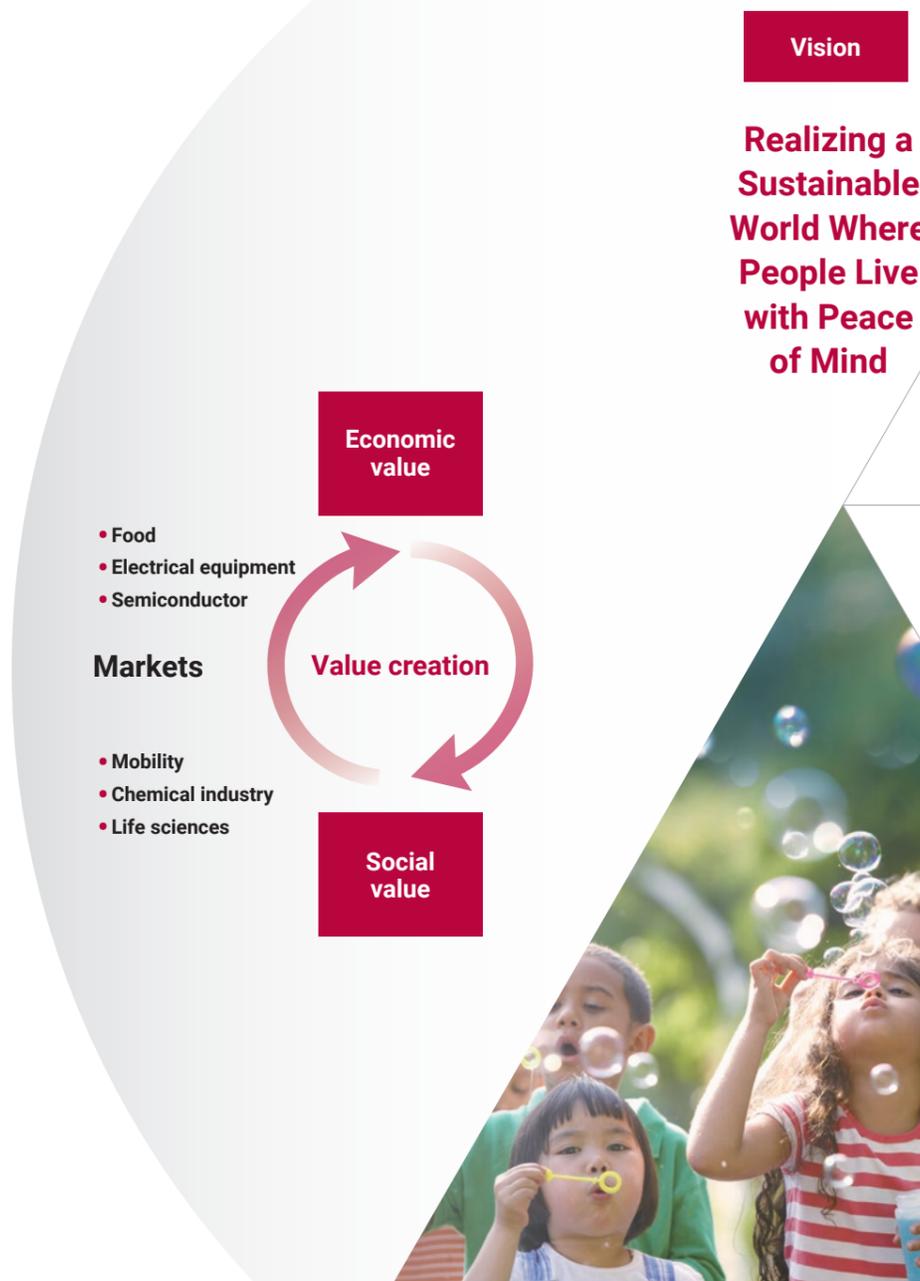
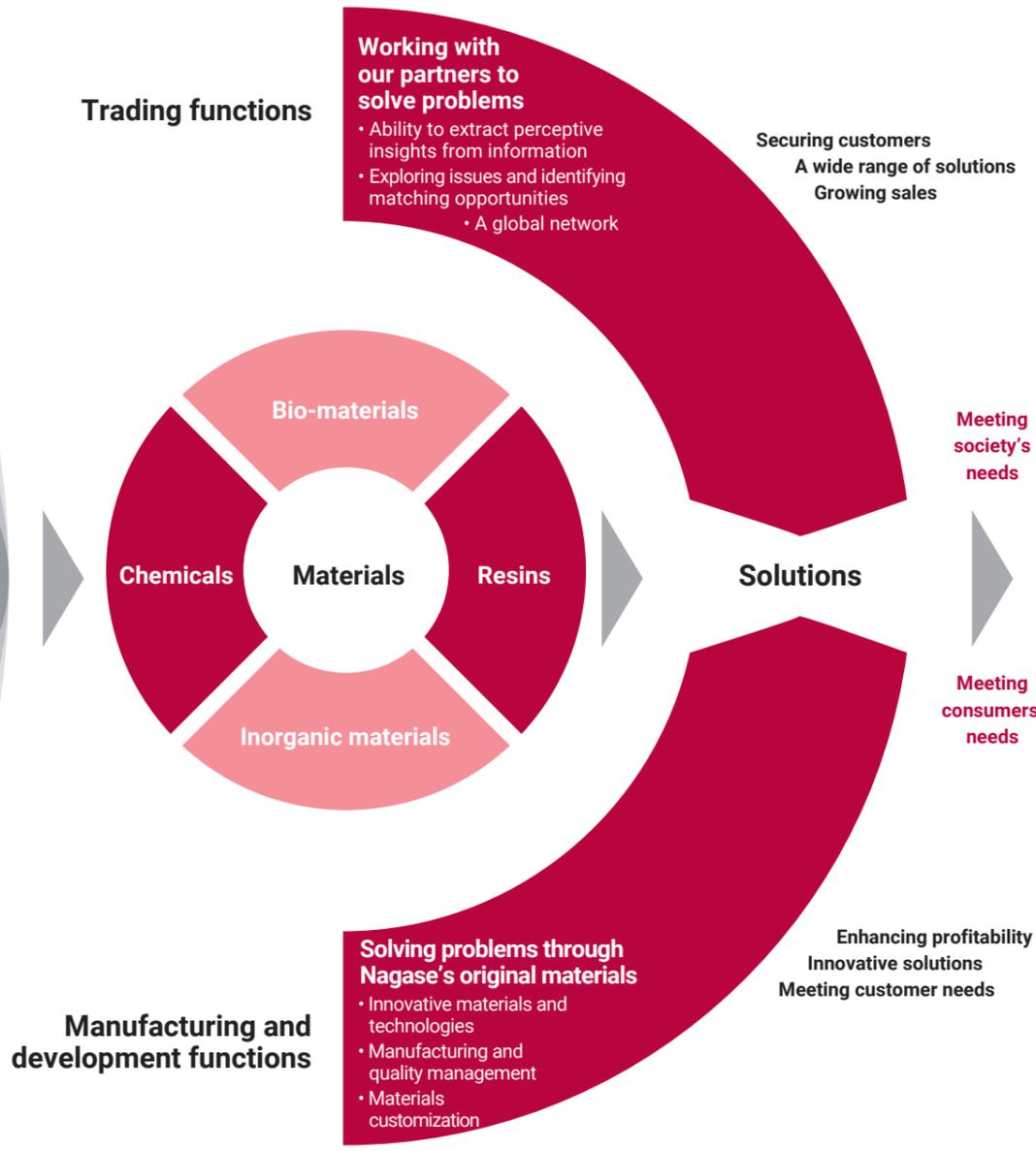
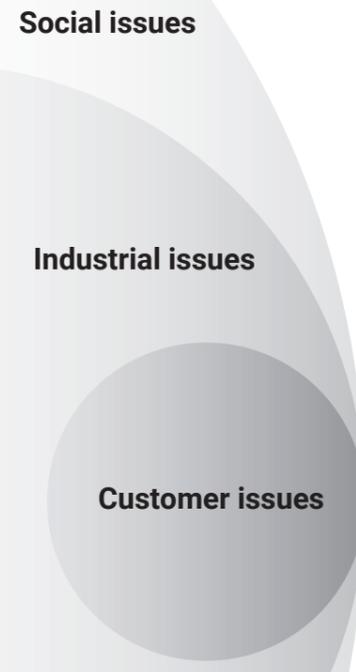
Trading,  
Manufacturing,  
R&D,  
DX,  
Business investment

**Our strengths**

Financial capital,  
Human capital,  
Intellectual capital,  
Manufacturing capital,  
Social capital,  
Natural capital

**Business domains**

Functional Materials,  
Advanced Materials &  
Processing,  
Electronics & Energy,  
Mobility,  
Life & Healthcare





**Hiroyuki Ueshima**

Representative Director,  
President and CEO  
Nagase & Co., Ltd.

## Accelerating our transformation as a corporate group with exceptional uniqueness

### Transformation while maintaining the NAGASE highest standards of integrity

It is a pleasure to introduce myself as the president of Nagase & Co., Ltd., to which I was appointed on April 1, 2023. As a representative of the NAGASE Group, I would like to extend our greetings and tell you about the business objectives and strategies that we will be pursuing in the year ahead.

We are in a time of unprecedented change. In the past, a company could remake itself once and expect to flourish for a decade. Those days are gone, however. In today's environment, companies must be constantly evolving or they will not survive. My appointment as president to lead our management in this environment comes with one vital directive—to transform the NAGASE Group. In my inaugural message to everyone in the NAGASE Group, I emphasized the importance of achieving our transformation. I also said that there are two things that we absolutely must not change: (1) our management philosophy of maintaining the highest standards of integrity and (2) our relationship of trust with stakeholders.

NAGASE is a company with a history of over 190 years. I believe the reason we have survived for so long is that we have maintained the highest standards of integrity as we have built businesses that help our customers and society thrive. In doing so, we have created a network connecting us to people and companies around the world and gained the major asset of trust from our stakeholders. This proven integrity cannot be matched by new start-up companies and is the very source of our value creation. When employees are unsure about a decision, I tell them to remember our management philosophy and ask themselves: will this decision be following the highest standard of integrity? This philosophy is also the reason for our existence—our purpose—and it will never change. While continuing the heritage of NAGASE's outstanding corporate culture, I will advance reforms that will enable the Group to remain an essential part of society for another 100 years.

### Solving manufacturing challenges with materials

We are entering the third year of the five-year medium-term management plan **ACE 2.0**. In this plan, we reform our profit structure and corporate culture in our "Pursuit of Quality." Our employees fully understand the plan's objectives and strategies, and the efforts they are putting in their work are starting to produce results. At the same time, the environment surrounding the NAGASE Group has changed substantially

since the plan was formed, and this has caused several challenges and discrepancies to emerge. We now see, for example, that the current decision-making system needs to keep up more with the speed of change in the external environment; that although we have a culture of taking on new challenges, we need to be more aware that management resources for investment are finite; and that we need to further eliminate inefficiency. We are therefore reexamining and revising the strategic details of **ACE 2.0** while maintaining its fundamental objectives.

The new normal is rapidly redefining what we think of as common sense. As we scrutinize the strategies, we also have been asking ourselves—who is NAGASE? and why we exist? My answer is that NAGASE is a company that solves manufacturing challenges with materials. The fundamental strength in our business is our ability to work closely with our customers to accurately understand their issues and to harness our network of some 18,000 partners worldwide to offer materials that provide solutions and that meet our customers' needs. If we need a material that no one else makes, we also have the ability to use the Group's manufacturing and processing functions to make the material ourselves. The combination of our expertise in chemical, electronics, and biotechnology, the network we have cultivated in our more than 190-year history, and the Group's manufacturing and R&D functions give us unmatched capability to meet very specific customer needs. Under the **ACE 2.0** plan, we will further refine our superior business model to raise the quality of management.

As we transform the way we think and our business structure, we will maximize the use of our key resources of people, money, and time as we restructure our business to make it more rational and efficient. One of the changes we made was realigning the Group businesses within the four areas of Improvement, Foundation, Development, and Focus. The new alignment allocates the businesses based on their functions, which better represents the strengths of NAGASE so we can enhance our profitability and generate further growth in the future. In addition, each business project will be comprehensively managed using return on invested capital (ROIC), and unprofitable businesses, including those with impairment risks, will be swiftly rebuilt and reorganized.



### Delegating authority and accelerating decision-making

We are taking steps to restructure our organization for greater management efficiency. In October 2023, for example, we consolidated our businesses from 11 to 7 divisions. We are also establishing a new system for the delegation of authority with the aim of speeding up decision-making. During my 35 years at the Company, I have worked in most of the business divisions, and that experience will be very useful in helping determine to who, what, and how to delegate authority so it can have the maximum effect at each worksite. We are also reviewing the process the Board of Directors uses for making decisions. The objective is to delegate authority to the executive side so the Board can better focus on the longer-term view when it discusses themes for maximizing NAGASE's value in the future.

Another change we will make is in our system for developing and promoting the next generation of management personnel who will lead NAGASE in the future. The first step will be made in April 2024, when we will introduce a personnel system created to be "fair and impartial." The system will be designed to actively and dynamically promote employees without consideration of age or gender. I believe that our employee evaluations and promotions must be in line with public perceptions. Having a system designed with that as its main objective should ensure

we hire outstanding human resources and have clearer evaluation criteria. These changes will undoubtedly give us a more robust succession plan as well. I intend to continue strengthening our governance and making efficient use of our capital to raise the NAGASE Group to a higher level.

### Employee potential is what drives NAGASE's growth

The NAGASE Group currently has 108 subsidiaries in 25 countries and regions with a workforce of diverse genders, nationalities, ages, religions, and values. Nagase & Co., Ltd. itself, however, still has some way to go with diversity and inclusion (D&I). Particularly in times when it is difficult to predict the future, D&I is vital for providing the different perspectives, experiences, and values needed for innovation and is also indispensable for risk management. Therefore, we are improving our work environments and enhancing our work systems. One improvement we are making, while listening to opinions from employees, is expanding our educational programs that support the active participation of female employees and enhancing our systems accommodating various life events, including childbirth.

After spending time in various business divisions in my career, I know very well that there are many talented people with huge latent potential working in NAGASE. It is not an exaggeration to say that their potential is what drives the growth of the NAGASE Group. I ask the managers to do three things to stimulate the potential of people working in NAGASE. The first is to create opportunities for learning and taking on challenges. The second is to actively engage in dialogue with subordinates and set goals appropriate to each individual. The third is, after delegating a task, do not micromanage it. NAGASE has always had a culture that tolerates failure. When a challenge to attain a rational goal ends in failure but then leads to setting a better goal, that is valuable. Talking with subordinates to thoroughly analyze the cause of the failure and sharing what you learn with others in the organization. This turns that failure into an asset that will increase our chance of success in the future.

A person can grow at any age. In the months since I became president, I myself have grown by learning on my own as well as by asking senior employees within the Company and external managers to teach me. I want our employees to take on bigger challenges, and as I mentioned earlier, we want to create a company that correctly recognizes people who take on challenges and put in consistent effort. I also recognize that my mission is also to foster a system and organizational culture that encourages and supports people throughout the Company to take on challenges.

### "The Earth is borrowed from future generations"

Industry used to consider social value and economic value as a "trade-off" in which one came at the cost of the other. This view has changed in recent years and we are entering an age of "trade-on" in which social value and environmental value are prerequisites for economic value. We recognize that sustainability is important, and that the NAGASE Group must contribute to the development of society as we seek to generate sustaining growth for our business. We established the Sustainability Committee in fiscal 2020 to formulate our Sustainability Basic Policy and strengthen our sustainability initiatives.

I believe that we need to instill our employees with a deeper understanding of issues related to sustainability. To help raise awareness, I visited various departments in all Group companies and talked with employees. When I talk to people, the first thing I want to share is my own views on sustainability. I tell them, "We borrow the Earth from future generations, and it is important that we give back to them an Earth so they can live better lives than we do. We must use our company's businesses so we can give them a more beautiful Earth." Then I say, "NAGASE can do that and, if we all work together, we can make it happen." Sustainability is fundamental to corporate management, and I plan to continue talking about it with employees.

We are placing particular emphasis on employee engagement and becoming carbon neutral. Both are part of the KPIs of the current medium-term management plan, and we are monitoring our progress. The NAGASE Group defines employee engagement as a relationship between organization and employee built on mutual respect and mutual motivation. The fiscal 2022 engagement survey of Nagase & Co., Ltd. produced a score of 56.5, which was an improvement of 4.1 points from the previous year. During the year, we used the survey findings to hold dialogue meetings between management and mid-level employees and created opportunities for employees to interact.

We also made progress toward achieving carbon neutrality. Increasing the use of renewable energy in business activities reduced the Group's Scope 1 and 2 greenhouse gas emissions (GHG) by 34% in fiscal 2022 compared to fiscal 2013. We are also using the NAGASE Group network to create several businesses in the field of carbon neutrality. In September 2021, we allied with Zeroboard, Inc. to launch a GHG emissions calculation service to support corporate decarbonization management. We are also participating in the Japan's Ministry of Economy, Trade and Industry's GX League to support the creation of forestry credits in cooperation with local governments. In addition, all of our Group companies are engaging in ambitious projects that will address social issues and grow their businesses. We look forward to sharing their successes.

### Using NAGASE's unique strengths to solve social issues

I joined Nagase & Co., Ltd. in 1988 and was first assigned to the paint materials division of the chemicals business, where I worked in sales. At my first job in Osaka, I learned the rigors and the joys of the trading company business. I went on to help launch new businesses and work in various departments, and this experience gave me a deep understanding of the NAGASE corporate culture and how each business works. Since being appointed representative director and president, I have been reminded of the unique strengths that NAGASE has accumulated through our long history from the trust we have earned with our customers and the strong network of business partners we have built in Japan and overseas. These strengths are unmatched, and I believe we can use them and build on them to make significant contributions to solving not only issues our customers face but also the complex intertwining issues confronting society. I believe the markets in our focus areas of food- semiconductor-, and life science-related businesses as well as for our biotechnology business, which is a development area that will extend across all of our businesses, each have substantial growth potential. I also believe that bringing together the Group's strengths will give us the ability to provide a wider variety of value to society.

The NAGASE Group will remain true to its philosophy of maintaining the highest standards of integrity and solving manufacturing challenges with materials. Our management and employees are working together to use our exceptional uniqueness to make us a leader in markets around the world where customers will always know NAGASE has solutions. I intend to lead the Group for an even faster transformation and believe that our employees have the power to make it a reality. The transformation will undoubtedly enhance the Group's corporate value, and I look forward to the support of our stakeholders as we "remain unchanged by continuing to change."

December 2023

**Hiroyuki Ueshima**

Representative Director, President and CEO  
Nagase & Co., Ltd..

**Masaya Ikemoto**

Representative Director and  
Senior Managing Executive Officer



## Strengthening corporate functions while continuing the “Pursuit of Quality” in business, finance, and human capital

### Steady progress reforming the profit structure

The medium-term management plan **ACE 2.0** outlines our growth plan for the “Pursuit of Quality” as we seek to become the “Ideal NAGASE” on the 200th anniversary of our founding in 2032. By backcasting from this vision, we defined issues of materiality to address and set two core strategies of the “reform of our profit structure” and the “reform of our corporate culture” for the five fiscal years of 2021-2025 as we seek to become a “Business Designer creating a sustainable future.”

In the second year of **ACE 2.0**, we recorded earnings declines in both operating income and net income owing to factors including the soaring raw material and logistics costs worldwide and a growing interest burden as many countries raised interest rate hikes. At the same time, we worked to reform the profit structure by advancing our main strategies of reconstructing our business portfolio, strengthening the existing businesses, creating sustainable businesses, and steadily implementing measures in our focus areas.

The food-related business, which is a focus area of **ACE 2.0**,

expanded the market share of its trading operations, primarily through the Prinova Group, commenced manufacturing operations at the new plant in the U.S. state of Utah, and stepped up marketing campaigns for products including the water soluble dietary fiber Fibryxa™ products manufactured by Hayashibara Co., Ltd..

In the semiconductor-related business, we delivered solutions to customers by highlighting the features of our products, which cover all areas of the production process. In addition to our business in the China and U.S. markets, we anticipate Taiwanese and Japanese semiconductor manufacturers to increase investment in Japan. The NAGASE Group is accordingly advancing multiple strategies to expand sales, including seeking to establish our products as built-in components in the semiconductor industry.

The NAGASE Bio-Innovation Center and the NAGASE Biotech Office are considering the best configuration for applying biotechnologies for food, healthcare, and industrial products. We integrated the Hayashibara Co., Ltd. and Nagase ChemteX Corporation biochemicals businesses in April 2023

to bring together their biotechnologies and set a foundation for activating synergies. In April 2024, Hayashibara will be renamed Nagase Viita Co., Ltd., and become a growth driver for the Group’s biotechnology. In the second half of the **ACE 2.0** plan, we will bring together the Group’s microbial research, enzymatic reaction, and other technologies to refine our development capabilities and take steps to strengthen the presence of NAGASE as “the Biotechnology Company” in the industrial world.

The NAGASE Group is currently creating “N-Sustainable businesses” that will enhance the social and environmental value that our Group provides and bring us closer to realizing our Group vision. The aim of these businesses is the early recognition of issues that customers and society will face in the future and to combine innovative Group services and technologies to offer solutions that generate profits. We have set a quantitative target for the N-Sustainable businesses to account for 15% of operating income by fiscal 2025.

### Responding to the tight supply chains and strengthening group manufacturing

We also made progress with **ACE 2.0** in the area of strengthening our existing businesses. Under the previous **ACE-2020** medium-term management plan, we started working to broaden business opportunity for the NAGASE Group by globalizing our business by building business foundations and acquiring local companies in key regions. These efforts raised the percentage of our gross profit earned overseas to above 50% in fiscal 2022 for the first time in our history. The balance of our overseas gross profit has also improved as the China region, which had previously accounted for roughly half of overseas gross profit, is now better balanced with earnings from the growing businesses in Europe and the United States.

Supply chains around the world were deeply disrupted and very tight in both fiscal 2021 and 2022. Because the NAGASE Group’s business content involves a high percentage of chemicals and electronic materials, not fulfilling our supply responsibilities would disrupt our customers’ businesses and instantly compromise the trust our customers put in us. It would also be very disadvantageous for our business partners. We have therefore invested funds to reinforce the supply chain with a main focus on securing inventory. This raised the value of the Group’s fixed inventory assets above ¥170 billion, which sharply increased the interest burden. Our inventories have been declining rapidly since the worldwide distribution networks began gradually recovering in November 2022 and, even with the depreciation of the yen, our inventory value has declined by tens of billions of yen from the peak. We have also been globalizing our financing activities through worldwide procurement management including foreign exchange risk hedging and reducing interest and interest expenses.

Manufacturing operations account for approximately 30%

of the NAGASE Group’s total operating income. The Group Manufacturers’ Collaboration Committee was created in 2019 to bring together all of our manufacturing companies to help strengthen our existing businesses by sharing primarily non-financial information, such as on safety, quality, and the environment, and by working together to resolve issues. The concerted effort of our companies to share their unique knowledge and know-how has exponentially improved the Group’s overall productivity and technical capabilities.

In April 2022, we added the Group Manufacturing Management Innovation Office as a corporate organization at the head office to oversee the manufacturing companies’ overall business conditions. The office plays a vital role in enhancing the Group’s manufacturing operations by monitoring the overall status of Group production technology, R&D, quality control, and investment evaluations and by identifying and organizing technologies for synergies as well as technological weaknesses.

Reforming the Group’s profit structure will require a complete reconstruction of our portfolio of businesses. Over the past decade, we have acquired Hayashibara Co., Ltd. and the Prinova Group, while also selling businesses that were struggling to remain profitable and competitive in the evolving industrial structure. We base decisions to sell a business on the best-owner principle and whether selling a business will improve our future value and growth potential.

### Achieving ROE targets and individual business ROIC management

I would like to go into a little more detail about our fiscal 2022 earnings performance from a financial perspective. After achieving the **ACE 2.0** quantitative target for ¥35 billion in operating income in fiscal 2021, the plan’s first year, we fell back below target in the second year. As I mentioned at the beginning, the main reasons for the decline in operating income were soaring worldwide costs for raw material and logistics and higher SG&A expenses. Return on equity (ROE) also declined from 7.7% in fiscal 2021 to 6.6% in fiscal 2022. The **ACE 2.0** target is to raise ROE to 8% by fiscal 2025, the plan’s final year. However, considering that the average ROE of listed companies in the United States is 18.4%, which is more than double the average of companies in Japan, we understand that investors want us to aim higher and are seeking ways to further strengthen our earning power. We will continue reforming our profit structure in the “Pursuit of Quality” by strengthening our existing businesses, withdrawing from unprofitable businesses, reorganizing our business portfolio by selling subsidiaries, and investing in businesses with strong competitive advantages.

Along with the need to raise our ROE, we are also aware that the state of our investment returns being below our capital costs is a major issue that must be rectified. We are taking steps to revise our weighted average cost of capital



(WACC) by lowering the cost of capital while maintaining adequate leverage to procure funds. Beginning in fiscal 2020, we have been systematically repurchasing treasury stocks and increasing shareholder return.

We are seeking efficient fund procurement, such as by closely monitoring short- and long-term interest rate movements, as we seek to maintain our leverage for procuring funds while lowering WACC. In June 2022, we tried a new method of procuring funds by issuing our first sustainability-linked bond. While diversifying our financing methods, we also decided to issue corporate bonds to provide additional financing to ensure we will achieve the quantitative targets of the NAGASE Group Carbon Neutral Declaration. The declaration is also our proclamation to the capital markets of the NAGASE Group's commitment to addressing climate change.

Management is also placing additional emphasis on ROIC, which is a key management indicator under **ACE 2.0**. We have in place a system for calculating ROIC not just for a business unit or department, but for more than individual 100 projects. The regular monitoring of ROIC will enable us to take action on investment projects producing inadequate returns.

### Approach to investment in growth and human capital

Under **ACE 2.0**, we are ramping up our investments in the food-related, semiconductor-related, and biotechnology businesses along with other business domains with high growth potential and capital efficiency. During the plan's five years, we also created a framework for ¥150 billion in strategic growth investment aimed at supporting the spirit of innovation and taking on challenges that are the DNA of the NAGASE Group. In the past two years, we have allocated investment funds for new businesses, digital transformation, and R&D. Our strict financial discipline is behind every decision to invest, and

the expected ROIC is closely scrutinized for each investment.

A long-term perspective is essential when investing for growth, but during the second half of **ACE 2.0**, we will be emphasizing investments that can start generating profits in the shorter term while seeking to strike a balance of short and long-term investments. Another criteria our investment decisions will consider is sustainability. We are keenly aware that investing in projects that ignore the SDGs or environmental impact or that do not consider sustainability would invite perilous risk for the NAGASE Group in the future. The objective of investing management resources in areas like the N-Sustainable businesses that enhance the social and environmental value we provide is to support the sustainable development of society and the growth of our Group.

The source of the NAGASE Group's sustainable growth is our human resources. That is why we consider investing in human capital as essential and linked directly to strengthening our management foundation. We currently have programs for dispatching personnel to overseas subsidiaries and business schools, subsidizing participation in certifications courses, and monetary rewards for earning qualifications. We plan to increase these programs as a part of our investment in human capital and to attract individuals that will bring new and unique capabilities to the NAGASE Group. We will also continue the reconstruction of the Tokyo Head Office Building and allocate funds to create workplaces that are safe, comfortable and encourage creativity.

### Reforming the corporate culture focused on using diverse human resources

The second core strategy of **ACE 2.0** to reform our corporate culture places considerable emphasis on using diverse human resources, which we have also defined as an important sustainability issue (materiality). Our concept for using diverse human resources refers to more than the ratio of male and female employees. At this stage, our goal is to fully incorporate the abilities of employees with various backgrounds, beliefs, and cultures into the Company's growth strategy.

Key to this will be increasing employee engagement, which refers to the level of trust and the strength of the connections between management and employees. Employee engagement scores increase when the management side provides a comfortable working environment and a consummately fair personnel system. High engagement nurtures a positive attitude for contributing to the Company and a corporate organization that can be expected to produce results, such as by achieving departmental goals and training lower-ranked employees. I believe that considering this balance and deepening understanding on both sides of management and employees will lead to improved engagement. We will continue to draw wisdom from various perspectives as we seek to establish a culture within the NAGASE Group in which a workforce of people from different backgrounds treat

each other with respect and work together to generate improving business results.

We are also strengthening our corporate functions to support the **ACE 2.0** plan's core strategies the "reform of our profit structure" and the "reform of our corporate culture" Our culture for the trading business has long been for each business unit to apply their own way of management. This approach allows business division management to become very specialized but at the same time compromised organizational management efficiency, which makes it difficult to fully combine and leverage the NAGASE Group's various functions. In previous medium-term management plan, we started taking steps to strengthen our corporate functions so we could formulate the most effective management and organizational operating structure. Over the past seven years, we have systematically consolidated our back-office departments and created visualization and standardization for our operations. When these were complete, in October 2023, we restructured the organizations and business content of each of our business divisions. This restructuring is not only for NAGASE Corporation, it is also for the dozens of NAGASE Group companies in Japan and around the world, where it will improve the profitability and efficiency and further advance us in our "Pursuit of Quality."

### Consistent dividend growth and revising the management plan, including the investment strategy

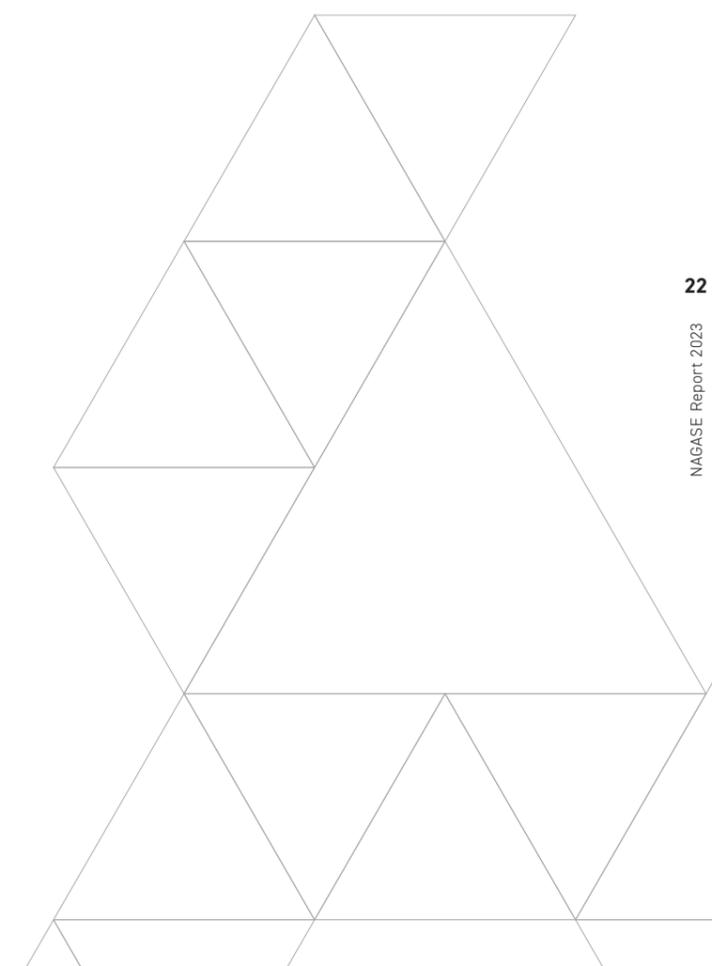
As I mentioned earlier, we recognize that the top priority for management is to establish the scenario for lifting ROE above 8% by fiscal 2025 by improving our management quality and implementing all measures in accordance with the two main **ACE 2.0** strategies. Investors have a positive impression from our shareholder return efforts to consistently increase the dividend per share payout, and this policy will continue during **ACE 2.0**. However, we know that investor expectations will not be met solely by increasing the dividend payment, which that is why we added flexibly buying treasury stock to our capital policy in fiscal 2021 as a second core form of providing shareholder return. In May 2023, we resolved to repurchase ¥8 billion in treasury stock and project a total shareholder return of 71% in fiscal 2023.

In the spring of 2023, the Tokyo Stock Exchange requested companies with a price-to-book ratio (PBR) of less than 1 to place greater management focus on the cost of capital and stock price. As of end-September 2023, our PBR stood at 0.70. We have no intention of conducting a shareholder return move solely for the sake of lifting the share price or any extraordinary measures to boost our PBR above 1. We intend to create conditions for our stock price and PBR to rise by enhancing our corporate value through investing in the NAGASE Group's core businesses and growth fields to strengthen our earning power, lowering our weighted average cost of capital (WACC), and raise our ROE. We will also increase dialogue with investors.

In fiscal 2023, the third and middle year of **ACE 2.0**, we

also introduced a new president. When the new president's starts his tenure in April 2023, I believe it will be crucial to further accelerate the two reforms dictated by **ACE 2.0**. We have also begun restructuring our business portfolio, which had been organized and optimized during the five years of **ACE-2020**, and partially revised our investment allocation. Normally, upon the appointment of the new president, we would announce revisions to the management plan and investment strategy, but we believe it was prudent to take the time to ensure the revisions were sound and impactful before announcing them. The revisions we are considering are aimed at improving capital and investment efficiency and also at making the strategies more powerful. (See page 23 for details.)

I believe that for a company to grow in the long term, it must have a balance of obtaining economic benefits and providing value to society. Since its founding nearly two centuries ago, NAGASE has a proven history of expanding its business domain amid dizzying changes in the business environment and providing distinct value to society. We will continue applying the unique value that the NAGASE Group offers to address social issues and extend our sustaining growth into the future.



# Strategy

Growth Strategy – Backcast from 2032 “Ideal NAGASE”

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### Medium-Term Management Plan

#### Reform of our profit structure

- 1) Pursuing profitability and efficiency
- 2) Strengthening existing businesses
- 3) Creating sustainable businesses

#### Reform of our corporate culture

- 1) Pursuing economic and social value
- 2) Pursuing efficiency
- 3) Strengthening human resources to drive reform

#### Functions supporting reforms

- 1) Further Accelerating DX (Digital Transformation)
- 2) Promoting sustainability
- 3) Strengthening corporate functions

# Medium-Term Management Plan: 5 Years in Pursuit of Quality as We Move toward “Ideal NAGASE”

Medium-Term Management Plan ACE 2.0 is the second stage of our campaign toward achieving “Ideal NAGASE,” and we have dedicated the five-year period it covers—from fiscal 2021 to fiscal 2025—to the pursuit of quality. To us, pursuit of quality means giving concrete form (in our business, our systems, and our corporate culture) to the expectations of our shareholders. We are aiming to achieve this, all while maintaining an ACE (Accountability, Commitment, and Efficiency) approach, in order to facilitate the NAGASE Group’s sustainable growth.



## ACE 2.0 Basic Policies

**Become a true “Business Designer”**

**ACE 2.0** With an ACE (Accountability, Commitment, and Efficiency) mindset, and in order to facilitate the NAGASE Group’s sustainable growth, **“Pursuit of Quality”** we are giving concrete form (in our business, our systems, and our corporate culture) to the consideration that our stakeholders expect from us (pursuit) (quality)

**Reform of our profit structure** >For more details, see P.27

**Create a profit base toward the “Ideal NAGASE”**

- Pursuing profitability and efficiency**  
• Company-wide businesses replacement and reallocation of resources
- Strengthening existing businesses**  
• Expand our business opportunities through globalization  
• Increase value added through manufacturing productivity improvements and technical innovation
- Creating “N-Sustainable businesses”**

**Reform of our corporate culture** >For more details, see P.35

**Mindset toward the “Ideal NAGASE”**

- Pursuing economic and social value**  
• Cultivating sustainability-related mindsets and thoroughly monitoring financial and non-financial data
- Pursuing efficiency**  
• Deepen awareness of capital efficiency  
• Improve productivity of core operations
- Strengthening human resources to drive reform**

**Functions supporting reforms** >For more details, see P.43

- Accelerating digital transformation further
- Promoting sustainability
- Strengthening corporate functions

## Quantitative Goals (KGIs, KPIs)

The key goal indicators (KGIs) for “Pursuit of Quality” in regard to enhancing the rate of capital efficiency are ROE of 8.0% or more and operating income of ¥35.0 billion for improvement of profitability. Key performance indicators (KPIs) have also been set for profit structure reform, corporate culture reform and corporate functions supporting reforms and we rigorously manage these goals.

