# INTEGRATED REPORT 2023

P

0000

111111

000



¥

#### **NOF's Philosophy**

**Corporate Philosophy** 

Contributing to humanity and society as a corporate group that creates new value through the power of chemistry, "from the biosphere to outer space"

In April 2023, the NOF Group shifted to have a new Corporate Philosophy and Guiding Framework.

Under the business slogan "From Biotechnology to Space," we will seek to contribute to the development of humanity and society as a chemical company. While continuing our basic policy, we will strengthen our unity for the future and aim to improve our business performance. Our basic policy is to live in harmony with society by paying close attention to environmental protection and safety.



We have conducted restructuring to create a new Corporate Philosophy and Guiding Framework, centered on our Corporate Philosophy that defines the mission and vision that form the basis of the NOF Group's business activities, our Values that are to be prioritized when putting the Corporate Philosophy into practice, and our Code of Conduct that defines the mindset for concrete actions in business operations. Under these are our Principles, Commitments, and Policies, and the Code of Ethical Conduct is positioned as the foundation for the entire Corporate Philosophy and Guiding Framework.

#### Values

We have newly established three Values that the NOF Group prioritizes when putting the Corporate Philosophy into practice.

Challenge Fairness Harmony

We continue to grow into our best selves through collaboration and mutual inspiration, undauntedly adapt to new realities, and tirelessly pioneer new frontiers.

As responsible members of society, we maintain high ethical standards, act in good faith, and cultivate a corporate culture that embraces diverse values.

We join forces to build a sustainable future in harmony with the global environment while keeping in mind safety and mutual respect.

#### **Code of Conduct**

3

4

5

We have newly established our Code of Conduct to represent an attitude to put actual action into practice based on the Corporate Philosophy and our Values.

Provide the highest quality products and servicesglobally for the development of humanity and society.

Leverage the group's collective strengths to develop
 cutting-edge technologies and products that create
 new value across a wide range of fields.

Take on ambitious challenges to achieve personal
 growth and a fulfilling lifestyle.

Respect diversity and act fairly with high ethical standards and good sense.

Be conscious of safety and being in harmony with the environment, while solving social issues by bringing everyone's strengths together.

#### **NOF's Philosophy**

#### Revision of the Corporate Philosophy and Guiding Framework: Management rooted in the growth of people during turbulently changing times

Our previous Corporate Philosophy was established in 1992. It was partially revised in 2002, and subsequently served as a guideline for the management activities of the NOF Group for the following 20 years. It was a philosophy to be proud of, and was widely familiar both inside and outside the company, refined throughout our history, and continuously passed down. However, more than 20 years have passed since the 2002 revision, and the business environment and social conditions surrounding the NOF Group are facing two major changes.

First, as a global trend, it has become the responsibility of companies to conduct activities in accordance with goals that respond to international frameworks for resolving climate change, human rights issues, and other such challenges. The Sustainable Development Goals (SDGs), which were adopted as voluntary goals by the United Nations General Assembly in 2015, are not limited to the national and governmental level, and have become widely recognized as a corporate social responsibility. Furthermore, setting specific action goals for greenhouse gas reduction to become carbon neutral by 2050 as well as respect for human rights in the supply chain have become essential for the sustainable growth of business.

The second change is further technological innovation. Technology has been continuously progressing through now, but fields such as the IoT, AI, and quantum computing are evolving to have more impact on society and business infrastructure than ever before. Technology, which is becoming social infrastructure, is driving ever-evolving innovations in various fields such as medicine and biotechnology, electric vehicles (EV), and fifth-generation mobile communication systems (5G). The creation of new value in this next era requires that we keep pace with rapidly developing technology while refining our own technologies as well as taking on the challenge of developing new technologies and products.

In addition to the above two changes, we must appropriately face a society in which "uncertainty is the norm." To this end, it is essential to have management that is rooted in the growth of people, the foundation that supports the company. We thus decided to revise our Corporate Philosophy and Guiding Framework.

Our new Corporate Philosophy and Guiding Framework will illuminate where we stand and serve as a "compass" for the future growth of our business together with society. For the mutual growth of our employees and the NOF Group, we will place our Corporate Philosophy and Guiding Framework at the center of our business management and organizational operations, and encourage that action be taken. Contents

#### Contents

#### **NOF's Philosophy**

002 Corporate Philosophy / Values / Code of Conduct

#### **Management Strategies**

- 006 Message from the President
- 014 New Mid-term Management Plan
- 022 New Organization System
- 024 Financial & Non-Financial Highlights

#### **Value Creation**

- 028 NOF's story
- 032 NOF's Strengths
- 033 Business Model
- 034 Everyday Products Created from NOF's Products
- 036 Value Creation Process
- 038 Materiality
  - 044 Provision of New Values to Realize a Prosperous and Sustainable Society
  - 048 Strengthening the Business Foundation
  - 054 Promotion of Responsible Care Activities 062 Special Feature | Work for Biodiversity

#### **Business Strategies**

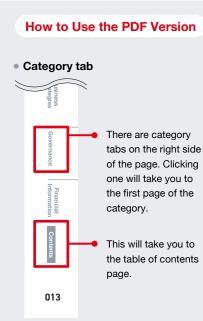
- 070 Five Forms of Business in Three Segments
- 072 Business Bases
- 074 Business Overview
  - 074 Functional Materials Business
  - 076 Metal Coatings Business
  - 078 Life Science Business
  - 080 Functional Foods Business
  - 082 Explosives & Propulsion Business

#### Governance

- **086** Introduction of Officers
- 088 Corporate Governance
- 092 Risk Management
- 094 Compliance

#### **Financial Information**

- 098 Consolidated Business Performance Indicators
- 099 Consolidated Balance Sheet
- 101 Consolidated Statement of Income / Consolidated Statement of Comprehensive Income
- **102** Consolidated Statement of Changes in Net Assets
- **103** Consolidated Statement of Cash Flows
- **104** Environmental Performance Data
- **106** Corporate Information / Stock Information
- **107** Editorial Policy / Information Provision Tools



Link buttons

#### ▶ P.000

- ..... This will take you to related pages in this report.
- Sustainability Report > P.000
- ..... This will take you to the Sustainability Report.

#### https://example.co.jp

..... This will take you to related external websites.

Contents

#### Message from the President

Create new value by combining innovation and the future.

President and Chief Executive Officer
Koji Sawamura

Thank you very much for your interest in the Integrated Report 2023 of the NOF Group.

The NOF Group has a Corporate Philosophy that states that we are a corporate group that creates new value through the power of chemistry, from the biosphere to outer space, and contributes to mankind and society. The Group is engaged in multifaceted business operations offering innovative products in our three prioritized business fields of "Life/Healthcare," "Environment/Energy," and "Electronics/IT."

The COVID-19 pandemic has generally subsided, marking a major turning point on a global scale. The major changes brought about by the pandemic have had a profound impact on people's lives and the state of society. Learning from this occurrence and based on the establishment of new values and technological advances, we have formulated our New Mid-term Management Plan NOF VISION 2030 as our strategic policy for the future. The NOF Group aims to make a leap forward as a global company through innovative approaches and proactive reforms. We will provide products and services that meet new needs while fully leveraging the possibilities offered by technological advances and responding swiftly to market changes. We will promote business activities that emphasize sustainability and social responsibility in order to meet the demands of society while keeping up with changing values.

Today, there is rapidly increasing interest in various social issues, including global environmental issues such as climate change as well as human rights issues. The NOF Group will face social changes with sincerity, endeavor to create new value with the power of and chemistry, and continue to meet the expectations of all of our stakeholders, with the aim of achieving a secure and affluent society. We shall be grateful if you would give your further support to the NOF Group and express your candid opinions. Contents

#### **Message from the President**

## Reflections on the 2022 Mid-term Management Plan

#### We achieved our numbers-based plan for FY2025 three years ahead of schedule.

In FY2022, net sales were ¥217.7 billion, operating income was ¥40.6 billion, ratio of operating income to net sales was 18.7%, ROA was 14.4%, and ROE was 14.8%. These were all record highs. Sales in the Functional Chemicals segment increased by ¥18.0 billion over the previous year, supported by sales price revisions in response to surging raw material and fuel prices as well as firm demand. Sales in the Life Science segment increased by ¥7.2 billion over the previous year, which was mainly due to growth in sales of raw materials for DDS drug formulations. In addition, the Explosives & Propulsion segment was flat year-on-year. In terms of profit, the increase in sales, especially in the Life Science segment, led Avto a ¥5.0 billion year-on-year increase in operatting income, which was the highest ever.

The reasons for our achievement of the NOF VISION 2025 numbers-based plan three years ahead of schedule included growth in the DDS business as planned, as well as contributions from demand related to COVID-19, particularly demand for vaccines. Another reason was the effect of our efforts to strengthen the earnings bases of less profitable businesses in the Strengthening Foundation stage. Specifically, in the Functional Chemicals segment, we implemented price revisions to improve profitability, mainly for products that had become commoditized. We also withdrew from the functional films business, which had been severely unprofitable. In addition, we strongly improved efficiency by investing in labor-saving measures as well as reviewing production and sales items, and promoted sales price optimization to strengthen our earnings bases. In the midst of a rapidly changing business environment, we were able to strengthen the earnings bases of businesses with low profitability and bolster profitability, which we believe was a factor in achieving the overall numbers-based plan ahead of schedule.

#### New Mid-term Management Plan NOF VISION 2030

Setting the NOF Group's corporate vision for FY2030 for the next leap forward

The NOF Group has set its corporate vision for FY2030 to be "a corporate group that continuously creates new value with the power of chemistry in the three business fields of 'Life/Healthcare,' 'Environment/Energy,' and 'Electronics/IT' in order to realize a prosperous and sustainable society." We have set our operating income target at ¥60.0 billion for FY2030, and based on our record of earnings growth achieved over the past six years, we aim to become a corporate group that continuously creates new value.

We have newly formulated NOF VISION 2030 in order to achieve our corporate vision for FY2030. In order to achieve our corporate vision, we have positioned the 2025 Mid-term Management Plan, which started in FY2023, as Stage II: Expanding Profit. We have also positioned the 2028 Mid-term Contents

Financial Information Management Plan as Stage III: Business Domain Expansion. We will conduct business operations toward further growth, aiming for operating income of ¥46.0 billion in FY2025 and ¥60.0 billion in FY2030.

#### Revision of the Corporate Philosophy and Guiding Framwork, and start of efforts pursuing new growth

Looking at the business environment today, we are facing two major changes. The first is that companies are now recognized as having the responsibility to take actions to solve social issues such as climate change and human rights issues. Achieving carbon neutrality by 2050 and respecting human rights in the supply chain are essential for business growth. The other change is technological innovation. Advances in IoT, AI, quantum computing, and other technologies are having a significant impact on society and business, and technologies in areas such as the pharmaceutical and biotech fields, electric vehicles, and 5G are evolving rapidly. In order to create new value, we must be perceptive of technological advances and take on the challenge of developing new technologies and products.

In addition to the above two changes, in an environment where we must appropriately face the various changes in a society in which "uncertainty is the norm," we have revised our Corporate Philosophy and Guiding Framework based on the determination that it will become increasingly important for management to be grounded in the growth of people, the foundation that supports the company.

We have compiled the principles and guidelines that we have valued throughout our long history into a Corporate Philosophy and Guiding Framework that we stand by today, focusing on the present and the future. We have summarized our mission and vision in our Corporate Philosophy, and have established three values that we prioritize in order to put our Corporate Philosophy into practice. We have established our Code of Conduct to represent an attitude to put actual action into practice based on the Corporate Philosophy and our Values.

#### Reform of the entire company into a robust organizational structure that strongly advances toward our corporate vision for FY2030

In conjunction with our new start, we implemented organizational restructuring as of April 1 this year. The reorganization of the business divisions was aimed at providing new value to customers to meet changing market needs in the three prioritized business fields of Life/Healthcare, Environment/Energy, and Electronics/IT, and there was also reorganization to upgrade and optimize the functions of corporate divisions in order to strengthen our ability to respond to changes in the business environment and other factors.

In the Functional Chemicals segment, the former Oleo & Speciality Chemicals Division and former Functional Chemicals & Polymers Division were merged to form the Functional Materials Division, which will cultivate new demand in growth fields by strengthening our capabilities to make proposals through sales integration. In the Governance

Pharmaceuticals, Medical and Health segment, the former DDS Development Division and former Life Science Products Division were merged to form the new Life Science Division, which will strengthen the quality assurance system for biocompatible materials and accelerate development in the medical field. In addition, the Functional Foods Division has a new Japanese name, and will shift to function-based business domains. This segment will be renamed from the former Life Science segment beginning in the fiscal year ending March 31, 2024 in order to more clearly communicate the nature of its business. The integration of these divisions is intended to



strengthen competitiveness in our three prioritized business fields. We will accelerate new product development and new market development by solidifying the creation of business synergies.

For corporate divisions, the Legal Department, the Corporate Communications Department, and the Corporate Technical Division were newly established to further enhance reliability related to compliance and quality management, as well as to strengthen our external communication abilities. In particular, the Corporate Communications Department will actively communicate with stakeholders.

Through these changes in our organization system, we will strongly advance toward our corporate vision for FY2030.

We set a strategic investment framework of ¥70.0 billion in Stage II of NOF Vision 2030 (2025 Mid-term Management Plan)

In the 2025 Mid-term Management Plan, we set

"Practice and Breakthrough" as our management policy for the three years of the Plan, aiming to realize our corporate vision for FY2030 as described in NOF VISION 2030. We will "put into practice" measures to increase earnings by bringing to fruition the measures to strengthen the earnings bases that were undertaken in the 2022 Mid-term Management Plan. We will also promote "strategic investments" to sow the seeds for future business pillars, and make "breakthroughs" toward our corporate vision for FY2030.

In order to realize our corporate vision for 2030, there are two important items that must be steadily implemented in the 2025 Mid-term Management Plan. The first is to ensure that we reap the results that we have cultivated under the 2022 Mid-term Management Plan. The second is to ambitiously sow the seeds of a new plan for the 2028 Mid-term Management Plan, while keeping an eye on future prospects. To ensure the realization of these goals, we have established a strategic investment framework of ¥70.0 billion, which is separate from the existing framework. Combined with existing investments, this will bring the total ount of investment to over ¥110.0 billion.

#### **Message from the President**

The following are descriptions of the strategic investments comprising facility investment, research and development, and human investment.

#### **Facility investment**

Facility investment under the 2025 Mid-term Management Plan is planned to be about three times the size of the investment under the 2022 Mid-term Management Plan. We will focus on strengthening our manufacturing facilities for raw materials for DDS drug formulations, and about 50% of the ¥69.5 billion in total facility investment will be used to strengthen facilities in the Pharmaceuticals, Medical, and Health segment. In the Functional Chemicals segment, about 35% of the total will be allocated to construction and reinforcement of manufacturing facilities in fields where demand continues to grow, such as cosmetics materials and anti-fog agents.

Of the total facility investment, ¥47.9 billion is expected to be related to manufacturing facilities, which includes a flexible investment framework including M&As. M&As are basically considered from the perspectives of improving services to customers, generating synergies with our existing businesses, and entering new business domains, rather than pursuing scale. In addition, in order to increase productivity, we will advance investment for improving operational efficiencies by promoting automation and labor-saving, and for increasing the use of data in production and sales.

In terms of investment for environmental response, we will promote investment in energy conservation and efficiency improvement of manufacturing facilities to address the regulatory control of CFCs and to reduce CO<sub>2</sub> emissions.

## Research and development investment

Total R&D investment under the 2025 Mid-term Management Plan is planned to be ¥25.6 billion, an increase of about 40% over the actual investment during the 2022 Mid-term Management Plan period. In addition, in order to achieve business

expansion under the next Medium-term Management Plan, we will more than double the number of R&D personnel involved in corporate research in FY2025 compared to FY2022. We plan to increase the overall number of R&D personnel in FY2025 by about 20% compared to FY2022. In order to create new businesses, we will promote the exploration of promising themes through external co-creation, open applications, and public bidding invitations, as well as promote R&D through measures such as MI environment improvement and human resources development. We will also continue to actively participate in open innovation to promote collaboration among industry. academia, and government To promote R&D aimed at creating new businesses, we launched industry-academia collaborative projects in FY2021 and are recruiting partners. In FY2023, we have begun sponsored research on themes adopted in the fields of materials for electronics and materials for health food. During the period of the 2025 Mid-term Management Plan, we will continue public bidding invitations for wider areas of industry-academia sponsored research.

#### Human investment

With regard to human capital, we will develop measures to promote diversity and employee engagement as new important pillars. Based on the basic philosophy that "A company is its people," we will implement active investment in human capital that encourages the development of our human resources.

As measures to create a diverse workforce with high work engagement, we will provide support for building career design for employees to help them plan their own career development, establish a new training program to develop digital transformation (DX) human resources, and expand training programs to foster global human resources. Furthermore, as a measure to motivate and utilize diverse human resources, we raised the retirement age to 65 years ahead of others. In addition, we will upgrade and renovate our employee welfare facilities.

#### Numerical targets of the 2025 Mid-term Management Plan

In FY2025, we plan to achieve operating income of ¥46.0 billion, a ratio of operating income to net sales of at least 18%, ROA of at least 13%, and ROE of at least 12%. We will implement various measures to realize our vision for FY2025. We expect growth in each segment toward the Group-wide net sales of ¥255.0 billion in FY2025. Although consolidated operating income and the ratio of operating income to net sales for FY2023 will be lower year-on-year due to increased expenses for strategic investments and other factors, we expect each segment to grow to a level exceeding that of FY2022 in FY2025.

#### **Financial strategy**

Strategic investments and existing investments will be made within the limits of our cumulative total cash flow from operating activities during the period of the 2025 Mid-term Management Plan and our cash reserves, including funds from the sale of cross-shareholdings. We will advance sale of cross-shareholdings with the goal of achieving a ratio of cross-shareholdings to net assets of 15% or less. As for our policy on shareholder returns, we will strive to maintain and improve shareholder returns while maintaining a balance with strategic investments, with an awareness of improving capital efficiency. We will maintain a total return ratio of about 50% as our target level for FY2025, and will pay dividends based on the maintenance of stable profit returns. We will also purchase and retire treasury stock as necessary.

#### Initiatives for sustainability issues

In order to strategically address global social issues, all directors, including those from outside the company, consider responses to these issues by participating in the Sustainability Committee, which I chair. In addition, this fiscal year, we incorporated ESG indicators into our executive compensation system. This will enhance the

#### **Message from the President**

effectiveness of our ESG-related initiatives and strengthen corporate governance.

With regard to climate change, we will take on the challenge of innovation for decarbonization. In the previous fiscal year, we started R&D for the effective utilization of biomass-derived raw materials and unused exhaust heat through industry-academia collaborative projects. We will continue to focus on this. The NOF Group also offers a variety of products for fields related to the mitigation of global warming. We will contribute to mitigating global warming by providing products such as dispersants for electronic components and lubricants for electric units for electric vehicles, as well as biodegradable hydraulic oil and anti-corrosives for wind power generation.

#### A company is its people

The most important component of corporate growth is human resources. We will reaffirm the

spirit of "A company is its people," recognize the importance of communication among all employees, and constantly strive for open organizational operations so that each employee can work independently with a clear sense of purpose and responsibility, and feel a sense of fulfillment and satisfaction from work.

#### Looking ahead to FY2030

The 2025 Mid-term Management Plan, with fiscal 2023 as its first year, faces a difficult business environment, including no outlook on the impact of the Ukraine crisis, soaring raw material and fuel prices, semiconductor supply shortages, and supply chain disruptions. However, we will monitor changes and steadily advance Stage II: Expanding Profit of NOF VISION 2030.

In an ever-changing society, corporate social responsibility (CSR) is a never-changing important issue. Being a part of efforts to achieve the SDGs

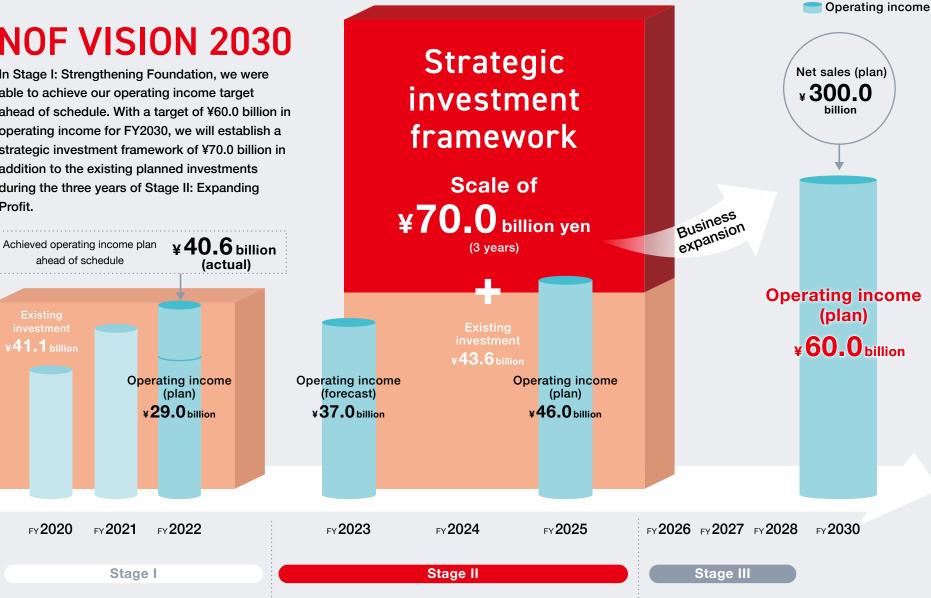
and contributing to realizing a sustainable society is not only our duty as a corporate citizen but also a challenge to be tackled. It is vital to have the mindset of trying to achieve greater wealth of society as a whole while trying to increase earnings for ourselves as a company. The NOF Group will steadily implement its CSR initiatives and continue to contribute to the realization of a sustainable society.