### “Pursuit of Quality” KGIs (KGI: Key Goal Indicator)

Measures	Indicators	FY2020	FY2021	FY2022	FY2025*
Improvement in capital efficiency	ROE	5.9%	7.7%	6.6%	8.0% or more
Increased profitability	Operating income	21.9 billion yen	35.2 billion yen	33.3 billion yen	35.0 billion yen

\* FY2025 assumptions: 1 USD = 108.7 yen, 1 RMB = 15.6 yen

### Key Performance Indicators (KPIs) for Achieving the “Pursuit of Quality” (KPI: Key Performance Indicator)

Reform/ Function	Measures	Indicators	FY2020	FY2025
Reform of our profit structure	Company-wide businesses replacement and reallocation of resources	Growth investments*1	—	150.0 billion yen*2
		Secure 10% of company-wide invested capital and reinvest in focus and development areas	—	10% or more
	Create “N-Sustainable businesses”	Operating income	—	5.0 billion yen or more*3
Reform of our corporate culture	Improve productivity of manufacturing and expand value added through technical innovation	Manufacturing business operating income*4	13.8 billion yen*5	20.0 billion yen or more
		Ratio of general administrative expenses to gross profit*6	57.1%*7	52.1%
	Improve productivity of core operations	Net DE ratio	0.23 times	0.5 times or less
Functions supporting reforms	Accelerate digital transformation further	Invested capital (including expenses)*8	2.4 billion yen	10.0 billion*2

\*1 N-Sustainable investment, new business investment, DX-related investment, R&D expenses, working capital \*2 Five-year cumulative total \*3 Figure based on internal management \*4 Simple sum calculation \*5 Manufacturing classifications were reviewed, and Prinova Group was reclassified as a manufacturing business from fiscal 2021. This new classification has been retroactively applied to performance figures for fiscal 2020. \*6 Excludes R&D expenses, amortization of goodwill and other acquisition-related intangible assets, and profit and loss due to amortization of actuarial differences \*7 Average figure for the five-year period from fiscal 2016 to fiscal 2020 \*8 Five-year cumulative total of 10.0 billion yen in DX-related investments is included in growth investments of 150.0 billion yen

## Review results and measures for Medium-Term Management Plan ACE 2.0

**ACE 2.0 “Pursuit of Quality”**

**Reform of our profit structure**

- Capital investment and revenue growth in focus areas (food, semiconductors)
- Developing new **bio-related** materials and launching related marketing
- Selling unprofitable businesses** and consolidating our overseas bases

**Reform of our corporate culture**

- Work style innovation** in connection with office relocation
- Promoting diversity** through mid-career recruitment
- Reducing **cross-shareholdings**

**Functions supporting reforms**

- Improving employee engagement** through enhancing opportunities for dialogue
- Promoting carbon neutrality in partnership with Zeroboard, Inc.**
- Improving our ESG scores** from external assessment bodies

**Results to date (up to March 2023)**

**Challenges identified in April 2023**

- The need for partial or full review of the Plan (the conditions on which it is based have changed in excess of certain limits)
- An ambitious growth strategy that will take the Company to new heights
- Decision-making processes and Company systems able to respond to the speed of changes in our business environment
- Not fully leveraging our resources to their limits (fostering readiness to take on challenges)
- Eliminating waste
- Increasing awareness of sustainability

### Launch of QUICK WINS

## QUICK WINS: maximizing and optimizing use of resources (people, finances, and time)

**Developing our business and financial portfolio**

- Manage and implement our business portfolio based on ROIC
- Rebuild and reorganize unprofitable businesses (including businesses at risk of impairment)
- Execute a corporate-led growth strategy
- Strengthen our search and development (S&D) capacities
- Advance our digital marketing

**Implemented policies**

- Set WACC targets for each of our businesses in the aim of increasing ROIC
- Formulated an action plan and decision-making processes for exit planning
- Shifted resources at our bases and in other areas from mature markets to growth markets
- Formulated a growth strategy for the future**
- Decided on a corporate venture capital (CVC) framework with the aim of creating new businesses

**Enhancing governance of management processes**

- Consolidate and manage our organization with rationality and efficiency as our goals
- Review and effectively utilize decision-making structures
- Delegate authority

**Implemented policies**

- Consolidated our 11 divisions into 7 and sped up our decision-making processes
- Reviewed meeting structure and made our business operations more efficient
- Began delegation of authority

**Rebuilding our human resources portfolio**

- Train our next generation of human resources
- Talent management (reallocation of human capital)
- Develop infrastructure for implementation of D&I initiatives and review systems and structures

**Implemented policies**

- Introduced an HRBP system (strengthening collaboration between our corporate and other divisions)
- Reallocated human capital through consolidation of our divisions
- Encouraged dialogue between management and employees
- Set fiscal 2025 targets for the proportion of women among new career-track hires (30% or more) and for the percentage of management roles held by women (6% or more)

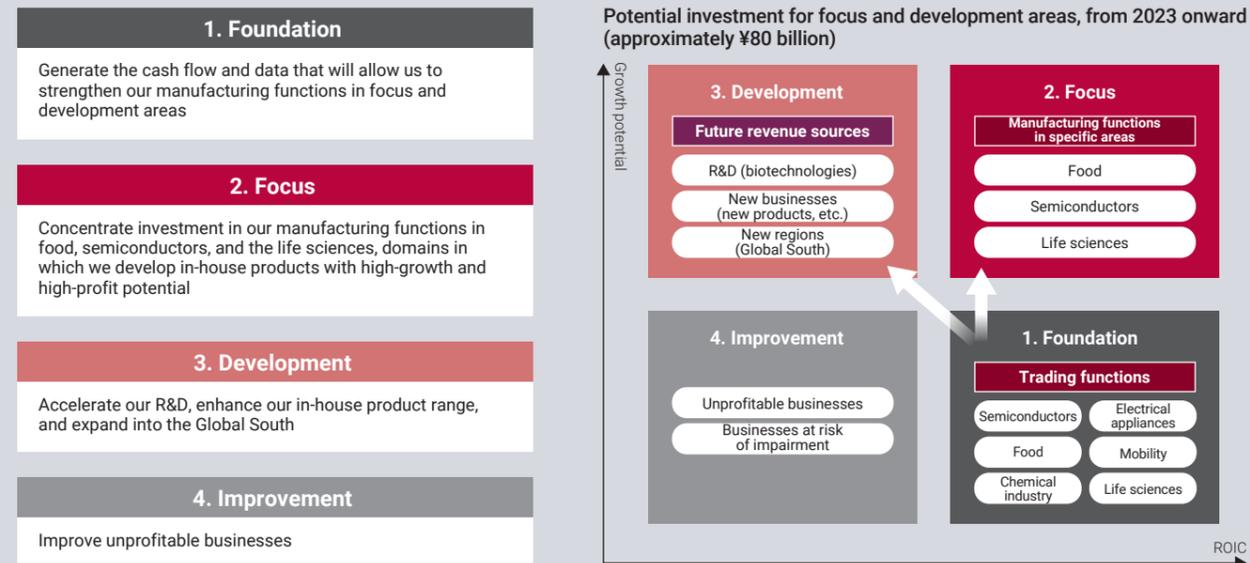
# Reform of Our Profit Structure

The key to profit structure reform is to secure and redeploy management resources to maximize efficiency. Specifically, from the standpoint of efficiency and growth potential, we have classified businesses into four quadrants: Improvement, Foundation, Development, and Focus, and are executing strategies according to each area.

## A growth strategy for the future

### Reorganizing each of our business domains along the lines of our trading, manufacturing, and R&D functions

NAGASE possesses manufacturing and R&D functions as well as its trading functions. While we had previously created four organizational quadrants divided along business lines, we have chosen to reorganize these quadrants to classify our businesses according to their functions, in order to clearly identify each business's functions and areas where we should invest our management resources. We will utilize management resources and data generated by our trading functions (one of our core operations) in our focus and development areas.



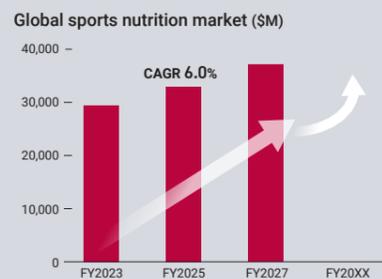
## 2. Focus Manufacturing functions in food-related fields

Expand our highly profitable manufacturing and processing businesses, and contribute to expanding healthy-life expectancy and reducing food waste

### Social issues and needs

- Increasing health consciousness globally
- Awareness of food waste issues

### Market growth potential



### NAGASE's strengths and the solutions

- NAGASE × Prinova × Hayashibara**
- Point of contact with the sports nutrition market, which offers high growth potential
  - Wide-ranging ingredients line-up, including our own functional food ingredients (ingredients we manufacture ourselves include TREHA®, Fibryxa™, HAYASHIBARA HESPERIDIN S)
  - Global sales network
  - M&A experience and knowhow
  - A business model offering one-stop solutions from procurement to manufacturing

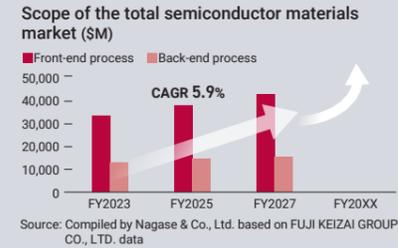
## 2. Focus Manufacturing functions in semiconductor fields

Increase our sales of high value-added products in the cutting-edge semiconductor market and develop our market presence

### Social issues and needs

- Growing demand for cutting-edge semiconductors
- Decentralization of manufacturing facilities driven by economic security concerns

### Market growth potential



### NAGASE's strengths and the solutions

- NAGASE × Nagase ChemteX**
- Proven record of having our unique technologies and products built into the cutting-edge semiconductor market
  - ⇒ Achieved top market share for liquid molding compound for semiconductors for use in devices integrating FOWLP\*
  - Planning, design, and manufacturing functions through our various key technologies
- \* Fan-out wafer level package

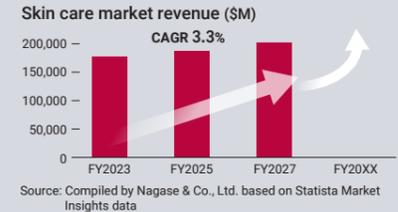
## 2. Focus Manufacturing functions in life sciences fields

Provide NAGASE-made materials tailored to market trends and customer needs in the life sciences market, where awareness of sustainability is rapidly increasing

### Social issues and needs

- Aging societies and increasing health consciousness
- Increasing awareness of sustainability

### Market growth potential



### NAGASE's strengths and the solutions

- NAGASE × Hayashibara × Nagase ChemteX**
- Sugar stabilization technology that will in turn support drug stability
  - Suggestions for drug formulation, as well as analysis and evaluation functions
  - Ability to conform to different countries' regulations
  - High-precision organic synthesis technologies
  - A global presence on sustainability issues

## 3. Development R&D (biotechnologies)

Strengthen our R&D and develop new biotechnological materials that will become industry mainstays

### Social issues and needs

- Climate change
- Resource recycling
- Healthy life expectancy (cognitive function, sleep quality, etc.)

### NAGASE's strengths and the solutions

- NAGASE (Nagase Bio-Innovation Center) × Hayashibara**
- Well-being: make progress on mass production of ergothioneine (which is expected to deliver the results below) through fermentation**
- Benefits for cognitive function
  - Amelioration of wrinkles and age spots
  - Comfortable sleep
- Environmental: develop bio-based, biodegradable SAPs**
- Reducing waste from disposable diapers
  - Regreening of drought-stricken areas

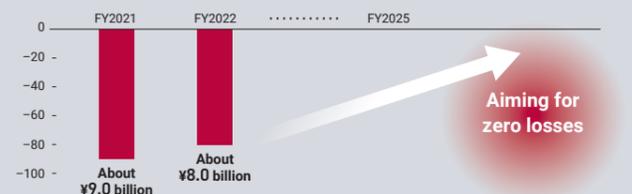
## 4. Improvement Initiatives in improvement areas

Move forward by reducing unprofitable businesses and impairment loss

### Targets for improvement

- Operating losses of our operating subsidiaries and equity losses of our affiliates:**
  - Rapidly formulate and implement improvement plans. Consider withdrawing from operations that seem unlikely to improve
- Impairment loss:**
  - Going forward, strengthen monitoring of assets at risk of impairment and minimize that impairment
- Unprofitable business arrangements:**
  - Aim to improve unprofitable business arrangements by strengthening monitoring and making exit plans

### Financial scale of operating subsidiaries' operating losses, equity losses, impairment losses, and unprofitable business arrangements



ACE 2.0	
Profit structure	Corporate culture
Functions supporting reforms	



**SPECIAL FEATURE 1**

# Delivering value with biomaterials by leveraging the group's expertise

The NAGASE Group has an in-depth understanding of society's needs, and is engaged in various businesses that make effective use of biotechnology to solve societal issues.

In April 2023, to consolidate the NAGASE Group's biotechnology operations and develop higher-growth businesses, Hayashibara Co., Ltd. (a Nagase Group company) and Nagase ChemteX Corporation's bio-related business (specifically, the Fukuchiyama

Plant), were merged.

Hayashibara Co., Ltd. has expertise in sugar production technology that makes effective use of microorganisms and enzymes, while Nagase ChemteX Corporation's bio-related business is strong in industrial enzyme production technology. The use of biotechnologies to develop sustainable materials is an area that has been showing increasing promise in recent years. By combining these two companies' respective

technologies and expertise, the NAGASE Group will strengthen our capacities in this area, and enhance the value that our products provide to customers and the market as a whole.

**Working to commercialize ergothioneine, which can contribute toward extending healthy lifespan**

One example of Nagase's R&D activity that makes effective use of next-generation bioproduction technology is the commercialization of ergothioneine (EGT), which has been touted as the "longevity vitamin."

EGT, which is found in small quantities in fungi, is a rare natural amino acid which helps to improve brain function, and which also has a strong antioxidant effect. As a next-generation functional material, it is expected to have a wide range of applications, including treating the symptoms of neurodegenerative diseases (such as Alzheimer's disease and Parkinson's disease), depression, skin aging (wrinkles and spots) due to exposure to

ultraviolet light, and cataracts, as well as controlling glycative stress. However, the natural extraction of EGT involves significant effort, while chemical synthesis also poses the problem of creating a considerable environmental impact in the production process.

In 2020, the Nagase Bio-Innovation Center, an R&D facility which possesses innovative fermentation technology, succeeded in using smart cell technology (a biosynthesis technology that artificially maximizes the substance production capability of cells) to increase EGT production capability roughly 1,000-fold.

Going forward, the NAGASE Group we will be using the production strains that we have developed to realize full-scale commercialization of EGT through life science related applications such as health foods, cosmetics, and pharmaceuticals. Through the achievement of environmentally friendly manufacturing that effectively utilizes bioproduction technology, we will contribute toward extending healthy lifespans throughout the world.

**Taking on the challenge of developing existing business areas to create new, sustainability-focused markets**

Besides developing new markets, NAGASE is also proceeding with the development and provision of new products in existing business areas that can contribute toward solving society's problems. As one example, in February 2023, we successfully completed the joint development of superabsorbent polymer (SAP) that is made using a higher percentage of bio-derived raw material, by combining Hayashibara Co.,

Ltd.'s enzyme utilization technology and Nagase ChemteX Corporation's resin manufacturing technology. SAP is a polymer material with superior water absorbency which has a wide range of applications, including sanitary products (such as paper diapers and sanitary napkins), as well as agricultural products and cosmetics. However, there have been issues with existing SAP products as being environmentally unfriendly, because of the petroleum-derived and non-biodegradable materials used. Although efforts have been made to develop SAP made using natural raw materials and with improved biodegradability, the creation of commercially viable end products proved difficult because of insufficient water absorption. Despite being made from starch as the main raw material, NAGASE's newly developed SAP material has absorption properties that equal or surpass those of conventional products, and is expected to have a wide range of applications for products that need to be environmentally-compliant. We are proceeding towards establishing a production system aimed at bringing the new material to market from 2025 onwards, and NAGASE is committed to strengthening our solution offering for the sustainability market.

**Contributing to the biopharmaceutical field  
Pharmaceutical excipient  
TREHALOSE SG**

In recent years, pharmaceutical development has shifted the focus of new drug development from traditional low-molecular-weight drugs towards drugs with more complex molecular

structure, including peptides, proteins and antibodies. Especially in regard to cancer treatment, an area with an increased need for new solutions, there has been a global acceleration in the development of antibody-based biopharmaceuticals (antibody drugs). One major problem in this area is maintaining stable quality during drug storage. TREHALOSE SG is a highly refined pharmaceutical excipient for injectable solutions made from trehalose, which Hayashibara Co., Ltd. became the first company in the world to successfully industrialize the production of. It is effective in enhancing quality stability, regarded as a problem for antibody drugs. With the advantage of handling the entire process domestically, from procurement of starch (the raw material for trehalose) to purification, TREHALOSE SG is now used as a stabilizing agent for a wide range of antibody drugs, including bevacizumab, by pharmaceutical manufacturers throughout the world, and it is expected to make a substantial contribution toward enhancing quality of life for many people.

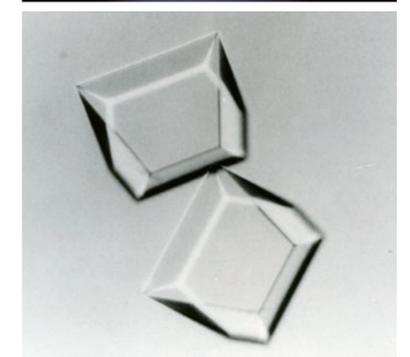
Nagase ChemteX Corporation's bio-related business hosts a company briefing about Hayashibara Co., Ltd.



NAGASE-developed SAP, which is made using a high percentage of bio-derived raw material, before and after absorbing water (left and right, respectively)



Powdered trehalose



Crystallized trehalose (micrograph)

ACE 2.0	
Profit structure	Corporate culture
Functions supporting reforms	

**SPECIAL FEATURE 2**

# Utilizing NAGASE's competitive advantage to tap into the food and semiconductor markets

## Food-related business

### Prinova's high-value-added businesses are meeting the needs emerging from the global trend toward greater health consciousness

In recent years, growing numbers of people throughout the world have started exercising regularly and have become more health conscious. The sports nutrition market, including protein and amino acid supplements, is growing steadily, particularly in Europe and North America. In response to this trend and in order to benefit from this market opportunity, NAGASE strategically acquired the Prinova Group in 2019.

In 2019 NAGASE's acquisition of the Prinova Group, a global food ingredients sales and processing business, significantly boosted market presence. Since its founding in 1978, Prinova has grown into one of the world's largest distributors of nutrition products, handling a wide variety of materials including proteins, amino acids, sweeteners, and caffeine, for use in food products. Beyond simply selling materials, Prinova has diversified into several high-value businesses. One example is the

solutions (processing) business, which takes the complexity out of food production by offering premixes. These premixes expertly combine multiple different ingredients, saving manufacturers time and ensuring consistent quality. Prinova also boasts a dedicated flavors business, where expert flavorists develop unique flavor profiles to cater to specific product needs. Finally, Prinova's OEM production arm allows their expertise in materials and processing to manufacture finished products for other companies, offering a comprehensive solution from start to finish. Further, in 2021, NAGASE acquired The Ingredient House, which sells high-intensity sweeteners such as sugar alcohols (including Xylitol) and sucralose. This acquisition has enabled NAGASE to extend its product line-up and expand into new business areas. Also in 2021, the NAGASE Group strengthened its manufacturing and processing capabilities by acquiring Lakeshore Technologies. This strategic move brought in the specialties of contract milling and micronizing services, crucial for food processing. 2022 saw an expansion for contract manufacturing through NAGASE's Armada Nutrition. A massive new facility was opened in Utah.

This strategic move positions NAGASE to swiftly meet the surging demand for sports nutrition products on the West Coast, while concurrently solidifying Armada's financial standing. The powerful synergy created by combining Prinova's sales expertise and NAGASE's food materials and consumer network fuels our accelerated global business expansion.

### Fulfilling consumer needs while leveraging the intrinsic value of our raw materials

Dietary fiber is known to perform various physiological functions, including promoting the smooth functioning of the digestive tract and regular bowel movements, helping to slow the absorption of nutrients, etc. However, Japanese people tend to lack dietary fiber in their food, creating demand for dietary fiber materials that can be combined easily with food products.

Fibryxa™ (Isomaltodextrin), a water-soluble dietary fiber material developed by Hayashibara Co., Ltd. in 2015, is widely used in products such as beverage and food products intended to compensate for dietary fiber deficiency, a category of products that has been attracting attention recently. When

dissolved in water, Fibryxa™ is transparent with hardly any flavor or sweetness, so it can be added to food and beverage products without affecting the color or taste. We are successfully increasing sales of this new-generation dietary fiber, which makes it possible for products to be both healthy and tasty. In addition, Fibryxa™ Granules, a consumer product providing dietary fiber in granular form, was relaunched in February 2022 as Foods with Functional Claims (FFC), with three individual claims related to maintaining and increasing health, and has proved very popular as a product that meets diverse consumer needs.

## Semiconductor business

### NAGASE's chemical technology is leading the development of the Japanese semiconductor industry

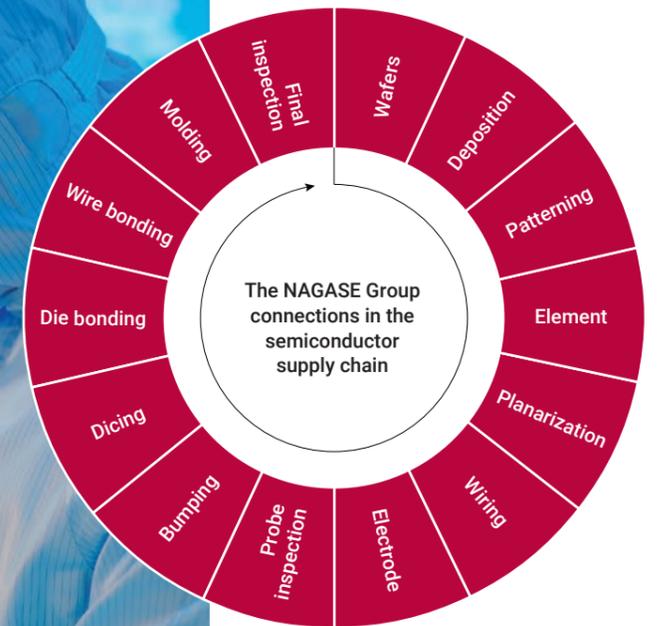
In the past, Japan's semiconductor industry held a global market share of over 50%, but by 2019 this had fallen to around 10%, and the industry was in the doldrums. The NAGASE Group began importing semiconductor materials into Japan as general agent for Kodak in the

1960s, through a joint venture company, and as a result developed a close relationship with semiconductor-related companies in Japan. From 1974 onwards, NAGASE organized the NAGASE Microelectronics Seminar, a study group aimed at enhancing Japanese semiconductor technology on a cross-enterprise basis, and was making a positive contribution to the industry's development across the board.

Today, NAGASE has developed a business handling the semiconductor chemicals required by semiconductor manufacturing's long and complex supply chain, both in Japan and overseas, including the manufacturing and sale of liquid epoxy encapsulant material for semiconductors (a sealing material that protects semiconductors from light and dust), which is manufactured by Nagase ChemteX Corporation. While working to leverage the most up-to-date technological information in this field, we are strengthening our presence within the semiconductor industry.

Various actors in Japan are currently moving into production of most advanced semiconductors and NAGASE is involved in providing solutions that meet a range of needs in this arena. Our chemical-related

knowhow, supplier network, and expertise in transporting hazardous materials have been recognized, and we have been selected as one of the operators collaborating with Rapidus Corporation, who is aiming to domestically mass production of 2-nanometer semiconductors. In this role, we will deliver and transport a wide range of different materials for semiconductor production using transportation methods optimized to each material's particular characteristics. In addition, in order to contribute to the sustainability of the semiconductor industry, Nagase & Co., Ltd., Nagase ChemteX Corporation, and SN Tech Corporation (our joint venture with SACHEM, INC.) are working together on a cutting-edge operation in Japan for the collection and recycling of the high-purity developer (tetramethylammonium hydroxide; TMAH) that is used in semiconductor manufacturing. Taking pride in having supported the semiconductor industry since its early days, and making effective use of the network we have built up, NAGASE is contributing toward a new stage in the evolution of Japan's semiconductor industry through the provision of the kind of value that only we can offer.



The NAGASE Group's business operations extend throughout the complex supply chain. With an extensive network that gives it a comprehensive view of the entire supply chain, NAGASE is able to make a significant contribution to Japan's semiconductor industry.

Armada Nutrition's Utah plant, which commenced operations in 2022



Our water-soluble dietary fiber material, Fibryxa™

ACE 2.0	
Profit structure	Corporate culture
Functions supporting reforms	



**SPECIAL FEATURE 3**

# Making the most of our network of connections to help solve social issues close to home

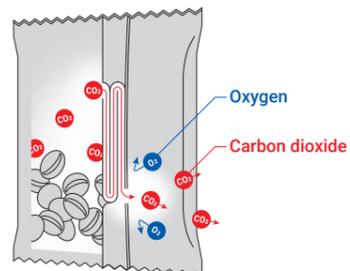
## NAGASE's network: solving global issues in our everyday lives

The NAGASE Group acts as a Business Designer, working in collaboration with our partner companies to develop new services by combining the various technologies that each company brings to the table. In this role, we are creating solutions that will solve social issues.

One example of these is the global challenge of moving away from plastics. We have been developing solutions that can tackle this issue in the arena of our daily lives. Bags for coffee beans feature a plastic valve that allows gases to be released from the bag. It has been calculated that, globally, we will be using 8.5 billion of these valves annually by 2028. Interested in finding a solution, NAGASE entered into a collaboration centered around MIB Co., Ltd.'s gas control technology TiMELESS®, with Nakabayashi Co., Ltd., Oji F-Tex Co., Ltd., and Mitsubishi Chemical Corporation. By bringing together areas each of us specializes

including the various packaging materials, barrier and sealing technologies, we developed asueco, a Nakabayashi Co., Ltd.-branded barrier packaging material to be used for coffee beans. Asueco is drawing attention as a solution that allows coffee beans to maintain their freshness without the use of a valve, reducing the bag's environment impact. TiMELESS®, a unique sealing technology for packaging and other materials, is also starting to be applied to efforts to reduce food waste following successful trials of its use in keeping vegetables fresh.

### TiMELESS®'s gas control technology



**Tadatsugu Tazo**  
Digital Printing Supply Division,  
Performance Chemicals Department

## Our trading company network opened up new possibilities for TiMELESS®

NAGASE saw the enormous potential of the TiMELESS® technology created by MIB Co., Ltd. to contribute to a sustainable society if paired with the right ideas. So, we suggested working together on marketing and product planning and development. The companies that developed asueco are our established business partners, and the connections that we have cultivated over time as a trading company appear to have been meaningful here. We hope that those we collaborate with will see NAGASE's involvement in a project as meaningful access to the optimal partners for the job and the expansion of its business possibilities.

## Facing up to logistics and environmental challenges in the chemicals industry with DX

With a domestic as well as global supply chain network, the NAGASE Group will be inevitably impacted by the "2024 logistics problem." From April 1, 2024, truck drivers' overtime in Japan will be limited under the Act on the Arrangement of Related Acts to Promote Work Style Reform, which is expected to lead to a shortage of drivers and cost increases. In addition, logistics companies are hesitant to deal with transportation of chemical products due to its difficulty from a safety perspective and issues with odors and similar challenges. Transit is therefore becoming an urgent issue for the chemical industry.

Within this context, NAGASE has acquired a license as part of Japan Pallet Rental Corporation's AI-powered joint distribution matching service TranOpt, and has been offering a version of the service specializing in chemical products since November 2023, a first in the industry. This service is aimed at companies that handle chemical products, and we hope that by

managing to achieve joint distribution of these items, which present various challenges in terms of consolidation of loads and other limiting factors, we will contribute to lowering both our customers' logistics costs and GHG emissions.

NAGASE does business with many chemical companies, and we are working to propose solutions to various social issues like the logistics problem through communication with our customers. The establishment of this service is part of these efforts. In response to the deep-seated concerns of our customers who work with chemical products, we utilized our knowledge in this area and our network of chemical manufacturers, logistics companies, and other enterprises to begin trialing this service in May 2022. Together with customers at over 20 companies, we performed multiple rounds of testing and improvement before finally launching the service. Going forward, we will build up transportation routes and corroborative data to further develop the utility of the service, thereby contributing to increasing the efficiency of logistics throughout the chemicals industry.

### TranOpt: a joint distribution matching service and transportation optimization solution

Creating new business opportunities	Reducing costs, maximizing efficiency	Decarbonization
Goals include: finding new transportation routes and partners for consolidated service	Goals include: improving vehicle efficiency on existing routes	Goals include: lowering CO2 emissions and encouraging a modal shift

TranOpt is a service that uses AI to match companies who have goods to ship. By creating opportunities for joint distribution, it contributes to improving the ratio of actual driving distance (distance traveled while loaded relative to total distance traveled) and loading efficiency (load carried relative to maximum possible load), both of which are issues in the logistics industry, as well as reducing GHG emissions.

- Numerous companies' transportation routes are compiled as database, and optimized matches are calculated by an AI. It can not only pair outward and return journeys, but also create a route that combines three others and match companies for load consolidation along a single route.
- The service considers not only transportation route information but also various other factors required for the job.
- Fare estimates (bids) can be provided for each route and be able to choose transportation at an optimized fare.



**Yosuke Nakayoshi**  
Total Solutions Office,  
Performance Chemicals Department

## Aiming to utilize NAGASE's network to optimize AI-powered joint distribution of chemical products

In order to build a joint distribution platform and enhance the accuracy of its matches, we need a great deal of data. We have been able to bring many other companies on board and occasionally act as a bridge between competing firms, from our neutral standpoint as a trading company, to look for more efficient ways of doing things. I think our ability to deliver value in this way is down to NAGASE's unique network of connections with a wide range of chemical companies. Through this initiative, we will be taking action on the logistics issues facing society as a whole, and contributing toward a carbon-free society.

# Reform of Our Corporate Culture

At the heart of our corporate culture reform is the improvement of both economic value and social value. We have therefore set both financial and non-financial KPIs and are moving forward with initiatives in both areas.

## Pursuing economic and social value

### Promoting the setting of both financial and non-financial KPIs

We set improving employee engagement and carbon neutrality as two of our non-financial KPIs in May 2022 and are continuing to monitor these.

#### Materiality (important issues)

##### Use diverse human resources; offer a workplace environment and corporate culture

- Use advanced technologies to improve productivity and leverage **diverse human resources**.
- Provide a **workplace environment** and foster a **corporate culture** as a group where employees with diverse backgrounds have mutual respect and motivate each other.

##### Use of state-of-the-art technology to create new value

- Create new value leveraging advanced technologies and a network of business partners.
- Provide a wide range of solutions based on understanding the true causes of the increasingly complex problems of business partners.

##### Solving social and environmental issues, and globalization

- Solve problems that threaten safety and security, e.g., **climate change** and food and water shortage.
- Contribute to securing and improving **food safety** by utilizing biotech, AI and other advanced technologies.
- Fulfill **health maintenance** demands due to increasingly aging societies in advanced countries.
- Contribute to the acceleration of **globalization** and solve social issues in each region.

##### Corporate governance

- Establish a highly transparent **corporate governance** system.
- Make sustainable **improvement of enterprise value** by balancing economic and social value

## Pursuing efficiency

### 1. Deepening awareness of capital efficiency and improving productivity of core operations

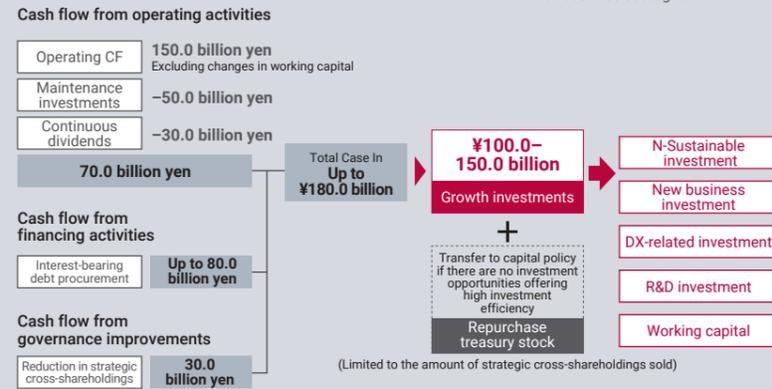
We will generate cash flow through sustained growth and portfolio improvements, ensure financial soundness, and efficiently allocate funds to new business investments and R&D investments for new growth.



### 2. Shareholder returns and repurchase of treasury stock

We will pursue a basic policy of continued dividend increases, with consideration of our consolidated results and financial structure, taking into account our consolidated cash flow and investment situation, and while aiming to increase profitability and reinforce our corporate structure.

We will take a flexible approach to repurchases of treasury stock, with efficiency in mind.



## Human resource development to drive innovation

By creating a positive feedback loop with our respective policies in the areas of human resources, the environment, and culture, we will increase engagement between employees and the Company and achieve sustainable growth and development for both.



## Non-Financial Target 1: Employee engagement improvement

The NAGASE Group defines employee engagement as a state in which companies (organizations) and employees understand each other and improve each other. We have prioritized the promotion of vertical dialogue and horizontal collaboration as a high-priority issue for NAGASE, starting with an Employee Engagement Improvement Project led by management. We are steadily implementing policies Group-wide, with periodic surveys conducted by the whole Group and a target of Nagase & Co., Ltd. (non-consolidated) employee total survey scores of 60 or more set as two of our ACE 2.0 KPIs.

<b>Our vision for the "ideal NAGASE" (long-term)</b>	<b>The value we hope to deliver to our stakeholders</b>	[Employees] • Safe and comfortable work environments • Environments that allow our employees to enjoy their work and bring cheerful energy to their tasks • Being a corporate group that our employees and their families can speak of with pride
	<b>Priority issues (materiality)</b>	[Use diverse human resources; offer a workplace environment and corporate culture] • Use advanced technologies to improve productivity and leverage diverse human resources • Provide a workplace environment and foster a corporate culture as a Group where employees with diverse backgrounds have mutual respect and motivate each other
<b>Our vision for the "ideal NAGASE" (medium-term)</b>	<b>ACE 2.0 non-financial targets (KPIs)</b>	<b>Group companies: Percentage of companies conducting regular engagement surveys: 100% NAGASE (Non-Consolidated): Total score on engagement survey: 60 or above</b>
	<b>Policies behind our initiatives</b>	<b>Talent management, health management, work style reform, diversity and inclusion, human resources policies</b>
	<b>Results of our initiatives</b>	Engagement surveys conducted, work style reform (launched PROJECT BRIDGE [see p. 37], adopted a flexible dress code)
<b>Performance this year (short-term)</b>	<b>Information disclosed</b>	[Employees (non-consolidated)] Numbers of male and female employees (ratio), number of non-regular employees (ratio), employment rate of people with disabilities, number of mid-career hires (sex disaggregated), proportion of management positions held by women [Working styles (non-consolidated)] Retention rate of new graduate hires three years after recruitment, voluntary severance rate, average years of service, average annual salary, total annual working hours, proportion of available paid leave taken, number of employees taking childbirth and childcare leave, number of employees taking human resources development training [Health and safety (non-consolidated + domestic Group manufacturing companies)] Number of work-related accidents, number of fatal accidents, frequency rate of work-related injuries, number of employees taking health and safety training

## Non-Financial Target 2: Carbon neutrality

Among our ACE 2.0 KPIs, we have also set reducing our consolidated Group Scope 1 and 2 emissions by 37% or more as compared to fiscal 2013 and a reduction target that we aim to reach by purchasing and generating our own renewable energies within the Group. We have also set a target of zero Scope 2 emissions for Nagase & Co., Ltd. (non-consolidated). In addition to our trading functions, manufacturing and processing account for a significant portion of NAGASE Group activity. We will work to implement carbon neutrality policies in the four quadrants and along the two axes of trading/manufacturing and visualization/reduction.

<b>Our vision for an "ideal NAGASE" (long-term)</b>	<b>The value we hope to deliver to our stakeholders</b>	[Society and Consumers] • Practicing legal compliance and ethical management, and contributing to the development of local communities • Consideration for the rights, health, and comfort of those involved in our supply chains • Products and services aimed at creating a safe and caring world where everyone can live with peace of mind
	<b>Priority issues (materiality)</b>	• Solve problems that threaten safety and security, e.g., climate change and food and water shortage • Contribute to the acceleration of globalization and solve social issues in each region
<b>Our vision for the "ideal NAGASE" (medium-term)</b>	<b>ACE 2.0 non-financial targets (KPIs)</b>	<b>Consolidated: Reduction rate for Scopes 1 and 2: 37% or more (compared to fiscal 2013)</b> <b>Consolidated: Reduction due to generation/purchase of renewable energy: 35,000 tons or more (cumulative)</b> <b>Nagase &amp; Co., Ltd. (non-consolidated): Scope 2 zero emissions</b>
	<b>Policies behind our initiatives</b>	<b>Overall Measures: Participate in external initiatives, promote environmental investing, consider internal carbon tax</b> <b>Visualization: Visualize emissions in the supply chain, calculate life-cycle assessments for strategic products</b> <b>Reduction: Provide low carbon products and reduction solutions and introduce green facilities</b> <b>Improve manufacturing processes and use renewable energy (Purchase/in-house generation)</b>
	<b>Results of our initiatives</b>	Our Carbon Neutral Declaration, announcement of endorsement of the TCFD recommendations, investment in Zeroboard, Inc., starting life-cycle assessments via our domestic manufacturing subsidiaries
<b>Performance this year (short-term)</b>	<b>Information disclosed</b>	• Greenhouse gas emissions (Scopes 1, 2, and 3) • Scope 1 greenhouse gas emissions breakdown by emissions type • Energy usage, electricity consumption, production emissions intensity (tons of CO <sub>2</sub> /tons of goods produced)

**SPECIAL FEATURE 4**

# Improving employee engagement through reforms to both environment and culture

**The ideal conditions for fostering innovative human resources**

The NAGASE Group is working to create comfortable, safe workplaces where employees can bring a high degree of creativity to their work, to promote development of a corporate culture that embraces challenge and the individuality of our diverse personalities, and to develop innovative global talent. Through these commitments, we aim to increase employee engagement.

Promotion of diversity is indispensable to enacting these strategies, and we are implementing a variety of measures to

support it at each career step, from recruitment to settling into the job to promotion.

**Toward an efficient, creative and healthy work environment**

PROJECT BRIDGE is an initiative to update our offices and working style. As part of this, we introduced Activity-Based Workplace (ABW) in August 2022 at our Tokyo Head Office, enabling employees to choose where to work depending on that day's duties and circumstances. We have also adopted a flexible dress code, where employees can choose their own

clothing, optimized to that day's duties.

PROJECT BRIDGE promotes discussions and initiatives to build a comfortable work environment for our diverse employees that will allow them and their families—all of whom we consider to be our assets—to enjoy both physical and mental health.

**Opportunities for dialogue  
1. Group discussions with management**

In fiscal 2022, we ran N-Dialogue sessions, in which one of our directors and four to five of our division supervisors met to

discuss various specific themes.

NAGASE's employee engagement survey identified vertical dialogue and horizontal collaboration as issues, and N-Dialogue was established as one measure to improve these. Through their discussions, both sides were able to learn about the other's accumulated experience and values and discover where these differed, with the aim of fostering empathy and new understandings and inspiring people to behave differently at work going forward.

**2. Connection among younger employees**

In another measure to promote vertical dialogue and horizontal collaboration, we have established the Nagase Good Company Project, which encourages new employees and senior employees to get together in groups of four for monthly hour-long meetings. Originally proposed by employees as a way to support new employees during the COVID-19 pandemic in 2021, we have continued the project as a way to provide opportunities for younger employees to connect with one another.

**Initiatives to support work-life balance**

By enhancing our systems and measures to support employees to balance childcare and other caring responsibilities with their work, we are focusing on developing a corporate culture that facilitates staying in work. The number of male employees taking childcare leave has been increasing in recent years.



**Hitomi Kobana**  
Pharma-Medical Products Section,  
Life & Healthcare Products Department

**Discovering a mindset for embracing change**

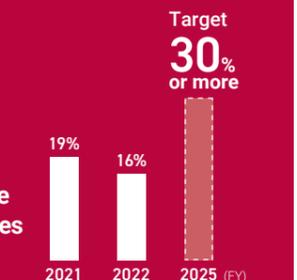
I took part in PROJECT BRIDGE as an ambassador of NAGASE's ABW program and the Company's new working style. Issues that came up in our on-site, cross-departmental discussions on operating rules for ABW and our approach to internal communications are now being incorporated into our workspaces at NAGASE's Tokyo Head Office. We all feel uncertainty when faced with big changes, but I learned that each of us can lean into and enjoy the changes to our working environment by taking ownership of the Company's new working style.



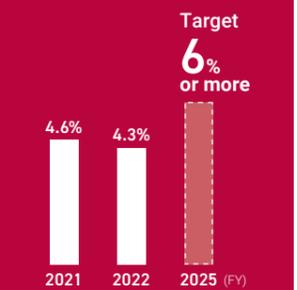
1 The Nagase Good Company Project, which encourages connection among younger employees  
2 ABW at our Tokyo Head Office, allowing employees to choose where they work to suit their working style  
3 N-Dialogue, where management and mid-level employees can engage in dialogue

ACE 2.0	
Profit structure	Corporate culture
Functions supporting reforms	

Proportion of women among new career-track hires (Nagase & Co., Ltd., non-consolidated)



Proportion of management positions held by women (Nagase & Co., Ltd., non-consolidated)



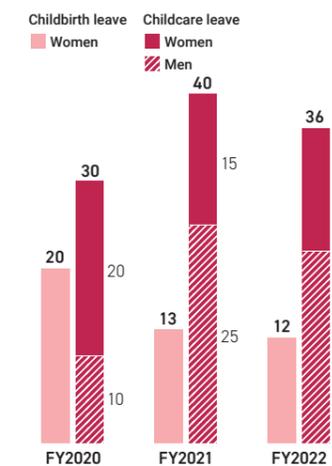
**Holding group discussions at which our female director meets with female mid-level employees**

In order to create comfortable working environments where our female employees can demonstrate their abilities, we are holding group discussions at which our female director meets with employees, which are leading to increased engagement among female employees, proactive career planning, changes in attitudes to working style, and more.

In fiscal 2022, all of our female career-track employees held discussions with our female director in small groups of four to five.

NAGASE has been striving to actively harness women's potential, including by hiring women as career-track employees, promoting them to management, and expanding their opportunities to advance, among other efforts. However, the proportion of women among our career-track employees remains relatively low. We have therefore added fiscal 2025 targets for the proportion of women among new career-track hires and management positions held by women to our quantitative goals.

**Our childbirth and childcare support systems (Nagase & Co., Ltd., non-consolidated)**



Percentage of male employees taking childcare leave (Nagase & Co., Ltd., non-consolidated)

**59.5%**



**Kosuke Tsukahara**  
Functional Resin Division,  
Advanced Functional Materials Department

**Childcare leave contributing to fulfillment at home and at work**

At the times when looking after our newborn twins was a bit crazy, being able to devote my time to looking after them together with my wife was invaluable. I am so grateful for the professional support I received from my managers and colleagues.

Even now that I am back at work, I have options that allow me to efficiently fulfill my childcare responsibilities and I have greater peace of mind in both my private life and my professional life, which also means I am better able to concentrate on my work. My image of childcare leave has totally changed, and I also feel more engaged at work.

ACE 2.0	
Profit structure	Corporate culture
Functions supporting reforms	

**SPECIAL FEATURE 5**

# Expanding connections along supply chains and supporting society-wide decarbonization



## “Visualizing and reducing” our GHG emissions in our “trading and manufacturing” in the aim of carbon neutrality

The NAGASE Group possesses manufacturing and processing capabilities as well as its trading capacities. As we work to achieve carbon neutrality, we have accordingly classified our strategies into four quadrants along the two axes of “trading business/manufacturing business” and “visualization/reduction.”

On the trading side, we are enhancing our initiatives by combining visualization—in the form of developing “zeroboard,” a service that visualizes GHG emissions throughout supply chains—and reduction, in the form of offering low-carbon products and solutions for GHG emissions reduction tailored to the challenges our customers are facing.

On the manufacturing side, in addition

to installing solar power generation facilities and purchasing renewable energies, we are also sharing case studies throughout the Group of production process improvements aimed at reducing greenhouse gas emissions in our manufacturing and processing.

The NAGASE Group will continue to follow the pathway toward decarbonization and carbon neutrality in collaboration with our customers, partner companies and everyone along our supply chains.



Using renewable energies for in-house generation (Hayashibara Co., Ltd.)

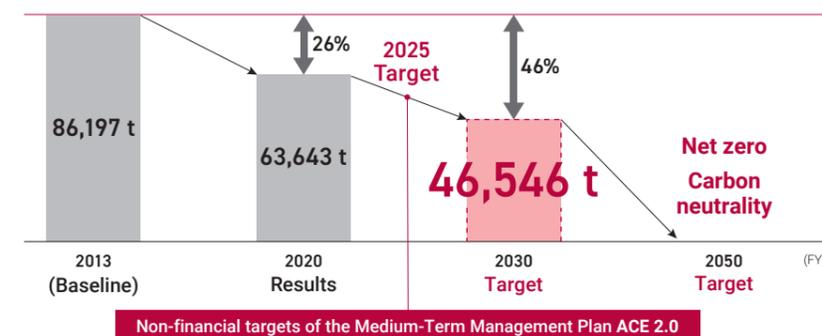
### A framework taking climate change risks and opportunities into account

The NAGASE Group recognizes climate change as one of its important management issues. To facilitate group-wide action on this issue, the Group has established a Sustainability Committee and a Risk Management & Compliance Committee—both overseen by the Board of Directors—which consider and discuss policies, issues, and other matters. Alongside analysis of the medium- to long-term risks and financial impacts presented by climate change, we also aim to seize the opportunities it

offers and are implementing a business strategy designed to develop the new products and services that will be required in a carbon-neutral and recycling society.

In the aim of achieving carbon neutrality, we also formulated the NAGASE Group Carbon Neutral Declaration in January 2022, which sets out a target of achieving net zero Scope 1 and 2 emissions by 2050. In addition, we have set carbon neutrality-related KPIs as part of the non-financial targets in our Medium-Term Management Plan **ACE 2.0**, which is currently in operation.

NAGASE Group Greenhouse Gas Emissions: Results and Targets (Scopes 1 and 2)



### Non-financial targets of the Medium-Term Management Plan ACE 2.0

FY2022 non-financial KPI outcomes  
Greenhouse gas emissions (Scopes 1 and 2)

# 37% reduction

We have set a target of reducing our consolidated Scope 1 and 2 emissions by 37% or more as compared to 2013 levels by 2025, with a (cumulative) reduction of 35,000 tons or more through generation and purchasing of renewable energies. We have also set a target of zero Scope 2 emissions for NAGASE & CO., LTD. (non-consolidated).

### Key Climate Change Risks and Opportunities

Category	Details	Degree of Impact
Transition Risks	Policy and Legal Regulations for carbon pricing, emissions trading, etc. (materials manufacturers with large GHG emissions may pass their costs onto prices, and this impact is being considered)	Large
	Market and Technology Consumer preferences for petrochemical products decline, resulting in lower market demand and sales	Large
Opportunities	Products and Services Provide alternative materials that help to improve energy efficiency (lighter weight, thermal insulation and heat dissipation, etc.)	Large
	Markets Provide emissions visualization and reduction solutions in the supply chain	Large

### Initiatives to realize carbon neutrality by 2050 (over the two axes and four quadrants)

Overall Measures					
Participate in external initiatives		Promote environmental investing		Examine internal carbon tax	
Trading			Manufacturing		
Measure 1	Visualize emissions in the supply chain	Visualization	Measure 2	Life-cycle assessments for strategic products	
Measure 3	Provide low-carbon products and reduction solutions, introduce green facilities, etc.	Reduction	Measure 4	Improve manufacturing processes, use renewable energy (purchase/in-house generation), etc.	

SPECIAL FEATURE 6

# Contributions toward Decarbonization in the Supply Chain

Case Study 1 **NAGASE** × Partner companies  
**All-inclusive support for calculating corporate GHG emissions and management for decarbonization**

Decarbonization initiatives require collaboration between companies, but we will be unable to devise concrete reduction measures for GHG emissions in the supply chain without the aid of visualization. As part of our efforts to increase society-wide awareness of decarbonization and advance our initiatives in this area, NAGASE has invested in Zeroboard Inc. and provides GHG emissions calculation and visualization services that cover the entire supply chain, in the form of "zeroboard."

"Zeroboard" allows users to calculate and visualize GHG emissions generated not only by their own company but through their business activities and

related supply chains. In addition to allowing companies using the service to link and share GHG emissions data with one another, "zeroboard" also helps with workload and cost issues by providing an easy-to-use interface and offering low-cost plans that make it simple for SMEs to adopt the service.

Using visualized GHG emissions data, we provide help with all aspects of corporate management for decarbonization, with our all-inclusive support even covering development and provision of solutions.

In this way, we are leveraging the NAGASE Group's unique strengths, including the expertise we have developed in the chemical industry

since our founding and the strong relationships with each of our business partners both upstream and downstream in the supply chain.



**Hiromu Sugita**  
Corporate Sustainability Office,  
Corporate Planning Department

**Taking supply chain visualization in new directions**

The Sustainability Linked Loan Framework that we have put forward is a new approach allowing us to progress toward carbon neutrality alongside our business partners.

Currently, it can be hard to see the impacts of our work to visualize our GHG emissions. In this context, we hope that this framework will provide opportunities to make new connections along supply chains for chemical products.

Case Study 2 **NAGASE** × Partner companies  
**NAGASE is first trading company to have groundbreaking Sustainability Linked Loan Framework selected as model case**

The NAGASE's Sustainability Linked Loan (SLL)\*1 Framework, which we developed together with MUFG Bank, Ltd., was submitted in response to the Ministry of the Environment's Green Finance Model Case Creation Project and selected as a model case.

Within our framework, planning and provision of SLLs are coordinated by MUFG Bank, Ltd., who are high-level experts in this field, with NAGASE expertise in supporting management for decarbonization utilized in developing the framework. Our framework designates as sustainability performance targets\*2 not only GHG emissions themselves but also the use of actual figures for supplier GHG emissions, and it is designed to facilitate NAGASE's commitment to

visualization and reduction of GHG emissions throughout the entire supply chain. These features were positively received and contributed to the framework's selection as a model case.

\*1: Loans that encourage borrowers to achieve ambitious sustainability performance targets (SPTs)

\*2: ESG targets based on the management strategy of the issuing body that set the terms of issue for the Sustainability Linked Bond



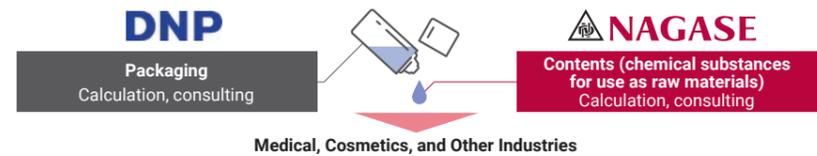
A seminar, organized by NAGASE, to discuss the utilization of SLL in the chemical sector

Case Study 3 **NAGASE** × Partner companies  
**Launching a product carbon footprint calculation consulting service for the cosmetics and pharmaceuticals industries**

Despite the high GHG emissions in the cosmetics and pharmaceutical industries at all stages up to and including distribution, cost barriers mean that we are seeing little action to remedy this issue.

In July 2023, NAGASE, in association with Dai Nippon Printing Co., Ltd. (DNP), launched a consulting service for product carbon footprint (PCF) calculation, which visualizes GHG emissions throughout the product life cycle, from raw materials to packaging.

DNP has been working for many years to calculate GHG emissions for the full life cycle of packaging, from procurement of raw materials to manufacturing and disposal or recycling. NAGASE, meanwhile, is furthering its work to support visualization and reduction of GHG emissions throughout supply chains. We are bringing together the strengths of both companies to create an enhanced support service for PCF calculation throughout the product life cycle.



Case Study 4 **NAGASE** × Local government  
**Contributing to local communities and economies through support for Forest Credit Creation**

Collaboration with the state and local governments is vital for the progress of society-wide decarbonization. Nagase & Co., Ltd. is active under the Ministry of Economy, Trade and Industry's GX League Basic Concept, which encourages industry, government, and academia to work together to discuss ways to achieve

transformation throughout our social and economic systems and create new markets. As one of our initiatives, in August 2022, Nagase & Co., Ltd. entered into an agreement with the town of Yusuhara in Kochi Prefecture aimed at piloting a Forest Credit Creation scheme. Under this agreement, Nagase & Co., Ltd. supports



**Yoshiyuki Shiobara**  
Corporate Sustainability Office,  
Corporate Planning Department

**Contributing to building a carbon neutral society by supporting PCF calculation**

When we calculate PCFs, we not only discover the levels of GHG emissions throughout a product's life cycle, we also use the results to identify processes with high GHG emissions and aim to improve them.

We will continue to move forward with these commitments, working to create an enhanced support service for PCF calculation through our partnership with DNP and at the same time—as a company that finds the solutions to manufacturing problems in the raw materials themselves—aiming to create value for the customers who will purchase our products after they have gone through the PCF calculation process.

Yusuhara's management of its forestry resources and utilizes our technological knowhow, the latest ICT technologies, and other tools to contribute to stimulating the town's economy and creating a model case of sustainable project co-creation.

We launched a further three initiatives in fiscal 2022. In collaboration woodinfo (a provider of forest management data systems), we piloted forest surveys using drones and portable laser technologies and explored possibilities for credit creation and forestry optimization. We are also moving ahead, together with BIOME Inc., with an initiative to turn the rich ecosystems that are protected by the town of Yusuhara's forest management into tourist attractions. Finally, we are using our expertise in materials R&D to develop high-quality scent products. Through these initiatives, we aim to contribute to sustainability in society, including sustainability in local communities.



① A thriving forest in Yusuhara  
② A snapshot from the signing ceremony for Yusuhara and NAGASE's agreement  
Left: Hisato Yoshida, Mayor of Yusuhara  
Right: Ryushei Tashima, then General Manager, Corporate Strategy Department, Nagase & Co., Ltd.

# Our Sustainability Policy and Framework

The NAGASE Group has identified priority issues (materiality) for sustainability based on providing value to stakeholders.

Through the establishment of the Sustainability Basic Policy as a way of thinking shared throughout our value system along with the pursuit of activities to “Identify,

Develop, and Expand” espoused in the NAGASE Vision, we will address issues affecting our business partners and society as a whole, thereby contributing toward the realization of a sustainable society.

## Sustainability Basic Policy

- |  |  |  |
|--|--|--|
| <p><b>1. Integrity in business activities</b></p> <ul style="list-style-type: none"> <li>● We shall conduct our corporate activities in compliance with all applicable national and regional laws and regulations, and in keeping with societal norms and ethical standards.</li> <li>● We shall strive to prevent corruption of all kinds and maintain healthy and proper relations with our partners and government entities.</li> <li>● We shall strive to provide safe, high-quality products and services, and seek to maintain and improve the value to our customers and partners.</li> <li>● We shall safeguard the benefit to the consumer through maintaining and promoting fair and free competition.</li> <li>● We shall strive toward rigorous management and protection of information about our customers and our company.</li> </ul> | <p><b>2. Positive relations with society</b></p> <ul style="list-style-type: none"> <li>● We respect human rights and do not permit any sort of discriminatory conduct. We absolutely refuse to accept infringements of human rights such as forced labor or child labor.</li> <li>● We respect the cultures and practices of national and regional societies, maintaining positive relations with society.</li> <li>● We shall strive to ensure health, safety, and appropriate communication with our diverse stakeholders.</li> <li>● 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.</li> <li>● We shall proactively disclose corporate information as appropriate.</li> </ul> | <p><b>3. Consideration for the environment</b></p> <ul style="list-style-type: none"> <li>● We shall comply with national and regional environmental regulations.</li> <li>● We shall contribute to the maintenance of the global environment, including limiting climate change and preventing contamination, promoting reduction in the environmental footprint of our business activities through suppression of greenhouse gas emissions and energy consumption.</li> <li>● We shall, through environmentally-conscious products and services, provide information to our customers about appropriate product usage, recycling, and disposal methods.</li> <li>● We shall contribute broadly to society through environmental conservation activities in various countries and regions.</li> <li>● We recognize the importance of biodiversity and shall strive to conserve ecosystems.</li> </ul> |
|--|--|--|

Note: Information about the NAGASE Group’s sustainability is also available on our website. <https://www.nagase.co.jp/english/sustainability/>

## Sustainability Committee

We have established the Sustainability Committee, chaired by the Representative Director and President with the aim of continuously increasing the NAGASE Group’s corporate value by contributing solutions to social and environmental issues through our corporate activities. The committee is composed of a chair and at least two members, who are appointed by the president from the employees of the Company and its Group companies. The Corporate Sustainability Office conducts business execution (practical implementation) based on the Sustainability Basic Policy.



## The NAGASE Group’s materiality (important issues)

The NAGASE Group conducted an external environmental analysis during the formulation of its medium-term management plan ACE 2.0 and identified the most important issues to both NAGASE and its stakeholders. We also identified important issues (materiality) in sustainability based on the value we provide to our stakeholders. We use the process shown at the top of the right page to formulate KPIs based on the identification of materiality, and then manage them.



\*1 Assessed as important matters that produce great change to the respective needs of employees, business partners, local communities, consumers, and shareholders.  
\*2 Assessed as important matters that offer opportunities for new businesses, opportunities for existing businesses, threats to existing businesses, and threats to business continuation.

## Formulation and monitoring of KPIs

FY2020	FY2021	FY2022	FY2025
<b>Identification of materiality</b> Conducted discussion in the NAGASE Group sustainability promotion project, and identified materiality to be addressed in the medium-term management plan ACE 2.0	<b>Establishment of projects and formulation of KPIs</b> 1) Employee Engagement Improvement Project 2) Carbon-Neutral Project	<b>KPI management and materiality (monitoring)</b> Set KPIs for “Carbon neutrality” and “Employee engagement improvement” as FY2025 medium-term management plan targets for carbon neutrality. Began managing progress on materiality, mainly through KPIs.	<b>Achieve targets of medium-term management plan</b>

## Materiality and KPIs

The NAGASE Group has identified materiality for each group of stakeholders. In May 2022, KPIs were set for materiality for employees and society/consumers, and the Group will promote sustainability management while checking its progress on these.

Stakeholders	Materiality	Report on KPIs and initiatives	Relevant SDGs
Employees	<b>Use diverse human resources; offer a workplace environment and corporate culture</b> <ul style="list-style-type: none"> <li>● Use advanced technologies to improve productivity and leverage diverse human resources.</li> <li>● Provide a workplace environment and foster a corporate culture as a Group where employees with diverse backgrounds have mutual respect and motivate each other.</li> </ul>	<b>KPIs</b> Group companies ● Ratio periodically conducting engagement survey: 100% NAGASE & Co. (non-consolidated) ● Total score on engagement survey: 60 or above	 
Business partners	<b>Use of state-of-the-art technology to create new value</b> <ul style="list-style-type: none"> <li>● Create new value leveraging advanced technologies and a network of business partners.</li> <li>● Provide a wide range of solutions based on understanding the true causes of the increasingly complex problems of business partners.</li> </ul>	<b>Report on initiatives</b> We have established the three N-Sustainable business fields: Environment and Energy, Next-generation Communications, and Life sciences. By 2025, we aim to achieve operating income of ¥5.0 billion or more in these businesses (based on internal management).	 
Society and consumers	<b>Solving social and environmental issues, and globalization</b> <ul style="list-style-type: none"> <li>● Solve problems that threaten safety and security, e.g., climate change and food and water shortage.</li> <li>● Contribute to securing and improving food safety by utilizing biotech, AI and other advanced technologies.</li> <li>● Fulfill health maintenance demands due to increasingly aging societies in advanced countries.</li> <li>● Contribute to the acceleration of globalization and solve social issues in each region.</li> </ul>	<b>KPIs</b> Consolidated ● Reduction rate for Scopes 1 and 2: 37% or more (compared to 2013) ● Reduction amount due to generation/purchase of renewable energy: 35,000 tons or more (cumulative) NAGASE & Co. (non-consolidated) ● Scope 2 zero emissions » For more details, see P.40	   
Shareholders	<b>Corporate governance</b> <ul style="list-style-type: none"> <li>● Establish a highly transparent corporate governance system.</li> <li>● Make sustainable improvement of enterprise value by balancing economic and social value.</li> </ul>	<b>Report on initiatives</b> We have been presenting a directors’ skill matrix, and as a company listed on the Tokyo Stock Exchange Prime Market, we are also making progress on disclosing information in line with the TCFD recommendations.	

## Organizations responsible for implementing materiality initiatives

Besides our trading company function, the NAGASE Group also includes Group companies with manufacturing functions, and we have positioned the pursuit of carbon neutrality and enhancement of employee engagement as common issues that all Group companies need to address. To this end, two projects have been established under the Sustainability Committee, and the project leaders are working, with a strong sense of responsibility, to promote materiality-related initiatives. Regarding carbon neutrality, we are also proceeding with related measures from a manufacturing perspective,

including the discussion of emissions reduction targets and reduction strategies by the Environmental Subcommittee of the Group Manufacturing Industry Cooperation Committee. The NAGASE Group Carbon Neutral Declaration specifies a goal of reducing Scope 3 emissions by at least 12.3% (compared to 2020). We are very much aware of the need for collaboration and coordination in the supply chain, and we are undertaking supply chain initiatives that include collaboration with business partners and participation in the GX League.

# Further Acceleration of Digital Transformation (DX)

## Basic approach

The NAGASE Group is further enhancing the strengths provided by a business network and industry knowledge built up over a period of more than 190 years by integrating them with digital technology, and is proceeding with system building and human talent cultivation that will lead to an enhancement of corporate value.

We are also speeding up the building of the foundations needed for digital marketing. In fiscal 2022 we launched our new English-language global website, with the aim of spreading awareness of the value that NAGASE provides throughout the world, and increasing the range of digital touch-points for communicating with our customers.

Going forward, we will be proceeding with the creation of websites for each region that we operate in, and by addressing customers' needs in more detail, we will be supporting the operating activities of the NAGASE Group as a whole.

## Making marketing and operating activities more systematic and more efficient

### Expanding the customer base through digital marketing

The NAGASE Group has around 110 Group companies that carry out their business activities across a wide range of fields and using different business models, but there has been an

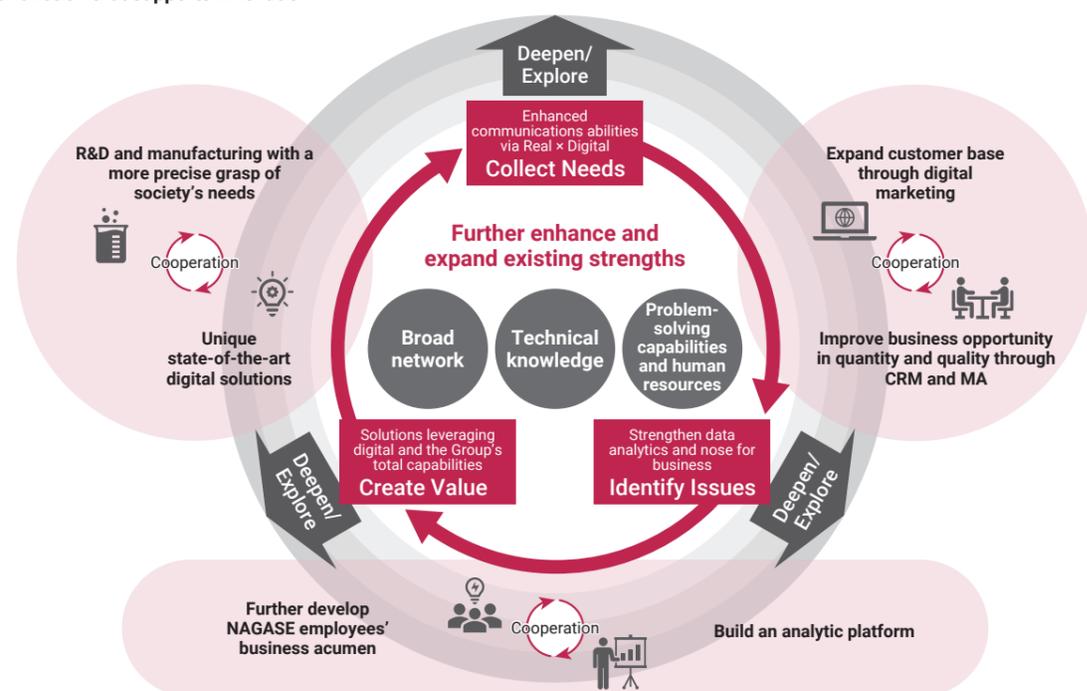
issue with not effectively sharing knowledge and business knowhow across organizations and companies. To address this, we have been integrating the Group's key systems, such as its enterprise resource planning (ERP) and customer relationship management (CRM\*1) systems, and used this integration to start accumulating data from both physical operating activities and digital marketing. By utilizing data according to clearly specified rules, not only are we able to make the work of our sales personnel and sales organization more efficient, we are also able to deliver solutions that already have a track record of success to new customers, and to expand the range of industry usage fields and applications for products that had previously only been sold to specific industries, thereby helping to solve problems for new customers, and aiming to expand our sales.

### Increasing the number and quality of business consultations through CRM and MA\*2

By sharing information through CRM systems, the NAGASE Group aims to strengthen the overall capabilities of the Group as a whole. Currently, we are proceeding with the adoption of a CRM system that will be shared by Group companies both within and outside Japan.

In the future, we will be striving to realize centralized management of usage methods and solutions on a group-wide basis, taking the system login rate and such as indicators.

## Enhance existing strengths through the use of DX as a function that supports innovation



\*1: Customer Relationship Management \*2: Marketing Automation

## Training and cultivation of DX talent

### Human talent cultivation program

The NAGASE Group has adopted a two-stage human talent cultivation model, defining employees who have acquired a range of digital knowhow relating to the full sweep of the company's operations and who are capable of using this knowledge effectively as "DX talent," and defining employees who are able to play a leading role in using digital knowhow to develop new solutions and develop new markets as "marketers."

We believe that it is vital for the NAGASE Group's DX to have DX talent account for over 50% of all employees. While striving to strengthen employees' digital capabilities through e-learning, we are aiming to cultivate 100 marketers by fiscal 2025, and have DX talent employees make up more than 50% of all employees by fiscal 2026.

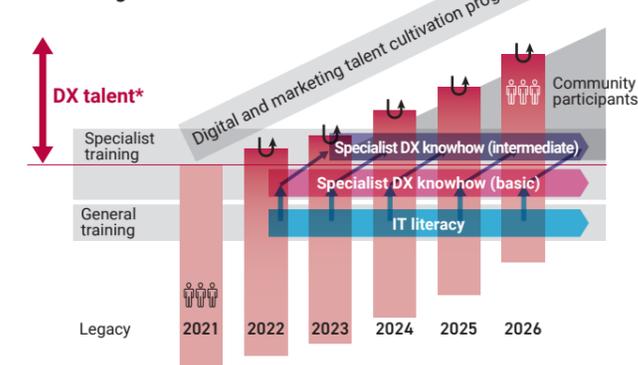
### Launching a marketer community

So that Marketers can learn from each other across the boundaries of individual businesses, in fiscal 2023, NAGASE established a participant-centric learning community for all NAGASE Group employees involved with digital marketing.

The learning community provides close support for

marketing initiatives and activities, and provides a venue for the sharing and co-creation of related knowledge, while also analyzing how frequently the Group's marketing websites are accessed, and aiming to enhance the digital skills of all employees participating in the community by sharing, on a common portal, data obtained by employees themselves, broken down by topic, such as search engine optimization (SEO) strategies, MA usage, etc.

### DX training framework

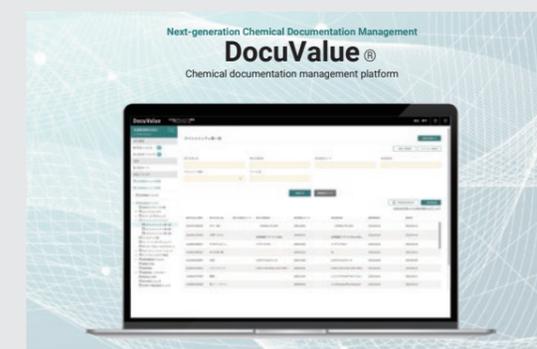


\* DX talent: Employees who have acquired a range of digital knowhow relating to the full sweep of the company's operations and who are capable of using this knowledge effectively

## Providing the DocuValue chemical document distribution management platform

In February 2023, NAGASE began providing the DocuValue cloud-based service, which aims to realize centralized management of the documents that are sent when transferring or providing chemicals.

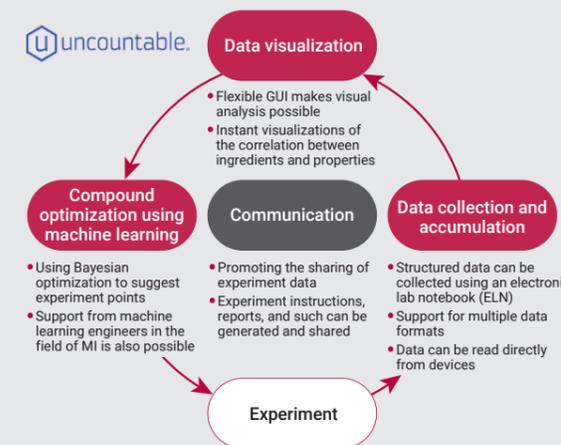
By avoiding the situation where the receipt and custody of documents become too dependent on individual employees, and by facilitating the visualization of inter-company communication, DocuValue supports better organized document management, and reduces the burden on every company in the chemical supply chain.



## Selling Uncountable, a digital service tailored to meet the needs of the materials development sector

Developed and supplied by Uncountable Inc., Uncountable is a data management platform that allows the digitalization of every stage in the materials development process, from experimental data collection through to analysis and plan formulation. In May 2022, NAGASE entered into a distribution agreement for Uncountable, and began selling this platform in Japan from October 2022 onwards.

By making possible the centralized management of vast amounts of research and performance data that in the past would have been dispersed and managed by individual employees, Uncountable promotes the sharing of data between researchers and provides powerful support for customers' materials development.



# Working Group-Wide to Contribute to Local Communities and Development of the Next Generation

## Basic approach

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

## Contributing extensively to society

### Hayashibara Life Seminars

Since fiscal 2017, Hayashibara Co., Ltd. has been holding the Hayashibara Life Seminars, a lecture series aimed at the general public.

Lectures are on themes closely related to people's lives and deliver useful information to consumers.

In 2023, Dr. Yuji Naito of the Kyoto Prefectural University of Medicine gave a talk on the relationships between aging and digestive health and how these relate to extending healthy-life expectancy, entitled "Gut Health for Mental and Physical Health! Gut Microbiome Diversity Is the Secret to Healthy Longevity."



5th Hayashibara Life Seminar

### Chemistry experiment study for elementary school students

Since 2019, Nagase ChemteX Corporation has been holding an event to invite the Tatsuno Kodomo Eco Club, an environmental learning group for elementary school students run by the city of Tatsuno in Hyogo Prefecture, to the company's Harima Plant.

Participants enjoy learning through simple experiments using the Company's environmentally friendly products and explanations of how factory wastewater is purified, and the participants have received the program well.



Presenting the results of an experiment at a hands-on event

## Nurturing local culture

### Hayashibara Museum of Art

The Hayashibara Museum of Art is supported by one of the NAGASE Group companies: Hayashibara Co., Ltd. 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 of 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.

In 2023, the museum's main building (designed by renowned architect Kunio Maekawa) and the nagaya gate and treasuries that were relocated to the site at the end of the 19th century were designated as national Registered Tangible Cultural Properties (Structures). The museum will also mark the 60th anniversary of its opening in 2024, and is planning an exhibition and a variety of events to commemorate this milestone.



Hayashibara Museum of Art (nagaya gate)



The museum's main building

## Supporting and training technologists

### 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.

In 2023, a total of 25 research grant winners were selected from 301 applicants in the fields of organic chemistry and biochemistry, and each received a grant of ¥2.5 million and the Nagase Foundation Award.



The award winners with members of the Foundation



The Foundation's Chairperson gives a speech at the award presentation ceremony

## Supporting athletes

### Supporting athletes

The NAGASE Group provides support for athletes. We are proud to count visually impaired runner Shinya Wada and his escort runner Takumi Hasebe among our employees. The pair won silver medals in the 1500 m (T11) and bronze in the 5000 m (T11) at the Tokyo 2020 Paralympic Games. Following this with a new world record in the T11 marathon at the Osaka Marathon in 2023 with a time of 2:24:29, they are continuing to achieve incredible successes in the international arena.



## Promoting the employment of people with disabilities

### NAGASE MIRAI Corporation

In order to deepen connections with the local community and

provide safe, stable working opportunities where people with disabilities and older people who would like to remain in the workforce can work with peace of mind, Nagase ChemteX Corporation established NAGASE MIRAI Corporation (NAGASE MIRAI), a wholly owned subsidiary, on April 3, 2023. NAGASE MIRAI was recognized as the first special subsidiary (a subsidiary that gives special consideration to employees with disabilities) in the city of Tatsuno, Hyogo Prefecture, in May of the same year.

With "bringing warmth to the different connections between us" as its guiding purpose, NAGASE MIRAI has begun providing general, janitorial, and other contract services at Nagase ChemteX Corporation's Harima Plant. We will aim to provide further employment opportunities in the production, processing, and sales of agricultural produce, as well as other areas, in the future, while giving close attention to local issues.



Recognition as a special subsidiary



Local clean-up operation

## Special sponsors of the NAGASE Cup athletics competition

Since 2022, as part of our commitment to social initiatives, NAGASE has sponsored the WPA Approved NAGASE Cup Para Athletics Competition (the NAGASE Cup), hosted by Japan Para Athletics. In September 2023, the second NAGASE Cup was held at the Japan National Stadium.

Based on a foundational concept of being an inclusive tournament in which everyone can participate, the NAGASE Cup is an athletics competition where athletes come together to compete regardless of disability status, age, or nationality. In 2023, the event was attended by a total of 1,424 athletes from Japan and overseas, including approximately 450 para-athletes, and saw the setting of numerous records, including a world record. A total of approximately 6,600 spectators attended over the two days of the event, and the 120 children running energetically around the stadium as they took part in the newly established Elementary School Division were met with enthusiastic cheers of support. During the tournament, we received comments from many athletes and spectators in agreement with the concept behind the competition and stating that they would like to take part next year, too. Approximately 50 NAGASE Group employees and other affiliates were involved in the tournament as volunteers, providing operational support.

Since welcoming visually impaired runner Shinya Wada

onto our staff in 2018, the NAGASE Group has been supporting sports in various ways and has held a range of related events. This has given us all the opportunity to truly experience the fighting spirit of athletes, with and without disabilities, going after new records, and the social impact of their amazing efforts, has inspired us to consider what we can give to society; this is the background to the launching of the NAGASE Cup. Going forward, we will continue to work to develop the tournament as a space where all athletes, spectators, and volunteers can encounter new experiences and values, as just one of our efforts toward creating a safe and caring world where everyone can live with peace of mind.



Delivering next.

# Governance

We recognize our responsibility to society and offer beneficial products and services while maintaining the highest standards of integrity.

## Governance Summary

Institutional Format	Company with Audit & Supervisory Board
Number of Directors	8
Outside Directors	3
Outside Audit & Supervisory Board Members	2
Chairperson of the Board	Chairman
Term of office stipulated in Articles of Incorporation	1 year
Separation of Management and Business Execution	Executive officer system
Board Member Appointment	Nomination Committee
Director Compensation	Compensation Committee [1] Basic salary [2] Performance-linked compensation (in cash) [3] Performance-linked compensation (non-monetary)
Compliance/Risk Management	Risk Management & Compliance Committee
Internal Control	Internal Control Committee
Sustainability	Sustainability Committee
Independent Auditor	Ernst & Young ShinNihon LLC

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## Interview with the Outside Directors



**Ritsuko Nonomiya**

**Hoping for concrete measures to realize diversity**

In 2022, I was lucky enough to have the opportunity to take part in a town-hall meeting with some of NAGASE's female employees, which was a very meaningful experience in terms of being able to learn about the NAGASE Group. I hope that the company will continue to hold this kind of event in the future, and I am looking forward to meeting more NAGASE employees.