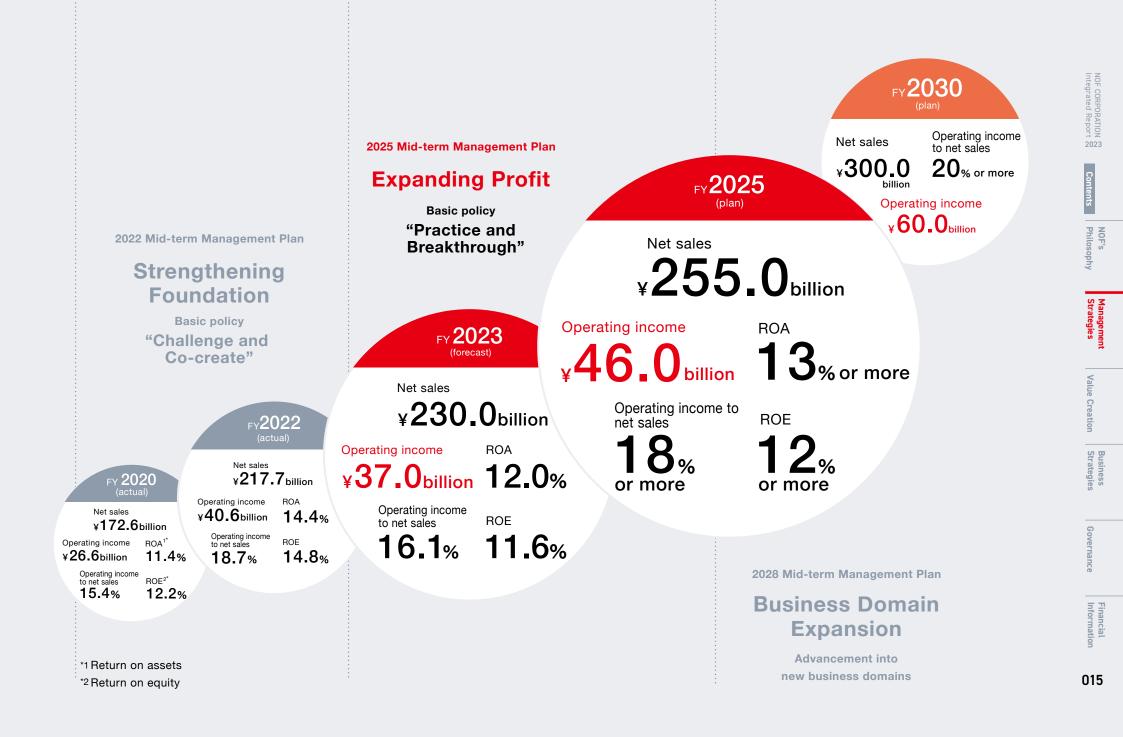


#### **New Mid-term Management Plan**

## **NOF VISION 2030**

In Stage I: Strengthening Foundation, we were able to achieve our operating income target ahead of schedule. With a target of ¥60.0 billion in operating income for FY2030, we will establish a strategic investment framework of ¥70.0 billion in addition to the existing planned investments during the three years of Stage II: Expanding Profit.





#### Stage II

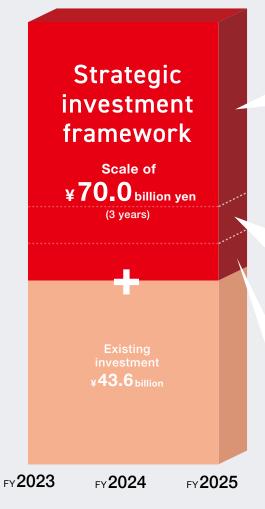
2025 Mid-term Management Plan

## **Expanding Profit**

Strategic investment for earnings base expansion / business domain expansion

## "Practice and Breakthrough"

Having completed the three years of Stage I: Strengthening Foundation, the three years from FY2023 are positioned as Stage II: Expanding Profit, with the target of ¥46.0 billion in operating income and a ratio of operating income to net sales of 18% or higher in FY2025. In addition to the "existing investments" of ¥43.6 billion related to the previous Medium-term Management Plan, we will establish a "strategic investment framework" of ¥70.0 billion for the three years of Stage II. Strategic investment includes three themes: (1) "production and environment" facility investment, (2) research and development, and (3) human investment, and will be funded through self-financing as well as funds from the sale of cross-shareholdings. We will actively make investments for further growth, aiming not only to achieve the goals of the Medium-term Management Plan for FY2025, but also to achieve operating income of ¥60.0 billion in FY2030.



## Production facilities and environmental facilities

Investment in the strengthening of manufacturing facilities in response to growing demand, as well as in promotion of smart factories and environmental response

#### **Research and development**

Investment in R&D to plan new products in existing domains and to create new businesses, including M&As

#### Human capital

Investment in hiring excellent human resources as well as improving work environments, introducing skill development programs, and developing DX human resources

#### **New Mid-term Management Plan**

Production facilities and environmental facilities

Research and development

Strategic investment in production facilities and environmental facilities

## Promotion of automation and labor-saving and contributions to CO<sub>2</sub> emissions reduction

In addition to existing facility investments, we will promote new and strengthened manufacturing facilities in fields where demand is expected to grow, such as raw materials for DDS drug formulations, cosmetics materials, and anti-fog agents. We are planning for facility investment that is about three times the amount during the 2022 Mid-term Management Plan period through investments in productivity improvement and environmental response.



#### Environmental response



- Improvement of operational efficiencies by promoting automation and labor-saving
  - Utilization of RPA and AI-OCR, and introduction of production schedulers
     Introduction of automatic filling machines
- Expansion of data utilization in production and sales
  - Promotion of smart factories (new DDS plants)
  - Introduction of marketing support tools, chemical substance management, and facility maintenance management systems
- Addressing the regulatory control of CFCs at manufacturing facilities
   Change CFCs to natural refrigerants
- Energy conservation and higher efficiency at manufacturing facilities
  - · Electrification of equipment that utilizes steam
  - Conversion of boiler fuel and improvement of boiler efficiency

#### Main facility investment

- Establishment of new manufacturing facilities for raw materials for drugs (PEG modifiers) Aichi Works
- Strengthening of manufacturing facilities for anti-fog agents
   Aichi Works
- Establishment of manufacturing facilities for SS lipids Aichi Works
- Strengthening of manufacturing facilities for cosmetics materials (Aichi Works)
- Strengthening of manufacturing facilities for fatty acid derivatives Amagasaki Plant

#### **New Mid-term Management Plan**

Production facilities and environmental facilities

#### Research and development

Human capital

Strategic investment for research and development

## ¥8.7billion

#### Promotion of open innovation through collaboration among industry, academia, and government, including external co-creation, open applications, and public bidding invitations

In order to create new businesses, we will explore promising themes with future potential both internally and externally, and promote R&D through environment improvement and human resources development. We will also promote active participation in open innovation through collaboration among industry, academia and government, and strive to expand our R&D areas.



**Initiatives for** 

open innovation

- Exploration of promising themes through external co-creation, open applications, public bidding invitations, etc.
- Acceleration of the development of new businesses through enhancement of the system for R&D
- · Introduction of a database system and analysis software
- Streamlining of R&D by developing the MI\* environment and fostering human resources
- Promotion of collaboration among industry, academia, and government utilizing open laboratories and government projects
- \*MI ··· Acronym for Materials Informatics. Utilization of digital technologies such as big data and AI in process-based manufacturing industries such as the chemicals industry.

#### [FY2023]

Commencement of sponsored research on themes adopted in two fields

#### Materials for electronics

Advanced technology such as materials for high-speed communications, materials for semiconductors, and materials for rechargeable batteries

Materials for health food

Useful materials for health food, and efficient production technologies of useful materials for health food

#### [2025 Mid-term Management Plan]

Continuation of public bidding invitations for wider areas of industry-academia sponsored research

▶ P.044-047

018

Go

Production facilities and environmental facilities

Research and development

Human capital

Strategic investment for human capital

¥8.6billion

#### Creation of a diverse workforce with high work engagement

Human capital is becoming increasingly important in business management. We aim to create a diverse organization by continuously securing human resources who are positive about their jobs and highly motivated to work, and by developing employees who can serve as DX personnel and global human resources.

Investment in securing and developing human resources



Promotion of employees' autonomous growth

• Strengthening of development of autonomous human resources and support for career design development

#### Promotion of DX human resource development

Acceleration of further development by enhancing training programs

#### Promotion of development of global human resources

- Revision of overseas study programs and related overseas educational systems
- Development of global human resources

#### Organizational revitalization through diverse human resources

- Raising of the retirement age to 65
- Upgrading and renovation of employee welfare facilities
  - Upgrading and renovation of company housing in the Kanto area and a dormitory in Kansai area

▶ P.048-053

Governance

Contents

## Three fields in which the NOF Group aims to capitalize on the changes in the times

#### Making the shift to EVs a business opportunity

Social issues

Three prioritized business fields

The shift from gasoline-powered vehicles to EVs will significantly change the components of vehicles. In addition to anti-corrosive coatings for bolts and nuts, new demand is expected for resin additives to prevent abnormal noise and antifogging agents for LED headlamps. In addition, lubricants used in offshore wind power generation, ship screws, and other areas are more biodegradable than mineral oil, which reduces environmental impact. We will leverage business integration and Group synergies to expand the applications of our eco-friendly products.

Environment / Energy



#### People's health and QOL

We offer new materials needed for medicine and medical care. We also contribute to the improvement of quality of life (QOL) through additives that prolong the efficacy of eye drops, formulas for cosmetics that are quick to catch on to trends, supplements that meet health needs, and research on improving the texture and flavor of meat alternatives, which have been the focus of much attention recently. We will promote the development of new technologies and products through the utilization of synergies from business integration and collaboration with universities and research institutions.



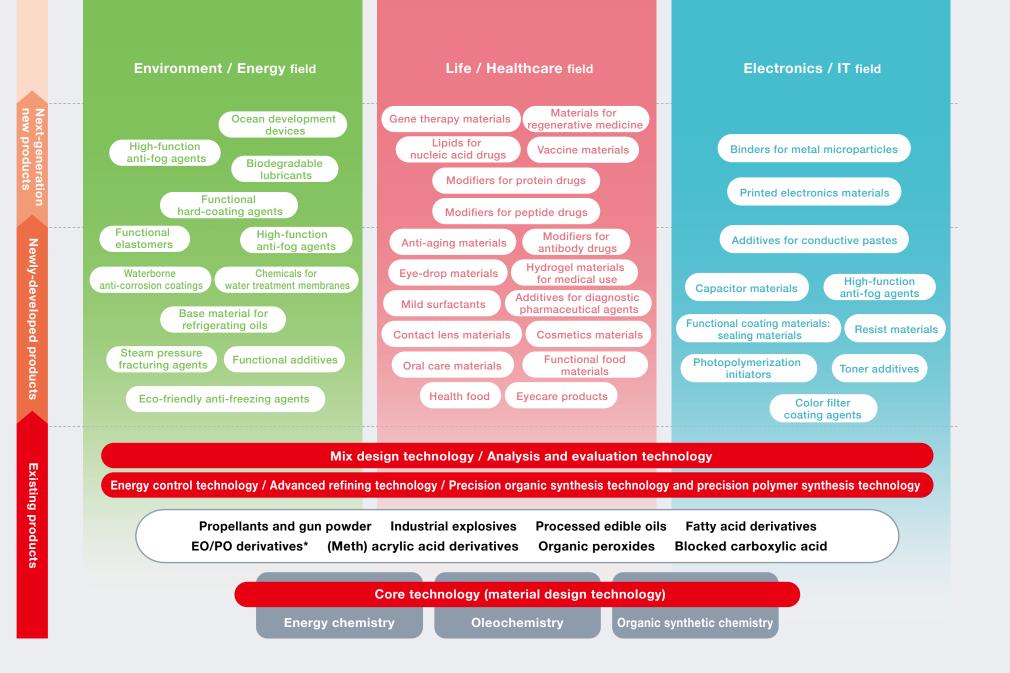
## Advances in communication technology and miniaturization

As telecommunication standards advance from 4G to 5G due to improvement in electronic technology, the amount of information transmitted will increase significantly, electronic components will become smaller, and there will be a shift to low-dielectric materials. Accordingly, it is expected that there will be increased demand for highly photosensitive materials, additives for electronic components, and curing agents for low-dielectric materials. We will leverage synergies from business integration and promote development of new materials that link design and evaluation technologies.

Electronics / IT



## field



\*Ethylene oxide Propylene oxide derivatives (polyalkylene glycol derivatives)

021

Financial Information

NOF CORPORATION Integrated Report

2023

Contents

NOF's Philos

Management Strategies

Value Creation

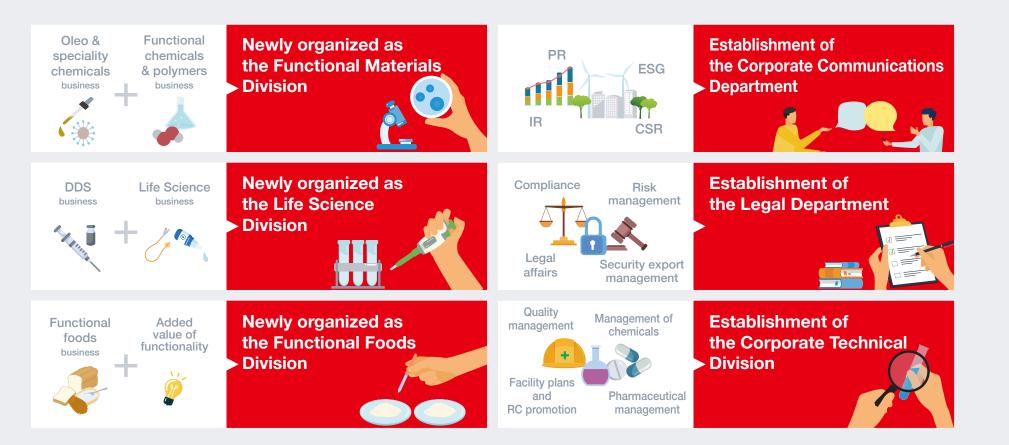
Business Strategies

Governance

#### New organization system

## Organization restructuring for quick and accurate decision making

We reorganized from seven to five businesses to achieve more synergy and provide higher value in response to customer needs and requests. In addition, in order to respond to diverse social demands, we reviewed the organization of corporate divisions to strengthen their functions and clarify their roles and responsibilities.



NOF CORPORATION Integrated Report

2023

Contents

NOF's Philosophy

Managemer Strategies

Value Creation

Business Strategies

Governance

023

#### New organization system

## Optimizing business divisions and strengthening the functions of corporate divisions

There is a greater need than ever before to disclose non-financial information to stakeholders, especially institutional investors, on matters such as the functioning of the board of directors, response to climate change, and investment in human capital. In addition, business management must respond to a wide range of social demands, including the promotion of DX, strengthening of cybersecurity measures, respect for human rights, and compliance. Against this backdrop, we have reorganized our business divisions and promoted the creation of an organization in which corporate divisions can further demonstrate their expertise.

#### POINT

- Establishment of the Corporate Communications Department Consolidates IR, CSR, and PR activities, and strengthens two-way communication with stakeholders.
- Establishment of the Legal Department to enhance compliance Consolidates specialized operations based on laws and regulations, strengthens the management system and enhances its functions, and ensures compliance with laws and regulations.
- Establishment of the Corporate Technical Division to strengthen our quality management system

Consolidates company-wide management of chemicals related to promotion of RC activities as well as pharmaceutical management work, and strengthens the quality management system.

#### Launch of the Functional Materials Division and Life Science Division

In order to provide optimal services to customers, the existing oleo & speciality chemicals business and functional chemicals & polymers business have been newly organized as the Functional Materials Division, and the DDS business and Life Science businesses have been newly organized as the Life Science Division.

#### Launch of the Functional Foods Division

The food business has been newly organized as the Functional Foods Division to promote the development of high value-added products with more specialized functionality.

#### New department

#### **Corporate Communications Department**

## Enhancement of internal and external communication through appropriate dialogue with stakeholders

The NOF Group aims to actively engage in two-way communication with stakeholders. As the first step toward achieving this, we have established the Corporate Communications Department. Amidst the need for appropriate information disclosure and highly transparent management, we will focus on improving communication channels. We will take feedback from all stakeholders seriously and reflect it in our future corporate activities in order to aim for sustainable growth.

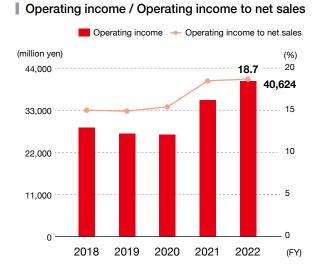
To date, we have kept in mind a high sense of ethics and consciousness about quality as we have built trusting relationships with our customers, investors, business partners, local communities, and other stakeholders. We will continue to value these relationships as we work to further improve our corporate communications.

Operating Officer General Manager, Corporate Communications Department

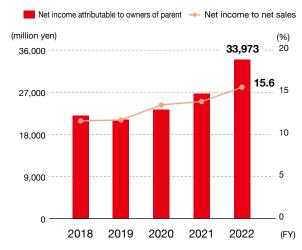
Hideru Furukawa



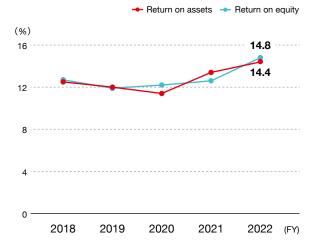
#### **Financial Highlights**

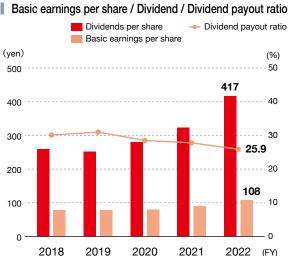


#### Net income attributable to owners of parent / Net income to net sales

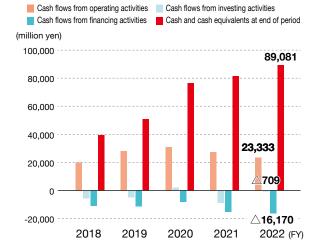


#### Return on assets (ROA) / Return on equity (ROE) Basic earnings per

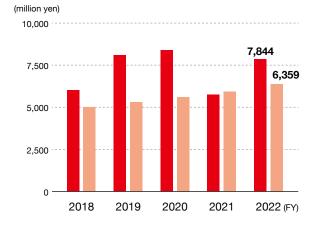




#### Cash Flows



#### Capital Expenditure / Depreciation

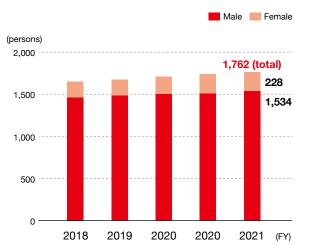


Capital Expenditure (Acceptance Basis) Depreciation

NOF CORPORATION 23 Integrated Report 20

#### **Non-financial Highlights**

Number of employees NOF



Changes in GHG emissions (reference year: FY2013)

(Thousand tons of CO2 / year)

250 -----

200

150

100

50

0

2018

2019

2020

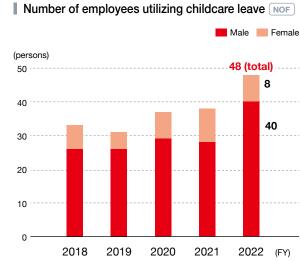
2021

NOF Group Domestic Group

175

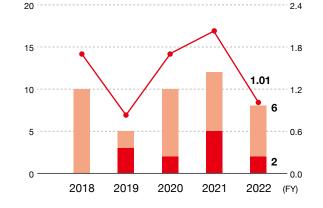
144

2022 (FY)

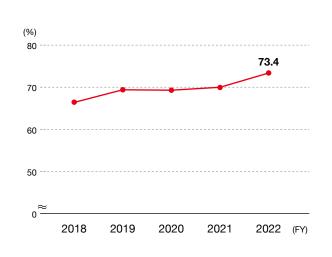




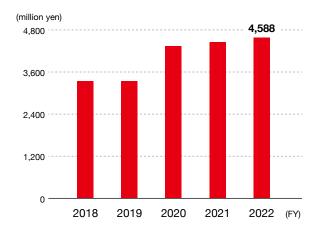
(No. of accidents)







#### Environmental Expenses Domestic Group



# NOF's Value Creation

NOF develops products by combining core technologies cultivated in a wide range of business areas in the three fields of "Life/Healthcare," "Environment/Energy," and "Electronics/IT." LENT



NOF's story

# since 1937

Established as a general oleochemical company Diversification of business in response to change Value Creation

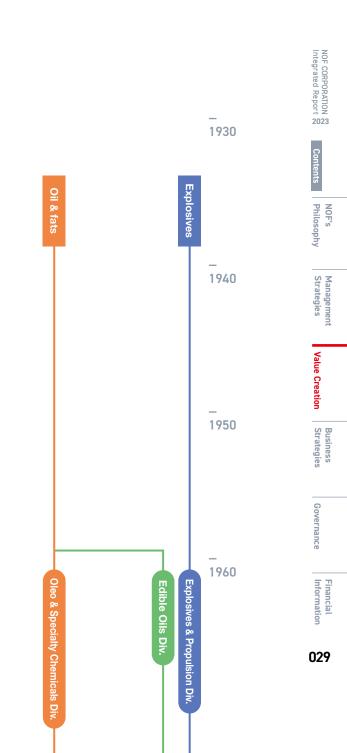
Busines

#### Expanding our business areas to include petrochemicals, centered on oils and fats Supporting rapid economic growth with products ahead of their time

Japan's oils and fats industry began with the export of hardened oil as a raw material for soap and margarine. As exports surged during the Showa period, Nippon Food Industries, Kokusan Industry Fuji Paint Works, Velvet Soap, and Associated Oil and Fats, which were under the Nippon Sangyo Group, merged to form the first Nippon Oil and Fats in June 1937. The company began operations as a general oleochemical company aiming for integrated production of cosmetic soap and detergent.

After the end of World War II, there was a period of turmoil that included financial difficulties for obtaining basic necessities and soaring commodity prices. In July 1949, the company once again took the name "Nippon Oil and Fats" as a chemical manufacturer with four divisions: oils and fats, coatings, explosives, and welding rods. Fish oil replaced beef tallow and coconut oil as the raw material for fats and oils, and uses of derivatives of simple fatty acids, developed through innovations in refining technology, expanded to include use as disinfectants and emulsifiers. The company also expanded into the field of processed edible oils such as margarine and shortening.

In the 1950s, as the petrochemical industry took off, the leading materials shifted from natural rubber to synthetic rubber, and from wood, metal, and glass to synthetic resin. The company focused on expanding sales channels to a wide range of industrial fields in response to the trend of rapid growth of large assembled products such as the "3Cs" (color TVs, cars, and coolers) due to high economic growth. The company developed derivatives along with various simple fatty acids to enhance its non-ionic surfactant product line. Applications as emulsifiers, modifiers, and stabilizers were also developed, and gained customers in a wide range of fields, including pharmaceuticals, cosmetics, toiletries, paper and pulp, and civil engineering and construction. Furthermore, efforts were made to mass produce organic peroxides, which are indispensable for the manufacture of synthetic rubber and synthetic resins, and production of processed edible oils increased rapidly due to the expanding market for western-style confections and baked sweets. In addition, the company diversified its business with efforts such as developing solid propellants for artificial satellite launch plans of the National Space Development Agency of Japan.



#### NOF's story | 1970 - 2006

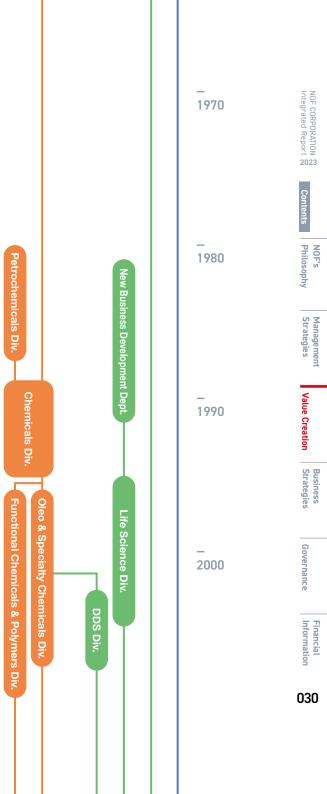
#### Focusing on the pharmaceutical industry, centered on biotechnology Focusing on R&D of new materials to expand our product lineup

In 1968, Japan's gross national product (GNP), which was soaring due to the Izanagi Boom, surpassed that of West Germany to become the second highest in the world However, the first oil crisis in 1973 caused a sharp rise in the price of imported crude oil and a major downturn in Japan's economy. In order to secure stable supplies of raw materials, the company accelerated its overseas expansion, including by investing in Malaysia, a palm oil producing country. At the same time, the company focused on fine chemicals as high value-added products. The BLEMMER series of world-class polymer modifiers expanded its sales channels in fields such as coatings, adhesives, and resist materials, and the company also advanced the development of finer organic peroxides. In 1983, the Tsukuba Research Laboratory was established for R&D of new materials. The Laboratory became a stepping stone for offering high value-added products by linking lipids to promising biotechnology, focusing on the pharmaceutical industry, developing high-purity unsaturated fatty acids, and other means.