To be frank, my impression of NAGASE is that, viewed from a diversity perspective, to some extent it lags behind the average level of diversity achieved by Japanese corporations. As many employees have been with the company for a long time, everyone tends to be "reading from the same hymn-sheet," but on the other hand, it may be more difficult for people to express dissenting views. Going forward, I hope that the company will take concrete steps to address this issue.

**Deciding whether to withdraw from certain businesses to achieve future growth is also important**

I have come to feel that, while NAGASE has adopted a stance of adapting flexibly to change, it will need to continue transforming itself in order to realize further growth. The challenge will be to realize change from within as early as possible while maintaining the essential features that make NAGASE what it is. In the past, NAGASE has focused on launching new businesses; in the future, I think it will also be important for the company to be resolute about withdrawing from certain businesses.

To provide support for transformation and growth, both the Executive and Outside Directors (myself included) will need to think more deeply and develop an in-depth understanding of what is needed. I believe that it would be good to have an atmosphere in which directors feel comfortable about expressing contrary opinions during Board meetings, and in which such opinions can be discussed freely, including by non-executive employees. But before building consensus and reaching a decision, it is important to look at issues from different perspectives, to present opinions based on differing viewpoints, and to engage in "three-dimensional" decision-making.



**Noriaki Horikiri**

**Balancing long-term development and short-term results**

One thing that companies with a long history have in common is that, while valuing their traditions, they are willing to take on the challenge of innovating and transforming themselves to keep pace with changing times. In the manufacturing sector, there is a need for a seemingly contradictory corporate posture of "Move fast but take it steady." For example, the biotech business offers immense potential, but the process of going from basic research to social implementation takes a long time. As I see it, the need to strike the right balance between long-term development and short-term results is a managerial issue that requires a greater degree of resolution and flexibility than ever before.

**Discussing where the company should be in the coming century**

While milestone of the company's 200th anniversary in 2032 represents an important goal for NAGASE, it is important to think 50 years ahead, or even 100 years ahead, when considering where the company should be in the future. It may be advisable for NAGASE to undertake the building of a system where, rather than each individual business focusing on its own area of specialization, the trading company part of NAGASE's operations and the manufacturing part are closely integrated, and can mutually make effective use of the information and technology that each other possesses.

An organization is formed from people with different personalities. As an organization gets larger, it becomes increasingly difficult to listen to the views of each employee, and to be aware of their situation. This is why the cultivation of first-rate middle managers is so important. Also, I believe that, by building an organization capable of cross-functional approach, and the human talent to support this, it should be possible to develop businesses that make effective use of NAGASE's comprehensive strength, while still maintaining a level of expertise that general trading companies lack.



**Toshiaki Mikoshiba**

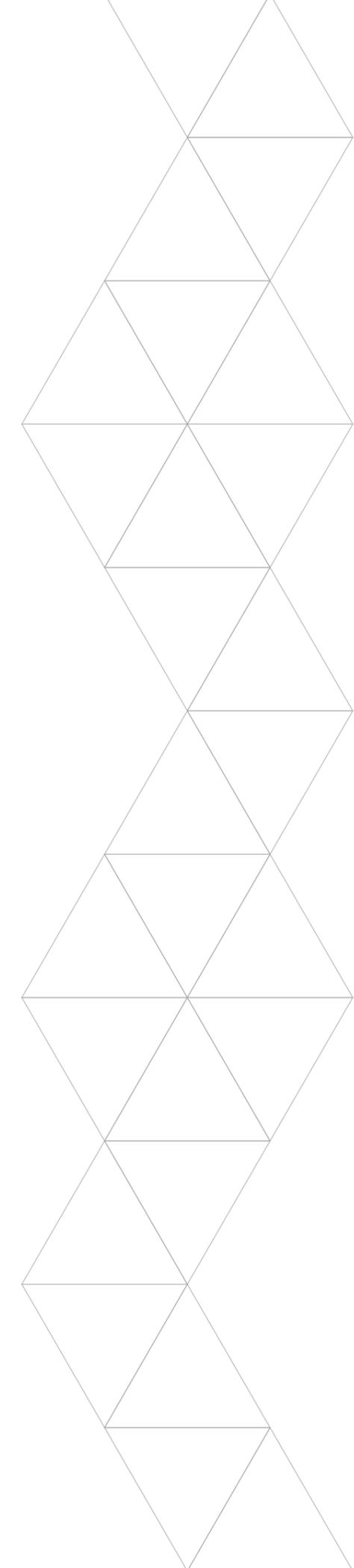
**A strong relationship of trust between outside directors and company executives, while maintaining an appropriate level of tension**

The NAGASE Group is seeking further growth opportunities in its overseas operations and is strengthening its manufacturing function on top of its trading company function. As a new member of the board, I would like to contribute to these efforts by making effective use of my own experience that I acquired through long-standing involvement with overseas business operations and integrated manufacturing-and-sales business at Honda. There are always risks involved in business, therefore, in order to allow the executive side to take on new challenges, it is important for the supervisory side to delegate the authority of decisions and keep monitoring business operations with properly recognizing risks. I believe that one of the most important roles of Outside Directors is to help guide on improving quality of the Board Meetings, while establishing a relationship of solid trust, and keeping an appropriate level of tension.

**Close communication based on the "Three Reality Principle."**

The NAGASE Group benefits from the high level of trustworthiness that has been built up over 190 years since its foundation and is capable of providing effective business solutions. Today, NAGASE is boldly taking on the challenge of striving for an enhanced level of profitability and the value of the company and solving social issues at the same time. I am very happy and excited about having opportunities to be involved in the process of corporate transformation and leaving a footprint on a page of this rich history of NAGASE.

I feel that the commitment to "maintain the highest standards of integrity" which forms an important part of NAGASE's management philosophy has much in common with the philosophy of "helping people and society" and "working for the benefit of people and the world" at Honda, where I worked for many years. Since I am so accustomed to the "Three Reality Principle" (San Gen Shugi), which emphasizes "going to the actual place", "knowing the actual situation" and "being realistic" from my experience with Honda, as an Outside Director, I hope to be able to engage in visiting actual worksites, examining actual products, and observing actual situations at NAGASE and keep close communications with employees.



# Our Board (as of November 1, 2023)

## Directors

Note: Number of shares held based on available information as of May 31, 2023. Figures given for the number of shares held include those held in the name of Nagase & Co., Ltd. Officers' Shareholding Association.



**Kenji Asakura**  
Representative Director and Chairman  
Number of shares held: 29 thousand



**Hiroyuki Ueshima**  
Representative Director, President and CEO  
Number of shares held: 22 thousand



**Masaya Ikemoto**  
Representative Director and Senior Managing Executive Officer  
Number of shares held: 11 thousand



**Masatoshi Kamada**  
Director and Senior Managing Executive Officer  
Number of shares held: 14 thousand



**Hiroshi Nagase**  
Director and Senior Adviser  
Number of shares held: 1,360 thousand



**Ritsuko Nonomiya**  
Outside Director  
Number of shares held: 1 thousand



**Noriaki Horikiri**  
Outside Director  
Number of shares held: 0 thousand



**Toshiaki Mikoshiba**  
Outside Director  
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, UBS Warburg Japan  
2008 Senior Vice President and Business Development Leader, GE Capital Asia Pacific Ltd.  
2013 Senior Executive Officer and Business Development Leader, GE Capital Japan, GE Japan Inc.  
2013 Managing Director, GCA Savian Corporation (currently GCA Corporation)  
2017 Director, GCA Corporation (current position)  
2020 Director, Nagase & Co., Ltd. (current position)  
2022- Representative Director and CEO, Houlihan Lokey Japan Co., Ltd. (current position)

1974 Joined Kikkoman Shoyu Co., Ltd. (currently Kikkoman Corporation)  
2003 Corporate Officer, Kikkoman Corporation  
2006 Executive Corporate Officer, Kikkoman Corporation  
2008 Director and Executive Corporate Officer, Kikkoman Corporation  
2011 Representative Director and Senior Executive Corporate Officer, Kikkoman Corporation  
2013 Representative Director, President and CEO, Kikkoman Corporation  
2021 Representative Director, Chairman and CEO, Kikkoman Corporation  
2022 Director, Nagase & Co., Ltd. (current position)  
2023 Representative Director and Chairman, Kikkoman Corporation (current position)

1980 Joined Honda Motor Co., Ltd.  
2008 Executive Officer, Honda Motor Co., Ltd., and Director and Vice President, Honda Motor Europe Limited  
2011 President, Guangqi Honda Automobile Co., Ltd.  
2014 Managing Officer, Chief Officer for Regional Operations (Europe Region), Honda Motor Co., Ltd., and President and Director, Honda Motor Europe Limited  
2015 Senior Managing Officer, Honda Motor Co., Ltd.  
2016 Chief Officer for Regional Operations (North America), Honda Motor Co., Ltd., and President and CEO, Honda North America, Inc.  
2017 Senior Managing Director, Honda Motor Co., Ltd.  
2019 Chairman, Honda Motor Co., Ltd.  
2023 Director, Nagase & Co., Ltd. (current position)

## Audit & Supervisory Board Members

Note: Number of shares held based on available information as of May 31, 2023. Figures given for the number of shares held include those held in the name of Nagase & Co., Ltd. Officers' Shareholding Association and Own Share Investment Association.



**Masanori Furukawa**  
Audit & Supervisory Board Member  
Number of shares held: 9 thousand



**Nobuyuki Shirafuji**  
Outside Audit & Supervisory Board Member  
Number of shares held: 2 thousand



**Akira Takami**  
Audit & Supervisory Board Member  
Number of shares held: 16 thousand



**Gan Matsui**  
Outside Audit & Supervisory Board Member  
Number of shares held: 2 thousand

## Executive Officers

### Managing Executive Officer

<b>Naoki Yasuba</b> In charge of Hayashibara Co., Ltd.	<b>Takanori Yamauchi</b> In charge of Nagase Business Expert Co., Ltd.	<b>Satoru Fujii</b> In charge of Nagase ChemteX Corporation	<b>Donald K. Thorp</b> In charge of Prinova Group LLC, Food Business	<b>Kusuo Ota</b> In charge of Group Companies, Greater China (CEO), and Europe (CEO)
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### Executive Officer

<b>Koichi Sagawa</b> GM, Corporate Planning Department	<b>Ryuichi Uchida</b> In charge of Marketing DX	<b>Takeshi Takada</b> Manager, Nagoya Branch Office	<b>Noriaki Arashima</b> GM, Specialty Chemicals Department	<b>Noriyoshi Yamaoka</b> GM, Human Resources & General Affairs Department
<b>Yoshihisa Shimizu</b> GM, Corporate Management Department	<b>Xiaoli Liu</b> GM, Nagase Bio-Innovation Center	<b>Eiroku Oki</b> ASEAN and India CEO, Regional Operating Centre Leader	<b>Toru Araki</b> GM, Risk Management Department	<b>Tamotsu Isobe</b> GM, Performance Chemicals Department
<b>Kenaro Nagase</b> GM, Global Communication Department				

## Board of Directors and Audit & Supervisory Board Skill Matrix

We have identified the skills that members of the Board of Directors need to possess, and the roles that members of the Board of Directors and of the Audit & Supervisory Board play, and the specialist knowledge that they possess, as shown to the right.

Position in the Company	Name	Corporate Management/ Management Strategy	Global Management	Sustainability	Marketing/Sales	DX	Manufacturing/R&D	Finance and Accounting	Legal Affairs/ Risk Management	Human Resources/ Labor Affairs
Representative Director and Chairman	Kenji Asakura	●	●	●	●	●				●
Representative Director and President	Hiroyuki Ueshima	●	●	●	●	●	●			●
Represent Director	Masaya Ikemoto	●	●	●			●	●		●
Director	Masatoshi Kamada	●	●	●	●	●			●	
Director and Senior Adviser	Hiroshi Nagase	●	●	●	●					●
Outside Director	Ritsuko Nonomiya	●	●	●				●	●	●
Outside Director	Noriaki Horikiri	●	●	●			●		●	●
Outside Director	Toshiaki Mikoshiba	●	●	●	●				●	●
Audit & Supervisory Board Member	Masanori Furukawa			●				●	●	
Outside Audit & Supervisory Board Member	Nobuyuki Shirafuji			●				●	●	
Audit & Supervisory Board Member	Akira Takami			●				●	●	
Outside Audit & Supervisory Board Member	Gan Matsui			●					●	●



### Nomination policy and criteria

#### Nomination policy and procedures for Directors and Audit & Supervisory Board Members Directors (Internal and Outside)

As a general rule, candidates for Internal Directorships are nominated from among persons who already have experience as an executive officer.

Candidates for Outside Directorships are chosen from persons of integrity who possess a high level of insight and competence, and who are able to raise issues from the standpoint of what stakeholders and society as a whole require.

Candidates for Directorships are selected by the President and Representative Director, and after review by a separate Nomination Committee, the appointments are deliberated on and decided upon by the Board of Directors, and then submitted to the Shareholders' Meeting for approval.

With regard to Audit & Supervisory Board Members, candidates are selected by the President and Representative Director from among persons who are deemed to meet the criteria specified in the Audit Standards for Audit & Supervisory Board Members, and after obtaining the agreement of the Audit & Supervisory Board through preliminary discussion, the appointments are deliberated on and decided upon by the Board of Directors, and then submitted to the Shareholders' Meeting for approval.

In addition, the reference materials appended to the notice of the Shareholders Meeting disclose the reasons for appointing each candidate for the positions of Director or Audit & Supervisory Board Member.

Regarding the removal of Directors, after the Nomination Committee has deliberated on the appropriateness of removal, the question of removal is then deliberated on and decided upon by the Board of Directors, after which, where necessary, the procedures for removal are followed. When a Director is removed, the grounds for removal are disclosed.

### Issues identified in the evaluation of the effectiveness of the Board of Directors, and response measures

#### Status of the response to items recognized as issues in FY2021

- Re-evaluation of document composition
  - ➡ We have made improvements in this regard, by adopting the inclusion of executive summaries in Board of Directors materials, and by clarifying submission content and discussion points.
- Ensuring opportunities for discussion of overall strategy and management issues
  - ➡ We have canvassed the views of each Director regarding the raising of topics relating to concrete management issues.

#### Issues recognized in the FY 2022 evaluation results

- The need for further discussion regarding how the Board of Directors operates
- The need for continuous improvement to realize efficient operation
  - ➡ With regard to operational improvement, we are discussing the effective utilization of pre-meeting explanations and adjustment of the criteria for submitting matters for discussion, so as to ensure that there is adequate time for discussion and deliberation on the day of Board meetings.
- The need to improve monitoring of management issues
  - ➡ We are proceeding with consideration of how to select discussion topics and ensure opportunities for discussion, of quantitative and qualitative reflection on the Medium-term Management Plan, and on the next action plan.

### Status of audit by Audit & Supervisory Board Members

The Audit & Supervisory Board comprises 3 full-time members (including 1 outside member) and 1 part-time member (including 1 outside member). The Audit & Supervisory Board meets once a month in principle and as necessary to discuss matters. In fiscal 2022, it held 16 meetings.

### Board of Directors effectiveness evaluation

#### Evaluation method

The Company analyzes and evaluates the effectiveness of the Board of Directors every year, believing in the importance of improving board effectiveness. It conducts an anonymous survey of all directors and Audit & Supervisory Board members in order to generate more proactive and honest opinions. The Company also eliminates bias by utilizing third-party organizations to collect, tally and analyze the survey results, thereby ensuring transparency in its evaluation methods.

#### Evaluation results

Based on the evaluation results, the Company confirmed that its Board of Directors functions effectively, conducting appropriate and timely deliberations and decision-making.

The status of the response to items recognized as issues in fiscal 2021, and the issues recognized in fiscal 2022 based on the evaluation results, and the response strategy for these issues, are as follows.

### Company officer compensation policy

Compensation standards are set so that compensation is appropriate for the role and scope of responsibilities for each company officer and motivates them to sustainably enhance corporate value in light of objective external data and the current management situation, etc. The target ratios for each category of compensation are as shown below.

Compensation for Outside Directors and Audit & Supervisory Board Members is limited to basic compensation, a fixed salary, in view of the nature of their duties.

The indicators selected for performance-linked compensation are net income attributable to shareholders of the parent company, which is the final profit, as an incentive to improve business performance, and ROE as an incentive to improve capital efficiency. The method used to calculate performance-linked compensation is as follows. The basic amount of performance-linked compensation based on profit attributable to owners of the parent is determined based on the consolidated performance forecast at the beginning of the fiscal year, and is multiplied by the ratio of net profit for the previous fiscal year and the achievement ratio relative to the consolidated performance forecast at the beginning of the fiscal year, and is adjusted based on individual assessment. With regard to compensation based on ROE, to achieve the ultimate goals set in the Medium-Term Management Plan, targets are set for each fiscal year, and the amount of compensation is determined based on the extent to which the target for that year has been reached. Starting from fiscal 2024, new ESG-related indicators are being added as additional performance-linked indicators.

#### Share held by each category of company officers' compensation

Fixed compensation	Share of total: 50 – 70%	Paid monthly, in cash
	Annual compensation, paid in equal monthly payments	
Performance-linked compensation (monetary)	Share of total: 25 – 40%	Paid annually, in cash
	Paid in lump sum at the end of June each year	
Performance-linked compensation (non-monetary)	Share of total: 5 – 10%	On retirement, in the form of shares
	A performance-linked share compensation system has been adopted whereby points are awarded based on position and achievement of performance targets, etc., and a number of shares corresponding to the number of points awarded is held in a trust set up by the Company to be paid on retirement.	

#### Breakdown of company officers' compensation and total amounts (FY2022)

Category of company officer	No. of eligible company officers (persons)	Total amount of compensation (million yen)	Amount of compensation by type (million yen)		
			Basic salary	Performance-linked compensation (monetary)	Performance-linked compensation (non-monetary)
Directors	Internal	6	200	270	31
	Outside	4	34	–	–
	Total	10	235	270	31
Audit & Supervisory Board Members	Internal	2	46	–	–
	Outside	2	33	–	–
	Total	4	80	–	–

### Strategic cross-shareholdings

To realize the sustainable enhancement of corporate value, the NAGASE Group holds strategic cross-shareholdings when this is deemed necessary, taking into account a comprehensive range of factors such as those relating to the maintenance and strengthening of relationships with business partners, business strategy, etc. Regarding the appropriateness of these shareholdings, the relevant units scrutinize them to gauge whether the earnings that can be achieved in terms of profits from related transactions and dividends received meet the Company's internal hurdle rate based on capital cost, whether the shareholdings can be expected to support business expansion or the creation of synergy, and whether they can be expected to ensure the stable provision of services that are vital to the NAGASE Group's corporate activities; the results of this scrutiny are then confirmed by the Board of Directors on an annual basis. In cases where the holding of a particular stock is deemed not to be appropriate, the Company will aim to reduce its holdings of these shares by selling them off in a step-by-step process, while taking various factors into account.

In addition, under the ACE 2.0 Medium-Term Management Plan, implementation of which began in fiscal 2021, NAGASE plans to sell off strategic cross-shareholdings valued at a cumulative total of 30 billion yen over a five-year period. As of March 31, 2023, a total of 15.1 billion yen of shareholdings had already been sold off.

#### Sale of strategic cross-shareholdings

	FY2019	FY2020	ACE 2.0 Medium-Term Management Plan	
			FY2021	FY2022
No. of stocks sold off	7 stocks	5 stocks	49 stocks	13 stocks
Total sale price	10.4 billion yen	6.2 billion yen	7.8 billion yen	7.3 billion yen

# Risk Management

## Basic approach

The NAGASE Group runs a global and diversified operation, being exposed to various risks associated with the nature of its businesses.

We therefore endeavor to gain an accurate assessment of risks related to business activities within and outside the company, take appropriate action, and make improvements so that we can achieve sustainable growth while minimizing harm from emerging risks.

## Strengthening of the risk management system

Responding to concerns about the possibility of failing to identify risks that require monitoring, and to increasing awareness of the need to upgrade risk management systems in response to changes in the external environment as well as growing external demand for disclosure related to these efforts, NAGASE has sought to overhaul the risk management system and rules. We have also implemented a large-scale adjustment of corporate risk management items. The existing 17 risks have been broken down into 102 individual risks. Of these 102 risks,

12 risks that have been assessed to be particularly high have been set as the Group's major risks, based on assessment criteria that utilize the three axes of impact, frequency/potential of occurrence for occurrence and inadequate management. The aim of these measures is to realize the wide-ranging identification of risks and build a framework for sustainable risk management.

## Internal control

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 business activities. The Internal Control Committee, the main entity for advancing internal controls, 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.

## Crisis prevention and business continuity planning (BCP)

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. We implement countermeasures through the dual wheels of crisis prevention activities and BCP activities. 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.

## 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 Legal and Compliance Department provides management of vendors and manufacturing contractors, and the Group Manufacturers' Collaboration Committee provides support to Group manufacturing companies and internal education.

## Occupational safety and health management by Group Manufacturers' Collaboration Committee

With regard to the occupational safety and health of Group manufacturing companies, the Group supports improvements to occupational safety and health activities undertaken by each company at the Occupational Safety Subcommittee within the Group Manufacturers' Collaboration Committee. It also supports solid implementation of activities and conducts occupational safety evaluations and follow-ups on priority target companies to achieve KPIs.

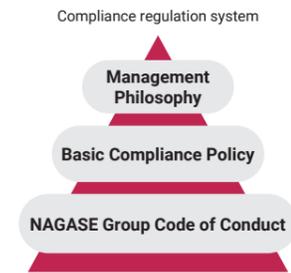
# Compliance

## Basic approach

The NAGASE Group values employee education and business activities that follow socially accepted norms and ethics as well as observing laws and regulations, which are becoming more complex and stringent in an increasingly borderless world. Thus, we are committed to compliance that keeps pace with the changing times. To this end, we have established a Risk Management & Compliance Committee to oversee risk management and compliance, and defined its functions and authority. The Risk Management & Compliance Committee operates as a structure with clearly defined roles and responsibilities.

## Components of the Basic Policy and Code of Conduct

Increasing the effectiveness of compliance requires clarification of our compliance philosophy, a functional system to implement that philosophy, and the demonstration of concrete action guidelines. The NAGASE Group has established a Basic Compliance Policy based on its core Management Philosophy, and has formulated and implemented the NAGASE Group Code of Conduct, which incorporates the Management Philosophy into more concrete actions, as important rules that all Group executives and employees must uphold.



## Components of the Basic Compliance Policy and Code of Conduct

- 1 Comply with applicable laws and regulations; conform to internal rules
- 2 Eliminate anti-social elements
- 3 Provide useful products and service
- 4 Respect employee's personality and individuality
- 5 Disclose information
- 6 Protect the global environment
- 7 Responsibilities of top management

Our Basic Policy and Code of Conduct is available on the Sustainability section of our website.

## Establishing a compliance system

The NAGASE Group has established consultation and reporting hotlines as well as compliance rules for each Group company and region, and established a system which makes it possible to detect compliance issues that have occurred within the Group in a timely manner and improve and resolve them quickly. It checks to make sure that the system for handling consultations and reports of harassment within the Group is properly functioning, and continually promotes compliance activities that involve taking proactive measures, such as education focused on management and those in administrative positions who lead organizations.

## Fair business practice initiatives

In regard to the Antimonopoly Act, the NAGASE Group actively runs education programs, mainly for our manufacturing companies, to ensure that they are not involved in unfair trade. We are also providing bribery education to Group companies in Japan and overseas in the context of strengthening our approach to the prevention of bribery of foreign public officials under Japan's Unfair Competition Prevention Act and extraterrestrial application of the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act. In fiscal 2022, as in past years, we implemented related education that included topics of current importance and developments within the NAGASE Group.

## Response to security trade controls

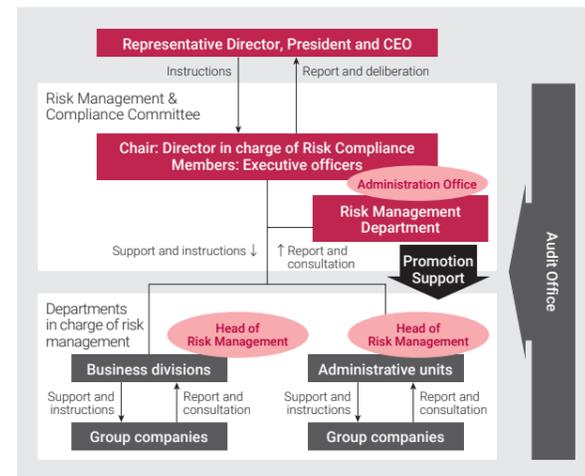
To conduct trade appropriately in line with laws and regulations as a member of the international community, the Security Trade Control Committee works to understand the export control situation, follows the latest revisions to the Foreign Exchange and Foreign Trade Control Law, and ascertains a detailed 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. To be capable of responding to the rapid change in the security trade control field, we encourage our employees, particularly those involved with export business, to take the security trade control certification exam provided by the Center for Information on Security Trade Control (CISTEC) (As of fiscal 2022, a cumulative total of 1,125 employees had obtained this certification).

## Compliance with laws and regulations related to products

We are strengthening our management of product-related laws and regulations, including those relating to chemical products. We are also promoting centralized information management and have implemented a management system to appropriately comply with related laws and regulations across all products handled by the NAGASE Group.

- **Specific compliance measures:** We implement centralized management of matters relating to relevant laws and regulations using our comprehensive product management system, based on the chemical composition and specifications of all the chemical products that we handle.
- **Compliance with global chemical substance regulations:** We are promoting the systemization of product management, and providing education and guidance to our overseas subsidiaries so that they can promptly provide their business partners with the latest and most accurate information in response to regulatory changes based on the Strategic Approach to International Chemicals Management (SAICM).

## Risk management system



## FY2023 Group's major risks – Candidate risks

Broad categories	Risk item
External environment	Tensions between U.S. and China
	Taiwan contingency
	Failure to address diversity, equity, and inclusiveness of human capital
	New technology and service development and technology and service innovation by competitors
	Failure to cope with climate change risk
	Depletion of natural resources
	Growing social demands for human rights, environmental issues, etc. in the supply chain
Internal environment	Failure of overseas strategy
	Losses incurred due to the withdrawal from business
	Workplace harassment
	Cyber-attacks
	Utilization of personal data

# Delivering next.

# Business Portfolio

Accelerate the shift of resources to focus and development areas

## Reconstruction of our business portfolio

Until September 30, 2023

<b>Functional Materials Segment</b>
Performance Chemicals Department
Speciality Chemicals Department
<b>Advanced Materials &amp; Processing Segment</b>
Colors & Advanced Processing Department
Polymer Global Account Department
<b>Electronics &amp; Energy Segment</b>
Electronics Department
Information & Communication and Energy Office
Functional Resin Department
Precision Process Materials Department
<b>Mobility Segment</b>
Mobility Solutions Department
<b>Life &amp; Healthcare Segment</b>
Food Ingredients Department
Life & Healthcare Products Department

From October 1, 2023

<b>Functional Materials Segment</b>
Performance Chemicals Department
Speciality Chemicals Department
<b>Advanced Materials &amp; Processing Segment</b>
Polymer Global Account Department
<b>Electronics &amp; Energy Segment</b>
Electronics Department
Advanced Functional Materials Department
<b>Mobility Segment</b>
Mobility Solutions Department
<b>Life &amp; Healthcare Segment</b>
Life & Healthcare Products Department

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**Masatoshi Kamada**  
Director and Executive Officer

## Combining real-world and digital technologies to enhance our marketing quality and deliver unique NAGASE solutions

### Shifting our mindset from a trading company centered on sales and distribution to a marketing-oriented business

I consider the "Pursuit of Quality" at the heart of medium-term management plan **ACE 2.0** to mean using the value that only NAGASE can provide to lead our customers to solutions. For us to do this, we must once again strengthen the horizontal integration of our marketing capabilities and business divisions. The NAGASE Group is shifting its focus away from a single standard trading company model of product sales and distribution to a model that also has marketing-driven business in which every employee is a "Business Designer" creating new businesses and diverse value in our sales activities. The reason we are making this transition is because of the increasing challenges our customers are facing are management-level issues that are difficult to resolve with a single product, service, or area of specialization. For us, this is an opportunity to expand our business. That is because we are more than a trading company specializing in chemicals, we

offer integrated high-level research, manufacturing, biotechnology, digital transformation, and other functions that enable us to provide a wide range of solutions beyond the reach of other companies. As our projects grow in scale and profits in turn grow with it, I believe we will be able to develop our business in line with the **ACE 2.0** basic policies.

To embody this scenario, however, we will need to strengthen the marketing capabilities that I mentioned earlier. More specifically, we will need to listen carefully to the concerns of our customers to draw out the issues, inspect and examine them, and then have the ability to harness the whole NAGASE Group to deliver value with our solutions. This mindset is spreading among our employees, and our marketing activities that have started from "uncovering potential issues" that NAGASE can address are becoming more noticeable. When I visit the business divisions, each year I see more employees who are eager to become Business Designers with the ability to find seeds for new businesses when talking with customers and to nurture the seeds and deliver multifaceted value.

### Strengthening Group collaboration with horizontal integration across business divisions

The NAGASE Group is strengthening cooperation among our internal organizations so we can better address the management-level issues our clients are facing. Our organizational structure was formed to leverage our high level of expertise in each field. But while this independence was a strength in the past, it can become a weakness in the future. The reason is that we cannot effectively address client problems on the management level unless we have full knowledge of all of our business's products and services, overseas networks, and examples of solutions. We therefore need to use digital marketing to broaden our customer base. One way we will do this is by planning an approach integrating digital information into our operations in countries and regions with potential for economic growth, such as Africa and South America, where cost restraints or lack of real-world data inhibited business development.

Digital technology will make this approach possible. Our Group often has multiple divisions working for a single client and even now several business negotiations are underway. Still, our performance was hindered by insufficient coordination among our organizations. We have now introduced cloud-based marketing automation (MA)\* and customer relationship management (CRM)\* tools enabling Group-wide access to centrally managed individual customer information obtained during marketing activities and on the status of business negotiations. These tools give us a comprehensive understanding of issues being faced by each customer's divisions. The deeper analysis that these systems have enabled has raised the quality of our business negotiations and increased the opportunities to propose solutions to managers.

We are strengthening cooperation across business divisions to accelerate information sharing and business exploration within the Group. We reformulated the organizational structure and business divisions in October 2023 to increase our operating efficiency and productivity and lower barrier between our divisions with the aim of creating new businesses. We have also started consciously creating opportunities for general managers and middle managers to bring together NAGASE's various functions and apply the Group's comprehensive strength to client account planning.\*

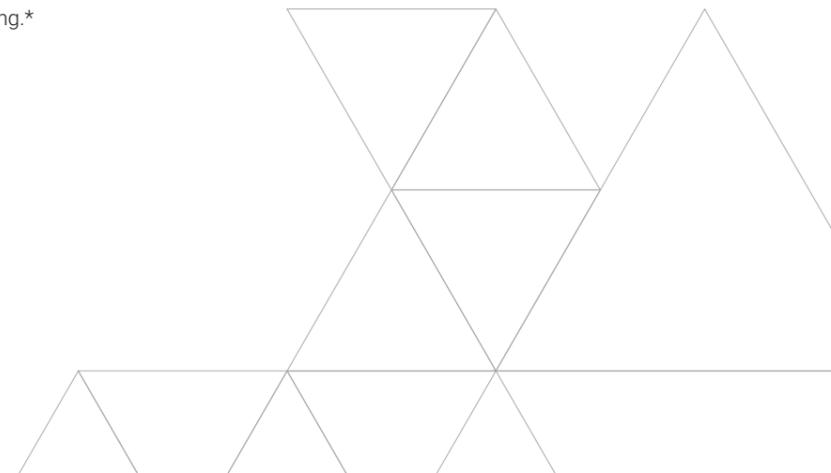
### Applying the management principles to business activities and to provide employees with growth opportunities

The focus of **ACE 2.0** is primarily focused on the semiconductor-related and food-related businesses. Semiconductor-related business sales have roughly doubled since we instituted the integrated group structure in 2021. In the food-related business, the Prinova Group is the main growth driver and is highly competitive in the European and American markets. We are planning to actively develop business in the Asian market. We are positioning the biotechnology business to be at the center of our Group operations. We will continue investing management resources in our unique materials to establish us as NAGASE, "the Biotechnology Company." We will continue consolidating our earnings foundations to generate Group synergies as we apply our business to address global environmental issues.

Human resources will be the key element to continuing our growth as we approach the 200th anniversary of the Company's founding. Project leaders lead by example in the sales process and make a conscious effort to provide employees with opportunities to think and act on their own. I myself have worked in the synthetic resin and mobility businesses and have had three assignments overseas. The variety of experiences I have had is one of the reasons I am where I am today. New businesses are more likely to arise out of a heterogenous culture than a homogeneous culture. We would like to provide an environment of diversity to develop our human resources.

Lastly, the NAGASE Group has a universal management philosophy of "maintaining the highest standards of integrity." Integrity is consistency in words and actions. With this shared principle throughout the Group, we are using our business activities to help build a better society.

\* MA is a tool or platform for organizational marketing activities providing visualization and streamlining of the process of acquiring information about prospective customers, negotiating business, and tracking orders and contracts.  
\* CRM is a system for implementing measures to build and maintain good relationships with customers.  
\* Account planning is our basic concept for strategically deepening and expanding our business by fully understanding each customer's business and external environment, and building long-term, continuing partnerships.



Business segments

Department

Main products and services

Functional Materials



For more details, see P.67

Performance Chemicals Department

Provides high-performance materials for a wide range of industries, including paint, inks, urethane, printing and film, and LCD. Also responding to customers' needs by developing sustainable products, demand for which is rapidly increasing, based on the key words "environment" and "bio," and by effectively utilizing the functions of the Nagase Group as a whole, including manufacturing, R&D, and processing.

Speciality Chemicals Department

Having established businesses over many years in a diversity of industries, now handles more than 10,000 products. Is also expanding into new fields with a focus on business partners' elemental technologies.

Performance Chemicals Department

Resin raw materials (various types of monomers), resins, solvents, pigments, dyestuffs, coloring matter, dispersion processing materials, paint and ink additives, urethane materials, flame retardants, release agents, conductive materials, functional sheets, films, adhesives, endotoxin removal services, and sanitary materials

Speciality Chemicals Department

Petrochemical products, raw materials for industrial metalworking oil solutions, surfactants and surfactant raw materials, environmental equipment and chemicals (wastewater, exhaust gas, energy conservation), resin raw materials and additives, electronics chemicals, UV curing agent materials, chemical outsourcing coordination



Advanced Materials & Processing



For more details, see P.69

Polymer Global Account Department

With a well-developed sales network and experienced local staff in the Asia Pacific region, the department works with global companies to sell synthetic resins for a wide range of industries, including office equipment and the electrical and electronics industries. It is also focusing on eco-friendly businesses, providing environmentally-friendly materials and services such as recycled material and biomass plastics.

Polymer Global Account Department

Engineering plastics, commodity plastics, packaging materials and other plastics-related products, and service



Electronics & Energy



For more details, see P.71

Electronics Department

In addition to providing functional materials and their constituent components to the silicon wafer, semiconductor, electronic components and display industries, is working with partner companies to develop products that align with market and customer needs.

Advanced Functional Materials Department

Nagase ChemteX Corporation's modified epoxy resins, developing fluid, stripping agent recovery solutions, high-performance materials for 3D printing, etc., which are developed based on the company's formulation, compounding, precision cleaning, surface finishing and photosensitive materials design technologies, are sold both in and outside Japan, with key fields including the electrical/electronics industry, mobility, the environment, energy, semiconductors (photolithography and encapsulant materials), 3D printing and displays.

Electronics Department

Fine polishing abrasives, optical materials for displays, touch panel components, functional paints, conductive and insulating materials, adhesive and encapsulating materials, high-heat-resistant films, optical lenses, high-frequency devices, low dielectric materials, sensing modules, optical materials for XR, semiconductor and electronic device-related equipment

Advanced Functional Materials Department

Formulated epoxy resins and related materials, photolithography materials for flat panel displays and semiconductors, 3D printing-related materials



Mobility



For more details, see P.73

Mobility Solutions Department

We will contribute to the realization of a safe, secure and comfortable mobility society by grasping the needs of the mobility industry, including automobiles, agricultural machinery, construction machinery and aircraft, and by offering diverse solutions through pursuing new technological innovations.

Mobility Solutions Department

Automotive interior/exterior and functional components: Various resins, functional paints, adhesives, lightweight components, decorative components, HMI components CASE-related: xEV-related components, heat management components, battery materials, sensors, LiDAR devices, autonomous driving technologies



Life & Healthcare



For more details, see P.75

Life & Healthcare Products Department

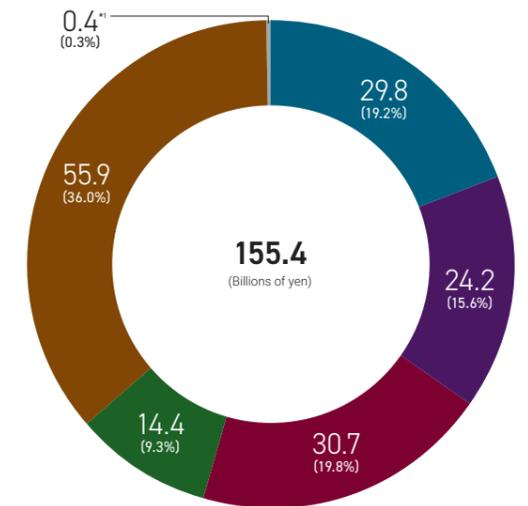
In the pharmaceutical, medical, cosmetics, household goods, and food products (processed foods and nutrition) sectors, we provide a wide range of solutions throughout the world through the Nagase Group's manufacturing, processing, procurement, logistics, research, application development and regulatory-related functions. We are striving to contribute toward the realization of healthy, enriched lifestyles.