After the Japanese economy reached its peak in the 1980s, the bubble economy collapsed in the early

1990s, ushering in an era in which product development capabilities would determine the future of the company. When the Life Science Products Division was established in 1999, the company expanded its manufacturing capacity in anticipation of increased demand for cleaning and storage solutions for contact lenses as well as cosmetic ingredients. In 2001, the DDS Business Development Department was established, after the company had established a track record in the development of high-purity activated PEG, phospholipids, and other products. In 2004, in addition to the establishment of a local subsidiary in China to supply organic peroxides to synthetic resin manufacturers, the Daishi Plant was completed as a new production base for processed edible oil, with the basic principle of "food safety and security" to ensure traceability of the raw materials used. Furthermore, in 2006, although the company established a new division to oversee the anti-corrosion business that had been operating in Japan, the United States, and Europe, it also made selections and concentrated its businesses, including discontinuing the welding and coating business and transferring it to another company.

lopment De



#### NOF's story | 2007 - 2023

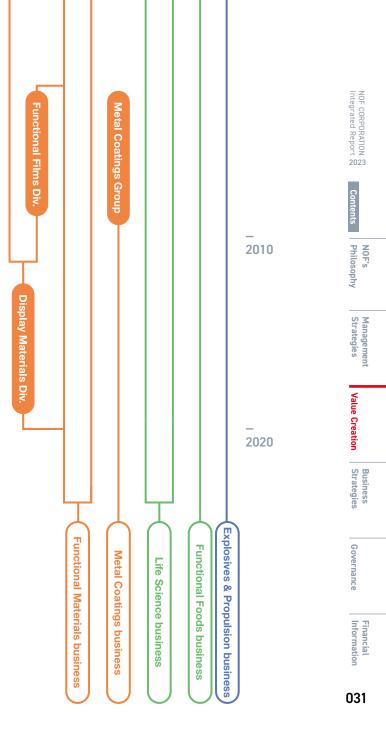
#### Global expansion with five forms of business that generate the NOF brand Promoting innovation toward a sustainable society

In October 2007, the 70th anniversary of our founding, the company name was changed from Nippon Oil and Fats to Nichiyu (NOF in English) with the aim of further expanding our business areas. In addition to the four core businesses of oleo & specialty chemicals, functional chemicals & polymers, explosives & propulsion systems, and functional foods, the company's organizational structure now also includes life science products, DDS development, and anti-corrosion. Under the slogan "From the Biosphere to Outer Space," we have taken the first step toward becoming a global general chemical manufacturer equipped with cutting-edge technologies.

As environmental and social issues continue to mount on a global scale, expectations are increasing for innovation toward a sustainable society. Therefore, in our Mid-term Management Plan for the 2010s and beyond, we identified three fields where future demand is expected to grow: Environment/Energy, Life/Healthcare, and Electronics/IT. In the Life/Healthcare field, for example, we are working on the development of new materials through co-creation in industry-government-academia collaboration, with a focus on advanced medical technique and regenerative medicine, which are attracting worldwide attention.

In the DDS business, which was created by integrating NOF's technologies, such as high purification and cutting-edge molecular design technologies, we provide a wide range of materials to the biopharmaceuticals field, which is expected to grow significantly in the future. Among these, the main product, activated PEG, is used in many biopharmaceuticals, including protein drugs and peptide drugs, and holds the largest share in the global market. In addition, functional lipids such as ionic lipids and PEG lipids are being developed for use in nucleic acid drugs, including expected applications in gene medicine. In response to the increase in the number of pharmaceuticals which use NOF's materials, our plan is to expand the manufacturing facilities at our Kawasaki Works in 2021 and make a facility investment of ¥10 billion in our Aichi Works by 2025.

In 2023, we renewed our Corporate Philosophy structure and reorganized our business units. We will develop our global business with 13 consolidated subsidiaries in Japan as well as 12 bases in nine countries overseas toward achieving NOF VISION 2030.



#### **NOF's Strengths**

## Support through technology from general consumer goods to advanced materials

The NOF Group has created a wide variety of products as a chemical manufacturer supplying materials to companies in Japan and abroad. We have a long history spanning 86 years since our founding. We support our customers' manufacturing with our technical capabilities and response capabilities.



## Diverse management

We are characterized by our wide range of business areas, from raw materials for familiar products such as cosmetics, foods, and pharmaceuticals to electronicsrelated products and solid propellants for rockets. While possessing proprietary technologies and products in each of these areas, we continue to create original products that are increasingly complex and highly functional, including the fusion of oleochemical and petrochemical technologies.

## <sup>2</sup> Global expansion

Strengt

Since entering the overseas market in 1984, we have promoted active overseas expansion, including the establishment of sales bases in the United States and Europe and production sites in Indonesia and China. Currently, we have 12 consolidated subsidiaries in the United States, Europe, Asia, and South America, providing products and technologies to the entire world. We will further develop new business to meet the expectations of the untapped global market.

▶ P.072-073

## Advanced technology development

We are engaged in development at the research facilities of our divisions, and in research on original and pioneering materials and technologies for the next generation at our Advanced Technology Research Laboratory. In addition, we are searching for new materials and technologies by leveraging our connections outside the company, including open innovation through industry-academia-government collaboration in advanced medical technique and regenerative medicine, as well as promoting development leveraging business integration synergies.

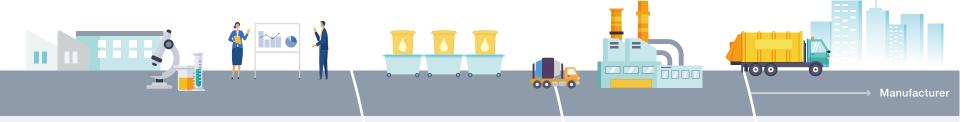
▶ P.044-047

#### **Business Model**

#### Support for customers from development to mass production

While utilizing our core technologies, we work closely with our customers in their product development efforts, proposing materials in accordance with their objectives and needs.

In addition, in accordance with our Responsible Care (RC) Activities, we are committed to safety management and make efforts for quality improvement throughout the entire value chain.



#### R&D

[Material design and precision synthesis technology]

#### Flexible design for customer requirements

We can flexibly design a variety of derivatives and polymers based on fats, oils, and petrochemicals, combined with our unique synthesis and refining technologies. This enables speedy product development that meets customer requirements.

#### [Technologies for formulation, analysis, and evaluation]

## Offering functions that customers want

We have advanced analysis and evaluation technologies that enable us to propose functions for our customers' fields. The wealth of accumulated data obtained from this enables advanced formulation design and rapid feedback for material design.

▶ P.044-047

▶ P.044-047

#### Procurement

#### Stable securing of raw materials with our BCP in mind

We strive for stable procurement under our business continuity plan. At the same time, we conduct CSR questionnaires for our suppliers and work to procure raw materials with consideration for human rights, the work environment, legal compliance, and the environment and safety.

▶ P.066-067

#### Manufacturing

Stable supply of products and consideration for the environment

We always strive to provide a stable supply of products under our advanced quality control system and thorough safety management. In addition, we are committed to eco-friendly manufacturing, giving due consideration to energy conservation and reduction of chemical substance emissions.

▶ P.066-067

#### Delivery

#### Safety-conscious logistics with low environmental impact

To ensure safe delivery of our products, we use safety data sheets (SDS) and GHS labels to thoroughly manage hazard information. In addition, we are promoting modal shifts and joint deliveries to reduce greenhouse gas emissions.

▶ P.066-067

Governance

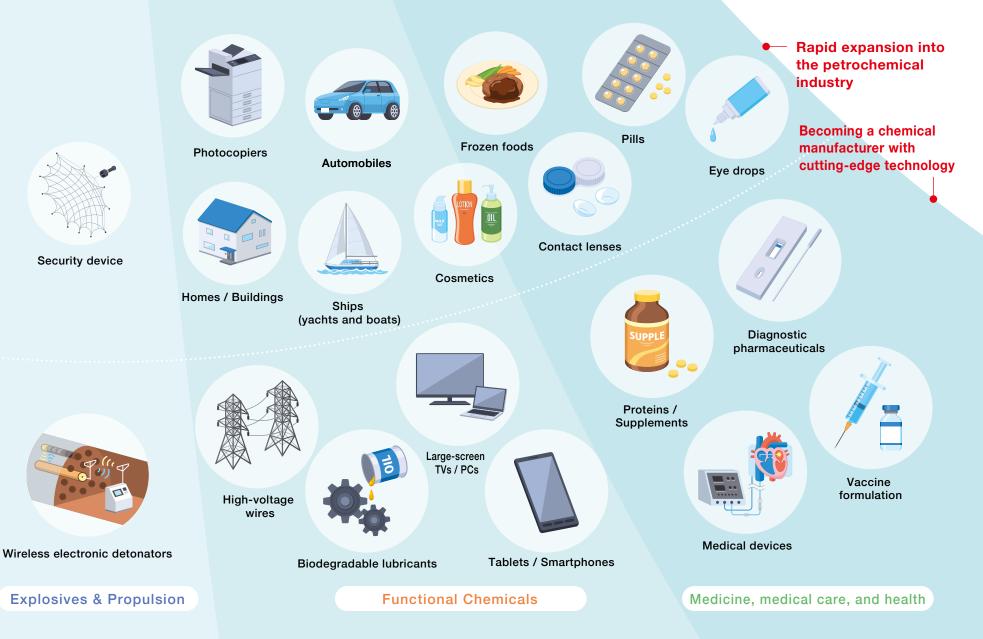
#### **Everyday Products Created from NOF's Products**



## The World Created through NOF's Technology

When NOF began operations in 1937 as an oleochemical manufacturer, we offered only a limited range of products. Later, in response to changes in industrial structures and global needs, we expanded our operations into the area of petrochemicals from the 1970s. Furthermore, by pursuing the functions of the materials that NOF possesses, we have developed a wide range of customer segments, including biocompatible materials and DDS. As a result, NOF materials are used in a wide variety of products that you see in your daily life, from daily necessities such as food, pharmaceuticals, and cosmetics to industrial products such as automobiles, home appliances, construction products, and electricity-related products.

**Expansion of product lineup** 



**Everyday Products Created from NOF's Products** 

NOF CORPORATION 23 Integrated Report 20

Contents

NOF's Philosophy

Manageme Strategies

Value Creation

Business Strategies

Gov

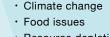
rnance

Financial Information

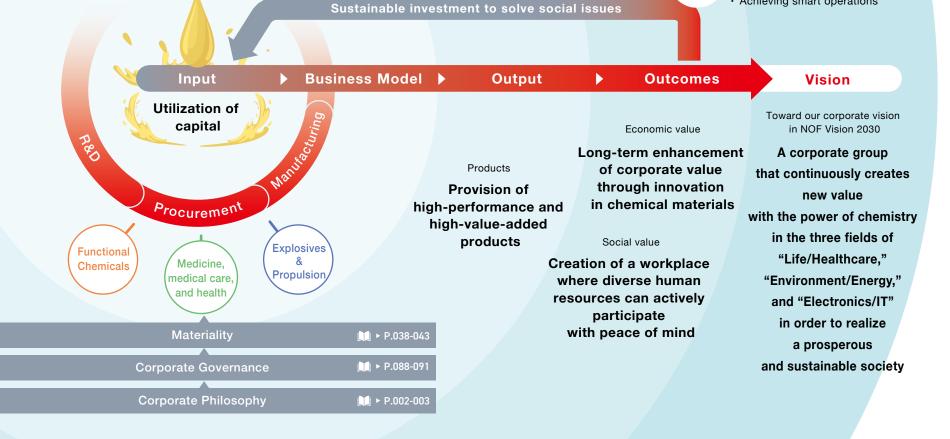
#### Value Creation Process

## Creating products, value, and a new future with the power of chemistry

We propose new technologies and new products by combining the core technologies we have acquired in our diverse business areas. To solve various social issues, we aim to grow sustainably centered on our three prioritized business fields.



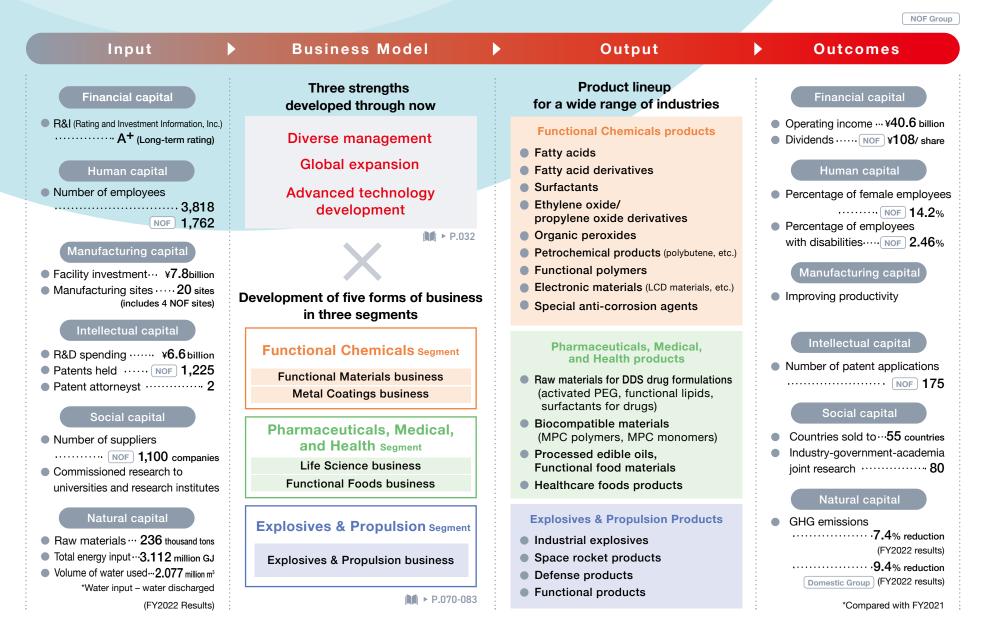
- Resource depletion
- Energy shortage Social
  - · Declining birthrate/aging population
- · Health issues issues
  - Achieving smart operations



Contents

Governance

#### **Value Creation Process**



NOF CORPORATION Integrated Report

## Materiality

## Identification of 11 materiality issues (important issues)

The NOF Group has set KPIs and their targets for each issue in order to realize the ideal conditions contained in the NOF VISION 2030. Gaps between target figures and actual results are evaluated, and targets are re-set for the following year and beyond to achieve them.

#### Process of identifying materiality

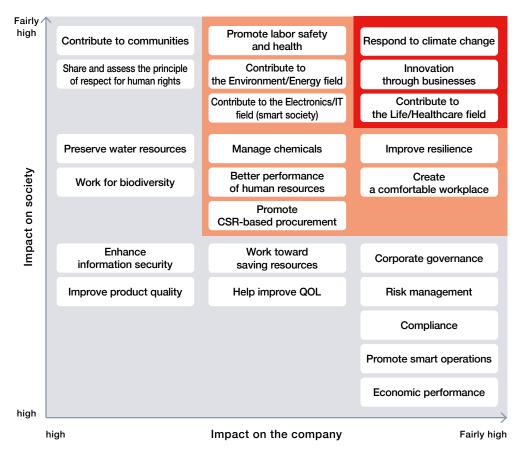
STEP Identify	2 Set priority levels	STEP	STEP
social challenges		3 Approval	<b>4</b> Review
We will draw up a list of potential themes by adding new social issues and high-profile issues to the themes considered in the previous process. We will classify and consolidate the themes as materiality factors with reference to various guidelines. <b>Reference material</b> • ISO26000 • GRI Standards • SASB CHEMICALS • SDGs • Competitors' materiality issues • In-house workshops	<ul> <li>We will assess the priority levels with which to tackle the materiality factors based on the two axes of "degree of impact on society" and "degree of impact on the company." We will also add the following elements to our considerations.</li> <li>I Results of evaluation of NOF by ESG rating agencies</li> <li>ESG-related opinions received from shareholders in the past twelve months</li> <li>Perspectives of issues pursued by the NOF Group in the past</li> <li>After summing up the opinions of the individual divisions that handle the promotion of CSR activities, we will hold discussions at Strategic Meetings, which comprise Operating Officers with a title, and in the Sustainability Committee chaired by the President, and select the important issues. The lead divisions and divisions tasked with handling the important issues will also draft KPIs and numerical targets.</li> </ul>	The Board of Direc- tors will approve the important issues. The KPIs and numerical targets of each important issue will be adjusted as required based on the opinions of the Board of Directors. Based on this, the individual divisions will carry out their respective activities.	The important issues will undergo periodic reviews. Each of the important issues will be reviewed annually by following Steps 1-3 while incorporat- ing internal and external stakehold- ers' opinions.

Contents

#### Materiality

#### **Materiality matrix**

The 24 materiality factors were mapped according to the two axes of "degree of impact on society" and "degree of impact on the company" to create a materiality matrix. The 11 items shown in the top right domain were identified as materiality issues.



#### FY2022 review

All Directors and Operating Officers, including Outside Directors, in the Sustainability Committee, which is chaired by the President, participated in conducting the materiality review based on the FY2022 actual results for each materiality issue. Two meetings of the Committee were held to confirm the FY2022 results and set the goals for FY2023. As a result of the review, the following changes were made.

By directly referring to the materiality issues in the three prioritized business fields as "Contribute to the three prioritized business fields," we clearly showed the relationship between our corporate vision and the 2025 Mid-Term Management Plan. As for contributions to the Electronics/IT field, due to the broad scope, we added "smart society" in parentheses to clarify the direction we are aiming for.

Three prioritized business fields	Before revision	After revision		
Life/Healthcare	Contribute to medicine, medical care and health	Contribute to the Life/Healthcare field		
Environment/Energy	Contribute through environmentally-friendly products (reduction of environmental burden)	Contribute to the Environment/Energy field		
Electronics/IT	Contribute to smart society	Contribute to the Electronics/IT field (smart society)		

As for the creation of a comfortable workplace and better performance of human resources, we set nine KPIs, compared to the three KPIs before the review.

▶ P.049-050

#### **Materiality**

#### Three categories and the main initiatives

The 11 important issues arranged in the Materiality Matrix were divided into three activity categories.

### Provide new values to realize a prosperous and sustainable society

Targeting the three prioritized business fields, we will aim to offer new value by combining the core technologies we have cultivated through our diverse business development.

#### **Strengthen** the business foundation

As well as building a corporate culture that accepts diversity of values, we will appropriately identify changes in the environment and technological progress and enhance our resilience.

### **Promote** responsible care activities

By securing the environment, safety, and health in all processes, from product development and manufacture to disposal, we will aim to be a corporate group that is trusted by the whole of society.







▶ P.054-067



040

▶ P.044-047

▶ P.048-053

#### Provide new values to realize a prosperous and sustainable society

	Materiality FY2022						FY20	)23	
Materiality	Goals (KPIs)	Numerical targets	Target year	Results	Details of major initiatives	Goals (KPI)	Numerical targets	Target year	Details of major initiatives
Innovation	R&D investment	¥21.6 billion (3-year cumulative total)	2022	¥6.6 billion (Cumulative total: ¥18.5 billion)	<ul> <li>Call for commissioned industry-academia research</li> <li>Promotion of joint</li> </ul>	R&D investment	¥25.6 billion (3-year cumulative total)	2025	Enhancement of R&D capabilities • Call for commissioned industry-academia research • Promotion of joint
through businesses	Number of patent applications	450 (3-year cumulative total)	2022	175 (Cumulative total: 494)	<ul> <li>Promotion of joint research</li> <li>Enhancement of R&amp;D capabilities</li> </ul>	Number of patent applications	500 (3-year cumulative total)	2025	<ul> <li>Profilection of joint research</li> <li>Intellectual property strategy formulation and strategic applications</li> </ul>
Contribute to the Life/ Healthcare field NOF Group	Net sales of high-function and high-value added products to the Life/Healthcare field	Up 5% (year-on-year)	Every year	116.6 *If the previous year is 100	<ul> <li>Supply high-function and high-value added products to the Life/Healthcare field</li> </ul>	Net sales of strategic products in the Life/ Healthcare field	UP 15% (compared to FY2022 results)	2025	<ul> <li>Supply strategic products to the Life/Healthcare field</li> </ul>
Contribute to the Environment/ Energy field NOF Group	Net sales of high-function and high-value added products to the Environment/Energy field	Up 5% (year-on-year)	Every year	117.2 *If the previous year is 100	<ul> <li>Supply high-function and high-value added products to the Environment/Energy field</li> </ul>	Net sales of strategic products in the Environment/ Energy field	UP 15% (compared to FY2022 results)	2025	<ul> <li>Supply strategic products to the Environment/Energy field</li> </ul>
Contribute to the Electronics/ IT field (smart society) NOF Group	Net sales of high-function and high-value added products to the Electronics/IT field	Up 5% (year-on-year)	Every year	120.5 *If the previous year is 100	<ul> <li>Supply high-function and high-value added products to the Electronics/IT field</li> </ul>	Net sales of strategic products in the Electronics/ IT field	UP 15% (compared to FY2022 results)	2025	<ul> <li>Supply strategic products to the Electronics/IT field</li> </ul>

#### Strengthen the business foundation

Markey Callbar			FY202	.2			FY2	.023	
Materiality	Goals (KPIs)	Numerical targets	Target year	Results	Details of major initiatives	Goals (KPI)	Numerical targets 1	Target year	Details of major initiatives
Creation of comfortable workplace	Utilization rate of yearly paid holidays	70% or more	2022	73.4%	<ul> <li>Promotion of work-life balance</li> <li>Promotion of health-</li> </ul>	Utilization rate of yearly paid holidays	75% or more	2025	<ul> <li>Promotion of utilization of yearly paid holidays</li> </ul>
employee engagement     NOF	-	_	_	_	<ul> <li>conscious management</li> <li>Support for childcare and nursing care</li> </ul>	Overall employee engagement score	50 or more	2025	<ul> <li>Execution of measures using employee engagement surveys as a starting point</li> </ul>
	-	_	_	_	-	Training costs	Over 2.5-fold (compared with FY2022)	2025	<ul> <li>Strengthening of the human resources development support system</li> </ul>
	Percentage of women among career-track hire	30% s or more	Every year	<b>36.1</b> % (Entering company in April 2023)	<ul> <li>Promotion of the active participation of women</li> </ul>	Percentage of women among career-track hires	30% or more	Every year	<ul> <li>Expansion of hiring of female new graduates recruited for career-track positions</li> </ul>
Better performance of human resources	-	_	_	_	-	Rate of female management-level employees	Over <b>3</b> -fold (compared with FY2021)	2030	<ul> <li>Increase of the rate of female management-level employees</li> </ul>
<ul> <li>Human resources development</li> </ul>	Percentage of employed with disabilities	es 2.30% or more	By March 2023	<b>2.46</b> % (As of the end of March 2023)	<ul> <li>Promotion of employment of people with disabilities</li> </ul>	Percentage of employees with disabilities	3.0% or more	2030	<ul> <li>Promotion of employment of people with disabilities</li> </ul>
Diversity	-	_	_	—	-	Pay gap between male and female full-time employees	e 75% or more	2030	<ul> <li>Reduction in the pay gap between male and female employees</li> </ul>
	-	_	_	_	-	Rate of male employee utilizing childcare leave		2030	<ul> <li>Increase of the rate of male employees utilizing childcare leave</li> </ul>
	-	_	_	_	-	Rate of hiring of mid-career workers	25% or more	Every year	<ul> <li>Hiring of mid-career human resources</li> </ul>
Promotion of	Coverage rate of CSR questionnaire (based on value of purchases)	70% or more	2022	<b>84</b> % Cumulative total over 2022	<ul> <li>Implementation of the CSR questionnaire for business partners</li> </ul>	Coverage rate of CSR questionnaire (based on value of purchase	85% or more	2025	<ul> <li>Implementation of the CSR questionnaire for suppliers</li> </ul>
CSR-based procurement	-	_	_	_	_	Improvement requests via interv with target suppliers in order to establish CSR-based procurem (based on number of companies	<sup>firmly</sup> 85% <sup>ent</sup> or more	2025	<ul> <li>Review of target suppliers and polishing of interview content</li> </ul>
Improvement of resilience NOF Group	BCP education and training hours	Total of 3,000 hours or more	Every year	Total of <b>5,200</b> hours	<ul> <li>Revision and dissemina- tion of the BCP manual</li> <li>Implementation of BCP training</li> <li>Confirmation of location activities through BCP audits</li> </ul>	BCP education and training hours	Total of <b>4,000</b> hours or more	Every year	<ul> <li>Enhancement of various BCP manuals</li> <li>Improvement of response capabilities through expanded training scenarios</li> <li>Inspection and confirmation of location activities through audits</li> </ul>

### Promote responsible care activities

			FY2022			FY2023			
Materiality	Goals (KPIs)	Numerical targets	Target year	Results	Details of major initiatives	Goals (KPI)	Numerical targets	Target year	Details of major initiatives
Responses to	CO <sub>2</sub> emissions	40% reduction (compared with FY2013)	2030	144,000 tons /year	<ul> <li>Planning and implementation of greenhouse gas reduction measures</li> <li>Grasp the status of energy</li> </ul>	CO <sub>2</sub> emissions	40% reduction (compared with FY2013)	2030	<ul> <li>Promotion of a shift to energy sources with low environmental impact</li> <li>Promotion of</li> </ul>
climate change	Carbon neutrality	Aim for achievement	2050	20.0% reduction (compared with FY2013)	<ul> <li>management</li> <li>Dissemination of the carbon neutrality policy</li> <li>Purchase of electricity certified to come from non-fossil fuel sources</li> </ul>	Carbon neutrality	Aim for achievement	2050	<ul> <li>introduction of energy-saving facilities</li> <li>Promotion of efficient energy use and visualization</li> </ul>
Management of chemicals	Emissions of substances subject to PRTR Act after revision in FY2021 Domestic Group	under 170 tons/year	Every year	148 tons/year	<ul> <li>Respond to revisions in the PRTR Act and regulations, as well as planning and implementation of reduction measures</li> <li>Implementation of emissions forecasts following the revision</li> <li>Survey of statuses of other companies and NOF</li> </ul>	Emissions of substances subje to PRTR Act after revision in FY202 Domestic Group	170	Every year	<ul> <li>Creation and execution of emission reduction measures</li> <li>Reevaluation of production processes</li> </ul>
Promotion of labor safety and health	Number of lost workday-involving accidents Domestic Group	0	Every year	1	<ul> <li>Enhancement of sensitivity toward danger and thorough enforcement of safety actions</li> <li>Provision of occupational safety education and training</li> <li>Strengthening of hazard prediction skills</li> <li>Reduction of disaster risks</li> <li>Removal of unsafe behavior and unsafe conditions and strengthening of safety measures</li> </ul>	Number of lost workday-involving accidents Domestic Group	g <sub>0</sub>	Every year	<ul> <li>Enhancement of sensitivity toward danger and thorough enforcement of basic safety actions</li> <li>Reduction of disaster risks</li> <li>Strengthening of responses based on Sangen Shugi (the "three actuals" principle)</li> </ul>

Provide new values to realize a prosperous and sustainable society

## Initiatives for clean tech

#### **Our fundamental view**

To achieve both a sustainable society and economic growth, NOF is focusing on development of clean tech. We are flexibly responding to changing market needs in the three fields of Life/Healthcare, Environment/Energy, and Electronics/IT, as well as further accelerating the development of new products and technologies and improving productivity.

In this era with 100-year life expectancy, there is a strong need to solve social issues related to health, such as reducing social security costs by extending healthy life expectancy and improving the quality of life of the elderly. In addition, required performance for electronic materials is increasing, such as higher picture quality for audio visual devices and smartphones, faster speed and larger capacity for telecommunications technology, and acceleration of the shift to electric vehicles (EVs) for automobiles. Based on these social needs, the Corporate R&D Division plans and proposes company-wide research strategies and focuses efforts on the creation of new business.

The "NOF call for commissioned industry-academia research," a project aimed at business creation through an external open call, was opened from October 2022 for several themes among the materials and technologies in the health food and electronics fields for which future market growth and NOF's technology utilization are anticipated. As a result of careful evaluation and screening, including for possibilities of commercialization at NOF, we decided to select four technologies in the health food field and four technologies in the electronics field. Those selected will be provided with commissioned research funds to conduct research over a period of one year toward contributing to society, aiming at commercialization in future. Contents

#### Promotion of R&D in our three prioritized business fields

Amid growing expectations for innovation in the chemical materials field, we are working to develop new technologies and products in the three prioritized business fields.



As demand for air conditioners and refrigerators increases due to global warming, we expect to see demand for base materials for refrigerating oils and polybutene for air conditioner putty. In addition, as offshore wind power generation gains momentum for development, particularly in Asia, there is a growing need for environmentally friendly products such as biodegradable lubricants made from raw materials derived from natural oils and fats and rust inhibitors for bolts to prevent marine pollution. Furthermore, as EVs become the norm, there are expectations for development of products with advanced functions, including anti-fog agents for LED headlamps and agents to prevent abnormal noises in order to maintain a quiet car interior.



For pharmaceuticals, we are developing functional lipids and activated PEG as DDS materials for biopharmaceuticals through means such as precision synthesis and advanced refining technologies. We are developing monodispersed PEG for antibody and nucleic acid drugs and ionic lipids for nucleic acid delivery. For medical care, we are developing the LIPIDURE® Series for areas such as eye care, diagnostic pharmaceuticals, and medical equipment-related fields, and are also developing high-function materials for the regenerative medicine sector. For cosmetics, we have a wealth of expertise in areas such as biocompatible materials. natural bioavailable substances, interface control technology, and mix design technology. We use this expertise to respond rapidly to functional advances.



In the telecommunications field, the need for curing agents for low-dielectric materials is increasing as the volume of information transmitted increases with the transition from 4G to 5G. Demand for highly photosensitive materials and additives for electronic components is also increasing as electronic components become smaller. The shift to EVs in automobiles also requires miniaturization of electronic components, and we are working to add more value to these products. In addition, the increase in number and larger size of LCD panels in EVs is expected to raise demand for overcoat materials for LCD color filters.

# "NOF call for commissioned industry-academia research" for open innovation through co-creation with external parties

We are actively promoting open innovation activities in line with our vision of co-creating new value through the power of chemistry.



In the health food field, four technologies were selected after an open call for three themes



Life/Healthcare field

We aim to acquire technologies that can contribute to solving issues related to people's health. We received applications from a diverse range of research institutions, academia, and startups in Japan in the three themes of (1) useful materials for health food, (2) technologies for improving the functionality, production efficiency, and advanced utilization of useful materials for health food, and (3) cultured materials aimed at addressing the protein crisis. With the support of NineSigma Holdings, Inc. and after careful screening for commercialization potential, we selected technologies from Setsuro Tech Inc., Tokyo Institute of Technology, the Graduate School of Agricultural and Life Sciences / Faculty of Agriculture of The University of Tokyo, and Tokyo University of Science.





In the electronics field, four technologies were selected after an open call for nine themes

Electronics/IT field

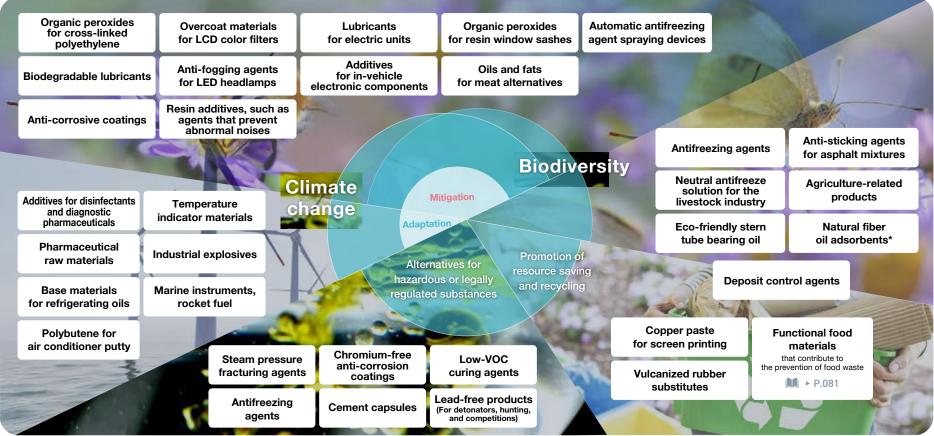
We aim to acquire technologies that can contribute to the enhancement of the functionality of electronic materials. We received applications from a wide variety of organizations in nine themes: (1) ultra high-speed communications, (2) next-generation displays, (3) new power generation methods, (4) power semiconductor materials used in consumer appliances and electronics for EVs, (5) autonomous control sensing for automatic driving, robots, and drones, (6) higher performance motors, (7) rechargeable batteries, (8) biological data acquisition, and (9) semiconductors for PCs, smartphones, home appliances, and electronic equipment. With the support of ReGACY Innovation Group, Inc., as a result of the screening, we selected WINGO TECHNOLOGY Co.,Ltd., Shinshu University, the Japan Advanced Institute of Science and Technology, and Yamagata University.



### **Eco-friendly products**

In response to global issues such as climate change and biodiversity, we are conducting R&D in the three prioritized business fields and creating a variety of eco-friendly products.

Technologies related to climate change and biodiversity among NOF's clean tech-related products



.

Sustainability Report > P.021-029

047

\*Sold by sales agents

Strengthen the business foundation

## Human capital initiatives

#### Taking on the challenge of creating new value

Three values of "Challenges," "Fairness," and "Harmony" We hope to weave values appropriate to the new era with the power of chemistry together with our customers by leveraging our organizational culture in which employees themselves embody these values and act in accordance with them.

Amidst the rapidly changing and increasingly uncertain business environment, in order to face various social issues, be perceptive of the progress of innovative technologies, and take on the challenge of creating new value, last year we discussed anew our mission and path forward and established our new Corporate Philosophy and values to uphold. Based on the belief that human resources development is the foundation of management, we will continue to provide generous support for the growth aspirations of our employees and enhance the potential of our human resources by expanding diversity and improving employee engagement, while also taking into account the perspective of human capital management.

Operating Officers General Manager, HR & General Affairs Department

Akihisa Maeda

### **Our fundamental view**

Based on the basic philosophy that "a company is its people," we will actively invest in human capital and encourage the growth of human resources who embody the NOF Group's values of "Challenges," "Fairness," and "Harmony," and can also create new value.

We will continue to hire diverse human resources regardless of their gender, age, nationality, or disability. In addition, in order to create a corporate culture in which women can play a more active role, we will actively hire women and enhance systems that facilitate women's work.

Furthermore, we will continue to hire mid-career human resources to accelerate our expansion into new business areas.

# Three pillars of human resources performance

The three pillars of the NOF Group's



advance creation of mechanisms, systems, and workplaces that enable each employee to understand our Corporate Philosophy and Values and perform their duties with motivation. We will also conduct employee engagement surveys on a regular basis and strive to improve job satisfaction.

We will continuously

In addition to our existing talent development system, we will promote human resource development measures aimed at fostering autonomous human resources, global human resources development, digital transformation (DX) human resources development, and support for career design development. We will introduce a "challenge goal system" to encourage employees to boldly take on difficult goals from a medium- to long-term perspective as part of the goal-setting items in personnel evaluations, and continue to create a corporate culture that recognizes tackling challenges.

Through these activities for the three pillars, the NOF Group will contribute to people and society as a corporate group that creates new value through the power of chemistry.

### Governance for human capital

The NOF Group identifies materiality (important issues) related to sustainability through discussions in the Strategic Meeting, which is composed of Directors concurrently serving as Operating Officers as well as Operating Officers with a title, and the Sustainability Committee, which is chaired by the President. This is then reported to the Board of Directors. For each materiality issue, KPIs and target values are set and activities are promoted by the supervising organization or department in charge. The progress and results are reported to the Sustainability Committee. The Sustainability Committee reviews materiality with the participation of all directors, and examines key issue items, KPIs, target values, and response policies in order to continuously improve the level of activities.

Response to human capital is identified as one of the materiality issues, and important matters including medium- and long-term targets are discussed at the Sustainability Committee. In regard to risks, the Risk Management Committee conducts a comprehensive assessment, and the Compliance Committee implements risk countermeasures and analysis. A system has been put in place in which the results of deliberations are reported to the Board of Directors at least twice a year for supervision.

			INPUT	$\rangle$	OUTPUT	
	Three pillars	Major activities	Metrics and targets		Result	Realization of the Corporate Philosophy
<b>U</b>	Human resources development	Human resources development support	Training costs (2025 vs. 2022)		Taking on challenges	
2		Expansion of hiring of female new graduates recruited for career-track positions	Percentage of female new graduates recruited 30% or more		voluntarily and proactively	Contributing to humanity
	Diversity	Expansion of female management-level employees	Percentage of female management- level employees (2030 vs. 2021) Over 3-fold New			and society as a corporate
		Expansion of employment of people with disabilities	Percentage of employees 3.0% or more		Better performance of	group that
	<b>N</b> IR	Reduction in the pay gap between male and female employees	Pay gap between male and female full-time employees (2030) 75% or more New		diverse human resources	creates new value through
		Promotion of utilization of childcare leave by male employees	Rate of male employees utilizing childcare leave (2030) 100% New		resources	the power of
	► P.052	Hiring of mid-career human resources	Rate of hiring of mid-career workers (Every year) 25% or more New			chemistry, from the
					Continuous	biosphere to
3	Employee engagement	Promotion of utilization of yearly paid holidays	Utilization rate of yearly paid 75% or more holidays (2025)		creation of innovation	outer space
	► P.053	Execution of measures using employee engagement surveys as a starting point	NOF's employee engagement score (2025) 50 or more New			

### We create diverse human resources that takes on the challenge of creating new value.

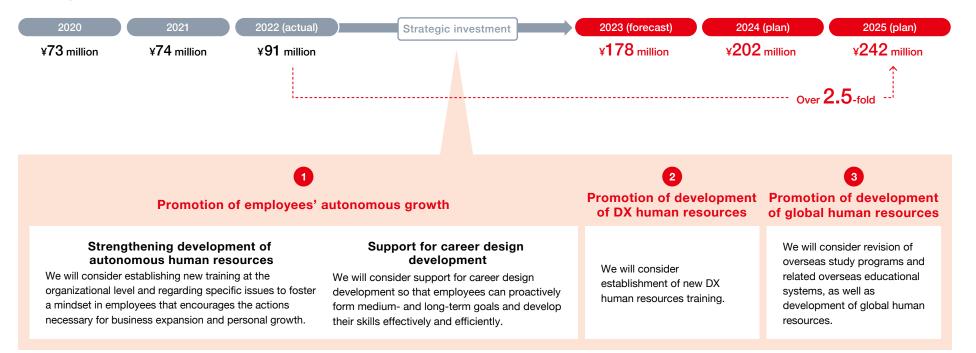
NOF

# Human resources development



Faced with a business environment where uncertainty is the norm, it is necessary to continuously create innovation even in such an environment. To do so, it is more important than ever before to utilize human resources as important capital to support corporate performance. The driving force behind sustainable growth for the company will be providing employees, regardless of their age or career stage, with opportunities to constantly learn new knowledge and skills and encouraging them to take on new challenges through enhancement of training at the organizational level and regarding specific issues as well as expansion of support for self-education/development. Furthermore, in order to keep up with the speed of technological advancement, we will not only conduct in-house development of employees, but also hire diverse human resources with the aim of developing our human resources who take on challenges.

#### Training costs NOF



Sustainability Report > New Employee Hiring / Turnover / Section Plans / Raising of the Retirement Age P.136 Talent development system / Performance support system P.151-153 Leadership P.154

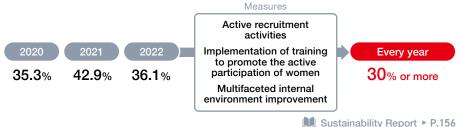
# **Diversity**

4.4%

4.8%

The NOF Group believes that human resources are the source of corporate growth, and designates one of its materiality items as "better performance of human resources." We promote diversity and inclusion based on the belief that acceptance and respect for diversity will promote the creation of innovation. We aim to be an organization where employees with diverse values can voluntarily and proactively take on all challenges with a sense of purpose, and where employees with talent and motivation are appropriately evaluated and can play an active role.

#### Rate of hiring of female new graduates recruited for career-track positions [NOF]



Measures

Systematic promotion of

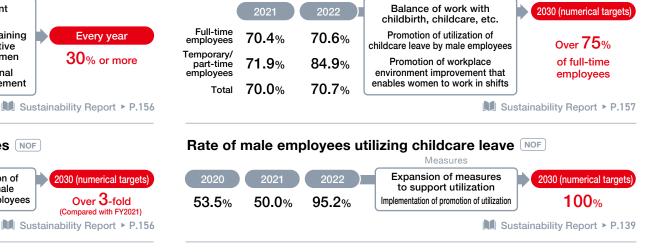
appointment of female

management-level employees

Rate of female management-level employees NOF

4.7%

#### Pay gap ratio between male and female employees<sup>\*1</sup> NOF Measures





\*1 Pay gap ratio between male and female employees (%) = Average annual income of women / Average annual income of men x 100

\*2 Rate of hiring of mid-career workers (%) = (Mid-career workers hired from April 1 to March 31) / (Total of new graduate hires and mid-career workers hired from April 1 to March 31) x 100

Over **3**-fold

Contents

#### **Employee** engagement



Based on the philosophy that "a company is its people," the NOF Group believes that the driving force for creating new innovation and corporate growth is having each and every employee perform their duties with motivation and understanding of our Corporate Philosophy and values. As one of our efforts to achieve this, we aim to improve employee engagement and create comfortable workplaces from various perspectives, including diversity and inclusion, talent development, work-life balance, health management, occupational health and safety, and labor-management relations. In addition, NOF has conducted employee engagement surveys since fiscal 2022 to ascertain employee engagement and the results of past initiatives. The employee engagement survey identifies our overall engagement score based on engagement related to work and duties (creativity, relationship building, and meaning-making) and engagement related to the company and organization (work content, human relations, and organizational systems). We are working to improve employee engagement by taking various measures to create comfortable workplaces.

#### Overall employee engagement score NOF



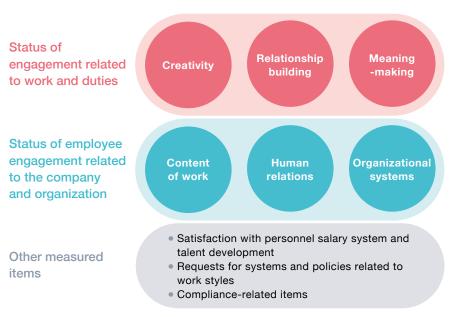




Measures

survey

#### Employee engagement survey measured items



Promote responsible care activities 1

## **Climate change initiatives**

#### **Our fundamental view**

Climate change is an urgent issue shared by the entire world. It poses various threats, including an increase in abnormal weather conditions, adverse effects on ecosystems, and a decrease in water resources. The NOF Group has set the reduction of greenhouse gas emissions as one of the goals of its responsible care activities, and has been working on various energy-saving measures. In view of the 2050 Carbon Neutral Declaration announced by the government in October 2020 and its new targets to reduce greenhouse gas emissions announced in April 2021, the NOF Group has decided to set new targets to reduce greenhouse gas emissions. By recognizing the risks and opportunities posed by climate change and promoting countermeasures, the NOF Group will co-create new value with the power of chemistry toward the realization of a prosperous and sustainable society as stated in the NOF VISION 2030.

# Support for the TCFD recommendations

In April 2022, the NOF Group announced its support for the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Based on the TCFD recommendations, the Group will work to reduce climate-related risks and create opportunities for growth, as well as expand our information disclosure.

Sustainability Report ► P.088-099



#### Governance

The NOF Group identifies materiality (important issues) related to sustainability through discussions in the Strategic Meeting, which is composed of Directors concurrently serving as Operating Officers as well as Operating Officers with a title, and the Sustainability Committee, which is chaired by the President. The Board of Directors then approves the materiality. For each materiality issue, KPIs and target values are set and activities are promoted by the supervising organization or department in charge. The progress and results are reported to the Sustainability Committee. The Sustainability Committee reviews this with the participation of all directors, and examines key issue items, KPIs, target values, and response policies in order to continuously improve the level of activities.

Response to climate change is identified as one of the materiality issues, and important matters including medium- and long-term targets are discussed at the Sustainability Committee. In regard to risks, the Risk Management Committee conducts a comprehensive assessment, and the Responsible Care Committee supervises monitoring and managing the progress of risk countermeasures and greenhouse gas emission reduction measures. In addition, opportunities are discussed by the Executive Management Committee and the Priority Business Review Committee, and important matters are deliberated by the Executive Committee. A system has been put in place in which the results of these committees and meetings are reported to the Board of Directors at least twice a year for supervision.

#### **Risk management**

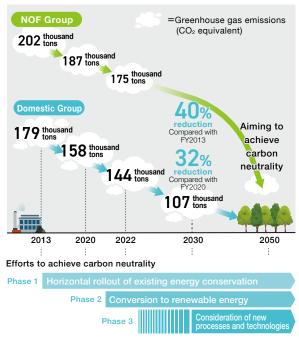
The Risk Management Committee comprehensively identifies various management risks surrounding its business, and conducts company-wide risk assessment on the level of impact and potential for occurrence of each item in order to identify risks that need to be addressed as a priority. In disclosing information based on TCFD recommendations, a working group consisting of members selected from the Risk Management Committee and the Responsible Care Committee plays the central role in identifying the risks that climate change will affect among the various management risks surrounding our business, and conducts risk management to determine the degree to which the impact will change in the future. The analysis results are reported to the Sustainability Committee, and important decisions are made related to climate change risk countermeasures.