Life & Healthcare Products Department

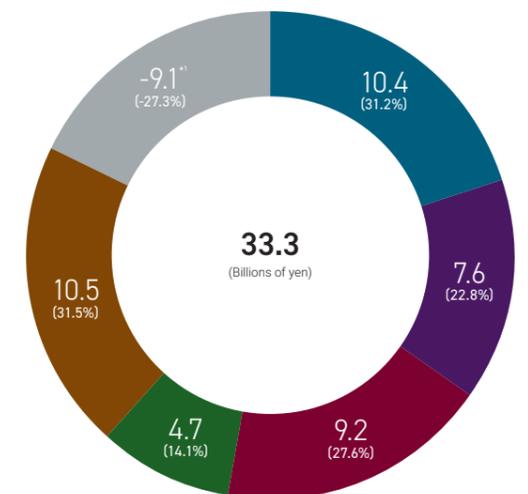
Pharmaceuticals products (APIs, additives, intermediates, and other materials), materials for In Vitro diagnostics, raw materials for cosmetics and household goods (active ingredients, additives, emulsifiers and fragrances), food ingredients (nutrition materials, functional saccharides such as TREHA™, glycosides, enzymes and other processing aids), premix (OEM/ODM), and materials for agriculture (including livestock raising) and fisheries



Gross Profit



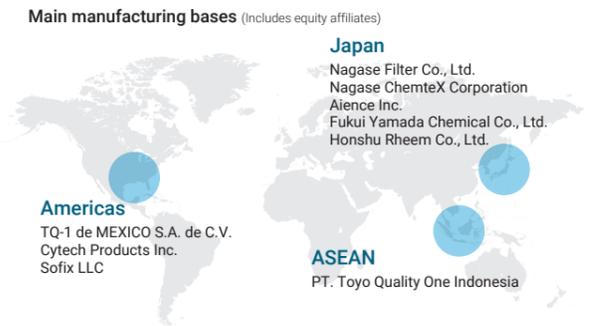
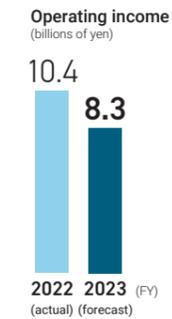
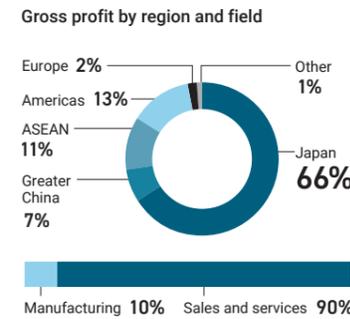
Operating Income



\*1 ■ Other/Corporate: Includes businesses not included in reported segments and eliminated inter-segment transactions, etc.



# Functional Materials Segment



## Performance Chemicals Department

<p><b>S Strength</b></p> <ul style="list-style-type: none"> <li>High market share in Japan</li> <li>Strong relationships of trust with suppliers</li> <li>A global network based on the high negotiating ability, ability to respond effectively to new developments in technology, and problem-solving ability, of individual unit</li> <li>An extensive product line-up and cross-business solutions</li> </ul>	<p><b>W Weakness</b></p> <ul style="list-style-type: none"> <li>Vulnerability to changes in the external environment, including economic indicators (oil prices, exchange rates, and automotive sector production volume)</li> <li>Reduced need for the general-purpose chemical trading company function, and lower profitability</li> <li>Unsatisfactory ability to generate new business models, due to operating in a mature market with restricted talent flow</li> <li>Unpreparedness for developing e-commerce and digital marketing</li> </ul>
<p><b>O Opportunity</b></p> <ul style="list-style-type: none"> <li>Launching services aimed at improving social value and economic value throughout the entire industry</li> <li>Submitting proposals to other firms in the upstream and downstream segments</li> <li>Expanded utilization of imported materials due to the consolidation or closure of many chemical businesses in Japan</li> </ul>	<p><b>T Threat</b></p> <ul style="list-style-type: none"> <li>The assumption that a stable supply can be realized for all products is being called into question in a business environment with a strong emphasis on sustainability and carbon neutrality</li> <li>Emergence of new competitors due to the widespread implementation of DX (digital transformation)</li> <li>Geopolitical risks (risk of conflict over Taiwan, risk to stable supply of products from China, etc.)</li> </ul>

## Speciality Chemicals Department

<p><b>S Strength</b></p> <ul style="list-style-type: none"> <li>Strong relationships with suppliers built on trust</li> <li>In-depth knowledge of the industry and chemicals, and information capabilities that leverage the Group's capabilities</li> </ul>	<p><b>W Weakness</b></p> <ul style="list-style-type: none"> <li>Portfolio optimization and acceleration of global expansion</li> </ul>
<p><b>O Opportunity</b></p> <ul style="list-style-type: none"> <li>Ability to contribute to carbon neutrality, within a business environment that requires sustainability</li> <li>Further strengthening of human talent cultivation, and effective talent utilization</li> </ul>	<p><b>T Threat</b></p> <ul style="list-style-type: none"> <li>Environmental impact of businesses centered on chemicals</li> </ul>

### Making an in-depth contribution precisely because of being a business with a heavy environmental impact

The second year of implementation of the **ACE 2.0** Plan saw a steady improvement in numerical terms, partly because of a favorable external environment. However, with excessively high inventory of intermediate goods leading to a slowdown in freight movement in the electronics market, and with China's recovery in the post-COVID period being slower than expected, there were still some causes for concern going into fiscal 2023.

As regards the areas that we focused on in the past year, we began to implement surveys and analysis of the semiconductor supply chain from a trading company perspective, to help maintain the competitive advantage of our business partners in Japan (from the point of view of economic security). Having set our sights on realizing global expansion for the business, we are strengthening our partnerships with suppliers. We have also been promoting digital marketing within our business division, and have been making smooth progress in securing leads and new projects.

However, there is room for further improvement in terms of optimizing our business portfolio, shifting resources to areas that we want to focus on, and achieving a clear division between functions. To achieve results at an early stage in key areas and R&D, we have established a planning and marketing office to facilitate close collaboration with the sales team.

Building the foundations needed for a sustainable business is vital for realizing growth over the medium and long term. This is a shared goal in this division, and we are employing diverse methods to make forward progress, while not being influenced by short-term economic fluctuations.

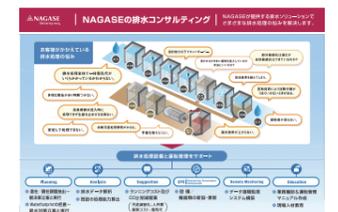


**Noriaki Arashima**  
Executive Officer  
GM, Speciality Chemicals Department

### Sustainability Topic

#### Wastewater consulting as an environmental solutions provider supporting customers' manufacturing operations

Responding to problems affecting our customers, including changes in wastewater treatment requirements resulting from product diversification, and the resulting need to overhaul facilities, as well as a shortage of operatives with related expertise at factory sites and difficulty in ensuring the transfer of wastewater treatment knowhow to a new generation of employees, NAGASE is leveraging its diverse product network, understanding of related issues and ability to offer solutions as a trading company to provide wastewater consulting services. From the identification of problems to operational improvements, we provide diverse solutions tailored to meet the needs and circumstances of individual customers.



### Enhancing social and environmental value through technological expertise and agility

In the second year of the **ACE 2.0** Plan, in numerical terms, results were favorable, partly due to the external environment.

We are proceeding with strategies to reduce the burden on the environment and enhance industry value, and although more time will be needed to fully disseminate these measures from a quantitative perspective, nevertheless, the past year has been one in which steady progress could be felt.

In fiscal 2022, we focused on safeguarding the environment and realizing carbon neutrality. This year saw the development of biodegradable superabsorbent polymers (SAPs), the adoption of TIMELESS™\*1 by major customers to drive the shift away from plastic, expanded adoption of greenhouse gas (GHG) visualization solutions, and initiatives aimed at realizing joint distribution for chemicals. Going forward, we will continue to take on the challenge of addressing environmental issues through a wide-ranging network that extends beyond our own supply chain.

Business-wide issues that need to be addressed include the adjustment of our business portfolio, allocation of resources to key business areas and related investment, and the need to spread awareness of the importance of an emphasis on return on invested capital (ROIC) in management, all of which should help to achieve enhanced efficiency. Going forward, we will be striving to implement efficient business development, including through business reorganization.

\*1 TIMELESS: A gas control technology that has applications in film and paper packaging materials, developed jointly by MIB Co., Ltd. and NAGASE.



**Tamotsu Isobe**  
Executive Officer  
GM, Performance Chemicals Department



### Sustainability Topic

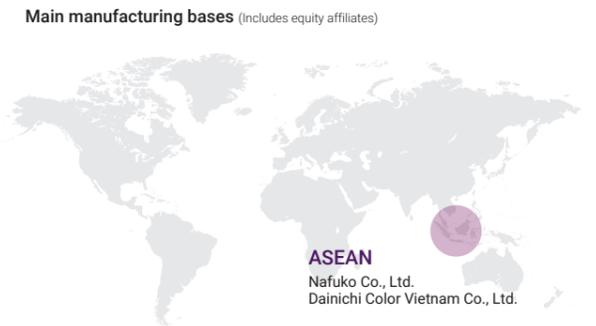
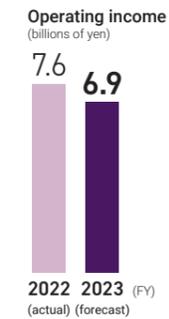
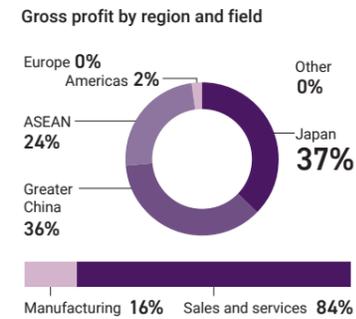
#### Plastic reduction technology adopted by leading Japanese coffee manufacturers

NAGASE is the exclusive distributor for coffee-related applications for TIMELESS™, which has already been adopted by several leading Japanese coffee manufacturers.

TIMELESS™ contributes toward cost reduction and also helps to protect the environment by reducing plastic usage; it is a "win-win" technology that creates both economic value and social value. Going forward, we will be aiming to roll out this technology more widely, with the aim of achieving full-scale dissemination and adoption both within and outside Japan.



# Advanced Materials & Processing Segment



## Polymer Global Account Department

S  
Strength

- Sound supplier and customer base, technical expertise and information as well as know-how, and a supply chain network in the Asia-Pacific area
- Effective global governance, and transparent business operation

- Relocation of invested capital in order to maximize business profitability
- Enhancement of systems in those business areas not directly linked to Japanese companies

W  
Weakness

O  
Opportunity

- Management efficiency support in relation to the business restructuring being undertaken by our global suppliers
- Advantageous position as customers diversify production bases and duties are increasingly divided internationally

T  
Threat

- From a sustainability standpoint, ensuring traceability in such ways as through a chemical information network

### Ensure a competitive position by leveraging the supply chain network capabilities

Although not matching our highest-ever annual profits, we have achieved a level of profitability that exceeds our target for the final year of implementation of the ACE 2.0 Medium-Term Management Plan, and the restructuring of our business portfolio is proceeding smoothly. In particular, in fiscal 2022, we almost completed our withdrawal from non-key, unprofitable business areas, and as a result, we have been able to realize the reallocation of invested resources from these businesses to new areas that we want to focus on.

We are also now operating the *plaplat*™ online platform, which represents the effective utilization of digital tools to strengthen our contact points with customers. Through this platform, we can help customers involved with the plastics and manufacturing sectors by proposing solutions for issues such as those relating to sustainability, and by disseminating information to support initiatives aimed at addressing these issues.

There is a need to build efficient operational systems in key areas, both within and outside Japan. We are working on building up our sales and marketing systems and strengthening relevant systems in relation to business activities undertaken for specific customers where production has been relocated to China, the ASEAN region, India, or North America, starting with making our business operations in China more efficient.

In recent years, the restructuring of the global chemical industry has accelerated, and there has been a diversification of our customers' production sites. To respond to these changes, we are considering more M&A activity, strengthening risk management, and implementing operations that are oriented toward greater efficiency through the integration of digital technology, as we aim to realize truly global business operation.



**Koji Yoshida**  
GM, Polymer Global Account Business Department



### *plaplat*™ – Integrating plastics and sustainability

On the *plaplat*™ platform, information collected through the NAGASE Group's specialist knowhow, superior sales capabilities, and global network is classified into six categories – materials, processing, facilities, logistics, regulatory, and industry trends – and used to offer sustainability solutions that can help our customers to address their problems, with new information being disseminated every working day.

This platform also provides the Plastics Pictorial Book, which is intended to let people learn about plastics in detail in an enjoyable manner, and which has been widely used both by industry insiders and people outside the plastics industry.

### Sustainability Topic

#### Proposals that integrate green materials with solutions

We have begun providing *Ultibatch*™, a high-concentration filler masterbatch product that will help to drive the transition to environmentally friendly "green materials" while also enhancing productivity and strengthening environment, health and safety (EHS) performance.

This new product will contribute toward the realization of a reduction in the usage of petroleum-derived resin, and toward a reduction in greenhouse gas emissions. An environmental solution material that also improves the working environment, *Ultibatch*™ is supplied in pellet form in unprecedentedly high concentrations, providing a filler material that meets users' needs. We are also proceeding with related processing technology licensing.

At Nagase Plastics Corporation's environmental solutions development center, we are undertaking further technology development with this material, and we are rolling out services tailored to the Japanese market.



### Sustainability Topic

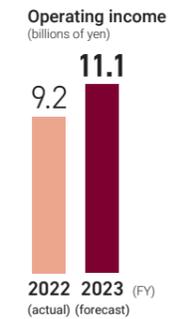
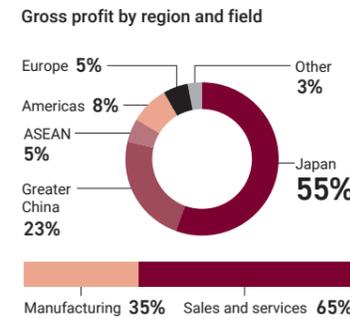
#### Taking the next step forward together with society – Participating in the UMIGOMI Zero WEEK project

The Polymer Global Account Business department handles around 500,000 tons of plastic per year. Plastic is a material that enriches our lives, but it also has a serious impact on the environment, and we need to keep in mind that the plastic our company sells is a contributing factor to the pollution of the oceans by plastic. We are constantly thinking about what form the continued operation of our plastics business should take in the future. With the aim of taking a first step forward by contributing toward improving the environment in the vicinity of our own business locations, and of realizing team-building, we have organized marine waste clean-up activities undertaken by employees and their family members. Aiming to be part of a sustainable society, we will continue to think carefully about what we can do in this area.





# Electronics & Energy Segment



## Electronics Department

<p><b>S</b> Strength</p> <ul style="list-style-type: none"> <li>Global network</li> <li>A diverse range of partners focused on the electronics sector</li> <li>Being able to gather information through sales activities throughout the supply chain, and to develop products in collaboration with business partners</li> <li>The knowhow, technology and strategies needed to contribute toward the realization of the "smart society"</li> </ul>	<ul style="list-style-type: none"> <li>Formulation and implementation of a future-oriented regional strategy that takes into account our current excessive focus on East Asia</li> <li>Development of technologies and materials that can be supplied to new markets</li> <li>Timely investment in new markets and technologies, and related judgements regarding manpower allocation</li> </ul> <p><b>W</b> Weakness</p>
<p><b>O</b> Opportunity</p> <ul style="list-style-type: none"> <li>Opportunities to expand into markets deriving from the development of the IoT-supported society and the effective utilization of AI</li> <li>Enhancement and diversification of devices, accompanying the increase in data processing volume</li> <li>Increasing demand for renewable energy and environmental value</li> <li>The growth of the 5G, 6G, EV, AI, semiconductor and AR markets</li> </ul>	<ul style="list-style-type: none"> <li>Impact of environmental regulations and the UN SDGs on existing materials and technologies</li> <li>Negative impact of intensified tension between the US and China on business oriented toward the Greater China region</li> <li>Increase in the time needed to recoup investments, and sluggish market growth that can be difficult to predict in advance</li> </ul> <p><b>T</b> Threat</p>

### Building a more robust team by strengthening networks and exercising perceptiveness

The Electronics Department is working hard to develop new technologies and materials that meet customers' needs. In the semiconductor business, we experienced growth (particularly in China, Taiwan, and South Korea), and in the last few years we have been adding new suppliers and strengthening our overseas sales system. However, taking geopolitical considerations into account, we are now aiming to achieve further growth by developing business oriented toward the US and Indian markets. In line with government policy, the Japanese semiconductor industry is likely to bring production back to Japan, and so we will adjust our regional strategy and systems to restructure our supply chain, both within and outside Japan.

In the display sector, while we are proceeding with the adoption of new materials and the forging of partnerships with start-ups, the shift away from existing materials may require more time due to the weak demand for smartphones and intensified price competition. Having said that, with the growing focus on sustainability in line with the UN SDGs when selecting materials, and with the outlook for development of new technologies and materials that contribute toward sustainability (by reducing electric power consumption, for example) looking bright, we will continue to add new suppliers.

Despite the turbulent business environment, we will proceed with R&D activity that looks ahead to the period after **ACE 2.0**, and we will develop a stronger organizational structure, so that a renewed Electronics Department can contribute toward decarbonization.



**Kazuyuki Sato**  
GM, Electronics Department

**Sustainability Topic**  
**Utilizing CMS in TFT and semiconductor photolithography processes**

Photolithography processes, which need rigorous quality management, require large quantities of chemical agents and generate large amounts of waste liquid. We provide a Chemical Management System (CMS) for these processes which realizes effective chemical agent quality management, efficient agent use, and reduced waste. Our CMS has a strong track record of successful performance dating back to the dawn of LCD panel mass production in the early 1990s. It also helps to reduce manufacturing costs, and to reduce the burden on the environment.



## Advanced Functional Materials Department

<p><b>S</b> Strength</p> <ul style="list-style-type: none"> <li>Providing solutions based on technology and R&amp;D capabilities through an integration of NAGASE's trading and manufacturing functions.</li> <li>Processing technologies and specialist knowhow in the field of electronic devices, among others</li> <li>A strong track record in raw materials recycling and reuse</li> <li>A wealth of business experience, and the technologies needed to contribute to society</li> </ul>	<ul style="list-style-type: none"> <li>A revenue base that is too dependent on specific areas</li> <li>Technologies that have been our strength in the past becoming so widely adopted as to cease to be a major source of competitive advantage for us</li> <li>Collaborative co-creation initiatives with manufacturers of process equipment and related materials</li> </ul> <p><b>W</b> Weakness</p>
<p><b>O</b> Opportunity</p> <ul style="list-style-type: none"> <li>Expansion into new business areas through effective use of technology</li> <li>Strong demand for network infrastructure that provides safety, stability and peace of mind</li> <li>Growing demand for environmentally friendly products that support the response to climate change</li> <li>The revival of the Japanese semiconductor industry</li> <li>The growth of the compound semiconductor market</li> <li>Geopolitical changes and the restructuring of the value chain</li> </ul>	<ul style="list-style-type: none"> <li>The shrinking of the domestic LCD industry, and domestic production in China by Chinese companies.</li> <li>The negative impact on earnings of fluctuations in oil prices and in exchange rates</li> <li>Changes in consumer behavior during and after the COVID-19 pandemic</li> </ul> <p><b>T</b> Threat</p>

### Strengthening human talent and technology capabilities is an urgent task to realize further business expansion

We are proceeding with many new initiatives aimed at transforming our business portfolio and developing new markets. In addition to the adoption of materials used in front-end to back-end manufacturing processes and encapsulating materials in advanced packaging for the major customers in the semiconductor market, we have also newly entered the medical-related market and are making progress in the evaluation of developed products in the electronic components and metal processing industries.

While we are promoting these various initiatives, the current situation in regard to the recruitment and cultivation of human talent possessing the necessary specialist skills is less than satisfactory, and we intend to address this issue as speedily as possible. Other issues that we face are the need to continuously play catch-up in relation to constantly evolving and increasingly complex technologies, and the need to strengthen technology alliances with other companies.

With the aim of becoming the core of the NAGASE Group's business, we will promote the penetration of our activity policy and roles across all areas of the Group, with a view to establishing new de facto standards, and will also focus on creating new businesses. In addition, we are accelerating our overseas business expansion and contributing toward the realization of a decarbonized society.



**Ryuhei Tashima**  
GM, Advanced Functional Materials Department

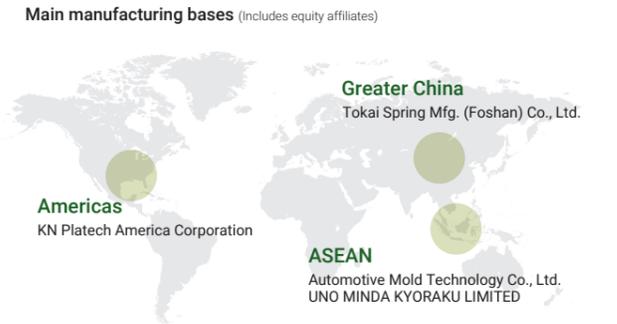
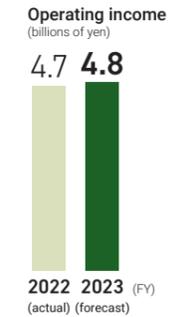
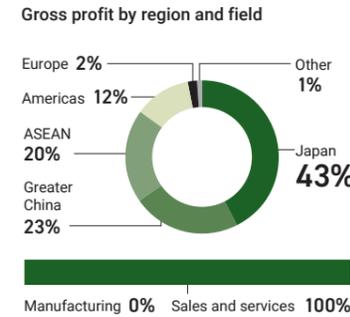
**Sustainability Topic**  
**Expanding our circular economy business**

In regard to circular economy demand, which is expected to increase in relation to various different applications, we will leverage our extensive experience and strong track record that has been cultivated in our display business in the recycling and reuse business, which covers a range of items from waste chemical agents to active ingredients, in order to expand the scope of the solutions that we provide for the semiconductor industry. We will be promoting the development of the circular economy across a wider range of areas.





# Mobility Segment



## Mobility Solutions Department

S  
Strength

- A wide range of product lineups, and the ability to develop new high-performance materials, products, and technologies
- A supply chain building capability that enables the stable supply of products across the globe
- Strong relationships with suppliers built on trust

W  
Weakness

- The need to expand business operations targeting overseas automotive manufacturers
- The need for business portfolio expansion tailored to the innovation in materials, products and technologies in line with the acceleration of EVs

O  
Opportunity

- The growth of EVs due to the global trend toward carbon neutrality and the widespread adoption of the Connected, Autonomous, Shared & Services, Electric (CASE)
- The emergence of new mobility and Mobility as a Service (MaaS)
- The rise of emerging countries

T  
Threat

- Industry restructuring accompanying dramatic changes in the business environment

### In an era of transformation, NAGASE is providing value throughout the world

Our core businesses, which include the sale of resins to Japanese automotive manufacturers, have grown in accordance with our original plan, partly due to the market conditions. However, as regards the expansion of our business dealings with overseas automotive manufacturers and the expansion of our business portfolio in line with the acceleration of the trend towards EVs, although we have made progress here, we are aware of the need to further accelerate this.

In 2022, with the adjustment of global supply chains against the background of a deteriorating US-China relationship and the increasing importance of emerging countries, we focused on the expansion of our business in India, which is one of the important strategies for us. India is a market where we expect to see continued growth in the future. We have grown our business there by introducing a variety of commercial materials, and we have also made a real effort to strengthen our relationships with important local partner companies. In addition, we have begun working with an Indian company that newly entered in market to jointly develop the global market for important materials used in EVs.

As regards our strategy for the future, to accelerate the growth of our EV-related business, we will be further increasing the number of partner companies we work with that possess technology on a par with Japanese firms. To meet customer needs, we will also be proceeding with overseas expansion together with Japanese partner firms, focusing on both the sales and overseas-based production aspects. In addition, to expand the scale of our business with overseas automotive manufacturers, we will be strengthening our marketing by making effective use of DX measures.

Working to develop our business in the midst of what has been described as a "once-in-a-century" transformation of the automotive sector, going forward, we will continue to provide value in the way that only NAGASE can, while dealing, on a global basis, with dramatically fast change in terms of technology, market players, and the supply chain.



**Daiji Matsuoka**  
GM, Mobility Solutions Department



### DX acceleration

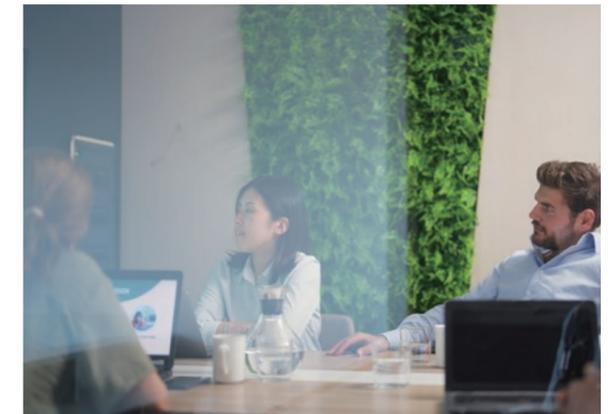
We are speeding up the pace of DX to generate further business opportunities. We have been proceeding with the overhauling of the Mobility Solutions Business website, the utilization of effective digital marketing, the across-the-board implementation of customer relationship management (CRM), and the expansion of operations using robotic process automation (RPA), and these tasks are scheduled for completion during fiscal 2023. In addition, we are spreading awareness of NAGASE's initiatives in a timely manner by disseminating the Mobility Solutions Business's PLUS NAGASE e-mail newsletter, with the aim of familiarizing a wide range of stakeholders with our business's ideas and activities.

### Sustainability Topic

#### Building the framework needed for effective utilization of environmentally friendly materials and technologies

While Europe has been at the forefront of the trend toward carbon neutrality in the global mobility sector, there are also growing calls within Japan to reduce the environment burden.

With Nagase & Co., Ltd., which has extensive recycling technology knowhow thanks to its global supply chain and wide-ranging relationships with suppliers, taking a leading role, we bring together suppliers who handle environmentally friendly materials. We also hold technology exchange meetings with customers, where we exchange information on specific materials and propose recycling technologies for intermediate products to customers.



### Sustainability Topic

#### Using self-driving vehicles to help solve the problem of labor shortages

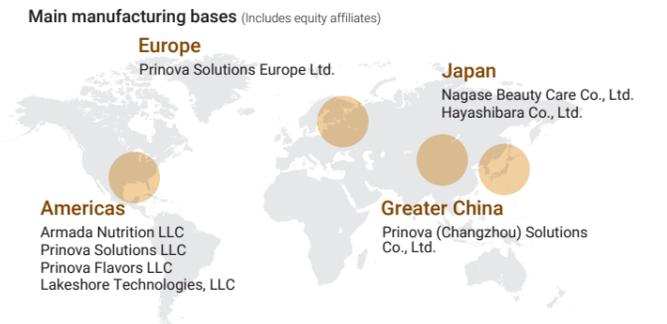
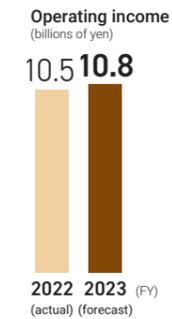
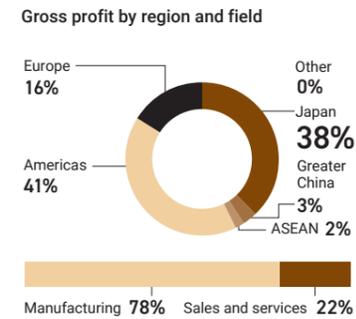
The logistics sector is facing many problems, including the "2024 problem" (the imposition of stricter rules on drivers' working hours, due to come into effect in Japan in 2024). Driver shortages are a particularly pressing problem for the industry. We are providing labor-saving self-driving vehicles to help those industries where delays in corporate activities caused by this issue are a concern.

A key tool for us here is our trading company business model, which enables us to build a single, unified platform for integrating different services. By providing self-driving vehicles of different sizes for different purposes, along with mapping technology for in-house use of these vehicles, and remote operation technology to facilitate self-driving, we can provide the support needed to not only reduce the burden that driver shortages place on companies, but also achieve smooth business operation.





# Life & Healthcare Segment



## Life & Healthcare Products Department

**S**  
Strength

- Industry-leading customer base
- Group companies that have a competitive advantage in their markets, including Hayashibara Co., Ltd. and Prinova Group LLC

- Improving efficiency and optimization of business resources
- Continuous training and securing of human resources

**W**  
Weakness

**O**  
Opportunity

- Expanding overseas businesses by using the knowledge and expertise acquired in domestic businesses.
- Shoring up our bio-related business based on the Group's manufacturing and R&D functions
- Developing new markets in the sustainability area

**T**  
Threat

- Dealing with Pharmaceutical and Medical Device Act, and the laws and other regulations of each country involved in overseas business expansion
- A high percentage of goods purchased from China

### Further strengthening group-wide collaboration globally

In the food business, one of the results achieved in the second year of **ACE 2.0** is that the Prinova business, which the NAGASE Group acquired in 2019, is expanding steadily and has become a major pillar of the Group. In addition to growth in our core business of distribution, in order to expand contract manufacturing of premixes and sports nutritions in the West Coast region of the USA, we have established a new plant in Utah, which began operation in fiscal 2022.

Multiple factors, including yen depreciation, price corrections, robust demand for existing products and launch of new products, led to record-high level profits in the area of pharmaceuticals and cosmetics in fiscal 2022. At the same time, ROIC was also improved through the measures for rationalization of invested capital, such as reducing inventory and eliminating strategic-holding stocks. While firming up our operations base, we also took up the challenge of entering new fields, such as health tech services related to sleep, and a website creation platform for hair stylists.

One of our challenges is to strengthen alliances within the Group in our overseas businesses. We are proceeding to optimize organizational design by revising our comprehensive business strategies, including Hayashibara, Prinova, and other overseas subsidiaries. Also we strengthen our business infrastructure typified by regulatory functions to build an environment which enables our group companies to perform their role even in the regulated markets without intervention of the head office.



**Kenji Okino**  
GM, Life & Healthcare Products Department

### Harnessing the power of the Group to meet growing worldwide healthcare needs

With the graying of Japan and the experience of the COVID-19 pandemic, customers are becoming more health conscious and aware of preventive self-care. In recent years, healthcare-related services have been expanding, not only in the area of therapeutics but also continuous management from preventions, diagnoses, therapies to prognoses. At the same time, technological innovations, most notably computerization, have prompted new players to take an active interest in these fields. The main business domain of this department is pharmaceuticals, foods, and cosmetics that lead directly to improvements in the customer's quality of life. Taking advantage of the materials, sales networks, biotechnology, and other assets that the Group possesses, we contribute to people enjoying better health and fulfillment in their everyday lives.



### Sustainability Topic (healthcare business)

#### Technology development for biopharmaceuticals that can lead to cost reduction

The biopharmaceutical industry has to deal with materials that are expensive and cannot be mass produced, sophisticated and complex manufacturing processes, the need for painstaking quality management, and strict regulations. In order to support the industry, the NAGASE Group provides its technology and services, utilizing its supply chains network.

The NAGASE Group selects its partners on the basis of their ability to create synergy in the areas of current systems, services, and functions, based on the Group's client information and technological information. By providing key technologies and manufacturing functions, it contributes to significant reduction in manufacturing costs in the client company's value chain.



### Sustainability Topic (food ingredients business)

#### Egg Reduction Solutions in Bakery and Confectionery

Egg reduction has been an unavoidable issue around the world, from the perspective of cost and sustainability. NAGASE Group has been presented DENABAKE™ RICH to Western-style bakery and confectionery manufacturers to reduce amount of eggs used for their products, without compromising texture and quality.

DENABAKE™ RICH is an enzyme that acts on lecithin to increase emulsifying properties. It keeps volume, texture and appetizing appearance of bakery and confectionery products with reduced-egg formulations.

NAGASE Group contributes to implementing sustainable product development with customers, by optimizing recipes and applications along with their needs.



# Regional Strategy

Note: Employees in the consolidated group (as of March 31, 2023)

**Built on a foundation of chemistry, the NAGASE Group is engaged in global business across a wide spectrum of industries. Utilizing the 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: 846

### Expanding locally-driven business with the “ONE China” business strategy

We have transitioned away from a region-focused strategy emphasizing the individual business locations to a new business strategy that treats China as a single unit, and we have been working to strengthen our operations in each field. Going forward, we will realize even closer coordination between our seven businesses (Semiconductor, Electronics, Functional Resin, Mobility, Life & Healthcare, Chemicals, and Advanced Materials & Processing), our manufacturing locations – including Nagase ChemteX (Wuxi) Corporation and Prinova (Changzhou) – and our business locations in Taiwan, responding rapidly to changes in each sector, and expanding the scope of locally-originated business within the Greater China region in addition to NAGASE’s technology and product development in Japan, Europe and North America.

#### Main Businesses

- Semiconductors** — We are developing our semiconductor business across the whole supply chain, from front-end processes to back-end processes, and we have built up a strong network in China and Taiwan. Going forward, we will be working to expand our business while exploring the potential of a wide range of materials.
- Mobility** — China’s EV market is one of the world’s most highly developed, and we are utilizing a variety of leading-edge technologies and products to explore high-quality concepts relating to safety and energy saving. Besides China, we are also planning to expand sales in Europe and in other parts of Asia.
- Electronics** — We are focusing on growing our business for both old and new applications, including those relating to electronic devices such as PCs and smartphones, those relating to next-generation devices such as OLED and Micro-LED displays, AR/VR and sensor applications utilizing 5G/6G infrastructure.

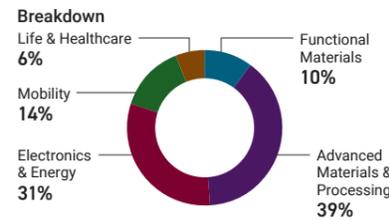
#### Topics

In fiscal 2022, despite the Shanghai lockdown and the rapid spread of infection in China following the easing of COVID-19 restrictions, overall, our business performed solidly. In particular, the semiconductor business, which is a key business area for us, continued to post strong growth. In fiscal 2023, the business environment has become increasingly challenging, with the slow economic recovery in the post-COVID era, and the impact of increased friction in the U.S.-China relationship and uncertainty in the property market. Going forward, we will be aiming to realize steady, balanced, and sustainable growth by placing more emphasis on the Life & Healthcare business, which is less subject to shocks in the external environment, and on bio-derived “green” materials. While continuing to focus on our existing seven business areas, we will also be striving to create new businesses and improve profitability.

**Kusuo Ota**  
Managing Executive Officer and Greater China CEO



Gross Profit/22.5 billion yen (FY2022)



## ASEAN

Base established: 1975/Number of employees: 800

### Using successful models and strengthening the local management system to develop new profitable areas

In the resin business, which is our main business area, we are aiming to expand our business throughout the region, across national boundaries, by establishing a trans-national, cross-regional business promotion organization, assigning specialists for each industry category, and strengthening ties with key suppliers. We have also forged a region-wide marketing organization for our Electronics and Life & Healthcare businesses, which had previously been relatively minor business areas for us. By undertaking intra-regional market analysis that covers the strengths and weaknesses of each country, promoting effective utilization of human capital within the region, and maintaining a close collaborative relationship with the relevant business divisions at NAGASE’s head office in Japan, we have put in place the optimal framework for business promotion.

#### Main Businesses

- Electronics Business** — Taking as a foundation the business development model that has proved successful in Malaysia, we are proceeding with analysis of the potential for business expansion in neighboring countries.
- Life & Healthcare Business** — With support from the cross-regional team and from the relevant business divisions in NAGASE’s head office, we are proceeding with the building of the framework needed to implement regulatory services in the future.

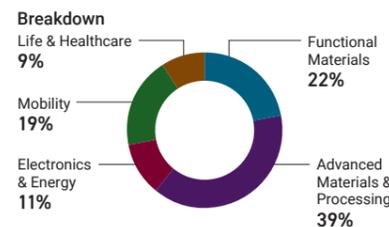
#### Topics

In fiscal 2022, despite the rise in resource prices following the end of the COVID-19 pandemic, demand for office automation applications rose, and we met both our sales and operating profit targets in this segment. Going forward, we anticipate that there will be a shift in business away from China due to heightened U.S.-China trade friction, and we will also consider how to address the issue of how to approach trading in recycled plastic, demand for which is rising due to increased environmental awareness. Due to factors such as semiconductor shortages, our performance in the automotive-related businesses did not meet the original targets. As the automotive market still accounts for a high share of overall resin sales, we are expanding the scope of the materials that we handle, proceeding with a shift toward products relating to vehicle electrification and advance mobility.

**Eiroku Oki**  
Executive Officer and ASEAN and India CEO Regional Operating Centre Leader



Gross Profit/14.9 billion yen (FY2022)



## Americas

Base established: 1971/Number of employees: 1,537

### Strengthening our organizational capabilities to address a wide range of business areas

The Americas region business is highly diverse and spans a wide range of industries. Our focus continues to be led by the food and nutritional ingredient markets with other key verticals such as mobility and chemicals playing a key role in future growth. To better leverage resources, we are focusing on creating market vertical-based leadership in combination with our regional affiliates in order to expedite growth.

Over the last several years, considerable investment has been made in the region to develop expertise in the area of additive manufacturing\*. In 2023, we introduced our additive manufacturing education and showroom resource, Empowr3D. Through Empowr3D we provide end-to-end solutions: from design, material selection, printer selection, validation, all the way through to the production of printed parts. By walking side by side with our customers we hope to expedite user adoption and, by extension, the growth of the additive manufacturing industry.

\* A manufacturing method that utilizes additive manufacturing technologies such as 3D printing

#### Main Businesses

- Food and Nutritional Ingredients** — We will continue to focus on growth through the development and expansion of value added capabilities and services.
- Mobility** — As the automotive landscape rapidly evolves, we are dedicated to providing innovative solutions that drive the transition to cleaner and more sustainable transportation. Our mission is to accelerate the adoption of electrification, enabling manufacturers to realize a new era of eco-friendly and efficient transportation.

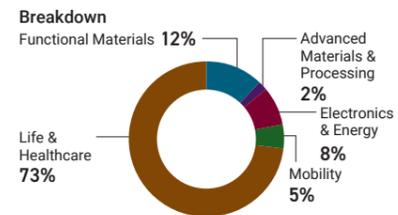
#### Topics

For FY2023, we have implemented three key strategic initiatives across the region: optimizing operations for heightened efficiency, enhancing decision-making by clearly differentiating risk-taking from profitable ventures, and driving our organizational vision through internal alignment and external engagement. These initiatives collectively propel us towards streamlined processes, focused growth, and amplified impact.



**Bradley Hilborn**  
Americas CEO and Nagase Holdings America Corporation CEO

Gross Profit/33.1 billion yen (FY2022)



## Europe

Base established: 1980/Number of employees: 284

### Exploring new business and investment opportunities against a background of rising environmental consciousness

The volatility in resource and energy procurement resulting from the conflict in Ukraine, and the related price rises, have had a severe impact on the European business environment. At the same time, Europe is leading the way in the global trend toward responding proactively to climate change, and it is becoming necessary for chemical sector products, including cosmetics, to secure certification under Ecovadis and other certification schemes. Changes such as the shift over to clean energy (including wind power) and to bio-derived materials, and particularly the decision in Europe to ban sales of vehicles with internal combustion engines by 2035 so as to boost the adoption of electric vehicles, represent major business opportunities. We offer a variety of solutions to meet the needs of electric vehicle manufacturers who are aiming to realize high-performance batteries and enhanced safety. In regard to our food sector products, we are proceeding with the selection of key products to focus on, so as to enhance our competitiveness by optimizing the operations of the Group as a whole, for example by transferring Hayashibara products to Prinova Europe Limited. Besides strengthening coordination with NAGASE Group companies in Japan, Asia, and the Americas, we will also be actively taking on the challenge of opportunities for investment, etc. in relation to locally originated businesses.

#### Main Businesses

- Pharmaceuticals** — We are proceeding with development of the biomedicine sector, focusing mainly on Hayashibara Co., Ltd. products.
- Mobility** — Batteries represent the core technology for electric vehicles, and for battery applications we offer solutions tailored to customers’ needs, including chemical products and additives to help realize high performance, and fire-resistant materials to enhance safety.
- Chemicals** — Making effective use of the Nagase Group network, we are offering Europe-based global corporations solutions for worldwide procurement functions. We are also proceeding with the development of a variety of solutions for environmentally friendly food product packaging.

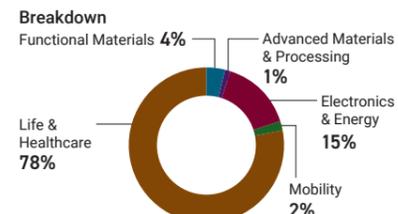
#### Topics

In fiscal 2022, we entered into a partnership with HALIX B.V., of the Netherlands, which is strong in biomedicines and pharmaceutical ingredients, such as viral vectors and recombinant proteins, to begin providing contracted development and manufacturing services for the Japan market. As a result, we are now able to provide end-to-end services from process development to GMP manufacturing and final formulation. We have also been focusing on providing environmentally friendly production solutions for electric vehicle batteries, chemical products, and the healthcare sector. In fiscal 2023, we will continue with sustainability-aware product development for the cosmetics sector.



**Kusuo Ota**  
Managing Executive Officer and Europe CEO

Gross Profit/11.2 billion yen (FY2022)



## 11-Year Financial Highlights

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	
Medium-Term Management Plan	<i>"CHANGE"11</i>				<i>Change-S2014</i>			<i>ACE-2020</i>			<i>ACE 2.0</i>	
	Investment Amount: ¥107.4 billion		Investment Amount: ¥41.1 billion			Investment Amount: ¥13.7 billion		Investment Amount: ¥129.1 billion				
Performance (Accounting Fiscal Year): (Millions of yen)												
Net Sales	¥ 666,272	¥ 723,212	¥ 759,713	¥ 742,194	¥ 722,384	¥ 783,933	¥ 807,755	¥ 799,559	¥ 625,245	¥ 780,557	¥ 912,896	
Segments	Functional Materials	167,017	169,973	168,238	157,149	153,546	174,922	179,627	169,318	75,294	99,874	156,161
	Advanced Materials & Processing	214,214	239,224	254,165	255,505	242,609	262,831	275,203	267,078	209,715	257,283	220,955
	Electronics & Energy	125,014	137,026	149,947	127,926	127,722	129,324	122,319	115,123	110,770	128,131	136,975
	Mobility	83,068	99,441	109,851	115,351	112,956	129,708	139,235	126,000	78,783	103,389	125,560
	Life & Healthcare	76,116	76,810	76,609	85,571	84,904	86,517	90,794	121,545	150,331	191,634	273,161
	Others	841	737	900	689	644	629	574	492	349	244	84
Region	Domestic	361,971	372,939	374,208	363,038	369,365	395,428	412,617	402,390	221,737	250,360	265,407
	Overseas	304,301	350,272	385,505	379,155	353,019	388,504	395,137	397,169	403,507	530,196	647,489
Gross Profit	82,583	88,936	91,991	91,663	91,503	102,675	105,441	104,901	114,600	139,494	155,410	
Operating Income	15,578	15,789	18,153	18,024	15,030	24,118	25,226	19,167	21,916	35,263	33,371	
Profit Attributable to Owners of the Parent	14,182	11,663	11,318	12,316	10,331	17,175	20,136	15,144	18,829	25,939	23,625	
Financial Condition: (Millions of yen)												
Total Assets	¥ 486,747	¥ 498,141	¥ 546,525	¥ 512,081	¥ 530,775	¥ 569,456	¥ 567,346	¥ 611,477	¥ 640,587	¥ 739,720	¥ 762,688	
Equity Capital	228,505	246,723	281,398	273,963	290,217	303,636	307,674	305,322	329,687	344,261	367,675	
Interest-Bearing Debt	98,425	92,828	98,493	87,560	82,046	86,173	85,620	135,974	118,947	166,530	179,697	
Per Share Data: (Yen)												
Net Income (Basic)	¥ 111.31	¥ 91.86	¥ 89.10	¥ 96.96	¥ 81.65	¥ 136.34	¥ 161.30	¥ 122.12	¥ 151.91	¥ 213.46	¥ 199.54	
Net Assets	1,803.31	1,942.20	2,215.18	2,156.67	2,301.10	2,424.97	2,481.01	2,462.04	2,670.09	2,868.22	3,139.26	
Cash Dividends	26	28	30	32	33	40	42	44	46	54	70	
Payout Ratio (%)	23.4	30.5	33.7	33.0	40.4	29.3	26.0	36.0	30.3	25.1	34.9	
Ratios: (%)												
Overseas Sales to Net Sales	45.7	48.4	50.7	51.1	48.9	49.6	48.9	49.7	64.5	67.9	70.9	
Manufacturing Ratio (Operating Income)	37.3	23.5	27.8	24.3	39.5	34.2	33.5	40.8	39.8	32.6	27.5	
Operating Margin (Operating Income/Net Sales)	2.3	2.2	2.4	2.4	2.1	3.1	3.1	2.4	3.5	4.5	3.7	
Return on Equity (ROE)	6.5	4.9	4.3	4.4	3.7	5.8	6.6	4.9	5.9	7.7	6.6	
Shareholders' Equity Ratio	46.9	49.5	51.5	53.5	54.7	53.3	54.2	49.9	51.5	46.5	48.2	
Net DE Ratio (Times)	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.3	0.4	
Total Return Ratio	34.9	30.5	33.7	33.0	51.0	39.5	35.6	36.0	35.2	48.3	58.9	
Shareholders' Equity Dividend Rate	1.5	1.5	1.4	1.5	1.5	1.7	1.7	1.8	1.8	1.9	2.3	

(Note 1) The Company has applied "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, issued on March 31, 2020) since the start of FY2021 (the fiscal year ended March 31, 2022), and retroactively applied it figures from FY2020 (the fiscal year ended March 31, 2021).

(Note 2) Starting from the fiscal year ended March 31, 2021, overseas sales are calculated by compiling separate totals for each region where consolidated subsidiaries are located. Figures for previous years were calculated by compiling separate totals for each region to which products are shipped.

# Financial Highlights

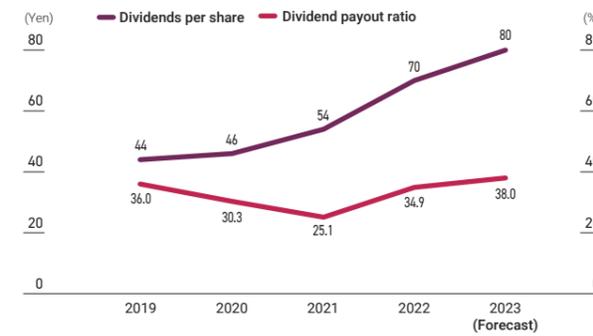
## 1 Net sales, gross profit and gross profit margin



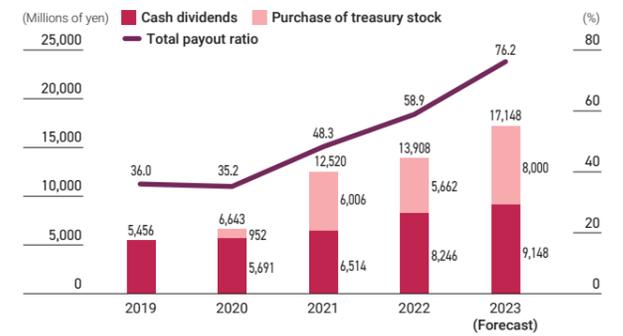
## 2 Operating income and profit margin by business category (Company-wide)



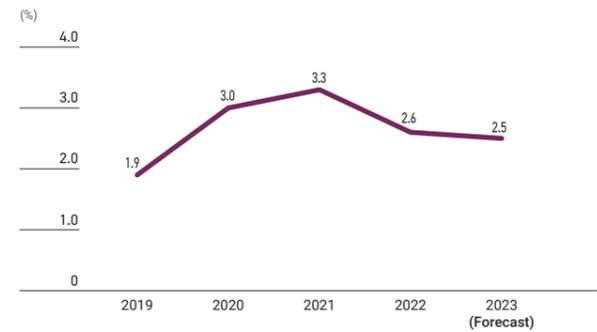
## 9 Dividends per share and dividend payout ratio



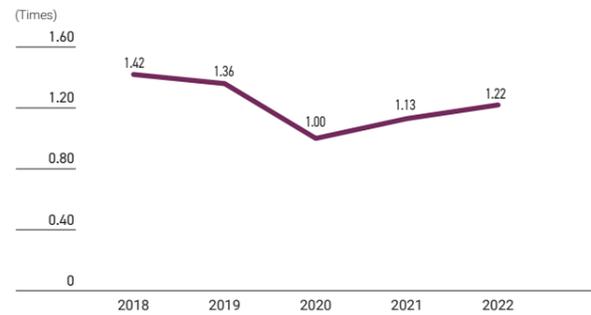
## 10 Cash dividends, purchase of treasury stock and total return ratio



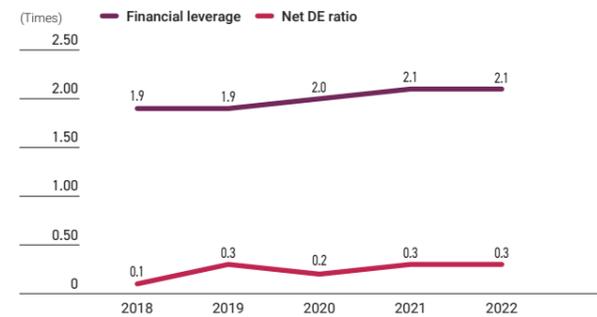
## 3 Ratio of profit attributable to owners of parent



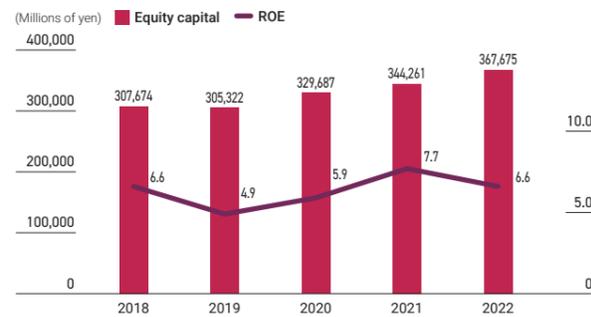
## 4 Total asset turnover



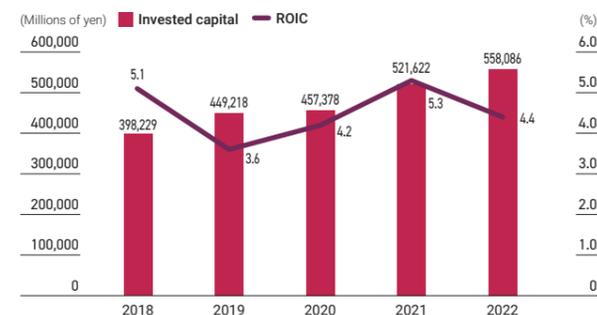
## 5 Financial leverage and Net DE ratio



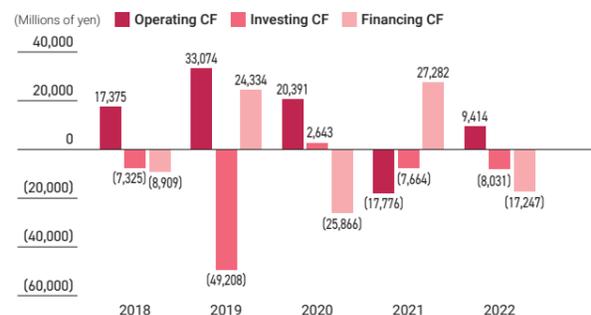
## 6 Equity capital/ROE



## 7 Invested capital/ROIC



## 8 Cash flows from operating, investing and financing



### Overview of consolidated results

During the consolidated fiscal year under review, the global economy saw both continued recovery, with the resumption of economic activity post-COVID-19, and mounting fears of a global economic slowdown as a result of heightened geopolitical risks due to worsening of the protracted situation in Ukraine, soaring raw materials prices and rising interest rates.

Each of the several regions in which the NAGASE Group operates was affected in different ways. In Greater China, manufacturing industry operations were among the principal areas affected by the surge in COVID-19 infections immediately following the reversal of the region's zero-COVID policy, but the spread of the virus was later curbed, allowing an upswing in both economic activity and the economy as a whole. In the Americas, increases in business costs due to inflation and a decline in lending activity designed to curb inflation reduced housing investment and capital expenditure, causing a moderate economic slowdown. The economies of the ASEAN region saw various negative impacts, including rising import prices due to local currency depreciation in response to higher interest rates in the U.S., yet remained steady, with increases in personal consumption. In Japan, despite a measure of inflation caused by price rises to cover increases in raw materials and energy costs, the economy is on course to recover thanks to increases in domestic demand and recovery in demand for inbound tourism due to relaxation of COVID-19 restrictions and depreciation of the yen.

Against this backdrop, the NAGASE Group recorded revenue increases in all segments, resulting in net sales of ¥912.89 billion (+17% year on year). In terms of profit, the yen saw progressive depreciation, but a decrease in our gross profit margin, rising logistics costs, increased selling costs associated with the Group's increased activity, and a rise in general administrative expenses meant that our operating income was ¥33.37 billion (-5.4%). With this decrease in operating income, as well as in ordinary income (primarily due to a rise in interest expenses), profit attributable to owners of the parent was ¥23.62 billion (-8.9%).

### Financial condition

As of March 31, 2023, current assets amounted to ¥530.13 billion, an increase of ¥15.84 billion compared to the end of the previous consolidated fiscal year. This was mainly due to an increase in inventories and accounts receivable, partially offset by a decrease in cash and deposits. Non-current assets amounted to ¥232.55 billion, an increase of ¥7.12 billion over the same period, due to additions to our tangible and intangible fixed assets, which were

partially offset by sales of investments in securities. As a result, total assets amounted to ¥762.68 billion, an increase of ¥22.96 billion compared to the end of the previous consolidated fiscal year.

Liabilities amounted to ¥384.3 billion, a decrease of ¥0.32 billion compared to the end of the previous consolidated fiscal year, mainly due to a decrease in accounts payable and short-term loans, partially offset by an increase in commercial papers and lease obligations. Net assets amounted to ¥378.38 billion, an increase of ¥23.29 billion over the same period, mainly due to recorded profit attributable to owners of the parent and an increase in translation adjustments, and despite a decrease in net unrealized holding gain on securities. As a result, the Company recorded a shareholders' equity ratio of 48.2%, up 1.7 points as compared to 46.5% at the end of the previous consolidated fiscal year.

### Summary of consolidated cash flows

As of March 31, 2023, cash and cash equivalents (hereinafter, cash), taking into account changes in exchange rates, decreased by ¥12.8 billion as compared to the end of the previous consolidated fiscal year, amounting to ¥40.33 billion. Of this, cash provided by operating activities was ¥9.41 billion, cash used in investing activities was ¥8.03 billion and cash used in financing activities was ¥17.24 billion.

### Cash flows from operating activities

Net cash provided by operating activities was ¥9.41 billion. This was mainly due to our recording a net income before taxes and other adjustments of ¥33.1 billion and reducing cash outflow by ¥12.3 billion because of depreciation, offset in part by an increase in working capital leading to the use of ¥20.0 billion and payment of ¥14.2 billion in corporate taxes.

### Cash flows from investing activities

Net cash used in investing activities was ¥8.03 billion. This was mainly due to the impact of purchases of property, plant and equipment amounting to ¥12.0 billion and of intangible fixed assets amounting to ¥4.8 billion, offset in part by proceeds of ¥7.4 billion from sales of investments in securities and of ¥2.0 billion from the sale of shares of subsidiaries resulting in changes in the scope of consolidation.

### Cash flows from financing activities

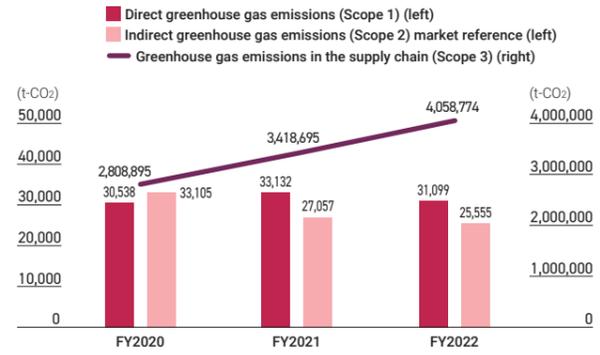
Net cash used in financing activities was ¥17.24 billion. This was mainly due to outgoings of ¥8.6 billion toward the repayment of long-term loans, ¥7.1 billion in payment of dividends and ¥5.6 billion for the acquisition of treasury stock, offset in part by an income of ¥5 billion from long-term loans.

# Non-Financial Highlights

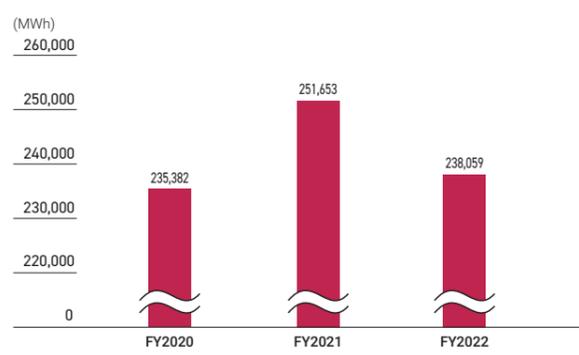
## Environment

We share environmental data, including greenhouse gas (GHG) emissions as established in the NAGASE Group Carbon Neutral Declaration from trading and manufacturing business, and promote business while giving consideration toward the environment.

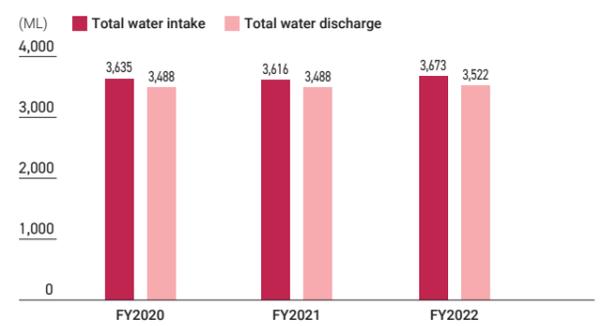
### Group Greenhouse gas emissions in our business activities



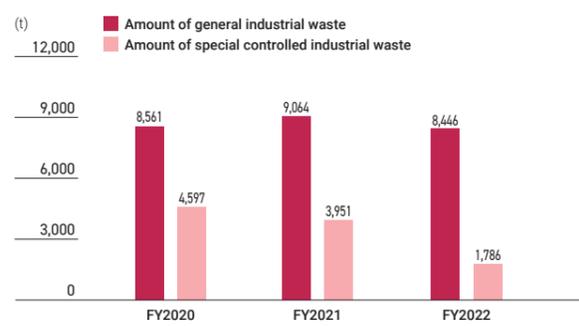
### Group Energy use



### Group Use of water resources



### Group Amount of waste



## Endorsed initiatives

### United Nations Global Compact



The NAGASE Group is a signatory to the United Nations Global Compact and promotes sustainability activities based on 10 principles in the four areas of human rights, labor, the environment, and anti-corruption.

### RSPO (Roundtable on Sustainable Palm Oil) Certification



Nagase & Co., Ltd. is a member of the RSPO (Roundtable on Sustainable Palm Oil), and holds an RSPO Distributor License.

### TCFD (Task Force on Climate-related Financial Disclosures)



The NAGASE Group has expressed its support for TCFD (Task Force on Climate-related Financial Disclosures).

### Sedex



In 2019, Nagase & Co., Ltd. joined Sedex, which promotes the creation of ethical supply chains.

### Expressing support for the GX League Basic Concept



Nagase & Co., Ltd. has expressed its support for the GX League Basic Concept, a framework announced by the Ministry of Economy, Trade and Industry for a group of companies that are working actively to realize Green Transformation (GX) to collaborate with government and the university sector on discussing the transformation of the economic and social systems as a whole and on creating new markets.

### Initiatives for responsible care



Nagase & Co., Ltd. participates in the Responsible Care (RC) Committee, an operational committee of the Japan Chemical Industry Association.

### Zero-Emission Challenge



Nagase & Co., Ltd. is participating in a project to develop production technology for bio-based products that will accelerate carbon recycling as part of the Zero-Emission Challenge sponsored by the Ministry of Economy, Trade and Industry to realize carbon neutrality by 2050.

### Certified as a DX certified business operator by the Ministry of Economy, Trade and Industry

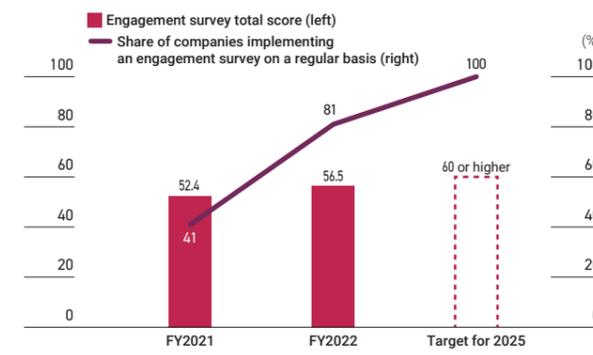


In January 2022, Nagase & Co., Ltd. was certified as a DX certified business operator under the Ministry of Economy, Trade and Industry's DX Certification System.

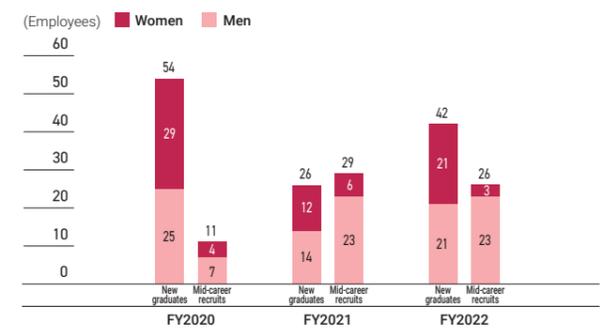
## Society

The NAGASE Group sets "Improve Employee Engagement" as a main KPI, and discloses data related to labor practices, human resource development, occupational health and safety, and health and productivity management, etc., and strives for the continual growth and development of employees and companies.

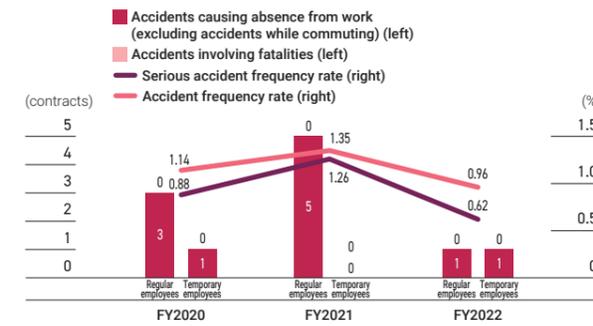
### Non-consolidated Group EES implementation status



### Non-consolidated Number of new graduates and mid-career recruits



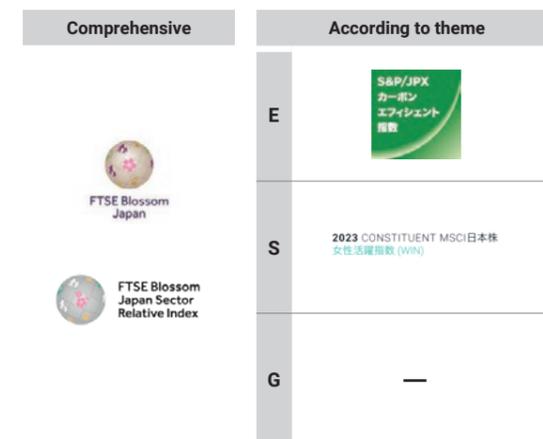
### Group Occupational health and safety



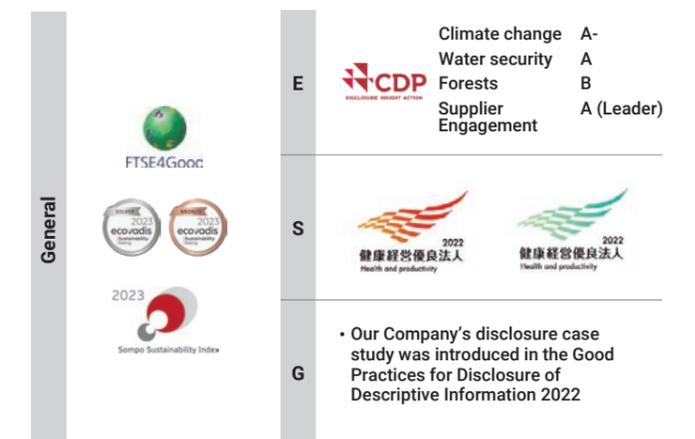
\* Serious accident frequency rate: No. of deaths and injuries per million hours worked (accidents causing absence from work)  
 \* Accident frequency rate: No. of occupational accidents (of all types) per hundred employees (accidents causing absence from work + Accidents that do not require absence from work)

## External evaluation (as of October 2023)

### GPIF (Government Pension Investment Fund) ESG Index



### Other external evaluations



As a result of third-party evaluation, FTSE Russell (a registered trademark of FTSE International Limited and Frank Russell Company) hereby certifies that Nagase & Co., Ltd. has met the criteria for incorporation in the FTSE Blossom Japan Sector Relative Index, making it a constituent stock of the index. The FTSE Blossom Japan Sector Relative Index is widely used to create and evaluate sustainable investment funds and other financial products. The incorporation of Nagase & Co., Ltd. into the MSCI Index and the use of the MSCI logo, trademark, service mark or index name in this article do not constitute sponsorship, endorsement or promotion of Nagase & Co., Ltd. by MSCI or its affiliates. The MSCI Index is the exclusive property of MSCI. MSCI Index names and logos are trademarks or service marks of MSCI or its affiliates.

# Consolidated Balance Sheet

Year ended March 31, 2023

Assets	Millions of yen		Thousands of U.S. dollars (Note 1)
	2023	2022	2023
<b>Current assets:</b>			
Cash and time deposits (Notes 19 and 25)	¥ 40,897	¥ 54,211	\$ 306,276
Notes and accounts receivable (Note 19)	302,105	289,862	2,262,450
Inventories (Notes 7 and 8)	169,721	157,525	1,271,033
Other current assets	18,429	13,935	138,014
Less allowance for doubtful accounts	(1,021)	(1,248)	(7,646)
Total current assets	530,132	514,286	3,970,134
<b>Non-current assets</b>			
<b>Property, plant and equipment, at cost</b> (Notes 9 and 10):			
Land	18,839	20,398	141,084
Buildings and structures	64,095	61,430	480,004
Machinery, equipment and vehicles	93,845	90,748	702,801
Leased assets	11,439	2,337	85,666
Construction in progress	2,135	2,027	15,989
	190,355	176,942	1,425,560
Less accumulated depreciation	(108,290)	(104,387)	(810,979)
Property, plant and equipment, net (Note 26)	82,064	72,554	614,574
<b>Investments and other assets:</b>			
Investments in securities (Notes 11 and 19):			
Unconsolidated subsidiaries and affiliates	9,341	9,017	69,954
Other	60,402	66,583	452,348
	69,743	75,600	522,302
Long-term loans receivable	17	24	127
Goodwill (Note 26)	29,004	29,492	217,210
Technology-based assets	4,337	5,912	32,480
Retirement benefit asset (Note 14)	2,645	3,139	19,808
Deferred tax assets (Note 15)	3,857	3,572	28,885
Other assets (Note 10)	41,063	35,248	307,519
Less allowance for doubtful accounts	(176)	(112)	(1,318)
Total investments and other assets	150,491	152,879	1,127,020
Total non-current assets	232,556	225,434	1,741,601
Total assets (Note 26)	¥ 762,688	¥ 739,720	\$ 5,711,735

Liabilities and Net Assets	Millions of yen		Thousands of U.S. dollars (Note 1)
	2023	2022	2023
<b>Current liabilities:</b>			
Notes and accounts payable (Note 19)	¥ 140,438	¥ 149,036	\$ 1,051,734
Short-term loans (Notes 12 and 19)	66,117	73,121	495,147
Current portion of long-term loans and lease obligations (Notes 12 and 19)	3,120	9,152	23,366
Commercial papers (Notes 12 and 19)	38,000	25,000	284,580
Current portion of bonds payable (Note 12)	—	10,000	—
Accrued income taxes (Note 15)	2,913	7,100	21,815
Accrued expenses	6,300	6,479	47,180
Accrued bonuses for employees	6,985	7,648	52,310
Accrued bonuses for directors and executive officers	371	497	2,778
Other current liabilities	21,957	19,799	164,435
Total current liabilities	286,203	307,836	2,143,361
<b>Long-term liabilities:</b>			
Bonds (Notes 12 and 19)	30,000	20,000	224,669
Long-term loans and lease obligations (Notes 12 and 19)	42,460	29,256	317,981
Deferred tax liabilities (Note 15)	10,360	12,310	77,586
Retirement benefit liability (Note 14)	13,197	13,238	98,832
Provision for directors' stock benefit	65	—	487
Other long-term liabilities	2,012	1,987	15,068
Total long-term liabilities	98,097	76,791	734,644
<b>Contingent liabilities</b> (Note 23)			
<b>Net assets:</b>			
<b>Shareholders' equity</b> (Note 17):			
Common stock:			
Authorized — 346,980,000 shares			
Issued — 117,908,285 shares in 2023 and 120,908,285 shares in 2022	9,699	9,699	72,635
Capital surplus	10,636	10,639	79,653
Retained earnings (Notes 24 and 28)	290,279	280,015	2,173,886
Treasury stock, at cost (Note 18) — 786,718 shares in 2023 and 881,767 shares in 2022	(1,550)	(1,534)	(11,608)
Total shareholders' equity	309,064	298,820	2,314,566
<b>Accumulated other comprehensive income:</b>			
Net unrealized holding gain on securities (Note 11)	28,928	31,732	216,640
Deferred (loss) gain on hedges (Note 20)	(7)	178	(52)
Translation adjustments	30,414	13,690	227,769
Retirement benefit liability adjustments (Note 14)	(726)	(161)	(5,437)
Total accumulated other comprehensive income	58,610	45,441	438,928
<b>Non-controlling interests</b>	10,713	10,830	80,229
Total net assets	378,388	355,092	2,833,730
Total liabilities and net assets	¥ 762,688	¥ 739,720	\$ 5,711,735

See notes to consolidated financial statements.

## Consolidated Statement of Income

Year ended March 31, 2023

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2023	2022	2023
Net sales (Note 26)	¥ 912,896	¥ 780,557	\$ 6,836,636
Cost of sales (Note 8)	757,486	641,062	5,672,778
<b>Gross profit</b>	<b>155,410</b>	139,494	<b>1,163,858</b>
Selling, general and administrative expenses (Notes 21 and 22)	122,038	104,231	913,937
<b>Operating income</b> (Note 26)	<b>33,371</b>	35,263	<b>249,914</b>
Other income (expenses):			
Interest and dividend income	1,734	1,551	12,986
Interest expense	(3,211)	(1,176)	(24,047)
Equity in earnings of affiliates	318	—	2,381
Equity in losses of affiliates	—	(1,031)	—
Gain on sales of shares of subsidiaries and affiliates	52	—	389
Gain on sales of investments in securities (Note 11)	6,587	7,037	49,330
Loss on sales of shares of subsidiaries and affiliates	(466)	(59)	(3,490)
Gain on sales of investments in capital of subsidiaries and affiliates	147	314	1,101
Loss on sales of investment securities	(7)	(6)	(52)
Loss on devaluation of investments in securities (Note 11)	(2,120)	(1,436)	(15,877)
Gain on sales of property, plant and equipment	144	16	1,078
Gain on donation of property, plant and equipment	—	719	—
Loss on sales of property, plant and equipment	(87)	(177)	(652)
Loss on disposal of property, plant and equipment	(998)	(453)	(7,474)
Loss on impairment of fixed assets (Notes 10 and 26)	(2,838)	(2,974)	(21,254)
Gain on change in equity	449	—	3,363
Subsidy income	25	75	187
Other, net	37	1,895	277
<b>Profit before income taxes</b>	<b>33,137</b>	39,557	<b>248,161</b>
Income taxes (Note 15):			
Current	9,621	12,826	72,051
Deferred	(694)	(141)	(5,197)
<b>Profit</b>	<b>24,210</b>	26,872	<b>181,308</b>
Profit attributable to:			
Non-controlling interests	(584)	(932)	(4,374)
<b>Owners of parent</b>	<b>¥ 23,625</b>	¥ 25,939	<b>\$ 176,927</b>

See notes to consolidated financial statements.

## Consolidated Statement of Comprehensive Income

Year ended March 31, 2023

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2023	2022	2023
<b>Profit</b>	<b>¥ 24,210</b>	¥ 26,872	<b>\$ 181,308</b>
Other comprehensive income (Note 13):			
Net unrealized holding loss on securities	(2,794)	(11,844)	(20,924)
Deferred (loss) gain on hedges	(186)	106	(1,393)
Translation adjustments	16,852	13,623	126,204
Retirement benefit liability adjustments	(564)	(430)	(4,224)
Share of other comprehensive income of affiliates accounted for by the equity method	477	282	3,572
	<b>13,784</b>	1,736	<b>103,228</b>
<b>Comprehensive income</b>	<b>¥ 37,994</b>	¥ 28,608	<b>\$ 284,535</b>
Total comprehensive income attributable to:			
Owners of parent	¥ 36,838	¥ 26,482	\$ 275,878
Non-controlling interests	¥ 1,156	¥ 2,126	\$ 8,657

See notes to consolidated financial statements.