## **Metrics and Targets**

The NOF Group has created a roadmap toward

reducing greenhouse gas emissions and is working to mitigate climate change in its business activities. Considering the possibility of an increase in emissions due to business expansion, the Group will aim for carbon neutrality in 2050 by introducing renewable energy as the new Phase 2 and starting to consider new processes and technologies as Phase 3, while also reducing the financial burden associated with transition risks.

Reduction of GHG (CO $_2$  equivalent) generated by our business activities [Scope 1, 2]



Governance

## Strategic scenario analysis

The NOF Group analyzes the risks and opportunities posed by climate change based on the 1.5°C and 2°C scenario as well as the 4°C scenario. The key risks and opportunities are as follows.

Category	Scenario	Major risks and opportunities	Overview	Level of impact (2030)	Countermeasures
		Tighter domestic and international regulations	Increased financial burden due to introduction of carbon tax, etc.	Large	Promotion of measures toward reducing greenhouse gas     emissions
Transition	1.5°C	Sharp rise in raw material prices	Sharp rise in prices of raw materials such as petrochemicals and vegetable and animal-based oils due to a decrease in the supply of petroleum, etc. and an increase in demand for biofuels	Large	<ul> <li>Securing stable raw materials through multiple purchases and long-term contracts</li> <li>Switching from petrochemical-based raw materials to plant-based raw materials</li> <li>Utilization of biomass chemicals</li> <li>Carbon recycling (solvent recycling, etc.)</li> </ul>
risks	2°C	Sharp rise in energy and transportation costs	Sharp rise in prices of oil and natural gas	Medium	<ul> <li>Introduction of energy-saving equipment, review of processes</li> <li>Promotion of joint delivery and modal shifts</li> </ul>
		Changes in the sales destination environment due to the shift to a decarbonized market	Decrease in sales due to decline in market share of gasoline and diesel vehicles	Medium	•Strengthening our response to decarbonized markets, such as electric vehicles and renewable energy
		Deterioration of evaluation/reputation	Deterioration of evaluation from investors in ESG investment and reputation among customers due to delay in climate change countermeasures	Small	•Active promotion of measures to reduce greenhouse gas emissions and information communication
Physical risks	4°C	Natural disasters such as torrential rains, floods, typhoons, storm surges, etc.	Increased risk of business interruption in production sites and supply chains due to increased torrential rainfall, sea level rise, and storm surges caused by stronger typhoons as a result of climate change	Large	<ul> <li>Rain water countermeasures and disaster prevention measures for buildings and facilities</li> <li>Review the business continuity plan (BCP) and conduct education, training, and audits</li> <li>Multiple purchases of raw materials</li> </ul>
		High temperatures and heat waves	Impact of rising temperatures on refrigeration, air-conditioned storage, etc. in warehouses	Medium	•Ongoing review of capital investment plans
Onnerturities	1.5°C	Growing needs for products that contribute to climate change solutions	Expanding needs for products that contribute to climate change mitigation and adaptation (see p.058-059 for details)	Large	•Development and provision of products that contribute to climate change mitigation and adaptation
Opportunities	2°C	Improvement of evaluation and reputation	Improve evaluation from investors in ESG investment and reputation among customers through active climate change countermeasures	Small	•Development and provision of products that contribute to climate change solutions and communication of information on promotion of greenhouse gas reduction

\* 1.5°C and 2°C scenario: A decarbonization scenario that assumes that necessary measures will be implemented to limit temperature increase to 1.5°C or 2°C or less compared to pre-industrial times (International Energy Agency (IEA) "Net Zero Emissions by 2050" (NZE2050), "Stated Policies Scenario" (STEPS), etc.)

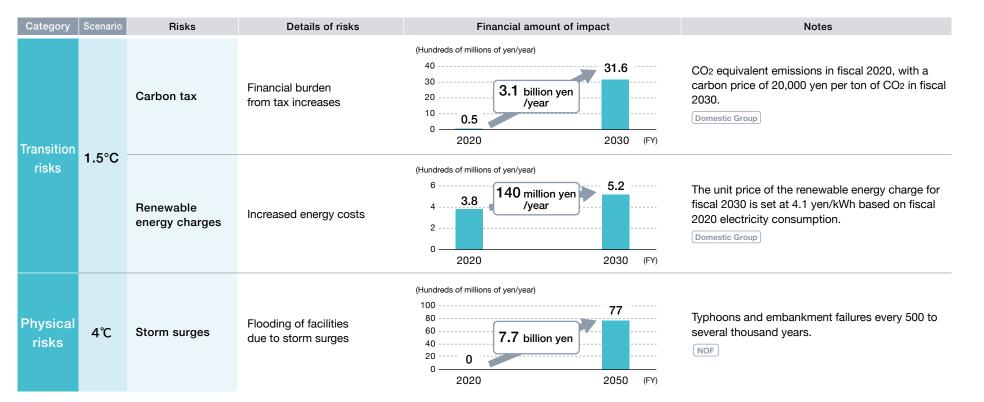
\* 4°C scenario: A scenario in which climate change has progressed to the point where the average global temperature has increased by 4°C at the end of the 21st century compared to pre-industrial times (UN Intergovernmental Panel on Climate Change (IPCC) "RCP8.5," etc.)

\* Level of impact: Financial amount of impact of risks - over 1 billion yen (large), less than 1 billion yen and over 100 million yen (medium), less than 100 million yen (small) Market scale of opportunities - over 30 billion yen per year (large), less than 30 billion yen and over 3 billion yen (medium), less than 3 billion yen (small)

### **Financial impacts (selected)**

Steam, electricity, and other forms of energy are consumed mainly in the manufacturing processes of the NOF Group. As transition risks brought about by climate change, the financial burden is expected to increase due to rising carbon tax costs and higher unit prices of renewable energy charges,\* and the total impact is estimated to be around 3.3 billion yen. In addition, the NOF Group has established a business continuity plan for physical risks with the 4°C scenario assuming 7.7 billion yen in facilities damage in the event that a typhoon, which occurs once every 500 to several thousand years, breaks through embankments and floods our waterfront plants.

\*Charges for promotion of renewable energy generation



Governance



(Antifogging agents)

End uses of the

(Biodegradable lubricants)

End uses of the

NOF Group's products

For bolts

For gear oil

NOF Group's products

Market

scale

Market

scale

Market

scale

Market

scale

Medium

Small

Small

by reducing greenhouse gas emissions

#### **Electric vehicles**

#### Functional Materials business Metal Coatings business

Compared to gasoline-powered vehicles, EVs are expected to cause increased demand for additives for in-vehicle electronic components, lubricants for electric units, anti-corrosive coatings, and overcoat materials for LCD color filters due to the increase in electronic components (passive components), electric units, and screws to hold the components in place, as well as more and larger LCD panels. In addition, because LED lights are effective in reducing power consumption of EVs, demand for antifogging agents for LED headlamps is expected to increase. Furthermore, EVs will make vehicles guieter, which is expected to increase demand for resin additives, such as agents that prevent abnormal noises caused by resins rubbing against each other in interior parts.

#### Wind power / Solar power

#### Functional Materials business Metal Coatings business

Demand is expected to increase for anti-corrosion coatings for bolts used in wind turbine blades and biodegradable lubricant required for gear lubrication. Demand is also expected to increase for organic peroxides for cross-linked polyethylene, which is used as a coating material for ultra-high-voltage and high-voltage electric wires used to transmit electricity from wind and solar power generation sites.

#### Meat alternatives

#### Functional Foods business

Demand is expected to increase for meat alternative oils and fats that help improve the flavor and texture of plant-derived meat alternatives that reduce environmental impact.

#### Resin window sashes

Functional Materials business

Demand for organic peroxides is expected to increase with the spread of energy-efficient housing because vinyl chloride resin is used in resin window sashes with high thermal insulation properties. End uses of the NOF Group's products

For capacitors and LCD panels (Additives for electronic components / (Resin additives) Lubricants for electric units / Overcoat materials) For antifogging of LED headlamps

For agents to prevent abnormal noises in door hinges and interior parts

> For bolts. nuts. and other parts that hold batteries in place (Anti-corrosive coatings)

For ultra-high-voltage

and high-voltage wire

coating materials

(Organic peroxides)

For meat alternatives

soy meat hamburgers

(Oils and fats for meat alternatives)

Value Creation





that hold blades in place

(Anti-corrosive coatings)



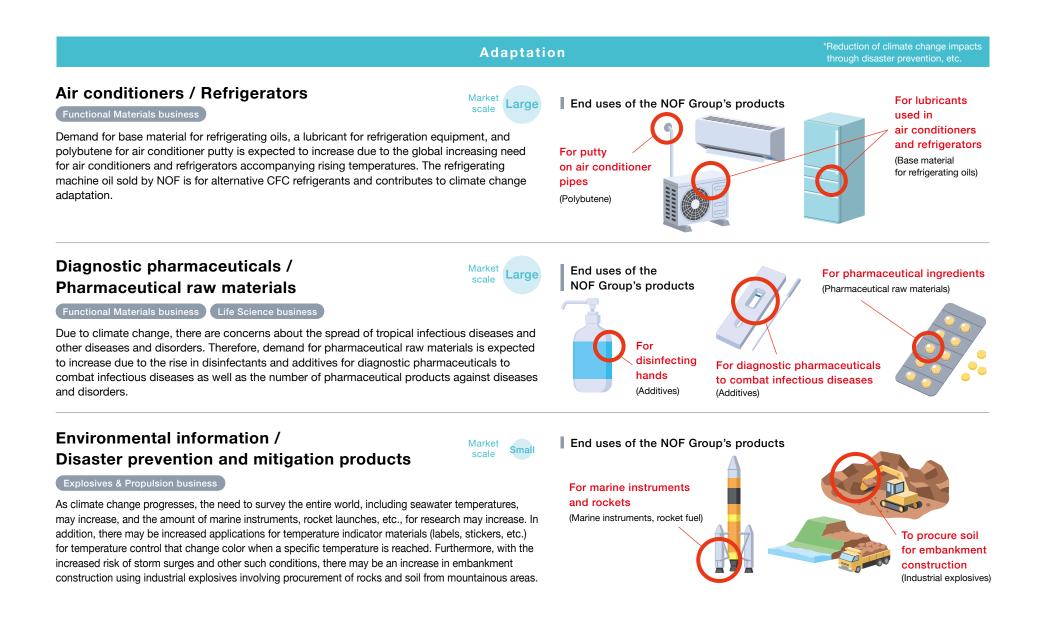
such as

NOF CORPORATION Integrated Report

2023

Contents

NOF's Philosophy



#### Greenhouse gas emissions

In view of the 2050 Carbon Neutral Declaration announced by the government in October 2020 and its new targets to reduce greenhouse gas emissions announced in April 2021, the NOF Group set a new target of reducing CO<sub>2</sub> emissions by 40% by fiscal 2030 compared to fiscal 2013. The Group had already reduced CO<sub>2</sub> emissions by about 20% (compared to fiscal 2013) in fiscal 2022, and is aiming to reduce greenhouse gas emissions and achieve carbon neutrality by 2050.

#### Scope 1 and 2 CO<sub>2</sub> emissions (FY2022)

• •••• • • • • • • • • • • • • • • • •		(mousaid tons of t					
	Scope 1	Scope 2	Total (Scope 1+2)				
NOF	53.3	78.2	131.5				
Domestic Group	60.1	83.5	143.6				
NOF Group	71.9	103.3	175.3				

#### Scope 3 CO<sub>2</sub> emissions (FY2022) Domestic Group

(Thousand tons of CO<sub>2</sub>) FY2022 Calculating method Purchased products Calculated by multiplying the quantity and cost of each item of purchased raw materials, 278.3 and services consumables, and repair materials by the emission intensity by division according to the quidelines Calculated by multiplying acquisition cost of fixed assets by CO<sub>2</sub> emission per Capital goods 22.4 product according to the guidelines Fuels and energy-related activities Calculated by multiplying the sum of electricity consumption and steam 36.3 not included in Scope 1 or 2 consumption by CO<sub>2</sub> emission per product according to the guidelines Calculated from ton-kilometers of transportation for purchased raw materials and Transportation and 25.0 distribution (upstream) ton-kilometers of transportation for delivered products for which the company is the consignor Waste generated Calculated by multiplying the weight of each type of waste generated at production 8.2 in business activities sites by CO<sub>2</sub> emission per product according to the guidelines 0.5 Calculated by multiplying the number of employees by CO<sub>2</sub> emission per product according to the guidelines **Business travel** Calculated by multiplying the amount of commuting expenses by CO<sub>2</sub> emission per Employee commuting 1.6 product according to the guidelines Not applicable Leased assets (upstream) Transportation and distribution (downstream) \_ Not applicable Calculated by multiplying the sales volume of processed edible oils and industrial Processing of sold products 20.6 explosives by emission intensity according to the guidelines Calculation is not possible because NOF products are mainly intermediate raw materials and Use of sold products Not determined the processing methods utilized by users after delivery are wide-ranging and undisclosed End-of-life treatment For packaging materials of shipped products, calculated by multiplying the weight 0.7 of sold products of each type by the emission intensity according to the guidelines Leased assets (downstream) \_ Not applicable Franchises Not applicable — Investments Not applicable Total 393.4

Guidelines utilized: "Emission Factor Database on Accounting for Greenhouse Gas Emissions of an Organization Throughout the Supply Chain (Ver. 3.3)" (issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry), "IDEA (Ver. 3.1)" (issued by the National Research and Development Agency and National Institute of Advanced Industrial Science and Technology)

(Thousand tons of COs)

ophy

#### Energy consumption and CO<sub>2</sub> emissions

Energy consumption for fiscal 2022 decreased 7.8% from the previous fiscal year for the NOF Group, and decreased 7.0% from the previous fiscal year for NOF. The total volume of energy-derived CO<sub>2</sub> emissions decreased 13.5% from the previous fiscal year to 149,000 tons for the NOF Group, and decreased 15.9% from the previous fiscal year to 111,000 tons for NOF. Energy intensity per product increased 2.0% from the previous fiscal year to 13.8 GJ/t for the NOF Group, and increased 4.6% from the previous fiscal year to 14.5 GJ/t for NOF. NOF will continue to implement energy-saving measures to produce even greater results.

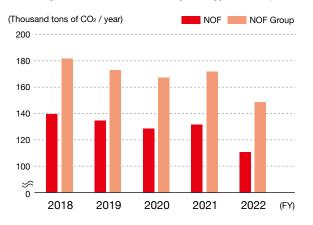
#### CO<sub>2</sub> emissions other than from energy consumption

At the Aichi Works, NOF manufactures products for specific purposes using perfluorocarbon (PFC), which has a high global warming coefficient, as the diluent for organic peroxides.

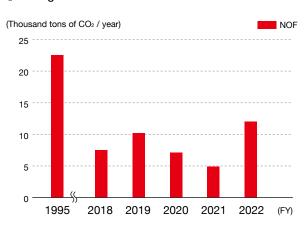
Efforts have been made to reduce PFC emissions by improving the manufacturing equipment on numerous occasions. As a result, PFC emissions have been reduced substantially compared with those in fiscal 1995 (the reference fiscal year for PFCs).

In fiscal 2022, emissions increased by 144% compared to fiscal 2021. However, we will continue our efforts to reduce emissions through stable operation of recovery equipment and promoting the use of an alternative diluent.

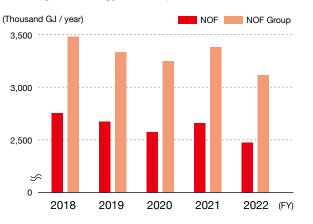
#### Changes in CO<sub>2</sub> emissions<sup>\*1</sup> by energy consumption



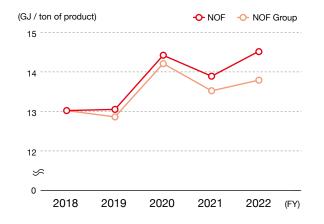
#### Changes in PFC emissions



#### Changes in energy consumption\*2



#### Changes in energy intensity per product



2023

061

\*1 The coefficient used in converting the electricity consumption into CO2 emissions is the emission coefficient used by electric power supply companies in the fiscal year.

\*2 The energy consumption is estimated using 9.76 MJ/kWh as the coefficient when converting electric power consumption into the calorific value.

## Special Feature | Work for Biodiversity



## NOF's initiatives to protect biodiversity

Sustainability Report 

P.110-115

### **Our fundamental view**

The NOF Group places great importance on proactively working to protect and restore biodiversity. To this end, we have adopted the following policies.

- In order to minimize the impact of our business activities on biodiversity, we conduct environmental impact assessments, identify risks, and implement countermeasures.
- We require our employees to comply with international guidelines, laws, and regulations related to biodiversity protection and to work for environmental conservation.
- We assess supply chain risks that may cause biodiversity loss and promote sustainable procurement through cooperation with our suppliers.
- We provide educational programs to raise environmental awareness and educate employees and relevant people on the importance of biodiversity protection.
- We cooperate with local communities to participate in local ecosystem protection activities and biodiversity restoration projects.

Through these initiatives, we will contribute to ensuring biodiversity and realize a more sustainable future.

#### Special Feature Work for Biodiversity

In addition to "forest planting" through creation of green areas alongside roads as well as thinning and pruning company-owned forests, we are implementing plans that contribute to biodiversity at our sites across Japan through protection activities mainly for endangered species, extermination of invasive non-native plants, and donation activities.



Activities to protect Japanese swamp lantern clusters (HOKKAIDO NOF CORPORATION)



Recycling of plastic waste



Going paperless





Introduction of alternative methods Participation in "Amagasaki Forest **Central Green Space Forest** to animal testing in the evaluation of Planting" volunteer activities cosmetics materials (animal welfare)



Aichi

tree planting festival (seedling purchase and sponsorship)

Oita



"lanceleaf tickseed"



Solar panels (NiGK Corporation)



.... ....

... 000000

000000 ....

00000000

0000000

.....

0000000 0000000 00000 0

00000

00000

00000

Donations aimed at protecting the global environment (WWF, Green Fund, Keidanren Nature Conservation Fund)



Use of FSC-certified paper



Green procurement



RSPO membership, participation in the Japan Business and Biodiversity Partnership, endorsement of the Keidanren Initiative for **Biodiversity Conservation**, participation in JaSPON and JaIME

Kawasaki



Purchase of electricity certified to come from non-fossil fuel sources



Food waste reduction (functional foods)



Modal shift, joint deliveries



Participation in the Kawasaki City Green Office Promotion Council Creation of rooftop greenery, green walls, and greenery on our grounds



Participation in the Forest **Restoration Partner System (NOF** METAL COATINGS ASIA PACIFIC CO., LTD.)



Business Strategies

## Spotlight on conservation initiatives

## **Participation in "Amagasaki Forest Central Green Space Forest** Planting" volunteer activities (from 2017)

In fiscal 2022, a total of seven employees from the Amagasaki Plant participated in the "Amagasaki Forest Central Green Space Forest Planting," one of the initiatives of the "Amagasaki 21st Century Forest Project" promoted by Hyogo Prefecture. Working together with general volunteers and the secretariat, the employees worked hard on tree planting and weeding. In addition to learning about the process of reforestation and the importance of biodiversity, they also experienced the satisfaction of nurturing rich natural forests.



**Participation in the Forest Restoration** Partner System under the Kanagawa **Forest Restoration 50-Year Project** 



The Kanagawa Forest Restoration 50-Year Project is an initiative to revitalize forests measuring about 95,000 hectares, or about 40% of the prefecture's land, from the prefecture's Mount Oyama and Hakone mountains to forest land in satoyama areas and urban areas. The objective is to prevent the devastation and erosion caused by lack of care and to pass on the rich blessings of the forests to the next generation. NOF METAL COATINGS supports forest maintenance on an area of about 10 hectares (equivalent to about two Tokyo Domes). The forest areas absorb about 247 tons of CO2 over 5 years. In addition, it has been decided to name a portion of the forest designated by the prefecture as "NOF METAL COATINGS Forest." Going forward, as a partner company, we will conduct events for forest maintenance, nature observation, and more. The forest will be used as a place to promote health and deepen friendship with employees and their families, thereby contributing to the protection of nature and environmental preservation.

## Activities to protect Japanese swamp lantern clusters



The Japanese swamp lantern, which is known in Japan from the children's song "A Memory from Summer," is an alpine plant that grows near water. On the grounds of the HOKKAIDO NOF CORPORATION Head Office plant (Bibai City, Hokkaido), which covers an area of about 43 hectares, or 9.2 times the size of the Tokyo Dome, there is a wetland where Japanese swamp lantern clusters grow as the sun filters through the trees. Surrounded by Japanese white birch and other trees and water, this rich ecosystem is carefully protected with the continuous observation of employees.

## Weeding of specified invasive non-native plants

The perennial plant "lanceleaf tickseed," a member of the Asteraceae family native to North America, was introduced from overseas as an ornamental and greening plant. However, in 2006 it was designated as a "Designated Invasive Alien Species" under the Act on the Prevention of Adverse Ecological Impacts Caused by Designated Invasive Alien Species because of its strong reproductive capacity and potential to seriously impact the ecosystem in Japan. Cultivation, transport, sale, and release into the wild are prohibited. Local governments throughout Japan are calling for extermination of lanceleaf tickseed through their websites and other means. At our Aichi Works, lanceleaf tickseed grows in various parts of the grounds, and has increased dramatically in recent years. Therefore, the entire plant is conducting extermination activities.



## Head Office Use of FSC-certified paper

FSC certification is an international system that certifies "responsible forest management" for the purpose of sustainable forest utilization and conservation. NOF uses FSC-certified paper for its Integrated Report, notice of General Meeting of Shareholders, company profile, and internal newsletters, and cooperates in activities to protect forests.

Promote responsible care activities 2

## **Chemical safety**

#### Management approach

In order to meet the needs of our customers now and in the future, the NOF Group promotes appropriate risk-based management of chemicals and conducts product safety risk assessments for all products, including new products.

Many countries and regions are now actively enacting or revising laws and regulations related to chemicals management. In cooperation with Group companies in Japan and overseas, NOF is strengthening its ability to gather information on regulatory trends and enhancing its functions using a comprehensive chemicals management system in order to ensure compliance with the following items.

- We maintain a comprehensive understanding of the hazards, risks, and impacts of each product as they relate to all phases of the product's life cycle and intended use(s).
- We update the quality and quantity of information as necessary to ensure global consistency and to comply with local requirements for product information.
- We keep records of all necessary and requested product safety information to ensure that our products are useable throughout their entire life cycle.
- Standardized safety data sheets (SDS) are provided to customers at the time of initial delivery and upon request in local areas. We consistently maintain this critical information provision mechanism, and conduct distribution to all customers worldwide for all products, in compliance with local regulations and in the language requested by the customer.

#### Initiatives by the NOF Group

The NOF Group believes that a sound understanding of its products' chemical properties, hazards, and impacts on people and the environment, as well as the management of risks associated with the handling of products, are fundamental to providing the market with a safe and competitive product portfolio in the future. The NOF Group works to ensure reliable operation of the mechanism for providing SDSs so that hazard information related to our products is easily available to our customers and employees, and we continuously provide updates on the latest information.

The NOF Group currently delivers over 5,000 products to markets in 55 countries around the world, and provides SDSs to these markets. We

RPORATION 23 ted Report 20

Contents

Governance

ophy

are also responsible for making revisions in response to changes in laws. We provide customers with appropriate information and technical assistance to ensure thorough understanding of our products and safe usage and handling practices. We are currently introducing a system to manage product information. As laws and regulations evolve, we are collecting more information on the conditions of use of our products to record and assess the associated risks, and reflect this in our SDSs.

In addition, NOF has made a list of controlled substances specified by the POPs Convention,

RoHS Directive, and the like, and promotes thorough management and volume reduction by ranking them as:

All chemicals prohibited to be handled,

- Chemicals for which we will consider alternatives and strive to reduce the amount handled, and
- Chemicals to be handled under appropriate management.

We also comply with relevant regional and national chemical regulations, such as REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) in the European Union

Sustainability Report > P.21-29,119

(EU), K-REACH in South Korea, and TSCA in the United States.

In FY2022, the NOF Group registered two new REACH applications, bringing the total number of registrations to 44.

Since the implementation of the REACH system, no products have been subject to the system for substances of very high concern (SVHCs).

In addition, in Japan, the Group is promoting making lead-free products for pyrotechnic devices such as detonators, which contain lead that can affect water pollution.

#### Initiatives in the supply chain

We are promoting the development of eco-friendly products that are biodegradable and do not contain hazardous substances, which contribute to recycling and energy conservation for the final products. In addition, we conduct screening tests on the risks and harms of all chemical substances we handle during design screening of new products and assessments in the commercial production transition phase, thereby developing products with low environmental impact.

We verify that new products are manufactured according to plan before commencing commercial production. We work to reduce environmental impact through stable operation of our environmental treatment facilities and optimizing the collection conditions of chemical substances. We started working on Chemical Substances Risk Assessment (RA) in 2008, before relevant laws and regulations made it obligatory in 2016. We conduct a risk assessment and review of chemical substances as needed to contribute to employee health and safety.

Product dev	elopment	>	Procurement of raw materials		Production		Distribution and use (chemicals management and information provision)		Disposal and recycling
impact on the environr time. The list of contro determined based on t and Japan's Act on the	nent and health ir led substances re he POPs Conven e Evaluation of Ch ., Industrial Safet s Control Act. The	n addition t egarding h tion, RoHS nemical Su y and Heal e list is rev	Directive, REACH regulations, bstances and Regulation of th Act, and Poisonous and	In fiscal 2020, and introduce creation support and has centra management throughout the Sustainat P.120	ed an SDS ort system, alized of SDS e company.	longer needed are not are thermally re and work to recycle external companies our certification rec	separated. The useful substances an ecycled. In addition, we promote the e them. With regard to waste dispos s that not only have received certific	re put in the separate al destina ation of ex formation	rate* of 0.1% or less. Substances that are no he recycling process, while those that are collection and recycling of waste plastics ation, we outsource the waste treatment to xcellence by the government but also satisfy on hazard assessment and conduct audits ement and Public Cleansing Act. Sustainability Report > P.121

\*NOF's definition of zero emission: Volume of final disposal by landfill/volume of waste, etc. generated × 100 ≦ 0.10

# NOF's Business Strategies

We operate five divisions in three main segments: "Functional Chemicals," "Pharmaceuticals, Medical, and Health," and "Explosives & Propulsion". Contents



### Five forms of business in three segments

#### Functional Materials business

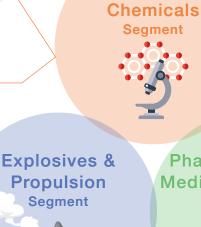
With various derivatives and petrochemical products made from oils and fats at the core, we promote business expansion in the growth fields of Life/Healthcare, Environment/Energy, and Electronics/IT.

#### Metal Coatings business

With our unique corrosion prevention agents at the core, we have accumulated cutting-edge surface treatment technologies to become the global standard for corrosion prevention treatment of vehicle parts. Eco-friendly surface treatments are our top priority.

## Explosives & Propulsion business

As one of the world's leading integrated explosives manufacturers, we utilize cutting-edge pyrotechnics to advance our industrial explosives, defense and space explosives, and consumer products businesses.



**Functional** 

Pharmaceuticals, Medical, and Health Segment



## Life Science

We develop highly functional materials for biopharmaceutical and nucleic acid drug applications, centered on the DDS field where technological innovation is advancing. We also focus on fields such as eye care, medical devices, and diagnostic drugs.

#### Functional Foods business

As a pioneer in processed edible oils refining and processing technology, we develop processed edible oils and healthcare foods business. We will advance a shift to function-based business domains, and contribute to abundant diets and people's health. Contents

### Five forms of business in three segments

Segment	Reflection on FY2022 and prediction of conditions in FY2023	Net sales composition ratio	Operating income composition ratio	Changes in business results
Functional Chemicals	Sales grew significantly due to strong demand for cosmetics materials, increased sales of special corrosion prevention agents caused by recovery of demand related to automobiles for overseas, and sales price revisions due to soaring raw material and fuel prices. In FY2023, although the demand recovery trend will continue, operating income is projected to be ¥100 million lower year-on-year due to an increase in fixed costs caused by active strategic investments and other factors.	in FY2022 ¥ 146.4 billion	(Bit in FY2022 ¥ 22.9 billion	lions of yen) Net sales Operating income ( : indicates plan targets) 160.0 120.0 40.0 2019 2020 2021 2022 2023 (FY) (Forecast)
Pharmaceuticals, Medical, and Health	For raw materials for DDS drug formulations, profit increased due to increased demand for COVID-19-related products and biopharmaceuticals. In FY2023, demand for COVID-19 vaccines will lessen, but overall demand for biopharmaceuticals will continue. However, fixed costs will increase due to our active strategic investments, and operating income is projected to decline by ¥1.5 billion year-on-year.	in FY2022 ¥ 40.9 billion	(Billion	lions of yen) Net sales Operating income ( ::: indicates plan targets) 60.0 40.0 20.0 0 2019 2020 2021 2022 2023 (FY) (Forecast)
Explosives & Propulsion	While sales of industrial explosives, defense products, and functional products declined, sales of space rocket products increased due to higher shipments of products for rockets. In FY2023, we expect an increase in demand for industrial explosives and an increase in sales of defense products. On the other hand, operating income is projected to decrease by ¥0.3 billion year-on-year due to increased fixed costs resulting from promotion of strategic investments and increased production and sales activities.	in FY2022 ¥ 29.8 billion	(Bit in FY2022 ¥1.7 billion	illions of yen) Net sales Operating income ( iii indicates plan targets) 40.0 20.0 10.0 2019 2020 2021 2022 2023 (FY) (Forecast)

### **Business bases**

## **Developing global business through our domestic and overseas bases**

The NOF Group has 13 consolidated subsidiaries in Japan, covering each region from Hokkaido to Kyushu. Overseas, we have 12 bases in nine countries, and are developing our business with locally based sales and production systems.

## **Europe**

NOF EUROPE GmbH / NOF METAL COATINGS EUROPE S.A. / NOF METAL COATINGS EUROPE N.V. / NOF METAL COATINGS EUROPE s.r.l.



## Asia

Changshu NOF Chemical Co., Ltd. / NOF (Shanghai) Co., Ltd. / PT.NOF MAS CHEMICAL INDUSTRIES / NOF METAL COATINGS KOREA CO.,LTD. / NOF METAL COATINGS SHANGHAI CO.,LTD. /



America

NOF AMERICA CORPORATION /

NOF METAL COATINGS NORTH AMERICA INC.

NOF METAL COATINGS SOUTH AMERICA IND. E COM.LTDA.

TILLES SHOT ILLES IS

Contents

#### Research laboratories

 Ibaraki
 Advanced Technology Research Lab.

 Kanagawa
 I & S (Innovation & Solution) Department /

 Chidori Research Lab./
 Functional Foods Research Lab. /

 Life Science Research Lab.
 Life Science Research Lab.

 Aichi
 Taketoyo R&D Department / Kinuura Research Lab.

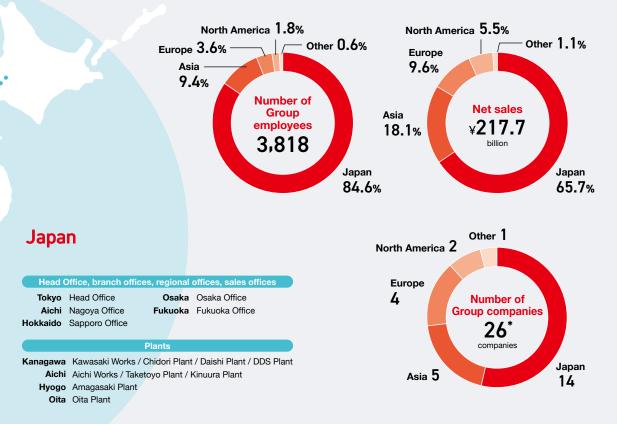
 Life Science Research Lab.
 Life Science Research Lab.

 Hyogo
 Amagasaki Research Lab.

 Oita
 Life Science Research Lab.

#### Domestic consolidated subsidiaries

NICHIYU TRADING CO., LTD. / NICHIYU LOGISTICS CO., LTD. / Nichiyu Kogyo Co., Ltd. / YUKA SANGYO CO., LTD. / NIGK Corporation / HOKKAIDO NOF CORPORATION / Showa Kinzoku Kogyo Co., Ltd. / Nippon Koki Co., Ltd. / Nippo Kogyo Co., Ltd. / JAPEX Corp. / CACTUS Co., Ltd. / NOF METAL COATINGS ASIA PACIFIC CO., LTD. / NIKKA COATING CO., LTD.



\*NOF + consolidated subsidiaries

(As of March, 2023)



Go/

nce

### Business overview | Functional Chemicals segment

# **Functional Materials business**

We will enhance our competitiveness and develop sustainable products with a combination of a wide range of materials and technologies of oleo & speciality chemicals and functional chemicals & polymers.

#### Business strengths

- Covers diverse industries, centered on fatty acid derivatives
- Top-class lineup of cosmetic materials in Japan
- Highly advanced technology for miniaturization of electronic components
- Developing high-performance products in collaboration with resin manufacturers
- Reliable technological capabilities in refining, synthesis, formulation, and more
- Promoting global business development by increasing the overseas sales ratio

The Oleo & Speciality Chemicals Division, whose core products were various derivatives made from oils and fats, and the Functional Chemicals & Polymers Division, whose core products were petrochemicals, were merged to form a division with a wide range of materials and technologies, including fatty acids, fatty acid derivatives, surfactants, ethylene oxide and propylene oxide derivatives, organic peroxides, polybutene, functional polymers and electronic materials. This business domain encompasses all of NOF's three prioritized business fields, and aims to expand business in each of these growth fields. The biggest goal is to develop more sustainable products while increasing competitiveness in the market.We are focusing on proposals that integrate materials of oleo chemicals and functional chemicals & polymers, such as eco-friendly products that utilize biomass and products that improve the performance of polybutene by applying oleo chemical's emulsification technology. Moreover, for our R&D, in addition to our key technologies such as functional polymers, we are working to consolidate and strengthen our technologies, by integrating the additive design technology of oleo & speciality chemicals and the

General Manager, Functional Materials

Kenshiro

Shuto

resin evaluation technology of functional chemicals & polymers, while pursuing technological innovation and the creation of new, higher-performance materials.

We will establish our position in the market through provision of innovative products while flexibly responding to global needs and environment changes. To achieve a sustainable business model, we emphasize the integration of technology in our strategic proposals and R&D. Along with improving our competitiveness in the market, we aim to have consideration for the global environment and contribute to building a sustainable society. Contents

NOF's Philosophy

#### Main products and uses

- Fatty acids (for tires, rubber, and other resin products, etc.) NAA®
- Fatty acid derivatives
   (for base material for refrigerating oils, toner for printing machines, lubricants, gear oil, etc.)
   UNISTER®, MILLUBE®, ELECTOL®

#### Surfactants

(for cosmetics, various detergents, etc.) UNILUBE®, DIAPON®, STAFOAM®, LUMINOVEIL®

 Ethylene oxide propylene oxide (EO/PO) derivatives

(for cosmetics, electronic components, coatings, adhesives, etc.) WILBRIDE®, MALIALIM®, BLEMMER®

#### Organic peroxides

(for various plastic products, rubber products, golf balls, home appliances, construction materials, automobile interiors and exteriors, etc.) PERBUTYL®, PERHEXYL®, PERCUMYL®, PEROYL®

Petrochemical Products

(for lubricants, various kinds of tape, adhesive plasters/pastes, coatings, etc.) Polybutene, EMAWET<sup>®</sup>, NA Solvent<sup>™</sup>

#### Functional polymers

(for lamps, air ducts and other automotive parts, bathtubs, etc.) MODIPER®. NOFALLOY®

#### • Electronic materials

(for LCD panels of PCs and smartphones, coatings, etc.)  $\mathsf{NOFCURE}^{\otimes}$ 

**Contribute to social issues** 

Expectations for naturally-derived products in response to tighter environmental regulations



Unlike mineral oils, which do not decompose naturally, the materials used by NOF are biodegradable, naturally-derived oils and fats. Even if lubricants leak from rotating parts of machines, environmental pollution can be prevented, so demand for naturally-derived oils for ships and wind power generation is expected to increase in the future. The usage of oiled products is expected to increase due to growing demand for products such as alternative CFC refrigerants caused by increased need for polymer surfactants for condensers alongside the shift to EVs, as increased need for air conditioners due to global warming. The shifts to 5G communication and EVs make development of new products an urgent task



We are working on the development of curing agents for low-dielectric materials for substrate material resins in preparation for 5G, which is expected to increase the volume of information. Furthermore, the increase in the number and size of displays accompanying the shift to EVs in automobiles is expected to increase demand for products in the display field, in addition to protective films for LCD color filters. For electronic materials, we will also focus on market development in East Asia, including China, Taiwan, and South Korea. Contents

# **Metal Coatings business**

We will respond to rapidly growing demand centered on the EV and renewable energy markets.

#### Business strengths

- Contributing to the corrosion protection of automotive parts in Japan and overseas
- Also used in railways, buildings, and wind power generation equipment
- Creating a global standard for corrosion protection through global expansion

Operating Officers Group Head of the Metal Coatings Group Kuniaki Tsuruoka

We have been offering materials to prevent rusting mainly on metal parts, centered on automotive parts, as well as joints of buildings, parts fastening railways, and other such parts. In our mainstay automotive market, we will work to expand sales by capturing new demand that is changing amid the ongoing shift to EVs. In the non-automotive market, one of our targets is wind power generation and solar photovoltaic (solar PV) in the growing renewable energy field. In particular, offshore wind power generation, whose development is rapidly expanding in China and elsewhere in East Asia, is expected to make extensive use of anti-corrosive coatings, including for the use of bolts to fasten rotating blades and anchors that are buried in the seabed. We will respond to the rapidly growing demand by consolidating the technologies where our Group companies have strengths.

The strength of our metal coatings business lies in the global locations of our manufacturing and sales bases, and we are building a strong network. By further strengthening this global supply chain, we aim to improve productivity and capture market needs.

In addition, as environmental regulations become increasingly strict, we will also contribute to solving sustainability issues to reduce impact on the global environment by leveraging Group synergies in the development of new products that reduce CO<sub>2</sub> emissions and eliminate the use of hazardous substances. Contents

Governance

#### Main products and uses

- Corrosion protection of automotive parts
- Corrosion protection of renewable energy generation facilities (Wind power and Solar power)
- Corrosion protection of railway parts GEOMET®, GEOMET PLUS®



#### Contribute to social issues

Differentiation through waterborne anti-corrosion coatings that reduce environmental impact



Unlike "solvent-based anti-corrosion coatings" offered by competitors in Europe and the United States, NOF's products are characterized by the fact that they are "waterborne anti-corrosion coatings." As the need to reduce environmental impact increases, expectations for eco-friendly GEOMET<sup>®</sup> have been increasing.

Aiming to reduce energy consumption by lowering the temperature in the curing process



Because the use of anti-corrosive coatings requires a manufacturing process that involves curing at temperatures of 300°C or higher, we have been studying the development of low-temperature curing type products to reduce greenhouse gas emissions. By developing anti-corrosive coatings that can be cured at lower temperatures, we can reduce the energy consumption, such as electricity and gas, required for the process. Contents

### Business overview | Pharmaceuticals, Medical, and Health segment

General Manager, Life Science Division

Yamamoto

Yuji

# Life Science business

We will promote the development of biopharmaceuticals and nucleic acid drugs, and aim to become an indispensable presence in the pharmaceutical and medical care industries.

#### Business strengths

- Widely used in medicine and medical care fields
- World's no. 1 share of activated PEG for DDS
- Contribute to the development of biopharmaceuticals and nucleic acid drugs
- Possess the highly biocompatible material LIPIDURE<sup>®</sup>
- Expansion of the LIPIDURE<sup>®</sup> lineup
- Support pharmaceutical and medical equipment manufacturers from research to commercialization

The spread of COVID-19 infections has led to technological innovations in drug delivery systems (DDS: drug delivery systems) in the pharmaceutical market at an astonishing speed. One of these is nucleic acid drugs (mRNA drugs) using lipid nanoparticles (LNPs), a technology that has been established and penetrated the market at a rate that would ordinarily be unfathomable. This new market is said to be growing at an accelerated pace.

The 2025 Mid-term Management Plan states that NOF is collaborating with universities and

research institutions to develop and propose more functional materials for biopharmaceuticals such as protein drugs and peptide drugs, as well as for nucleic acid drugs (mRNA drugs) applications, which are attracting attention. In addition, we will provide courteous customer support utilizing our overseas sales bases, strengthen our quality management system by introducing the latest information management system, and expand our production system at the new Aichi Works. Furthermore, in the fields of eye care, medical devices, and diagnostic pharmaceuticals, where the biocompatible material LIPIDURE® (MPC polymer) has grown as a key material, we will leverage our business integration for further business development, aiming to become an indispensable presence in the global pharmaceutical and medical care industries.

Leveraging the synergies from the business integration, NOF's life science business will continue to contribute to technological innovation in the global pharmaceutical and medical care industries with highly functional life science-related materials.

#### Main products and uses

- Activated PEG (for various pharmaceuticals) SUNBRIGHT® Series, PUREBRIGHT® Series
- Functional lipid
   COATSOME® series
- Surfactant for drugs (for injection and vaccine preparations)
   Polysorbate 80 (HX2)<sup>™</sup>
- Biocompatible materials (for contact lenses, drugs and diagnostic pharmaceuticals, medical devices, etc.) LIPIDURE®





**Contribute to social issues** 

Contributing to improvement of patients' quality of life



DDS is a technology that enhances the effects of drugs by adjusting their physiological activity, targeting lesions, yielding chemical stability, adjusting metabolic activity, and other means, so that they act at the required place in the body in the required amount for the required time. This technology makes it possible to reduce the side effects of drugs and the frequency of daily injections, thereby contributing to improving the QOL of patients who need these drugs. Focusing on the development of diagnostic pharmaceutical agent technologies in the wake of the outbreak of infectious disease



COVID-19 is raging around the world. PCR test kits and antigen test kits have been widely used as diagnostic pharmaceuticals. Going forward, as global warming progresses and new infectious diseases emerge, the demand for diagnostic pharmaceuticals is expected to increase. Therefore, in order to contribute to people's health and hygiene, NOF is promoting the development of technologies that contribute to improving the quality and performance of diagnostic pharmaceuticals.

# **Functional Foods business**

We will shift our focus from quantity to quality, promote R&D, and balance both sustainable development of the food industry and people's health.

#### Business strengths

- Functional food materials with a wide variety of functions
- Strong sales network for bread-making and confectionery production
- Develop new markets with healthcare foods products

Executive Operating Officer General Manager, Functional Foods Division **Hirofumi Kato** 

Hirofumi Kato

We will reform our profit structure through a strategic shift beyond the conventional food business, shift our focus from quantity to quality, and shift to the functional foods business.

In the processed edible oils business, we will focus on the development of functional food materials, promote R&D related to underutilized food resources, and contribute to sustainable food production and consumption. Furthermore, we will pursue functions to improve the physical properties of foods and address social issues such as greenhouse gas reduction and food loss to contribute to both the global environment and human health. In the healthcare foods business, we will expand the domains of our proprietary health food materials and fats-coating technologies. With a mission to contribute to people's health, we will provide innovative products by making full use of the latest scientific knowledge and cutting-edge technologies. Furthermore, through public bidding invitations for industry-academia sponsored research, we aim to develop new processing technologies, create proprietary materials, and provide functions involved in biological regulation.

To achieve sustainable innovation, we will collaborate with external experts to respond to market changes and

customer needs. The development of new processing technologies and the creation of innovative materials require a wide range of expertise and experience. Therefore, we actively promote the use of external human resources and collaborate with top-class experts to provide the highest level of quality and value.

We will support development of high-quality products that consumers can use with peace of mind, contribute to the health of people around the world, and establish a sustainable business model by supporting the development of the food industry in consideration of the global environment. NOF CORPORATION Integrated Report

2023

Contents

Governance



#### Main products and uses

 Processed edible oils, functional food materials (for bread, confections, etc.) CRUMB SOFT® SK, BREADY® SA, SUNSHORT®, COOKRICH®

(for alternative foods made with plant materials, etc.) Delinular™

Healthcare foods products

(for supplement, nutritional products, etc.) Komecosanol®, NICHIYU®PS50, NICHIYU®GPC85R

Delinular<sup>™</sup> soy protein fat substitute



**Contribute to social issues** 

Supporting the development of food ingredients that can replace meat, which has a high environmental impact



Plant-derived meat alternatives are attracting attention as plant-based foods with both environmental and health-related value. Based on this trend in Japan as well, food manufacturers are actively working to improve the quality of their products as they commercialize them. In response, NOF has begun to develop ingredients with functions to improve taste and texture. Meanwhile, we are also providing function-related support for new materials created by university research laboratories and food ventures. Contributing to the reduction of food loss, which has now become a major social issue



"Food loss," which refers to the disposal of food that could have been eaten, such as unsold, uneaten, or expired food, has become a major social problem. We have developed functional food materials that maintain the softness of bread and improve its texture and volume, which prolongs its deliciousness and prevents its early disposal, thereby contributing to the reduction of food loss.

#### Business overview **Explosives & Propulsion segment**

# **Explosives & Propulsion business**

We will develop businesses based on national policies, such as on defense and space, and focus on the introduction of eco-friendly equipment and product manufacturing.

#### Business strengths

- There are continuous needs for space and defense-related products
- Solid propellants for rockets are the best technology in Japan
- Development of energy control technologies for a wide variety of consumer products

**Executive Operating Officer** General Manager, Explosives & Propulsion Division Kazuhito Narumi

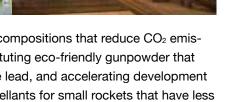
The NOF Group's Explosives and Propulsion business provides explosives in three major areas: the industrial explosives field, the defense field, and the space field. We are developing business for much of this based on national policies. Our industrial explosives are used in public works mainly for purposes such as quarrying and tunnel excavation. Our defense business responds to Japanese demand for defense equipment, such as firearms and guided missiles for the Self-Defense Forces to face geopolitical risks. In the space business, we have a mission as a top manufactur-

er in Japan to meet needs for solid propellants for space rockets required for launching satellites, which have become indispensable to people's lives. In each of these businesses, we have established efficient production systems to ensure a stable supply of products and to meet increasing demand, and we are working to further improve productivity.