# Consolidated Statement of Changes in Net Assets

Year ended March 31, 2023

	Millions of yen											
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Net unrealized holding gain on securities	Deferred gain (loss) on hedges	Translation adjustments	Retirement benefit liability adjustments (Note 13)	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
<b>Balance at April 1, 2021</b>	¥ 9,699	¥ 10,646	¥ 265,920	¥ (1,503)	¥ 284,763	¥ 43,576	¥ 72	¥ 1,006	¥ 268	¥ 44,924	¥ 8,743	¥ 338,431
Profit attributable to owners of parent	-	-	25,939	-	25,939	-	-	-	-	-	-	25,939
Cash dividends	-	-	(5,876)	-	(5,876)	-	-	-	-	-	-	(5,876)
Purchases of treasury stock	-	-	-	(6,006)	(6,006)	-	-	-	-	-	-	(6,006)
Disposition of treasury stock	-	0	-	0	0	-	-	-	-	-	-	0
Retirement of treasury stock	-	(0)	(5,975)	5,975	-	-	-	-	-	-	-	-
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	-	(6)	-	-	(6)	-	-	-	-	-	-	(6)
Increase in retained earnings resulting from changes in scope of equity method	-	-	7	-	7	-	-	-	-	-	-	7
Other changes	-	-	-	-	-	(11,843)	106	12,684	(430)	516	2,086	2,603
<b>Balance at April 1, 2022</b>	<b>9,699</b>	<b>10,639</b>	<b>280,015</b>	<b>(1,534)</b>	<b>298,820</b>	<b>31,732</b>	<b>178</b>	<b>13,690</b>	<b>(161)</b>	<b>45,441</b>	<b>10,830</b>	<b>355,092</b>
Profit attributable to owners of parent	-	-	23,625	-	23,625	-	-	-	-	-	-	23,625
Cash dividends	-	-	(7,150)	-	(7,150)	-	-	-	-	-	-	(7,150)
Purchases of treasury stock	-	-	-	(5,662)	(5,662)	-	-	-	-	-	-	(5,662)
Retirement of treasury stock	-	-	(5,645)	5,645	-	-	-	-	-	-	-	-
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	-	(3)	-	-	(3)	-	-	-	-	-	-	(3)
Decrease in retained earnings resulting from changes in scope of equity method	-	-	(330)	-	(330)	-	-	-	-	-	-	(330)
Changes in accounting period of consolidated subsidiaries	-	-	(234)	-	(234)	-	-	-	-	-	-	(234)
Other changes	-	-	-	-	-	(2,804)	(186)	16,723	(564)	13,169	(117)	13,051
<b>Balance at March 31, 2023</b>	<b>¥ 9,699</b>	<b>¥ 10,636</b>	<b>¥ 290,279</b>	<b>¥ (1,550)</b>	<b>¥ 309,064</b>	<b>¥ 28,928</b>	<b>¥ (7)</b>	<b>¥ 30,414</b>	<b>¥ (726)</b>	<b>¥ 58,610</b>	<b>¥ 10,713</b>	<b>¥ 378,388</b>

See notes to consolidated financial statements.

	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 gain (loss) on hedges	Translation adjustments	Retirement benefit liability adjustments (Note 13)	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
<b>Balance at April 1, 2022</b>	<b>\$72,635</b>	<b>\$79,675</b>	<b>\$2,097,019</b>	<b>\$(11,488)</b>	<b>\$2,237,849</b>	<b>\$237,639</b>	<b>\$1,333</b>	<b>\$102,524</b>	<b>\$(1,206)</b>	<b>\$340,306</b>	<b>\$81,105</b>	<b>\$2,659,268</b>
Profit attributable to owners of parent	-	-	176,927	-	176,927	-	-	-	-	-	-	176,927
Cash dividends	-	-	(53,546)	-	(53,546)	-	-	-	-	-	-	(53,546)
Purchases of treasury stock	-	-	-	(42,402)	(42,402)	-	-	-	-	-	-	(42,402)
Retirement of treasury stock	-	-	(42,275)	42,275	-	-	-	-	-	-	-	-
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	-	(22)	-	-	(22)	-	-	-	-	-	-	(22)
Decrease in retained earnings resulting from changes in scope of equity method	-	-	(2,471)	-	(2,471)	-	-	-	-	-	-	(2,471)
Changes in accounting period of consolidated subsidiaries	-	-	(1,752)	-	(1,752)	-	-	-	-	-	-	(1,752)
Other changes	-	-	-	-	-	(20,999)	(1,393)	125,238	(4,224)	98,622	(876)	97,738
<b>Balance at March 31, 2023</b>	<b>\$72,635</b>	<b>\$79,653</b>	<b>\$2,173,886</b>	<b>\$(11,608)</b>	<b>\$2,314,566</b>	<b>\$216,640</b>	<b>\$(52)</b>	<b>\$227,769</b>	<b>\$(5,437)</b>	<b>\$438,928</b>	<b>\$80,229</b>	<b>\$2,833,730</b>

See notes to consolidated financial statements.

# Consolidated Statement of Cash Flows

Year ended March 31, 2023

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2023	2022	2023
<b>Operating activities:</b>			
Profit before income taxes	¥ 33,137	¥ 39,557	\$ 248,161
Adjustments to reconcile profit before income taxes to net cash provided by operating activities:			
Depreciation and amortization other than amortization of goodwill	12,377	11,216	92,691
Loss on impairment of fixed assets	2,838	2,974	21,254
Amortization of goodwill	2,545	2,478	19,059
Subsidy income	(25)	(75)	(187)
Share of (gain) loss of entities accounted for using equity method	(318)	1,031	(2,381)
Gain on change in equity	(449)	—	(3,363)
Decrease in retirement benefit liability	(609)	(599)	(4,561)
Increase in retirement benefit asset	(55)	(869)	(412)
Interest and dividend income	(1,734)	(1,551)	(12,986)
Interest expense	3,211	1,176	24,047
Exchange gain, net	(891)	(778)	(6,673)
Gain on sales of investments in securities	(6,312)	(7,285)	(47,270)
Loss on valuation of investment securities	2,120	1,436	15,877
Changes in operating assets and liabilities:			
Notes and accounts receivable	(5,171)	(34,234)	(38,725)
Inventories	(1,275)	(49,346)	(9,548)
Notes and accounts payable	(13,584)	20,465	(101,730)
Other, net	(1,462)	4,859	(10,949)
Subtotal	24,341	(9,544)	182,289
Interest and dividends received	2,418	1,926	18,108
Interest paid	(3,058)	(1,202)	(22,901)
Income taxes paid	(14,286)	(8,956)	(106,987)
Net cash provided by (used in) operating activities	9,414	(17,776)	70,501
<b>Investing activities:</b>			
Purchases of property, plant and equipment	(12,029)	(8,830)	(90,085)
Proceeds from sales of property, plant and equipment	540	326	4,044
Purchases of intangible fixed assets included in other assets	(4,888)	(1,624)	(36,606)
Purchases of investments in securities	(437)	(1,317)	(3,273)
Proceeds from sales of investments in securities	7,474	7,736	55,972
Proceeds from sales of investments in capital	178	890	1,333
Purchase of shares of subsidiaries resulting in change in scope of consolidation	—	(3,848)	—
Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation	2,040	587	15,277
Increase in short-term loans receivable included in other current assets, net	(623)	(83)	(4,666)
Decrease (increase) in time deposits, net	337	(137)	2,524
Subsidy income	25	75	187
Payments of leasehold and guarantee deposits	—	(1,352)	—
Other, net	(650)	(86)	(4,868)
Net cash used in investing activities	(8,031)	(7,664)	(60,144)
<b>Financing activities:</b>			
(Decrease) increase in short-term loans, net	(11,961)	33,325	(89,575)
Increase in commercial papers, net	13,000	17,000	97,356
Proceeds from long-term loans	5,000	1,900	37,445
Repayments of long-term loans	(8,623)	(12,039)	(64,577)
Proceeds from issuance of bonds	10,000	—	74,890
Redemption of bonds	(10,000)	—	(74,890)
Purchase of treasury stock	(5,662)	(6,006)	(42,402)
Cash dividends paid	(7,150)	(5,876)	(53,546)
Cash dividends paid to non-controlling interests	(1,133)	(543)	(8,485)
Other, net	(716)	(477)	(5,362)
Net cash (used in) provided by financing activities	(17,247)	27,282	(129,162)
<b>Effects of exchange rate changes on cash and cash equivalents</b>	<b>3,064</b>	<b>2,942</b>	<b>22,946</b>
<b>Net (decrease) increase in cash and cash equivalents</b>	<b>(12,800)</b>	<b>4,783</b>	<b>(95,859)</b>
<b>Cash and cash equivalents at beginning of the year</b>	<b>53,336</b>	<b>48,553</b>	<b>399,431</b>
<b>Decrease in cash and cash equivalents resulting from changes in fiscal year-end of consolidated subsidiaries</b>	<b>(204)</b>	<b>—</b>	<b>(1,528)</b>
<b>Cash and cash equivalents at end of the year (Note 24)</b>	<b>¥ 40,331</b>	<b>¥ 53,336</b>	<b>\$ 302,037</b>

See notes to consolidated financial statements.

# Notes to Consolidated Financial Statements

Year ended March 31, 2023

## 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.

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 ¥133.53 = U.S.\$1.00, the rate of exchange prevailing on March 31, 2023. 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 have been omitted. Consequently, the totals shown in the accompanying consolidated financial statements (both in yen and in U.S. dollars) do not necessarily agree with the sum of the individual amounts.

## 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 equity 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.

Of the Company's subsidiaries, 33 have a December 31 year end, which is different from that of the Company. The financial statements of 11 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 22 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.

Interfacial Consultants LLC and Infinite Material Solutions, LLC whose fiscal year-end date used to be December 31 had been consolidated as of each of their year-end date and necessary adjustments had been made for major transactions that occurred between the companies' fiscal year-end date and the consolidated closing date. From the current fiscal

year, their fiscal-year end date was changed to March 31. With this change in the accounting period, a 12-month period from April 1, 2022 to March 31, 2023 was consolidated for the current fiscal year. Income during the period from January 1, 2022 to March 31, 2022 of those consolidated subsidiaries has been recognized as a change in retained earnings.

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

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 profit 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 the 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 subsidiaries shifted to the stand-alone taxation system in the current fiscal year in conjunction with the abolishment of the consolidated taxation system.

**(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) Provision for Directors' Stock Benefit**

In order to provide for the payment of shares, etc. of the Company to Directors (excluding Outside Directors) and executive officers, the estimated amount of stock-based compensation payable in accordance with the Stock-Grant Rules for Directors (internal rules) is recorded.

**(o) 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.

**(p) Accounting for Significant Revenues and Expenses**

The following is a description of the principal performance obligations of the Company and its consolidated subsidiaries' principal businesses relating to revenue from contracts with customers and the usual timing at which point such

performance obligations are satisfied (the usual time at which revenue is recognized).

Sales of merchandise and products are classified based on the reportable segments and revenue is recognized primarily at the time the merchandise and products are delivered to the customer, since the risks and economic value of ownership of the products are transferred and the right to receive payment is established at that time. In addition, the Group may act as an agent in certain transactions. The consideration from the customer is received primarily within one year of satisfying the performance obligation and does not include a significant financing component.

When the Group is acting as a principal in a transaction, revenue is recognized at the gross amount of consideration received from the customer, and when the Group is acting as an agent for a third party, revenue is presented in a net amount of fees received, which is the gross amount of consideration received from the customer less the amount collected for the third party.

**(q) 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

### 3. ACCOUNTING CHANGES

**(a) Application of Accounting Standard for Fair Value Measurement**

As of the beginning of the current fiscal year, the Company has adopted Implementation Guidance on Accounting Standard for Fair Value Measurement (Accounting Standards Board of Japan ("ASBJ") Guidance No. 31, June 17, 2021). In accordance with the transitional treatment prescribed in Paragraph 27-2 of ASBJ Guidance No.31, new accounting policies prescribed by the guidance have been adopted prospectively. This change in accounting treatment has no effect on the consolidated financial statements.

**(b) Application of FASB Accounting Standards Codification ("ASC") 842, "Leases"**

Certain foreign consolidated subsidiaries that adopted U.S. GAAP apply ASC 842, Leases, beginning with the current

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.

**(r) Research and Development Costs**

Research and development costs are charged to income when incurred.

**(s) 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(a).)

fiscal year. As a result, these subsidiaries, as lessees, generally recognize all leases as assets and liabilities on their balance sheets.

In applying this accounting standard, the subsidiaries recognized the cumulative effect as of the date of adoption, which is permitted under the transitional provisions.

As a result, Other assets under Non-current assets, Current portion of long-term loans and lease obligations in Current liabilities, and Long-term loans and lease obligations under Long-term liabilities increased ¥8,206 million, ¥1,391 million and ¥7,875 million, respectively, as of the end of the current fiscal year. The impact of this accounting treatment on operating income, profit before income taxes, and profit for the current fiscal year is immaterial.

## 4. SIGNIFICANT ACCOUNTING ESTIMATES

### Assessment of impairment of property, plant and equipment and intangible fixed assets

(a) Amounts recorded in the consolidated financial statements as of March 31, 2023 and 2022, and for the years then ended are as follows.

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Property, plant and equipment	¥ 82,064	¥ 72,554	\$ 614,574
Intangible fixed assets	68,928	65,070	516,199
Impairment losses	2,838	2,974	21,254

### (b) Information about significant accounting estimates pertaining to identified items

#### (i) Method of calculation

Non-current assets are grouped into the smallest units that generate cash flows, and are measured for impairment if any indication of impairment exists and, if so, whether an impairment loss should be recognized.

For the grouping of non-current assets, idle assets are grouped individually, and business assets are grouped mainly by company or plant. Goodwill is principally allocated to larger unit that includes related business-use assets.

Undiscounted future cash flows used to determine whether impairment losses need to be recognized are calculated in consideration of main assets' economic useful lives, etc., based on future business plans.

Impairment losses are measured by calculating the recoverable amount of the relevant asset or asset

group as the higher of net selling value or the value in use, and the difference between the book value and the recoverable amount is recorded as an impairment loss for the current fiscal year. The discount rate used for the calculation of the value in use is basically determined using the time value of money taking into account the risk related to the business.

#### (ii) Key assumptions used in the calculation

The key assumptions are the projected sales and costs of sales included in future business plans, and the discount rate used to calculate the value in use.

#### (iii) Effects on consolidated financial statements for the next fiscal year

If the actual profit or loss of each asset or asset group falls below the business plan, or if there is a significant change in the assumptions on which future business plans are based, the recoverable amount may fall below the book value and an impairment loss may be recognized in the next fiscal year.

## 5. CHANGE IN PRESENTATION

As a result of our adoption of ASC842, certain subsidiaries generally recognize all leases as assets and liabilities on their balance sheets. Therefore, "Long-term loans and finance lease obligations" presented in the previous fiscal year has been changed to "Long-term loans and lease obligations" from the current fiscal year in line with the new accounting treatment.

## 6. ADDITIONAL INFORMATION

### Stock-Based Compensation Plan

Effective from the current fiscal year, the Company has adopted a stock-based compensation plan (the "Plan") for directors (excluding outside directors) and executive officers (collectively, "Eligible Individuals"). The purpose of the Plan is to establish a clear link between compensation for the Eligible Individuals and the Company's performance and share value, as well as for the Eligible Individuals to share the benefits and risks associated with fluctuations in the share price with NAGASE shareholders. In this way, the NAGASE Group intends to raise awareness about contributing to improvement of business

performance and increase in corporate value over the medium to long term.

#### (i) Overview

The Plan is a stock-based compensation plan under which a trust (the "Trust") established by monetary contribution from the Company acquires Company shares. The Company grants points to each Eligible Individual, and the Trust delivers the number of Company shares equivalent to the points earned by each Eligible Individual. In principle, the delivery is made at the time of the retirement of Eligible Individual.

#### (ii) Company shares remaining in the Trust

Company shares remaining in the Trust are recorded as treasury stock under net assets in the consolidated balance sheet based on the carrying value in the Trust

(excluding-related expenses). The carrying value of treasury stock as of the end of the current fiscal year was ¥619 million and the corresponding number of shares of treasury stock amounted to 292,200 shares.

## 7. INVENTORIES

Inventories at March 31, 2023 and 2022 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Merchandise and finished goods	¥ 152,504	¥ 142,590	\$ 1,142,095
Work in process	2,446	2,401	18,318
Raw materials and supplies	14,770	12,533	110,612
Total	¥ 169,721	¥ 157,525	\$ 1,271,033

## 8. 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, 2023 and 2022:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Loss on devaluation of inventories included in cost of sales	¥ 2,010	¥ 622	\$ 15,053

## 9. 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, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Buildings and structures	¥ 403	¥ 433	\$ 3,018
Machinery, equipment and vehicles	730	774	5,467
Land	190	190	1,423
Total	¥ 1,324	¥ 1,398	\$ 9,915

## 10. LOSS ON IMPAIRMENT OF FIXED ASSETS

Loss on impairment of fixed assets for the years ended March 31, 2023 and 2022 was as follows:

Major use	Classification	Area	Millions of yen		Thousands of U.S. dollars	
			2023	2022	2023	2022
Business-use assets for product and manufacturing process development in the resin field	Machinery, equipment and vehicles, Leased assets and other assets included in Investments and other assets	Wisconsin, USA	¥ 2,285		\$ 17,112	
Business-use assets for development and manufacturing of water-soluble support materials for 3D printing	Machinery, equipment and vehicles and other assets included in Investments and other assets	Wisconsin, USA	539		4,037	
Idle assets	Buildings and structures, and Land	Kanto	12		90	
<b>Total</b>			<b>¥ 2,838</b>		<b>\$ 21,254</b>	

Major use	Classification	Area	Millions of yen	
			2023	2022
Goodwill, business-use assets for product and manufacturing process development in the resin field	Goodwill, machinery, equipment and vehicles, and other	Wisconsin, USA	¥ 2,911	
Goodwill related to water soluble support materials for 3D printing production and development business	Goodwill	Wisconsin, USA	63	
<b>Total</b>			<b>¥ 2,974</b>	

The Company and its consolidated subsidiaries group fixed assets for business use principally based on business management segments. Fixed assets to be disposed of and idle assets are grouped individually as the smallest cash-generating units.

For the year ended March 31, 2022, the book value was reduced to the recoverable amount because the Company no longer expects to generate the initially anticipated earnings.

The recoverable amounts were measured at the net selling value or the value in use. Net selling value is based on the assessed value for property tax purposes or the appraised value of real estate. Goodwill related to the product and manufacturing process development business in the resin

segment was measured based in the value in use.

The future cash flows are discounted at a rate of 19.0%.

For the year ended March 31, 2023, the book values of certain fixed assets for business-use were reduced to their recoverable amounts, because the future cash flows fell below the book value as a result of reviewing the future business plans. As for idle assets, due to a declining fair value, the carrying values were reduced to their recoverable amounts.

The recoverable amounts were measured at the net selling value or the value in use. Net selling value is based on the assessed value for property tax purposes or the appraised value of real estate. The recoverable amounts for business-use assets were measured at the net selling value.

## 11. INVESTMENTS IN SECURITIES

(a) Marketable securities classified as other securities at March 31, 2023 and 2022 are summarized as follows:

	Millions of yen					
	2023			2022		
	Carrying value	Acquisition costs	Unrealized gain (loss)	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:						
Equity securities	¥ 53,460	¥ 12,004	¥ 41,456	¥ 57,951	¥ 13,108	¥ 44,842
Securities whose carrying value does not exceed their acquisition costs:						
Equity securities	2,389	3,056	(667)	2,560	2,810	(249)
<b>Total</b>	<b>¥ 55,849</b>	<b>¥ 15,061</b>	<b>¥ 40,788</b>	<b>¥ 60,511</b>	<b>¥ 15,918</b>	<b>¥ 44,592</b>

	Thousands of U.S. dollars		
	2023		
	Carrying value	Acquisition costs	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition costs:			
Equity securities	\$ 400,359	\$ 89,897	\$ 310,462
Securities whose carrying value does not exceed their acquisition costs:			
Equity securities	17,891	22,886	(4,995)
<b>Total</b>	<b>\$ 418,251</b>	<b>\$ 112,791</b>	<b>\$ 305,459</b>

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

(b) Securities classified as other securities whose market value is not available and not included in the table (a) at March 31, 2023 and 2022 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
	Carrying value	Carrying value	Carrying value
Market value not available:			
Unlisted equity securities	¥ 4,552	¥ 6,071	\$ 34,090
<b>Total</b>	<b>¥ 4,552</b>	<b>¥ 6,071</b>	<b>\$ 34,090</b>

(c) Proceeds from sales of, and gross realized gain and loss on, other securities for the years ended March 31, 2023 and 2022 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Proceeds from sales	¥ 7,448	¥ 7,736	\$ 55,778
Gain on sales	6,584	7,037	49,307
Loss on sales	7	6	52

(d) A breakdown of loss on devaluation of investments in securities for the years ended March 31, 2023 and 2022 is summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Loss on devaluation of investments in securities (*)			
Securities classified as other securities	¥ 2,028	¥ 1,436	\$ 15,188
Other investments in capital	81	—	607
Investments in capital of subsidiaries and affiliates	10	—	75
Total loss on devaluation of investments in securities	¥ 2,120	¥ 1,436	\$ 15,877

(\*) 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 whose market value is not available 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.

## 12. SHORT-TERM LOANS, BONDS, LONG-TERM LOANS, COMMERCIAL PAPERS AND LEASE OBLIGATIONS

Short-term loans at March 31, 2023 and 2022 principally represented loans and commercial papers in the form of deeds at weighted-average annual interest rates of 5.06% and 1.14% per annum, respectively.

Long-term loans, bonds and lease obligations at March 31, 2023 and 2022 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Unsecured loans from banks and insurance companies, payable in Yen, U.S. dollars, and Euros due through 2032, at rates from 0.18% to 5.50%	¥ 33,754	¥ 36,997	\$ 252,782
Unsecured bonds in Yen, due 2022, at a rate of 0.539%	—	10,000	—
Unsecured bonds in Yen, due 2024, at a rate of 0.150%	10,000	10,000	74,890
Unsecured bonds in Yen, due 2029, at a rate of 0.290%	10,000	10,000	74,890
Unsecured bonds in Yen, due 2032, at a rate of 0.640%	10,000	—	74,890
Lease obligations	11,826	1,411	88,564
	75,580	68,408	566,015
Less current portion	(3,120)	(19,152)	(23,366)
Total	¥ 72,460	¥ 49,256	\$ 542,650

The aggregate annual maturities of bonds, long-term loans and lease obligations subsequent to March 31, 2023 are summarized as follows:

Years ending March 31,	Millions of yen	Thousands of U.S. dollars
2024	¥ 3,120	\$ 23,366
2025	19,053	142,687
2026	6,982	52,288
2027	16,307	122,122
2028	6,185	46,319
2029 and thereafter	23,932	179,226
Total	¥ 75,580	\$ 566,015

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, 2023 and 2022 is as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Lines of credit	¥ 20,000	¥ 20,000	\$ 149,779
Credit utilized	—	—	—

## 13. OTHER COMPREHENSIVE INCOME

Reclassification adjustments and tax effects allocated to each component of other comprehensive income for the years ended March 31, 2023 and 2022 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Net unrealized holding loss on securities:			
Amount arising during the year	¥ 2,840	¥ (10,058)	\$ 21,269
Reclassification adjustments for gains and losses realized in the statement of income	(6,671)	(6,800)	(49,959)
Amount before tax effect	(3,830)	(16,858)	(28,683)
Tax effect	1,036	5,013	7,759
Net unrealized holding loss on securities	(2,794)	(11,844)	(20,924)
Deferred (loss) gain on hedges:			
Amount arising during the year	(460)	125	(3,445)
Reclassification adjustments for gains and losses realized in the statement of income	192	27	1,438
Amount before tax effect	(268)	152	(2,007)
Tax effect	82	(46)	614
Deferred (loss) gain on hedges	(186)	106	(1,393)
Translation adjustments:			
Amount arising during the year	16,852	13,623	126,204
Reclassification adjustments for gains and losses realized in the statement of income	—	—	—
Amount before tax effect	16,852	13,623	126,204
Tax effect	—	—	—
Translation adjustments	16,852	13,623	126,204
Retirement benefit liability adjustments:			
Amount arising during the year	(1,042)	(218)	(7,803)
Reclassification adjustments for gains and losses realized in the statement of income	229	(396)	1,715
Amount before tax effect	(813)	(614)	(6,089)
Tax effect	248	184	1,857
Retirement benefit liability adjustments	(564)	(430)	(4,224)
Share of other comprehensive income of affiliates accounted for by the equity method:			
Amount arising during the year	477	282	3,572
Total other comprehensive income	¥ 13,784	¥ 1,736	\$ 103,228

## 14. 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, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Balance at the beginning of the year	¥ 34,218	¥ 34,457	\$ 256,257
Service cost	1,272	1,299	9,526
Interest cost	232	257	1,737
Actuarial differences	45	20	337
Retirement benefits paid	(1,743)	(1,750)	(13,053)
Changes in scope of consolidation	(262)	(94)	(1,962)
Other	23	28	172
Balance at the end of the year	¥ 33,786	¥ 34,218	\$ 253,022

The changes in plan assets for the years ended March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Balance at the beginning of the year	¥ 24,119	¥ 24,093	\$ 180,626
Expected return on plan assets	502	484	3,759
Actuarial differences	(989)	(198)	(7,407)
Contributions by the Company and its consolidated subsidiaries	595	761	4,456
Retirement benefits paid	(1,001)	(1,043)	(7,496)
Other	8	21	60
Balance at the end of the year	¥ 23,234	¥ 24,119	\$ 173,998

The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheets as of March 31, 2023 and 2022 for the Company's and the consolidated subsidiaries' defined benefit plans:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Funded retirement benefit obligation	¥ 21,168	¥ 21,481	\$ 158,526
Plan assets at fair value	(23,234)	(24,119)	(173,998)
Unfunded retirement benefit obligation	12,618	12,736	94,496
Net retirement benefit liability in the balance sheet	10,552	10,098	79,023
Retirement benefit liability	13,197	13,238	98,832
Retirement benefit asset	(2,645)	(3,139)	(19,808)
Net retirement benefit liability in the balance sheet	¥ 10,552	¥ 10,098	\$ 79,023

The components of retirement benefit expenses for the years ended March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Service cost	¥ 1,272	¥ 1,299	\$ 9,526
Interest cost	232	257	1,737
Expected return on plan assets	(502)	(484)	(3,759)
Amortization of actuarial differences	229	(396)	1,715
Retirement benefit expense	¥ 1,232	¥ 676	\$ 9,226

Actuarial differences included in other comprehensive income (loss) (before tax effect) for the years ended March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Actuarial differences	¥ (813)	¥ (614)	\$ (6,089)

Unrecognized actuarial differences included in accumulated other comprehensive income (before tax effect) as of March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Unrecognized actuarial differences	¥ (1,032)	¥ (218)	\$ (7,729)

The allocation of plan assets, by major category, as a percentage of total plan assets at fair value as of March 31, 2023 and 2022 is as follows:

	2023	2022
Bonds	64%	59%
Equity securities	18	23
Alternative investments (*)	17	16
Other	1	2
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:

	2023	2022
Discount rate	0.7%	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
	2023	2022	2023
Contributions to defined contribution plans by the Company and its consolidated subsidiaries	¥ 740	¥ 592	\$ 5,549

## 15. 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, 2023 and 2022.

The effective tax rates reflected in the accompanying consolidated statements of income for the years ended March 31, 2023 and 2022 differ from the statutory tax rates for the following reasons:

	2023	2022
Statutory tax rates	30.6%	30.6%
Adjustments for:		
Expenses not deductible for income tax purposes	2.0	1.7
Dividends and other income deductible for income tax purposes	(8.4)	(5.5)
Net adjustment resulting from elimination of dividend income upon consolidation	9.6	5.5
Different tax rates applied at overseas subsidiaries	(4.1)	(3.8)
Tax credit	(2.7)	(1.1)
Amortization of goodwill	2.4	1.9
Loss on impairment of goodwill	—	0.8
Adjustment of book value of shares of subsidiaries for consolidated taxation system	0.5	(0.1)
Equity in losses (gains) of affiliates	(0.3)	0.8
Valuation allowance	(3.2)	0.8
Other, net	0.6	0.5
Effective tax rates	26.9%	32.1%

The significant components of the Company's and its consolidated subsidiaries' deferred tax assets and liabilities at March 31, 2023 and 2022 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Deferred tax assets:			
Accrued bonuses for employees	¥ 1,680	¥ 1,888	\$ 12,581
Allowance for doubtful accounts	119	110	891
Unrealized gain on inventories	717	728	5,370
Accrued enterprise taxes	145	345	1,086
Tax loss carryforwards	2,441	3,034	18,281
Retirement benefit liability	3,161	3,018	23,673
Investments in securities	3,428	2,298	25,672
Loss on impairment of fixed assets	672	941	5,033
Other	6,807	3,731	50,977
Gross deferred tax assets	19,174	16,098	143,593
Valuation allowance	(6,691)	(6,370)	(50,109)
Total deferred tax assets	12,482	9,727	93,477
Deferred tax liabilities:			
Technology-based assets	(1,321)	(1,801)	(9,893)
Deferred capital gain on property	(936)	(1,055)	(7,010)
Reserve for special depreciation	(49)	(99)	(367)
Undistributed earnings of subsidiaries and affiliates	(373)	(406)	(2,793)
Revaluation of land	(292)	(291)	(2,187)
Net unrealized holding gain on securities	(12,214)	(13,276)	(91,470)
Other	(3,798)	(1,534)	(28,443)
Total deferred tax liabilities	(18,985)	(18,464)	(142,178)
Net deferred tax liabilities	¥ (6,503)	¥ (8,737)	\$ (48,701)

## 16. REVENUE RECOGNITION

### (a) Information on disaggregation of revenue from contracts with customers

Information on disaggregation of revenue from contracts with customers is presented in the Segment Information. (Refer to Note 26.)

### (b) Information that forms the basis for understanding revenues from contracts with customers

The information that forms the basis for understanding revenues is presented in the Summary of significant accounting policies. (Refer to Note 2(p).)

### (c) Information about the relationship between the fulfillment of performance obligations based on the contract with the customer and the cash flow generated from the contract, and the amount and recognition timing of revenue from the contract with the customer existing at the end of the current fiscal year expected to be recognized in the following fiscal year

#### (i) Contract balances

The following is a breakdown of contract balances of the Company and its consolidated subsidiaries for the current fiscal year. In the consolidated balance sheets, receivables from contracts with customers are included in "Notes and accounts receivable" and contract liabilities are included in "Other current liabilities." At the end of the previous fiscal year and the end of the current fiscal year, the beginning balance of contract liabilities were transferred to revenue by the end of the fiscal year, and the amount carried forward from the next fiscal year onward is not significant.

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Receivables from contracts with customers	¥ 302,105	¥ 289,862	\$ 2,262,450
Contract liabilities	4,822	3,789	36,112

As of March 31, 2023, Accounts receivable and Notes receivable from contracts with customers included in the table above are ¥261,375 million (\$1,957,425 thousand) and ¥40,730 million (\$305,025 thousand), respectively.

#### (ii) Transaction price allocated to remaining performance obligations

Since there are no transactions with individual expected contract terms exceeding one year, the practical expedient method is applied and information on remaining performance obligations is omitted. There is no material consideration with respect to contracts with customers that is not included in the transaction price.

## 17. 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

Movements in common stock during the years ended March 31, 2023 and 2022 are summarized as follows:

	Number of shares			
	2023			
	April 1, 2022	Increase	Decrease	March 31, 2023
Common stock	120,908,285	—	3,000,000	117,908,285
	2022			
	April 1, 2021	Increase	Decrease	March 31, 2022
Common stock	124,408,285	—	3,500,000	120,908,285

## 18. TREASURY STOCK

Movements in treasury stock during the years ended March 31, 2023 and 2022 are summarized as follows:

	Number of shares			
	2023			
	April 1, 2022	Increase	Decrease	March 31, 2023
Treasury stock	881,767	2,904,951	3,000,000	786,718
	2022			
	April 1, 2021	Increase	Decrease	March 31, 2022
Treasury stock	933,995	3,447,833	3,500,061	881,767

(\*) Treasury stock at the end of the current fiscal year does include 292,200 shares of the Company's shares held by the Stock-Granting Trust for Directors

The increase in treasury stock includes 2,612,300 shares resulting from the purchases of treasury stock by resolution of the Board of Directors, 292,200 shares resulting from the purchases of treasury stock by the Stock-Granting Trust for Directors and 451 shares resulting from the purchase of shares less than one voting unit for the year ended March 31, 2023. The decrease in treasury stock includes 3,000,000 shares resulting from the retirement of treasury stock by resolution of the Board of Directors for the year ended March 31, 2023.

The increase in treasury stock includes 3,447,500 shares resulting from the purchases of treasury stock by resolution of the Board of Directors and 333 shares resulting from the purchase of shares less than one voting unit for the year ended March 31, 2022. The decrease in treasury stock includes 3,500,000 shares resulting from the retirement of treasury stock by resolution of the Board of Directors and 61 shares resulting from the disposition of shares less than one voting unit for the year ended March 31, 2022.

## 19. FINANCIAL INSTRUMENTS

### (a) Policy for financial instruments

With regard to the Group's 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 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, 2023 and 2022, are shown in the following table. Financial instruments for which fair value is deemed extremely difficult to determine are not included.

	Millions of yen		
	2023		
	Carrying value	Fair value	Difference
Assets			
Notes and accounts receivable	¥ 302,105	¥ 302,105	¥ —
Investments in securities (*2)			
Other securities	55,849	55,849	—
Total assets	¥ 357,955	¥ 357,955	¥ —
Liabilities			
Notes and accounts payable	¥ 140,438	¥ 140,438	¥ —
Bonds	30,000	29,580	(420)
Long-term loans	32,697	32,286	(410)
Total liabilities	¥ 203,135	¥ 202,304	¥ (830)
Derivatives (*3)			
Not subject to hedge accounting	¥ (405)	¥ (405)	¥ —
Subject to hedge accounting	(11)	(11)	—
Total derivative transactions	¥ (416)	¥ (416)	¥ —

	Millions of yen		
	2022		
	Carrying value	Fair value	Difference
Assets			
Notes and accounts receivable	¥ 289,862	¥ 289,862	¥ —
Investments in securities (*2)			
Other securities	60,511	60,511	—
Total assets	¥ 350,374	¥ 350,374	¥ —
Liabilities			
Notes and accounts payable	¥ 149,036	¥ 149,036	¥ —
Bonds	20,000	19,820	(180)
Long-term loans	28,244	27,992	(251)
Total liabilities	¥ 197,280	¥ 196,849	¥ (431)
Derivatives (*3)			
Not subject to hedge accounting	¥ (133)	¥ (133)	¥ —
Subject to hedge accounting	266	266	—
Total derivative transactions	¥ 132	¥ 132	¥ —

	Thousands of U.S. dollars		
	2023		
	Carrying value	Fair value	Difference
Assets			
Notes and accounts receivable	\$ 2,262,450	\$ 2,262,450	\$ —
Investments in securities (*2)			
Other securities	418,251	418,251	—
Total assets	\$ 2,680,708	\$ 2,680,708	\$ —
Liabilities			
Notes and accounts payable	\$ 1,051,734	\$ 1,051,734	\$ —
Bonds	224,669	221,523	(3,145)
Long-term loans	244,866	241,788	(3,070)
Total liabilities	\$ 1,521,269	\$ 1,515,045	\$ (6,216)
Derivatives (*3)			
Not subject to hedge accounting	\$ (3,033)	\$ (3,033)	\$ —
Subject to hedge accounting	(82)	(82)	—
Total derivative transactions	\$ (3,115)	\$ (3,115)	\$ —

(\*1) Cash is omitted from the notes. Time deposits, short-term loans, current portion of long-term loans, commercial papers, and current portion of bonds are omitted from the notes because their fair values approximate their carrying amounts due to their short maturities.

(\*2) Stocks and other securities without market quotations are not included in "Investment securities (\*2)". The carrying amount of such financial instruments on the consolidated balance sheet is as follows.

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Unlisted equity securities	¥ 4,552	¥ 6,071	\$ 34,090
Investments in unconsolidated subsidiaries and affiliates	9,341	9,017	69,954
Total	¥ 13,893	¥ 15,089	\$ 104,044

(\*3) Receivables and payables arising from derivative transactions are presented as a net value with the amount in parentheses representing a net liability position.

The redemption schedule for time deposits and notes and accounts receivable with maturity dates at March 31, 2023 is summarized as follows:

	Millions of yen	
	Within 1 year	Over 1 year and less than 5 years
Time deposits	¥ 40,045	¥ —
Notes and accounts receivable	302,105	—
Total	¥ 342,151	¥ —

	Thousands of U.S. dollars	
	Within 1 year	Over 1 year and less than 5 years
Time deposits	\$ 299,895	\$ —
Notes and accounts receivable	2,262,450	—
Total	\$ 2,562,353	\$ —

With respect to the redemption schedule of bonds, long-term loans and finance lease obligations, please refer to Note 12.

The fair value of financial instruments is classified into the following three levels based on the observability and materiality of the inputs used to determine fair value.

Level 1 fair value:

In the inputs related to the calculation of observable fair value, fair value is calculated based on quoted market prices for assets or liabilities whose fair value are formed in an active market.

Level 2 fair value:

In the inputs related to the calculation of observable fair value, fair value is calculated by using inputs related to the calculation of fair value other than Level 1 input.

Level 3 fair value:

Fair value is calculated using inputs related to the calculation of unobservable fair value.

When multiple inputs that have a significant effect on fair value are used, fair value is classified into the level with the lowest priority in the fair value calculation among the levels to which those inputs belong.

Financial instruments recorded on the consolidated balance sheet at fair value.

	Millions of yen			
	2023			
	Level 1	Level 2	Level 3	Total
Investments in securities				
Other securities				
Shares	¥ 55,849	¥ —	¥ —	¥ 55,849
Derivatives				
Forward exchange contracts	—	(416)	—	(416)
Total assets	¥ 55,849	¥ (416)	¥ —	¥ 55,432

	Millions of yen			
	2022			
	Level 1	Level 2	Level 3	Total
Investments in securities				
Other securities				
Shares	¥ 60,511	¥ —	¥ —	¥ 60,511
Derivatives				
Forward exchange contracts	—	132	—	132
Total assets	¥ 60,511	¥ 132	¥ —	¥ 60,644

	Thousands of U.S. dollars			
	2023			
	Level 1	Level 2	Level 3	Total
Investments in securities				
Other securities				
Shares	\$ 418,251	\$ —	\$ —	\$ 418,251
Derivatives				
Forward exchange contracts	—	(3,115)	—	(3,115)
Total assets	\$ 418,251	\$ (3,115)	\$ —	\$ 415,128

Financial instruments other than those recorded on the consolidated balance sheets at fair value

	Millions of yen			
	2023			
	Level 1	Level 2	Level 3	Total
Notes and accounts receivable	¥ —	¥ 302,105	¥ —	¥ 302,105
Total assets	¥ —	¥ 302,105	¥ —	¥ 302,105
Notes and accounts payable	—	140,438	—	140,438
Bonds	—	29,580	—	29,580
Long-term loans	—	32,286	—	32,286
Total liabilities	¥ —	¥ 202,304	¥ —	¥ 202,304

	Millions of yen				
	2022				
	Level 1	Level 2	Level 3	Total	
Notes and accounts receivable	¥ —	¥ 289,862	¥ —	¥ 289,862	
Total assets	¥ —	¥ 289,862	¥ —	¥ 289,862	
Notes and accounts payable	—	149,036	—	149,036	
Bonds	—	19,820	—	19,820	
Long-term loans	—	27,992	—	27,992	
Total liabilities	¥ —	¥ 196,849	¥ —	¥ 196,849	

	Thousands of U.S. dollars				
	2023				
	Level 1	Level 2	Level 3	Total	
Notes and accounts receivable	\$ —	\$ 2,262,450	\$ —	\$ 2,262,450	
Total assets	\$ —	\$ 2,262,450	\$ —	\$ 2,262,450	
Notes and accounts payable	—	1,051,734	—	1,051,734	
Bonds	—	221,523	—	221,523	
Long-term loans	—	241,788	—	241,788	
Total liabilities	\$ —	\$ 1,515,045	\$ —	\$ 1,515,045	

Explanation of valuation techniques used, and inputs related to the calculation of fair value.

(i) Notes and accounts receivable

The fair value of notes and accounts receivable is calculated based on the present values classified by the certain period of times which are discounted respectively by the interest rate determined taking into account the remaining period to maturity and is classified as Level 2.

(ii) Investment securities

Listed stocks are valued by using quoted market prices. Since listed stocks are traded in active markets, their fair value is classified as Level 1.

(iii) Derivative

Fair value is calculated based on prices, etc., provided by counterparty financial institutions and is classified as Level 2.

The fair value of foreign currency forward exchange contracts and other derivatives that applied the allocation method is included in the fair value of the underlying accounts receivable and payable.

The fair value of interest rate swaps that applied the exceptional accounting treatment is included in the long-term loans because it is accounted for as if the interest rates applied to the swaps had originally applied to the underlying long-term loans.

(iv) Notes and accounts payable

The fair value of notes and accounts payable is calculated based on the present values classified by the certain period of times which are discounted respectively by the interest rate determined taking into account the remaining period to maturity and is classified as Level 2.

(v) Bonds

The fair value of bonds issued by the Company is calculated based on quoted market prices and classified as Level 2.

(vi) Long-term loans

The fair value of long-term loans payable is calculated based on the present value of the total of principal and interest discounted by the incremental borrowing rate and is classified as Level 2.

## 20. DERIVATIVES AND HEDGING ACTIVITIES

The currency-related derivatives positions outstanding for which hedge accounting has not been applied at March 31, 2023 and 2022 are as follows:

Classification	Transaction	Millions of yen			
		2023			
		Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
Foreign currency forward exchange contracts:					
Selling:					
	U.S. dollars	¥ 5,287	¥ —	¥ (61)	¥ (61)
	Yen	226	—	(2)	(2)
	Euro	13,918	—	(283)	(283)
Over-the-counter transactions	RMB	311	—	0	0
	IDR	2,002	—	(37)	(37)
	Others	152	—	(2)	(2)
Buying:					
	U.S. dollars	4,770	—	(20)	(20)
	Yen	3,045	—	(2)	(2)
	Euro	186	—	5	5
	Others	165	—	(0)	(0)
Total		¥ 30,066	¥ —	¥ (405)	¥ (405)

Classification	Transaction	Millions of yen			
		2022			
		Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
Foreign currency forward exchange contracts:					
Selling:					
	U.S. dollars	¥ 11,953	¥ —	¥ (373)	¥ (373)
	Yen	566	—	24	24
	Euro	13,154	—	298	298
Over-the-counter transactions	RMB	706	—	(45)	(45)
	IDR	1,835	—	(14)	(14)
	Others	161	—	(11)	(11)
Buying:					
	U.S. dollars	4,679	—	98	98
	Yen	3,130	—	(127)	(127)
	Euro	251	—	10	10
	Others	185	—	7	7
Total		¥ 36,626	¥ —	¥ (133)	¥ (133)

		Thousands of U.S. dollars			
		2023			
Classification	Transaction	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value	Valuation gain (loss)
	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars	\$ 39,594	\$ —	\$ (457)	\$ (457)
	Yen	1,693	—	(15)	(15)
	Euro	104,231	—	(2,119)	(2,119)
Over-the-counter transactions	RMB	2,329	—	0	0
	IDR	14,993	—	(277)	(277)
	Others	1,138	—	(15)	(15)
	Buying:				
	U.S. dollars	35,722	—	(150)	(150)
	Yen	22,804	—	(15)	(15)
	Euro	1,393	—	37	37
	Others	1,236	—	(1)	(1)
Total		\$ 225,163	\$ —	\$ (3,033)	\$ (3,033)

The currency-related derivatives positions outstanding for which hedge accounting has been applied at March 31, 2023 and 2022 are as follows:

		Millions of yen			
		2023			
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars		¥ —	¥ —	¥ —
Deferral hedge accounting	Euro	Accounts receivable	335	—	(8)
	RMB		72	—	0
	Others		17	—	(0)
	Buying:				
	U.S. dollars		5,480	—	(13)
	Euro	Accounts payable	359	—	11
	RMB		57	—	0
	Others		67	—	0
Allocation method for foreign currency forward exchange contracts (Note 2(p))	Foreign currency forward exchange contracts:				
	Selling				
	Euro	Accounts receivable	110	—	(*)
	Others		12	—	(*)
	Buying:				
	Euro	Accounts payable	202	—	(*)
	THB		122	—	(*)
	Others		12	—	(*)
Total			¥ 6,850	¥ —	¥ (11)

		Millions of yen			
		2022			
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars		¥ —	¥ —	¥ —
Deferral hedge accounting	Euro	Accounts receivable	342	—	(16)
	RMB		99	—	(6)
	Others		10	—	(0)
	Buying:				
	U.S. dollars		4,879	—	274
	Euro	Accounts payable	352	—	14
	RMB		7	—	0
	Others		36	—	1
Allocation method for foreign currency forward exchange contracts (Note 2(p))	Foreign currency forward exchange contracts:				
	Selling				
	Euro	Accounts receivable	41	—	(*)
	Others		11	—	(*)
	Buying:				
	Euro	Accounts payable	86	—	(*)
	THB		81	—	(*)
	Others		7	—	(*)
Total			¥ 5,956	¥ —	¥ 266

		Thousands of U.S. dollars			
		2023			
Method for hedge accounting	Transaction	Major hedged item	Contract value (notional principal amount)	Contract value (notional principal amount over one year)	Fair value
	Foreign currency forward exchange contracts:				
	Selling:				
	U.S. dollars		\$ —	\$ —	\$ —
Deferral hedge accounting	Euro	Accounts receivable	2,509	—	(60)
	RMB		539	—	0
	Others		127	—	(1)
	Buying:				
	U.S. dollars		41,039	—	(97)
	Euro	Accounts payable	2,689	—	82
	RMB		427	—	0
	Others		502	—	0
Allocation method for foreign currency forward exchange contracts (Note 2(p))	Foreign currency forward exchange contracts:				
	Selling				
	Euro	Accounts receivable	824	—	(*)
	Others		90	—	(*)
	Buying:				
	Euro	Accounts payable	1,513	—	(*)
	THB		914	—	(*)
	Others		90	—	(*)
Total			\$ 51,299	\$ —	\$ (82)

(\*): 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, 2022 are as follows.

Method for hedge accounting	Transaction	Hedged item	Millions of yen		Fair value
			Contract value (notional principal amount)	Contract value (notional principal amount over one year)	
Swap rates applied to underlying long-term loans	Interest-rate swap transactions (pay-fixed, receive-variable)	Long-term loans	¥ 4,000	¥ —	(*)

(\*): 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.

## 21. RESEARCH AND DEVELOPMENT COSTS

Research and development costs included in selling, general and administrative expenses for the years ended March 31, 2023 and 2022 totaled ¥5,755 million (\$43,099 thousand) and ¥5,539 million, respectively.

## 22. OPERATING LEASES

Future minimum lease payments subsequent to March 31, 2023 under noncancelable operating leases are as follows:

Year ending March 31,	Millions of yen	Thousands of U.S. dollars
2024	¥ 269	\$ 2,015
2025 and thereafter	177	1,326
Total	¥ 447	\$ 3,348

(\*): Since consolidated subsidiaries outside Japan that adopt U.S. accounting standards have applied ASC842, "Leases," from the current fiscal year, future minimum lease payments at the end of the current fiscal year under noncancelable operating leases have decreased.

## 23. CONTINGENT LIABILITIES

At March 31, 2023, the Company and its consolidated subsidiaries had contingent liabilities as guarantors of loans of customers and other in the aggregate amount of ¥54 million (\$404 thousand).

In addition, at March 31, 2023, the Company and its consolidated subsidiaries had contingent liabilities arising from notes discounted with banks in the amount of ¥355 million (\$2,659 thousand).

## 24. AMOUNTS PER SHARE

Amounts per share at March 31, 2023 and 2022 and for the years then ended are as follows:

	Yen		U.S. dollars
	2023	2022	2023
Profit attributable to owners of parent:			
Basic	¥ 199.54	¥ 213.46	\$ 1.49
Diluted	—	—	—
Net assets	3,139.26	2,868.22	23.51
Cash dividends applicable to the year	70.00	54.00	0.52

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, 2023 and 2022 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 Company's shares held by the Stock-Granting Trust for Directors are included in treasury stock in shareholders' equity. These are excluded from the total number of issued shares at the end of the period when calculating net assets per share. Also, these are excluded from the calculation of average number of shares during the period when calculating profit attributable to owners of parent per share.

The number of such shares at the end of the period excluded from the calculation of net assets per share was 292,200 shares, while the average number of shares during the period excluded from the calculation of profit attributable to owners of parent per share was 22,477 shares.

The financial data used in the computation of basic profit attributable to owners of parent per share for the years ended March 31, 2023 and 2022 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Profit attributable to owners of parent	¥ 23,625	¥ 25,939	\$ 176,927
Profit available for distribution to shareholders of common stock	23,625	25,939	176,927
Weighted-average number of shares	118,398,261	121,522,286	

## 25. CASH AND TIME DEPOSITS

A reconciliation of cash and time deposits in the accompanying consolidated balance sheets at March 31, 2023 and 2022 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
	2023	2022	2023
Cash and time deposits	¥ 40,897	¥ 54,211	\$ 306,276
Time deposits with maturities of more than three months	(565)	(874)	(4,231)
Cash and cash equivalents	¥ 40,331	¥ 53,336	\$ 302,037

## 26. SEGMENT INFORMATION

### (a) Overview of reportable segments

The Company's reportable segments are those units comprising the NAGASE Group for which separate financial information is available and for which the board of directors makes regular decisions regarding resource allocation and reviews operating performance.

The Company classifies the reportable segments according to the position of the business in the value chain and the target market(s). Accordingly, the Company has defined five segment categories: Functional Materials (positioned in the upstream value chain), Advanced Materials & Processing (positioned in the next stage of the value chain), Electronics & Energy, Mobility, and Life & Healthcare (these last three segments functioning across all industries).

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, and adhesives, 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 solutions and environment-related commercial products, sintered metal filters, and more for the paints/inks, resins, urethane foam, organic synthesis, surfactants, electronics chemicals, communications equipment, water processing, metal processing, plastic and film processing, and other industries.

The Advanced Materials & Processing Segment is engaged in the sales of dyestuffs, pigments, additives, processed pigments, dispersing elements, functional pigments, thermal paper materials, toner and inkjet materials, thermoplastic resins, thermosetting resins, automobile refinish paints, conductive coatings, synthetic rubber, inorganic materials, plastics products, resin molding tools/dies, and more for the dye/additive, coatings, ink, plastic compounds, masterbatch, stationery, digital print processing material, digital printing, fiber processing, raw

resin material, resin molding, functional film and sheet, appliance and office automation device, electronics, packaging material, daily commodities, household goods, hygiene materials, construction material, and other industries.

The Electronics & Energy Segment is engaged in the sales of formulated epoxy resins, fluorine products, precision abrasives, semiconductor assembly materials and devices, adhesives and encapsulant materials, display panel components and devices, chemical management equipment for display manufacturing processes, low-temperature/vacuum equipment, liquid state analysis equipment, LEDs, 3D printing products, design and manufacture of storage battery systems, solar panels, optical wireless communication equipment, and other products for the semiconductor, electronic component, AR/VR, environmental energy, 3D printing, heavy electrical and light electrical, HDD, automotive and aircraft, display, touch panel, housing, lighting, storage battery, energy, renewable energy, security device, large-scale commercial facility, and other industries. Its main services include energy management system proposals, battery assessments, and health care services.

The Mobility Segment is engaged in the sales of plastic products in general, materials for secondary batteries, interior and exterior materials and components, materials for

functional components, products for electrification, sensor components, in-vehicle electronics products, in-vehicle display-related components, self-driving-related products, and other products for the overall mobility industry and related industries.

The Life & Healthcare segment is engaged in the sale 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, surfactants, and medical appliances for the pharmaceutical, food and beverage, cosmetics, agricultural, toiletries, and health care industries. The segment offers radiation measurement and sleep measurement as one of its main services. In addition, this segment sells cosmetics, health foods, and beauty foods directly to consumers.

**(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.

**(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, 2023 and 2022 are as follows:

	Millions of yen										
	2023										
	Reportable Segments										
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Total	Others	Total	Corporate	Adjustments	Consolidated
Sales to customers	¥112,092	¥265,024	¥136,975	¥125,560	¥273,161	¥912,815	¥ 81	¥912,896	¥ -	¥ -	¥912,896
Intersegment sales and transfers	853	755	2,580	2,257	490	6,936	7,439	14,376	-	(14,376)	-
Net sales	112,946	265,779	139,555	127,817	273,651	919,751	7,521	927,273	-	(14,376)	912,896
Segment income	8,810	9,342	9,273	4,794	10,581	42,802	108	42,910	(9,932)	394	33,371
Segment assets	87,094	156,840	77,666	74,739	240,442	636,782	3,221	640,004	189,535	(66,850)	762,688
Other items											
Depreciation and amortization other than amortization of goodwill	477	1,440	1,608	468	6,536	10,531	19	10,551	1,826	-	12,377
Amortization of goodwill	134	-	51	-	2,359	2,545	-	2,545	-	-	2,545
Unamortized balance of goodwill	1,890	-	442	-	26,671	29,004	-	29,004	-	-	29,004
Investments in affiliates accounted for by the equity method	1,334	1,920	2,562	1,259	3,268	10,344	104	10,449	-	(0)	10,448
Increase in property, plant and equipment, net and intangible assets	421	2,177	1,908	279	5,737	10,524	7	10,531	6,642	-	17,174

	Millions of yen										
	2022										
	Reportable Segments										
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Total	Others	Total	Corporate	Adjustments	Consolidated
Sales to customers	¥ 99,874	¥257,283	¥128,131	¥103,389	¥191,634	¥780,313	¥ 244	¥780,557	¥ -	¥ -	¥780,557
Intersegment sales and transfers	711	777	2,319	2,389	452	6,649	4,649	11,298	-	(11,298)	-
Net sales	100,585	258,060	130,450	105,778	192,087	786,962	4,893	791,856	-	(11,298)	780,557
Segment income	7,823	10,858	10,278	4,131	9,429	42,521	100	42,621	(7,690)	331	35,263
Segment assets	83,793	164,249	77,163	68,492	218,060	611,759	2,838	614,598	190,048	(64,926)	739,720
Other items											
Depreciation and amortization other than amortization of goodwill	465	1,447	1,479	342	5,959	9,694	16	9,711	1,505	-	11,216
Amortization of goodwill	111	178	42	-	2,145	2,478	-	2,478	-	-	2,478
Unamortized balance of goodwill	1,853	-	452	-	27,186	29,492	-	29,492	-	-	29,492
Investments in affiliates accounted for by the equity method	1,300	1,828	2,761	1,403	3,139	10,432	95	10,528	-	(0)	10,528
Increase in property, plant and equipment, net and intangible assets	562	1,742	1,610	558	2,435	6,909	25	6,934	3,791	-	10,725

	Thousands of U.S. dollars										
	2023										
	Reportable Segments										
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Total	Others	Total	Corporate	Adjustments	Consolidated
Sales to customers	\$ 839,452	\$1,984,752	\$1,025,799	\$ 940,313	\$2,045,690	\$6,836,029	\$ 607	\$6,836,636	\$ -	\$ -	\$6,836,636
Intersegment sales and transfers	6,388	5,654	19,322	16,903	3,670	51,943	55,710	107,661	-	(107,661)	-
Net sales	845,847	1,990,407	1,045,121	957,216	2,049,360	6,887,973	56,324	6,944,305	-	(107,661)	6,836,636
Segment income	65,978	69,962	69,445	35,902	79,241	320,542	809	321,351	(74,380)	2,951	249,914
Segment assets	652,243	1,174,568	581,637	559,717	1,800,659	4,768,831	24,122	4,792,960	1,419,419	(500,637)	5,711,735
Other items											
Depreciation and amortization other than amortization of goodwill	3,572	10,784	12,042	3,505	48,948	78,866	142	79,016	13,675	-	92,691
Amortization of goodwill	1,004	-	382	-	17,666	19,059	-	19,059	-	-	19,059
Unamortized balance of goodwill	14,154	-	3,310	-	199,738	217,210	-	217,210	-	-	217,210
Investments in affiliates accounted for by the equity method	9,990	14,379	19,187	9,429	24,474	77,466	779	78,252	-	(0)	78,245
Increase in property, plant and equipment, net and intangible assets	3,153	16,303	14,289	2,089	42,964	78,814	52	78,866	49,742	-	128,615

(d) Geographical information

Net sales by country or region for the years ended March 31, 2023 and 2022 are summarized as follows:

Millions of yen								
2023								
Reportable Segments								
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Others (Note) 3	Total	Composition (%)
Japan	¥ 44,808	¥ 61,641	¥ 51,955	¥ 39,817	¥ 67,103	¥ 81	¥265,407	29.1
Greater China	13,288	115,304	56,943	33,499	3,276	—	222,312	24.4
ASEAN	29,358	73,801	7,540	36,541	5,507	—	152,750	16.7
Americas	20,969	6,893	6,929	14,039	122,538	—	171,370	18.8
Europe	2,660	5,606	4,712	1,321	74,386	—	88,686	9.7
Other	1,007	1,775	8,893	342	349	—	12,368	1.3
Revenues from contracts with customers	112,092	265,024	136,975	125,560	273,161	81	912,896	100.0
Net sales to customers	112,092	265,024	136,975	125,560	273,161	81	912,896	100.0

- Net sales are categorized by country or region, according to the location of the customer.
- Major countries and regions in each category other than Japan
  - Greater China..... China, Hong Kong, Taiwan
  - ASEAN..... Thailand, Vietnam, Indonesia
  - Americas..... U.S., Mexico
  - Europe..... U.K., Germany
  - Other..... Korea
- "Others" is a business segment consisting of businesses not included in Reportable Segments, and includes information processing services, and professional service.

Millions of yen								
2022								
Reportable Segments								
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Others (Note) 3	Total	Composition (%)
Japan	¥ 40,971	¥ 69,123	¥ 50,640	¥ 31,555	¥ 57,825	¥ 244	¥250,360	32.1
Greater China	11,987	117,092	54,354	30,534	3,594	—	217,562	27.9
ASEAN	26,580	58,949	7,267	29,416	3,493	—	125,707	16.1
Americas	16,703	6,172	5,221	10,249	79,243	—	117,589	15.1
Europe	2,634	4,598	4,071	1,466	47,083	—	59,855	7.7
Other	996	1,347	6,575	167	394	—	9,481	1.1
Revenues from contracts with customers	99,874	257,283	128,131	103,389	191,634	244	780,557	100.0
Net sales to customers	99,874	257,283	128,131	103,389	191,634	244	780,557	100.0

- Net sales are categorized by country or region, according to the location of the customer.
- Major countries and regions in each category other than Japan
  - Greater China..... China, Hong Kong, Taiwan
  - ASEAN..... Thailand, Vietnam, Singapore
  - Americas..... U.S., Mexico
  - Europe..... U.K., Germany
  - Other..... Korea
- "Others" is a business segment consisting of businesses not included in Reportable Segments, and includes information processing services, and professional service.

Thousands of U.S. dollars								
2023								
Reportable Segments								
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Others (Note) 3	Total	Composition (%)
Japan	\$ 335,565	\$ 461,627	\$ 389,089	\$ 298,188	\$ 502,531	\$ 607	\$1,987,621	29.1
Greater China	99,513	863,506	426,443	250,872	24,534	—	1,664,884	24.4
ASEAN	219,861	552,692	56,467	273,654	41,242	—	1,143,938	16.7
Americas	157,036	51,621	51,891	105,137	917,681	—	1,283,382	18.8
Europe	19,921	41,983	35,288	9,893	557,073	—	664,165	9.7
Other	7,541	13,293	66,599	2,561	2,614	—	92,623	1.3
Revenues from contracts with customers	839,452	1,984,752	1,025,799	940,313	2,045,690	607	6,836,636	100.0
Net sales to customers	839,452	1,984,752	1,025,799	940,313	2,045,690	607	6,836,636	100.0

- Net sales are categorized by country or region, according to the location of the customer.
- Major countries and regions in each category other than Japan
  - Greater China..... China, Hong Kong, Taiwan
  - ASEAN..... Thailand, Vietnam, Indonesia
  - Americas..... U.S., Mexico
  - Europe..... U.K., Germany
  - Other..... Korea
- "Others" is a business segment consisting of businesses not included in Reportable Segments, and includes information processing services, and professional service.

Information of major customers not presented here, since no single customer accounts for 10% or more of consolidated net sales.

Property, plant and equipment by country or region as of March 31, 2023 and 2022 are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Japan	¥ 59,807	¥ 62,185	\$ 447,892
Other	22,257	10,369	166,682
Total	¥ 82,064	¥ 72,554	\$ 614,574

(e) Information on loss on impairment of fixed assets per reportable segments

Loss on impairment of fixed assets for the years ended March 31, 2023 and 2022 is as follows:

Millions of yen									
2023									
Reportable Segments									
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Total	Others	Eliminations or corporate	Total
Loss on impairment of fixed assets	¥ —	¥ 2,825	¥ 12	¥ —	¥ —	¥ 2,838	¥ —	¥ —	¥ 2,838

The Company conducted a review of the future business plans for the business assets for the products and manufacturing process development business related to resins and for the development and manufacturing business in connection with water-soluble support materials for 3D printing, both in the Advanced Materials & Processing segment. As a result, the Company determined that future cash flows fell below book value. Therefore, the Company wrote down the book value of these assets to their recoverable amounts and recorded impairment losses of ¥2,285 million (\$17,122 thousand) and ¥539 million (\$4,037 thousand), respectively.

Millions of yen									
2022									
Reportable Segments									
	Functional Materials	Advanced Materials & Processing	Electronics & Energy	Mobility	Life & Healthcare	Total	Others	Eliminations or corporate	Total
Loss on impairment of fixed assets	¥ —	¥ 2,974	¥ —	¥ —	¥ —	¥ 2,974	¥ —	¥ —	¥ 2,974

The Company no longer expects the profitability originally anticipated for the product and manufacturing process development business related to resins in the Advanced Materials & Processing segment. Therefore, the Company has written down the book value of goodwill and other intangible fixed assets related to this business to their recoverable amounts, recording impairment losses in the amount of ¥2,911 million.

Thousands of U.S. dollars									
2023									
Reportable Segments									
	Functional Materials	Advanced Materials & Processing	Electronics	Mobility & Energy	Life & Healthcare	Total	Others	Eliminations or corporate	Total
Loss on impairment of fixed assets	\$ —	\$ 21,156	\$ 90	\$ —	\$ —	\$ 21,254	\$ —	\$ —	\$ 21,254

## 27. RELATED PARTY TRANSACTION

A consolidated subsidiary of the Company recorded the following related-party transactions for the years ended March 31, 2023 and 2022:

Name of related party	Relationship with the related party	Description of the transaction	Account	Millions of yen		Thousands of U.S. dollars
				2023	2022	2023
315 Fullerton LLC (*1)	A director of a consolidated subsidiary of the Company owns a majority of the voting rights of the company.	Rental of real estate (*2)	Rent payment for real estate	¥ 45	¥ 36	\$ 337
LivPure LLC (*3)	A close family member of a director of a consolidated subsidiary of the Company owns a majority of the voting rights of the company.	Sale of products (*4)	Sale of sports nutrition products	26	—	\$ 195
			Accounts receivable	21	—	\$ 157
<b>Total</b>				<b>¥ 92</b>	<b>¥ 36</b>	<b>\$ 689</b>

(\*1): Mr. Donald K. Thorp, a director of Prinova Group, LLC, which is a consolidated subsidiary of the Company, owns 77% of the voting rights.  
 (\*2): Rent is determined taking the transactions in the neighboring area into consideration.  
 (\*3): A close family member of Mr. Donald K. Thorp, a director of Prinova Group, LLC, which is a consolidated subsidiary of the Company, owns 67% of the voting rights.  
 (\*4): Transaction terms relating to sale of products, and policies on determination of transaction terms are determined in the same manner as general transactions.

## 28. SUBSEQUENT EVENTS

### (a) Cash Dividends

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, 2023, was approved at a meeting of the shareholders held on June 20, 2023:

	Millions of yen	Thousands of U.S. dollars
Cash dividends (¥40.0 = U.S.\$ 0.3 per share)	¥ 4,696	\$ 35,168

(\*): Total amount of dividends for common stock of 4,696 million yen includes dividends of 11 million yen in relation to the Company's shares held by the Stock-Granting Trust for Directors.

### (b) Acquisition of treasury stock

The Company resolved matters relating to the acquisition of treasury stock at the meeting of its Board of Directors held on May 9, 2023 as follows, pursuant to the provision of Article 156, as applied pursuant to Article 165, paragraph (3) of the Companies Act.

#### (1) Reason for the acquisition of treasury stock

The Company will acquire treasury stock with the aim of improving the corporate value through further improvement in capital efficiency as a result of taking into consideration comprehensively the current valuation of the Company's shares in the market, the status of financial soundness, surplus investment capacity for growth, and others, as part of efforts to improve capital efficiency from both business and financial aspects under the Medium-term Management Plan ACE 2.0.

#### (2) Details of matters relating to the acquisition

- |  |   |
|--|---|
| (i) Type of shares to be acquired                | Common stock of the Company   |
| (ii) Total number of shares that can be acquired | Up to 6,000,000 (5.11% of total number of issued shares (excluding treasury stock)) |
| (iii) Total value of shares that can be acquired | Up to ¥8 billion  |
| (iv) Acquisition period                          | From May 10, 2023 to December 22, 2023  |
| (v) Acquisition method                           | To be purchased on the market   |

\* Reference: Treasury stock held as of April 30, 2023

Total number of issued shares (excluding treasury stock)	117,413,767 shares
Number of shares of treasury stock	494,518 shares

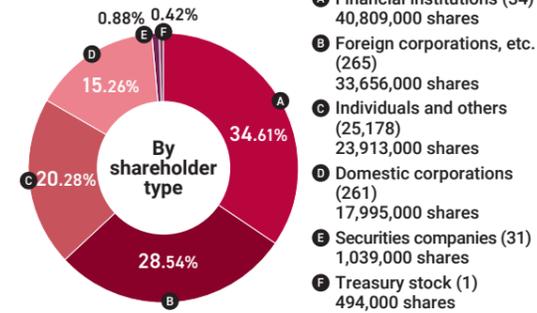
(\*): The number of treasury stock above does not include 292,200 shares of the Company's stock held by the Stock-Granting Trust for Directors.

# Investor Information (As of March 31, 2023)

## Stock status

<b>Stock exchange</b>	Tokyo (Prime Market)
<b>Code</b>	8012
<b>Stock status</b>	Total number of shares issuable: 346,980,000 shares Issued number of shares: 117,908,285 shares
<b>Number of shareholders</b>	25,770

## Composition of shareholders

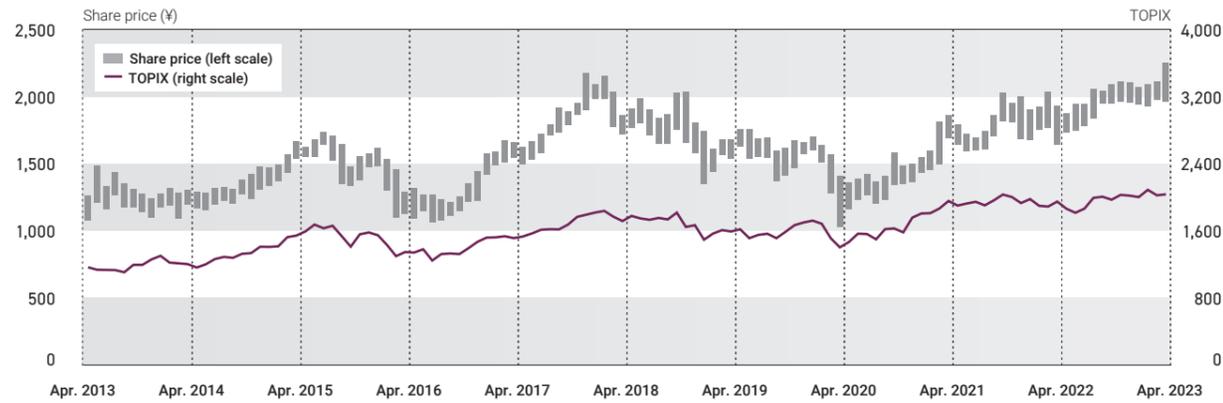


## Principal shareholders

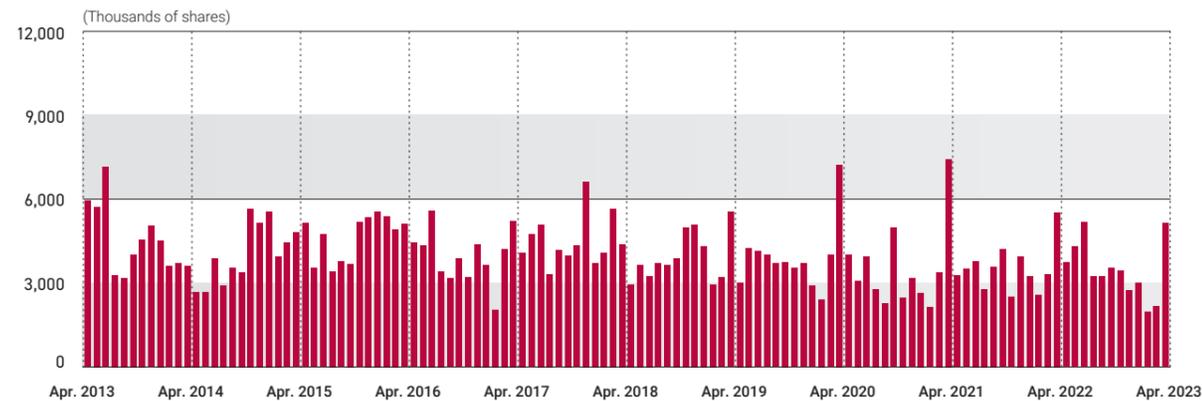
Name	Number of shares held (thousands)	% of Total Shares Outstanding
The Master Trust Bank of Japan, Ltd. (Trust Account)	15,078	12.84
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	5,375	4.58
Custody Bank of Japan, Ltd. (Trust Account)	5,028	4.28
Sumitomo Mitsui Trust Bank, Limited	4,776	4.07
Sumitomo Mitsui Banking Corporation	4,377	3.73
Nippon Life Insurance Company	3,589	3.06
Reiko Nagase	3,503	2.98
Nagase & Co., Ltd. Own Share Investment Association	3,492	2.97
Nagase Shunzo Co., Ltd.	2,688	2.29
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	2,302	1.96

\* The above figures do not include treasury stock (494,518 shares)  
Note: Treasury stock was excluded when calculating the percentage of total shares outstanding held.

## Monthly share price range of NAGASE



## Monthly trading volume



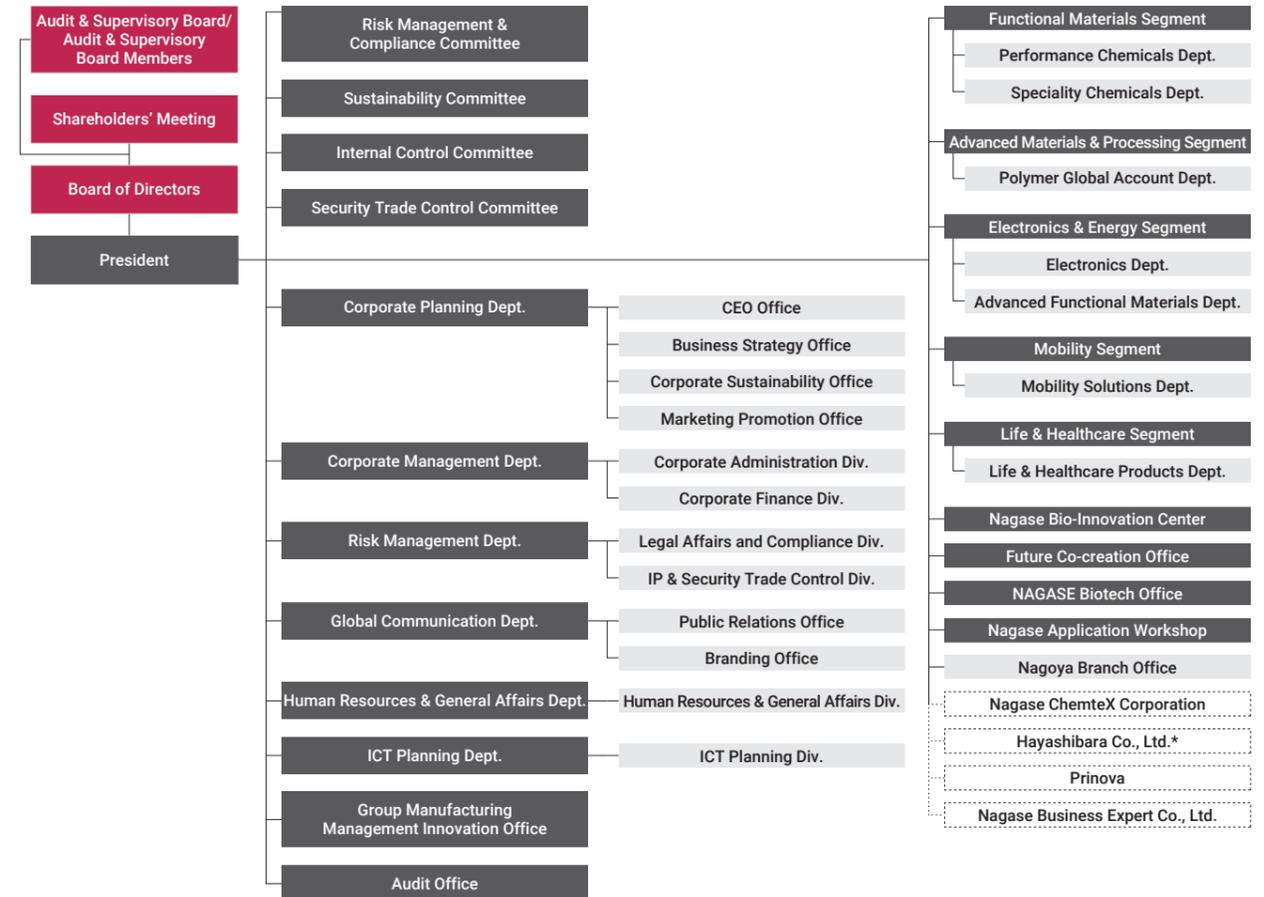
# Corporate information (As of March 31, 2023)



## Overview

<b>Company name</b>	Nagase & Co., Ltd.	
<b>Founded</b>	June 18, 1832	
<b>Establishment</b>	December 9, 1917	
<b>Capital</b>	¥9,699 million	
<b>Employees</b>	943 (consolidated: 7,220)	
<b>Main business</b>	Import/export and domestic sales of chemicals, plastics, electronics materials, cosmetics raw materials and food ingredients	
<b>Main banks</b>	Sumitomo Mitsui Banking Corporation, MUFG Bank, Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited	
	Osaka Head Office	1-1-17, Shinmachi, Nishi-ku, Osaka City, Osaka 550-8668 Tel: (81) 6-6535-2114
	Tokyo head office	Tokiwabashi Tower, 2-6-4, Otemachi, Chiyoda-ku, Tokyo 100-8142 Tel: (81) 3-3665-3021
<b>Main offices</b>	Nagoya branch office	3-14-18, Marunouchi, Naka-ku, Nagoya City, Aichi 460-8560 Tel: (81) 52-963-5615
	Nagase Bio-Innovation 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
<b>Number of bases</b>	108 companies in 25 countries	
<b>Number of manufacturing companies</b>	45 companies in 15 countries	
<b>Number of sales and service companies</b>	63 companies in 24 countries	

## Organization (As of November 11, 2023)



\* Hayashibara Co., Ltd. will begin trading under the new name of Nagase Viita Co., Ltd. on April 1, 2024.