In addition, we have been introducing eco-friendly facilities, such as those that reduce CO<sub>2</sub> emissions. Aiming to improve sustainability going forward, we are promoting research on

gunpowder compositions that reduce CO<sub>2</sub> emissions, substituting eco-friendly gunpowder that does not use lead, and accelerating development of solid propellants for small rockets that have less environmental impact.

The production plant of our Explosives & Propulsion business has a large area for security reasons, and a wide variety of wild plants grow within the grounds. By properly managing these living things, we will contribute to climate change and biodiversity.





#### Main products and uses

- Industrial explosives (for quarries, tunnels, etc.)
   Emulsion explosives, ANFO explosives, electric detonators
- Space rocket products Solid propellants, pyrotechnic devices for space rockets

#### Defense products

Gun propellants / rocket propellants, pyrotechnic devices for missiles, defense equipment

#### Functional products (consumer products business)

Temperature Label® (temperature indicator), UV Label®, sterilization materials, anti-freezing agents, NET LAUNCHER® (crime prevention devices), vapor pressure crushing agent (GANSIZER®)



**Contribute to social issues** 

Focusing efforts on space and defense-related businesses from a medium- to long-term perspective



The NOF Group has long supported the space business, starting with the Japan Aerospace Exploration Agency (JAXA). It can be predicted that information from satellites will become increasingly necessary for industries in Japan and abroad going forward, such as in the evolution of communications and the commercialization of automated driving. On the other hand, launching a rocket with high accuracy is not easy, and constant technological innovation is required. Space and defense-related business is an essential part of national policy. We will continue to focus our efforts on contributing to society while earning stable profits. Preventing road surfaces from freezing and contributing to traffic safety Automatic liquid antifreezing agent spraying devices



When automobiles drive on roads with snow and ice in winter, there is a danger of traffic accidents caused by tires slipping. Our competitors' antifreezing agents are mostly chloride-based. However, the chlorine-free antifreezing agent KAMAGU® sold by HOKKAIDO NOF CORPORATION does not cause salt damage to structures such as metal or concrete, nor to the natural environment. In addition, the AUTOKAMAGU® automatic antifreezing agent spraying device is equipped with a solar panel and can be operated without electricity, which contributes to energy conservation.

# NOF's Governance

In order to realize stable and sustainable growth and development, the NOF Group aims to continue to be a company valued by all kinds of stakeholders through fulfilling its corporate social responsibility as a member of our society, such as by protecting the natural environment and securing health and safety, in addition to compliance.



# Introduction of officers



#### Introduction of officers | Table showing expected skills

		Name	Position	Years in current position	Business management, business administration, DX	R&D, quality and production technologies	Sales and marketing, SCM	Overseas business, global	Legal and ESG, environment and safety, HR and labor	Finance and accounting
Directors		1 Takeo Miyaji	Representative Director, Executive Chairman	12 years	•		•		•	•
		2 Koji Sawamura	Representative Director, President and CEO	-	•	•	•	•		
		<b>3</b> Manabu Saito	Director and Executive Operating Officer	-	•		•		•	•
tors		4 Kazuyoshi Yamauchi	Director and Executive Operating Officer	2 years	•	•		•	•	
	Outside	5 Shingo Unami	Outside Director	2 years	•				•	•
	side	6 Izumi Hayashi	Outside Director	2 years				•	•	
Audit and		7 Masanobu Miyo	Audit and Supervisory Committee Member Directors	3 years	•		•	•		
udit and Supervisory		8 Kunimitsu Ito	Audit and Supervisory Committee Member Outside Director	3 years				•		•
isory Committee	Outside	9 Yuriko Sagara	Audit and Supervisory Committee Member Outside Director	2 years				•	•	
e member		10 Keiichi Miura	Audit and Supervisory Committee Member Outside Director	2 years	•	•			•	

\*The • symbols indicate skills that are particularly expected of each director.

\*The above table does not indicate all professional skills possessed by each individual.

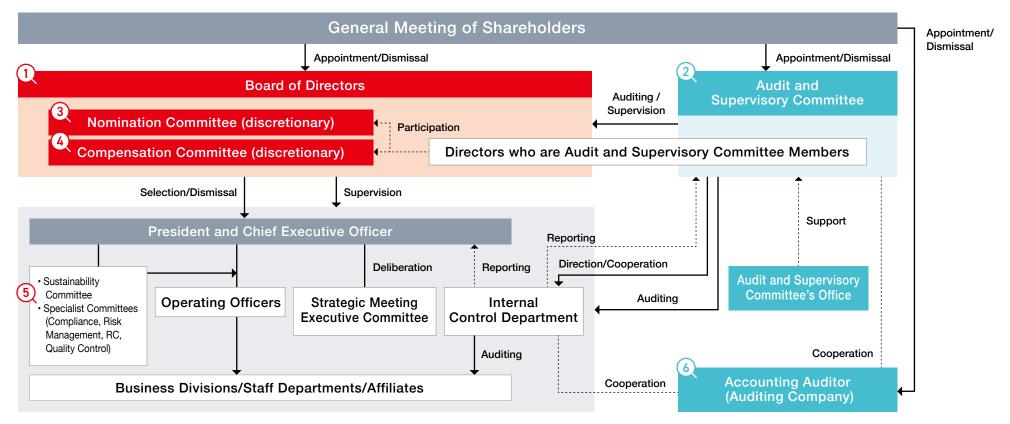
\*The number of years in current position indicates the terms of directors as of the close of the 100th Annual General Meeting of Shareholders.

#### Our fundamental view

**Corporate Governance** 

In order to respond precisely to changes in the business environment and the intensifying competition between companies, NOF strives to speed up management decisions and, from the perspective of securing transparency and improving accountability, recognizes that the strengthening of corporate governance is an important issue, and endeavors to secure the effectiveness thereof.

#### Corporate governance diagram



NOF CORPORATION Integrated Report

2023

(3)

#### **Board of Directors**

The Board of Directors holds one regular meeting every month and extraordinary sessions are also convened as required. Besides deciding on important matters, such as basic management policies and internal control system, based on laws, regulations, the articles of incorporation, and the rules of the Board of Directors, the Board supervises the state of business execution. In addition, the Executive Committee deliberates as necessary on the company's overall business execution policies and the implementation of important operations, and the Strategic Meeting is held once a week as a general rule. Any important matter to be referred to the Board of Directors goes through prior deliberation at the meeting of the Executive Committee or at the Strategic Meeting, intended to ensure appropriate decision making. Of the ten members comprising the Board of Directors, five are independent Outside Directors (including Audit and Supervisory Committee Members).

#### **Audit and Supervisory Committee**

The Audit and Supervisory Committee consists of four Directors, including three independent Outside Directors. In accordance with auditing policy and standards, the standing Audit and Supervisory Committee members play a leading role in attending important meetings including meetings of the Executive Committee, implementing audits through inspection of important documents, and supervising the business execution of Directors. In addition, with regard to internal control, the Committee receives reports on audit plans and audit results conducted by the Internal Control Office, our internal audit division, and confirms effective collaboration by giving instructions for investigations as necessary. In addition, the Committee maintains close cooperation with the Accounting Auditor by holding meetings regularly and as necessary to exchange relevant information, including receiving reports on audit plans and audit results.

#### **Nomination Committee**

In order to improve the oversight function of the Board of Directors and strengthen the corporate governance system, the Nomination Committee, which is a voluntary advisory committee to the Board of Directors, has been established. In consultation with the Board of Directors, the Nomination Committee deliberates and reports to the Board of Directors on matters such as the election and dismissal of directors (excluding Audit Committee members), the selection and dismissal of representative directors, and succession planning for such directors. The committee is chaired by an independent Outside Director, and consists of five independent Outside Directors and two Internal Directors. This ensures the committee's independence and objectivity.

#### (4) **Compensation Committee**

2

In order to improve the oversight function of the Board of Directors and strengthen the corporate governance system, the Compensation Committee, which is a voluntary advisory committee to the Board of Directors, has been established. The Compensation Committee, in consultation with the Board of Directors, deliberates and reports to the Board of Directors on matters related to the compensation of Directors, excluding Audit and Supervisory Committee members. The committee is chaired by an independent Outside Director, and consists of five independent Outside Directors and two Internal Directors. This ensures the committee's independence and objectivity.

#### **Specialist** committees

5

For management risks, the **Risk Management Committee** takes the lead in conducting company-wide risk assessments. The Risk Management Committee, Responsible Care Committee, Quality Control Committee, and other specialized committees analyze risks, consider countermeasures, analyze and evaluate matters under their jurisdiction, and report to the Board of Directors.

#### Accounting Auditor

Ernst & Young ShinNihon LLC has been selected as the Accounting Auditor.

089

Business Strategies

#### **Outside Director**

Name	Audit and Supervisory Committee	Independent Director/ Auditor	Reasons for Election
Shingo Unami		•	Mr. Shingo Unami has abundant experience and advanced insight in the financial industry as well as extensive knowledge of corporate management. He provides appropriate opinions on overall management from a fair and objective standpoint. He serves as chairman of the Compensation Committee and as a member of the Nomination Committee, and works on in deliberations in the Sustainability Committee. The Company expects that he can continue to play a role going forward in advising management and supervising business execution from a professional perspective, including HR and labor matters and financial accounting.
Izumi Hayashi		•	As an attorney, Ms. Izumi Hayashi is well versed in corporate legal affairs and has advanced knowledge of intellectual property and corporate compliance. She has served as an Outside Director. She is chairwoman of the Nomination Committee, is a member of the Compensation Committee, and engages in deliberations in the Sustainability Committee. The Company expects that she can continue to play a role going forward in advising management and appropriately supervising business execution from a global and professional perspective, including legal and risk management.
Kunimitsu Ito	•	•	Mr. Kunimitsu Ito is a certified public accountant and tax accountant with deep insight on accounting and taxation. He serves as a member of the Nomination Committee and the Compensation Committee, and also engages in deliberation in the Sustainability Committee. Although he has never been involved in corporate management except as an outside officer, for the reasons above, the Company deems that he will be able to continue to fulfill the responsibilities of conducting appropriate auditing and oversight, etc. over business execution, based on his specialized knowledge. Therefore, the Company has elected him.
Yuriko Sagara	•	٠	Ms. Yuriko Sagara has a high level of expertise and global-based knowledge as an attorney. In addition, as a patent attorney, she has a deep level of insight on intellectual property. She is a member of the Nomination Committee and Compensation Committee, attends meetings of the Sustainability Committee, and engages in the deliberations of these committees. Although she has never been involved in corporate management other than as an outside officer, the Company deems that she will continue to fulfill her duties as an appropriate auditor and supervisor of business execution.
Keiichi Miura	•	٠	Mr. Keiichi Miura has been engaged in the management of TAIHEIYO CEMENT CORPORATION, and has abundant experience and advanced insight and capabilities regarding research planning, etc. He also has extensive experience, having served in positions such as outside director in the chemicals industry. He is a member of the Nomination Committee and Compensation Committee, attends meetings of the Sustainability Committee, and engages in the deliberations of these committees. For the reasons above, the Company deemed that he can continue to perform his duties such as appropriate auditing and supervision of business execution. Therefore, the Company has elected him.

# **Evaluation of the effectiveness of the Directors**

NOF analyzes and evaluates the effectiveness of the Directors once a year, in principle.

Since fiscal 2016, NOF has implemented an effectiveness evaluation every year. In fiscal 2022, the Company employed a questionnaire form crafted by an external institution, and implemented the Directors effectiveness evaluation questionnaire by surveying all 10 Directors.

# Summary of results for fiscal 2022 effectiveness evaluation

The NOF Board of Directors ensures a suitable diversity of knowledge, experience, and abilities necessary in light of management strategies and provides appropriate opportunities to utilize the experience and expertise of Outside Directors. Through this, it was confirmed that the Board of Directors is generally operating appropriately, with Outside Directors freely and openly expressing their opinions based on their careers and expertise, open and active discussions taking place as a Board of Directors, and ensuring of sufficient time for deliberation on important matters.

Among the challenges identified in the fiscal 2021 effectiveness evaluation, improvements were seen in the top management succession plan, such as semi-annual checks and discussions on the progress of the training process by the Nomination Committee. With regard to initiatives for constructive dialogue with shareholders, the Board of Directors held in-depth discussions after receiving reports from the divisions with jurisdiction over the matter.

#### Points of improvement for the future

It was confirmed that we will continue to further enhance our overall governance structure, including the top management succession plan. Contents

# Overview of the policy on determining compensation

Under the policy to promote sustainable growth and medium- to long-term enhancement of corporate value based on the Company's Corporate Philosophy and reward Directors for business results and other achievements through an appropriate level of compensation with decisions made through a fair and transparent process, compensation for Directors, excluding Audit and Supervisory Committee members, consists of monthly compensation, bonuses, and stock compensation. In order to maintain incentives, at least 40% of the compensation paid is set as performance-linked compensation (bonuses, ESG indicators-linked compensation, stock compensation). Compensation for Outside Directors is limited to fixed compensation. In addition, the compensation system, compensation levels, individual compensation, and other such matters are deliberated by the Compensation Committee.

#### Compensation system

	Туре	Deliberation and resolution method
cor	Fixed npensation	Calculation methods, etc. of fixed compensation for Directors are deliberated by the Compensation Committee and resolved at the Board of Directors meeting. In addition, with regard to the determination of the specific details of the amount of fixed compensation for each individual director, excluding members of the Audit and Supervisory Committee, a resolution is passed by the Board of Directors after deliberation by the Compensation Committee.
formance-linked compensati	Bonuses	Calculation methods, etc. of bonuses for Directors (excluding Audit and Supervisory Committee members and Outside Directors) are deliberated by the Compensation Committee and resolved at the Board of Directors meeting. The calculation method of the said bonuses is based on consolidated operating income, an important indicator related to the Group's business performance evaluation. The base amount is multiplied by a designated coefficient determined for each Director position. The Compensation Committee verifies this calculation method and the amount paid in each term.
	ESG indicators-linked compensation	At the Board of Directors meeting held on January 27, 2023, it was decided to use a calculation method utilizing the level of achievement of ESG indicators and other factors for a portion of the compensation for Directors (excluding Audit and Supervisory Committee members and Outside Directors) in the next term.
	Stock compensation	Based on the resolution of the 96th Annual General Meeting of Shareholders held on June 27, 2019, a new performance-linked stock compensation plan (Board Benefit Trust) was introduced. At the 98th Annual General Meeting of Shareholders held on June 29, 2021, NOF transitioned to being a company with an Audit and Supervisory Committee. In conjunction with this transition, the plan applies to Directors who concurrently serve as Operating Officers and Operating Officers with a title (excluding Outside Directors and Audit and Supervisory Committee members, hereinafter collectively "Directors, etc."). For each fiscal year, the Directors, etc. are awarded points, the number of which is to be decided taking into account their respective positions, achievement level of their performance, etc. based on the Officer Stock Distribution Rules. Each point awarded to the Directors, etc. (In the event of a stock split, allotment of shares without contribution, or a consolidation of shares, the maximum number of points, the number of points already granted, and the conversion ratio will be used as the basis for the distribution of the Company's shares, etc., is, in principle, the number of points awarded to the said Director, etc. by the time of his/her retirement. The Officer Stock Distribution Rules, which determine the calculation method, etc., which considers such matters as the respective positions and achievement level of performance targets of the Directors, etc., is deliberated of the site stock of the Directors, etc., is deliberated of the site stock of the Directors, etc., is deliberated of the Company's shares, etc., is deliberated of the officer Stock Distribution Rules, which determine the calculation method, etc., which considers such matters as the respective positions and achievement level of performance targets of the Directors, etc., is deliberated of the termine the velo of performance targets of the Directors, etc., is deliberated of the distribution funce as the performance targets of the Directors, etc., is

by the Compensation Committee and then resolved by the Board of Directors.

### **Risk management**

#### **Our fundamental view**

- The NOF Group comprehensively identifies various management risks surrounding its business, and conducts risk assessment based on the impact and frequency of each factor in order to identify risks that need to be addressed as a priority.
- We work to minimize the impact on management by taking appropriate measures to reduce the impact of risks that have materialized, as well as measures to reduce the probability of occurrence.
- We work to objectively verify the effectiveness of risk countermeasures by periodically conducting risk assessments, while working to recognize and evaluate new risks.
- 4. Under the leadership of the Risk Management Committee, we promote the risk management of the NOF Group by implementing the above risk management cycle.

#### **Organizational setup**

The Risk Management Committee, the Compliance Committee, the RC Committee, and the Quality Control Committee analyze management risks, consider countermeasures, and report to the Board of Directors. The Board of Directors receives reports and deliberates as necessary on various business risks, including those related to compliance, information management, and environment and safety, as well as confirmation and evaluation of the comprehensiveness of risks.

We manage and monitor Group companies in accordance with the rules on the management of Group companies, and offer advice, as necessary; while any important matters that are deemed to materially impact our subsidiaries' assets or profit and loss are approved by the NOF Board of Directors or the Executive Committee.

# Confirming "major risks" and identifying "priority risks"

The NOF Group works to comprehensively identify management risks surrounding the Group, considering the characteristics of each business as well as external environments, including political, economic and social changes. In addition, we evaluate the impact and the frequency of occurrence of each identified risk on Group management, confirming major risks and taking appropriate measures against risks identified as "priority risks," which necessitate enhanced resilience. Moreover, for other risks, each committee evaluates the current response, sorts it into categories such as "retained" and "reduced," and considers additional countermeasures as necessary.

#### Flow of risk assessment

- Identify expected risks of the NOF Group and prepare a list of risks
- Prepare a questionnaire sheet for risk evaluation based on the list of risks
- Managers of each department conduct a risk evaluation based on the questionnaire sheet
- Aggregate the survey results and evaluate the impact and frequency of occurrence of risks to the NOF Group

each risk

each risk

risk map

Directors hold discussions

based on the aggregated

evaluation of the impact and

Prepare a risk map for the entire

frequency of occurrence of

NOF Group based on the

evaluation of the impact and

frequency of occurrence of

Confirm the major risks in the

Identify priority risks, based on

countermeasure status

results, and confirm the

Aggregating

survey results

Conducting a

survey using the

Workshop by directors

#### Completing a risk map

Identifying priority risks

NOF CORPORATION Integrated Report

2023

Contents

NOF's Philosophy

Management Strategies

#### Overview of major risks and status of countermeasures (excerpt)

Major risk	Risk description	Ongoing Countermeasures (excerpt)
Earthquakes/tsunami	Possible interruption of production activities or business activities, including sales and distribution, due to earthquakes, tsunami, or other natural disasters	<ul> <li>Formulate a business continuity plan (BCP)</li> <li>Implement internal audits and training regarding the BCP</li> </ul>
Violations of laws and regulations	Possible suspension of business activities and possible payments of surcharge, etc. following administrative dispositions taken in response to violations of laws and regulations, such as Unfair Competition Prevention Act, Antimonopoly Act, Subcontract Act, Foreign Exchange and Foreign Trade Act, Chemical Substances Control Law and Pharmaceutical and Medical Device Act	<ul> <li>Prepare a Global Compliance Manual and country-specific compliance manuals based on the legal systems of each country</li> <li>Establish compliance training and contact points for whistle-blowing/consultation</li> </ul>
Inadequate governance of overseas bases	Possible decline in trust in the Company due to fraud, such as violations of laws and regulations, as a result of inadequate governance at overseas bases	<ul> <li>Develop a system for ensuring the appropriateness of business operations</li> <li>Request a regular report on the state of business execution and financial condition, etc.; conduct business audits</li> </ul>
Cyberattacks and information system failures	Possible information leaks and interruption of business activities, due to illicit access from outside such as cyberattacks and information system failures	<ul> <li>Establish the information security management rules and appoint a person responsible for information security management, etc.</li> <li>Develop a defense system against illicit access and Implement safety measures at rational levels</li> </ul>
Fires/explosions	Possible casualties among employees and neighborhood residents, possible suspension of business activities, and possible compensation for damages as a result of large-scale fires and explosion accidents at plants	<ul> <li>Formulate emergency response manuals and implement trainings</li> <li>Implement joint disaster prevention drills and dialogue activities with local municipalities</li> </ul>
Intellectual property infringement, etc	Possible compensation for damages and possible orders to suspend manufacturing and shipment, due to infringements of intellectual property rights	<ul> <li>Develop a check system for intellectual property management and patent infringement</li> <li>Educate employees on intellectual property including patents and trademarks</li> </ul>
Technology leaks	Possible decline in the NOF Group's competitiveness, due to leakages of technical information, and similar products/technologies provided by competitors	<ul><li>Establish rules for trade secrets</li><li>Develop a management system for trade secrets</li></ul>
Quality fraud	Possible decline in trust in the Company due to quality fraud, falsification of quality inspection results, and other situations	<ul> <li>Ensure strict management of data related to quality control</li> <li>Raise awareness and train employees</li> </ul>
Harassment / human rights abuse	Possible decline in trust in the Company due to human rights abuse, such as abuse of authority and sexual harassment at workplaces	<ul> <li>Establish the Code of Ethical Conduct and the Compliance Manual</li> <li>Establish a consultation service with male and female employees as well as an external contact point with attorneys</li> </ul>
Delays in fostering human resources	Possible stall in development of human resources who will be responsible for the growth of the NOF Group, due to a failure of medium- and long-term human resource development plans	<ul> <li>Promote rank-specific trainings for next-generation human resources for specific issues</li> <li>Promote/foster international human resources and human resource rotation</li> </ul>
Inadequate disclosure of non-financial information	Possible loss of trust from stakeholders due to uncertainty about economic and environmental impact as well as social reputation	<ul> <li>Analyze the current situation and identify targets</li> <li>Establish management indicators and targets and develop specific measures</li> </ul>

#### Sustainability Report > P.68-72

#### 094

## Compliance

#### **Our fundamental view**

The NOF Group has developed an internal control system for ensuring adherence to laws and regulations, the Articles of Incorporation, and various internal rules of the Company and appropriateness of business operations. Regarding

#### **Basic CSR Policy**

We will fulfill our corporate social responsibility and conduct sustainable business activities.

- 1. We will, each and all, act in accordance with the highest standards of corporate ethics.
- 2. We will respect human rights, and enable a diversity of personnel to demonstrate their abilities.
- 3. We will promote responsible care activities, based on the five kinds of safety.
- 4. We will consider the interests of all our stakeholders.
- 5. We will contribute to society in cooperation with local communities.

observance of social norms and laws and regulations, the Company has formulated its NOF Basic CSR Policy as well as its code of conduct known as the NOF Code of Ethical Conduct based on the Policy. The Compliance Committee is established to ensure thorough adherence to the Policy and Code.

#### **Basic Anti-Bribery Policy**

In today's society, preventing corruption related to business activities is recognized as one of the major issues for companies. NOF set forth the NOF Group's basic Anti-Bribery Policy and announced it in the name of the President. We have also promoted its adoption at the Group companies in each country. We will ensure adherence to anti-bribery and corruption regulations in each country and region that have become increasingly strict in recent years.

As a result of these activities, there have been no cases of bribery offenses in the past five years.

#### **Prevention of unfair competition**

NOF prohibits acts of unfair competition such as improper acquisition of trade secrets, actions that could lead to factual errors, and infringement of intellectual property rights, and ensures compliance with the Unfair Competition Prevention Act by providing detailed information in the Compliance Manual and making it thoroughly known. As a result of these activities, there have been no cases of violations of the Unfair Competition Prevention Act during the past five years.

#### **Organizational setup**

Regular meetings of the Compliance Committee are held three times every year. The Committee also meets as required when a compliance issues arises, identifies issues, and devises and follows up on countermeasures. The results are reported to the Board of Directors and deliberated as necessary.

#### **Operations and management**

#### **Compliance Manual**

In order to instill a sense of compliance in its executives and employees, the NOF Group has prepared a Compliance Manual, which explains the Code of Ethical Conduct in detail and in easily understood terms. The universal Global Compliance Manual has been published in eleven different languages.

#### Compliance

# Country-specific compliance manuals

The NOF Group is preparing country-specific compliance manuals based on the legal systems of each country. Following the publication of versions for the U.S.A., China, Indonesia, France, Germany, Belgium, Italy, South Korea, and Brazil where the Group has a large number of employees, the manuals are being utilized in Group companies.

#### **Compliance-related training**

The NOF Group regularly holds compliance-related training sessions for employees. In fiscal 2022, we continued compliance training for new employees and mid-career hires, as well as ensuring awareness of precautions related to the Act against Delay in Payment of Subcontract Proceeds, Etc. for Subcontractors. In addition, we implemented training on the subcontract act for materials-related personnel of affiliates.

#### Obtaining information on the enactment and revision of laws and regulations

We have obtained information on the enactment and revision of laws and regulations by utilizing various sources on a continual basis while taking appropriate actions. In order to reduce risk of overlooking information on the enactment and revision of laws and regulations, the whole Group has introduced a system that enables us to automatically receive information on the enactment and revision of laws and regulations by email.

# Raising awareness by internal magazine

NOF uses its quarterly internal magazine to help raise employees' awareness of compliance. NOF continues activities to raise awareness through relatable articles using cartoon characters.



#### Whistle-blowing system

Consultation desks in Japanese, English, Chinese (Simplified Chinese), Korean, Indonesian, and

Portuguese have been set up at external third-party institutions as contact points for whistle-blowing / consultation in overseas countries where NOF's business bases are located. Employees can contact the desks if they become aware of a violation or potential violation of compliance rules. Persons who report or consult on a violation or potential violation of compliance rules will not be treated disadvantageously because of the report or consultation, and the report or consultation will be handled with confidentiality. This system and contact points are communicated to executives and employees of the Group companies worldwide on a regular basis.

In FY2022, there were 20 cases of reports or consultations, which were mainly about harassment, which was a significant increase compared to before. This is presumed to have been a result of the revision of our internal rules in response to the amendment of the Whistleblower Protection Act in June 2022, as well as careful explanation of the aim of the amended act (search for whistleblowers, prohibition of disadvantageous treatment, etc.) and making the whistleblower contact points widely known. In addition, we carefully investigated the facts of any report promptly and without searching for the whistleblower, and took necessary corrective actions and measures to prevent recurrence.

# NOF's

# Financial Information

- **098** Consolidated business performance indicators
- **099** Consolidated balance sheet
- 101 Consolidated Statement of Income / Consolidated Statement of Comprehensive Income
- 102 Consolidated statement of changes in Net Assets
- **103** Consolidated statement of Cash Flows
- 104 Environmental performance data





### **Consolidated business performance indicators**

										(Millions of yen)
	91th fiscal year March 2014	92th fiscal year March 2015	93th fiscal year March 2016	94th fiscal year March 2017	95th fiscal year March 2018	96th fiscal year March 2019	97th fiscal year March 2020	98th fiscal year March 2021	99th fiscal year March 2022	100th fiscal year March 2023
Net sales	160,963	167,697	170,460	174,057	179,935	189,152	180,917	172,645	192,642	217,709
Ordinary profit	17,582	18,983	20,161	25,001	27,430	30,099	28,830	28,870	37,624	43,183
Profit attributable to owners of parent	9,737	11,703	13,589	17,586	19,913	22,034	21,140	23,302	26,690	33,973
Comprehensive income	13,905	21,851	10,193	24,126	25,364	19,226	11,810	31,606	28,922	33,389
Net assets	112,622	131,313	135,636	152,564	169,572	178,285	178,716	203,516	221,706	240,002
Total assets	176,700	196,865	196,293	217,127	235,874	244,533	235,248	271,536	289,630	309,438
Net assets per share (Ye	n) 610.54	724.46	761.25	1,753.44	1,980.14	2,108.77	2,140.98	2,448.60	2,690.65	2,960.56
Basic earnings per share (Ye	n) 53.10	64.74	76.41	202.27	230.96	259.29	251.72	280.49	323.77	417.02
Diluted earnings per share (Ye	n) —	_	_	_	_	_	_	_	_	-
Equity-to-asset ratio (9	63.32	66.30	68.69	69.90	71.56	72.59	75.64	74.68	76.28	77.29
Rate of return on equity (9	<sup>6)</sup> 9.06	9.66	10.24	12.27	12.42	12.73	11.90	12.24	12.60	14.77
Price-earnings ratio (Time	s) 14.07	13.78	10.44	11.69	13.62	14.54	13.63	20.64	15.50	14.80
Cash flows from operating activities	15,692	14,230	16,906	24,024	20,211	19,864	27,837	30,726	27,393	23,333
Cash flows from investing activities	∆8,056	∆7,894	∆5,408	∆5,831	∆4,881	∆5,540	∆4,838	1,894	∆8,755	∆709
Cash flows from financing activities	∆4,292	∆4,846	∆6,478	∆7,512	∆8,490	∆10,814	∆11,287	∆8,042	△15,312	∆16,170
Cash and cash equivalents	11,788	14,640	18,930	29,215	36,465	39,357	50,684	76,596	81,431	89,081
Number of employees (Number of person	s) 3,857	3,791	3,779	3,712	3,721	3,725	3,718	3,755	3,787	3,818

\* Diluted earnings per share for the fiscal year have been omitted because there were no potentially dilutive common shares.

\* The Company conducted a consolidation of common stock at the ratio of 2 shares to 1 share effective October 1, 2017. Net assets per share and basic earnings per share are calculated based on the assumption that the consolidation was implemented at the beginning of the 94th fiscal year.

\* The Company has adopted the "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) from the beginning of the 96th fiscal year. Figures regarding the business performance indicators for the 95th fiscal year have been adjusted based on the retrospective adoption of the above standards.

\* The Company has introduced the Board Benefit Trust (BBT) in the 97th fiscal year. The Company's shares held by the BBT are included in treasury shares in the consolidated financial statements. Accordingly, in the calculation of the net assets per share, the Company's shares held by the BBT are included in the treasury shares deducted from the total number of shares issued at the end of the fiscal year. In addition, for the calculation of basic earnings per share, the Company shares held by the BBT are included in the treasury shares deducted in the calculation of the average number of common shares during the fiscal year.
\* The Company has adopted the "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020) from the beginning of the 99th fiscal year.

# **Consolidated Balance Sheet**

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2023
Assets		
Current assets		
Cash and deposits	85,430	92,520
Notes and accounts receivable - trade, and contract assets	42,424	45,971
Electronically recorded monetary claims - operating	2,813	3,014
Merchandise and finished goods	25,655	30,079
Work in process	1,693	3,412
Raw materials and supplies	12,552	16,245
Other	2,937	2,706
Allowance for doubtful accounts	∆185	∆199
Total current assets	173,322	193,750

#### / ..... .....

(Millions of yen)	1	(Millions	of yen)	
-------------------	---	-----------	---------	--

	As of March 31, 2022	As of March 31, 2023
Non-current assets		
Property, plant and equipment		
Buildings and structures	75,771	76,870
Accumulated depreciation	∆51,758	<b>∆53,689</b>
Buildings and structures, net	24,013	23,181
Machinery, equipment and vehicles	106,729	109,677
Accumulated depreciation	∆93,181	<b>∆96,252</b>
Machinery, equipment and vehicles, net	13,547	13,424
Land	20,706	20,790
Leased assets	438	490
Accumulated depreciation	∆242	∆344
Leased assets, net	196	145
Construction in progress	1,423	3,927
Other	16,191	17,258
Accumulated depreciation	∆14,132	∆14,863
Other, net	2,058	2,394
Total property, plant and equipment	61,944	63,863
Intangible assets		
Other	947	1,148
Total intangible assets	947	1,148
Investments and other assets		
Investment securities	47,812	44,719
Long-term loans receivable	2	5
Deferred tax assets	985	950
Retirement benefit asset	3,148	3,071
Other	1,521	1,988
Allowance for doubtful accounts	∆53	∆60
Total investments and other assets	53,416	50,675
Total non-current assets	116,308	115,688
Total assets	289,630	309,438

NOF CORPORATION 23 Integrated Report 20

Contents

NOF's Philosophy

#### **Consolidated Balance Sheet**

		(Millions of yen)
	As of March 31, 2022	As of March 31, 2023
Liabilities		
Current liabilities		
Notes and accounts payable - trade	21,262	18,496
Electronically recorded obligations - operating	584	1,230
Short-term borrowings	1,997	2,080
Current portion of long-term borrowings	2,800	150
Lease liabilities	130	103
Accrued expenses	1,514	1,585
Income taxes payable	5,879	8,626
Deposits received	3,803	4,137
Provision for bonuses	3,473	3,521
Asset retirement obligations	169	168
Other	8,853	11,496
Total current liabilities	50,468	51,598
Non-current liabilities		
Long-term borrowings	610	2,332
Lease liabilities	92	178
Deferred tax liabilities	11,117	9,820
Provision for officers' retirement benefits	48	56
Retirement benefit liability	4,992	4,842
Asset retirement obligations	388	388
Other	206	219
Total non-current liabilities	17,455	17,837
Total liabilities	67,924	69,436

	As of March 31, 2022	As of March 31, 2023
Net assets		
Shareholders' equity		
Share capital	17,742	17,742
Capital surplus	15,115	15,052
Retained earnings	166,062	192,092
Treasury shares	∆3,292	∆10,299
Total shareholders' equity	195,627	214,588
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	24,226	21,725
Foreign currency translation adjustment	809	2,683
Remeasurements of defined benefit plans	264	180
Total accumulated other comprehensive income	25,300	24,588
Non-controlling interests	777	825
Total net assets	221,706	240,002
Total liabilities and net assets	289,630	309,438

#### (Millions of yen)

NOF CORPORATION 23

# **Consolidated Statement of Income / Consolidated Statement of Comprehensive Income**

(Millions of yen)

#### **Consolidated Statement of Income**

	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Net sales	192,642	217,709
Cost of sales	123,713	141,766
Gross profit	68,928	75,943
Selling, general and administrative expenses	33,333	35,318
Operating profit	35,595	40,624
Non-operating income		
Interest income	137	174
Dividend income	993	1,197
Rental income from real estate	272	273
Foreign exchange gains	681	793
Other	457	534
Total non-operating income	2,543	2,973
Non-operating expenses		
Interest expenses	60	80
Expenses for conditional assignment	29	29
Rental expenses on real estate	85	82
Expenses for disposal of fixed assets	156	112
Other	182	110
Total non-operating expenses	514	415
Ordinary profit	37,624	43,183
Extraordinary income		
Gain on sale of non-current assets	1,154	7
Gain on sale of investment securities	63	4,840
Gain on extinguishment of tie-in shares	_	34
Total extraordinary income	1,218	4,882
Extraordinary losses		
Loss on sale of non-current assets	0	0
Impairment losses	51	1
Loss on retirement of non-current assets	51	23
Loss on tax purpose reduction entry of non-current assets	697	_
Loss on sale of investment securities	44	0
Other	18	_
Total extraordinary losses	864	25

	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Profit before income taxes	37,977	48,040
Income taxes - current	11,026	14,114
Income taxes - deferred	228	<b>∆89</b>
Total income taxes	11,255	14,025
Profit	26,722	34,015
Profit attributable to non-controlling interests	31	42
Profit attributable to owners of parent	26,690	33,973

#### Consolidated Statement of Comprehensive Income (Millions of yen)

	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Profit	26,722	34,015
Other comprehensive income		
Valuation difference on available-for-sale securities	185	∆ <b>2,500</b>
Foreign currency translation adjustment	1,796	1,957
Remeasurements of defined benefit plans, net of tax	217	∆83
Total other comprehensive income	2,200	∆ <b>626</b>
Comprehensive income	28,922	33,389
Comprehensive income attributable to		
Owners of parent	28,869	33,261
Non-controlling interests	52	127

*.* . .

(Millions of yen)

NOF CORPORATION 23 Integrated Report 20

Contents

NOF's Philosophy

Management Strategies

# **Consolidated Statement of Changes in Net Assets**

											(Millions of yen)	
		Sł	nareholders' equ	ity		Accumulated other comprehensive income			Non-			
(For the Year Ended March 31, 2022)	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	controlling interests	controlling not assots	
Balance at beginning of period	17,742	15,115	154,793	∆7,984	179,666	24,039	∆967	49	23,121	727	203,516	
Cumulative effects of changes in accounting policies			73		73						73	
Restated balance	17,742	15,115	154,867	∆7,984	179,740	24,039	∆967	49	23,121	727	203,589	
Changes during period												
Dividends of surplus			∆6,943		∆6,943						∆6,943	
Profit attributable to owners of parent			26,690		26,690						26,690	
Purchase of treasury shares				∆3,871	∆3,871						∆3,871	
Disposal of treasury shares				10	10						10	
Cancellation of treasury shares			∆8,552	8,552	—						—	
Change in ownership interest of parent due to transactions with non-controlling interests					—						—	
Net changes in items other than shareholders' equity						186	1,777	215	2,179	49	2,229	
Total changes during period	_	_	11,194	4,692	15,887	186	1,777	215	2,179	49	18,116	
Balance at end of period	17,742	15,115	166,062	∆3,292	195,627	24,226	809	264	25,300	777	221,706	

											(Millions of yer
	Shareholders' equity						Accumulated other comprehensive income				
(For the Year Ended March 31, 2023)	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	controlling interests	Total net assets
Balance at beginning of period	17,742	15,115	166,062	∆ <b>3,292</b>	195,627	24,226	809	264	25,300	777	221,706
Cumulative effects of changes in accounting policies					-						-
Restated balance	17,742	15,115	166,062	∆3,292	195,627	24,226	809	264	25,300	777	221,706
Changes during period											
Dividends of surplus			∆7,943		∆7,943						∆7,943
Profit attributable to owners of parent			33,973		33,973						33,973
Purchase of treasury shares				∆7,007	∆7,007						∆7,007
Disposal of treasury shares		0		0	0						0
Cancellation of treasury shares					_						_
Change in ownership interest of parent due to transactions with non-controlling interests		∆ <b>62</b>			∆ <b>62</b>						∆ <b>62</b>
Net changes in items other than shareholders' equity						<b>∆2,501</b>	1,874	∆84	∆711	47	∆663
Total changes during period	_	∆ <b>62</b>	26,030	∆7,007	18,960	∆2,501	1,874	∆84	∆711	47	18,296
Balance at end of period	17,742	15,052	192,092	∆ <b>10,299</b>	214,588	21,725	2,683	180	24,588	825	240,002

Governance

# **Consolidated Statement of Cash Flows**

		(Millions of yen)
	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Cash flows from operating activities		
Profit before income taxes	37,977	48,040
Depreciation	5,909	6,359
Impairment losses	51	1
Increase (decrease) in retirement benefit liability	∆21	<b>∆279</b>
Interest and dividend income	∆1,131	∆1,371
Interest expenses	60	80
Loss (gain) on extinguishment of tie-in shares	_	∆34
Loss (gain) on sale of non-current assets	∆1,154	∆6
Loss on tax purpose reduction entry of non-current assets	697	-
Loss (gain) on sale of investment securities	∆18	<b>∆4,840</b>
Decrease (increase) in trade receivables	∆2,494	<b>∆2,967</b>
Decrease (increase) in inventories	∆7,301	<b>∆9,410</b>
Increase (decrease) in trade payables	3,088	<b>∆3,129</b>
Other, net	2,250	1,107
Subtotal	37,915	33,548
Interest and dividends received	1,113	1,370
Interest paid	∆61	∆78
Income taxes paid	∆11,574	∆11,506
Net cash provided by (used in) operating activities	27,393	23,333

		(Millions of yen)
	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Cash flows from investing activities		
Purchase of investment securities	∆29	∆1,305
Proceeds from sale of investment securities	246	5,612
Purchase of property, plant and equipment and intangible assets	∆7,416	<b>∆6,219</b>
Proceeds from sale of property, plant and equipment and intangible assets	136	22
Net decrease (increase) in short-term loans receivable	∆120	224
Long-term loan advances	_	∆6
Proceeds from collection of long-term loans receivable	4	2
Other, net	∆1,577	960
Net cash provided by (used in) investing activities	∆8,755	∆709
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings	308	<b>∆488</b>
Proceeds from long-term borrowings	329	2,200
Repayments of long-term borrowings	∆5,000	∆ <b>2,800</b>
Proceeds from sale of treasury shares	2	0
Purchase of treasury shares	∆3,871	∆7,007
Purchase of treasury shares of subsidiaries	_	∆0
Repayments of finance lease liabilities	∆159	∆130
Dividends paid	∆6,919	∆7,916
Dividends paid to non-controlling interests	∆2	∆ <b>26</b>
Net cash provided by (used in) financing activities	∆15,312	∆16,170
	1 510	1 100
Effect of exchange rate change on cash and cash equivalents	1,510	1,139
Net increase (decrease) in cash and cash equivalents	4,835	7,593
Cash and cash equivalents at beginning of period Increase in cash and cash equivalents resulting	76,596	81,431
from merger with unconsolidated subsidiaries	_	55
Cash and cash equivalents at end of period	81,431	89,081

NOF CORPORATION 23 Integrated Report 20

# Environmental performance data

# Changes

#### NOF Group

Item	Unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production volume	[thousand tons]	267	243	242	245	266	267	259	229	249	226
Total energy input	[thousand GJ]	3,554	3,461	3,444	3,431	3,464	3,477	3,330	3,247	3,377	3,112
Total substance input	[thousand tons]	256	259	263	267	280	273	253	231	261	236
Water resource input	[thousand m <sup>3</sup> ]	7,949	7,900	7,987	8,240	8,131	8,061	8,232	8,319	8,420	8,498
Greenhouse gas emissions	[thousand tons of CO2]	202	206	195	202	207	205	196	187	189	175
SOx emissions	[tons]	15	7	8	9	7	7	6	4	5	7
NOx emissions	[tons]	92	89	62	93	65	64	55	57	55	55
Soot and dust emissions	[tons]	6	3	3	5	4	5	5	8	4	5
BOD emissions	[tons]	196	127	105	79	160	69	74	104	93	67
COD emissions	[tons]	451	278	318	225	314	302	441	219	154	148
Suspended solid emissions	[tons]	38	35	41	39	32	50	37	40	36	25
Waste quantity from plants	[tons]	23,776	24,024	24,719	25,567	27,947	30,161	28,446	28,955	29,164	25,157
Internally recycled quantity	[tons]	2,242	5,100	3,929	1,177	1,190	955	1,182	1,165	953	914
Externally recycled amount	[tons]	13,438	14,309	14,704	17,055	17,645	19,253	16,426	17,808	17,687	16,547
Final disposal quantity by landfill	[tons]	961	1,157	1,260	1,333	1,168	1,046	1,302	1,588	950	1,095
Emissions of PRTR Act-controlled substances	[tons]	233	232	187	170	167	177	158	147	155	143

Financial Information

# Environmental performance data

#### Domestic Group

Item	Unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production volume	[thousand tons]	216	214	217	219	231	232	225	194	210	188
Total energy input	[thousand GJ]	3,033	3,039	3,016	3,018	2,987	3,004	2,917	2,810	2,892	2,699
Total substance input	[thousand tons]	256	259	263	267	280	273	253	231	261	236
Water resource input	[thousand m <sup>3</sup> ]	6,454	6,396	6,389	6,560	6,374	6,352	6,376	6,435	6,448	6,535
Greenhouse gas emissions	[thousand tons of CO <sub>2</sub> ]	179	184	182	181	173	172	169	158	159	144
SOx emissions	[tons]	13	6	7	9	6	6	5	3	3	4
NOx emissions	[tons]	86	87	60	90	62	60	52	53	50	51
Soot and dust emissions	[tons]	4	3	3	4	3	2	1	2	1	1
BOD emissions	[tons]	35	32	39	28	40	43	33	38	52	39
COD emissions	[tons]	71	61	78	68	73	66	60	60	68	44
Suspended solid emissions	[tons]	38	35	41	39	32	50	37	40	36	25
Waste quantity from plants	[tons]	19,395	19,966	20,508	21,351	23,466	25,976	23,662	24,176	23,796	21,270
Internally recycled quantity	[tons]	2,242	5,100	3,929	1,177	1,190	955	1,182	1,165	953	914
Externally recycled amount	[tons]	13,025	14,011	14,576	16,696	17,267	18,676	16,002	17,320	17,138	15,916
Final disposal quantity by landfill	[tons]	149	159	111	157	117	95	81	681	135	64
Emissions of PRTR Act-controlled substances	[tons]	233	232	187	170	167	177	158	147	155	143

#### NOF

Item	Unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production volume	[thousand tons]	194	193	198	200	211	211	205	178	191	170
Total energy input	[thousand GJ]	2,725	2,751	2,753	2,739	2,728	2,753	2,673	2,572	2,658	2,471
Total substance input	[thousand tons]	234	236	243	248	259	253	233	214	244	218
Water resource input	[thousand m <sup>3</sup> ]	5,832	5,760	5,838	5,967	5,879	5,843	5,832	5,874	5,889	6,007
Greenhouse gas emissions	[thousand tons of CO <sub>2</sub> ]	162	166	166	164	158	157	155	145	146	131
SOx emissions	[tons]	10	2	3	4	3	3	3	1	2	3
NOx emissions	[tons]	84	85	58	88	59	58	50	51	48	49
Soot and dust emissions	[tons]	1	1	2	2	2	2	1	2	1	1
BOD emissions	[tons]	31	29	35	25	37	39	30	34	50	37
COD emissions	[tons]	70	60	78	68	72	65	60	60	67	44
Suspended solid emissions	[tons]	32	29	33	31	25	35	31	33	31	22
Waste quantity from plants	[tons]	18,694	19,156	19,716	20,350	22,372	25,061	22,721	22,529	22,822	20,493
Internally recycled quantity	[tons]	2,242	5,100	3,929	1,177	1,190	955	1,182	1,165	953	914
Externally recycled amount	[tons]	12,631	13,466	14,017	16,132	16,355	17,965	15,235	16,489	16,374	15,242
Final disposal quantity by landfill	[tons]	63	55	60	66	61	60	50	40	54	37
Emissions of PRTR Act-controlled substances	[tons]	192	188	143	123	121	127	118	111	117	109

NOF CORPORATION 3 Integrated Report 20

## **Corporate Information**

(As of March 31, 2023)

Nof Corporation

Head Office 20-3 Ebisu 4-chome, Shibuya-ku, Tokyo, Japan

Established June 1, 1937

Incorporated July 1, 1949

Capital ¥17,742 million

Employees 1,762 (consolidated: 3,818)

#### **Consolidated subsidiary**

25 subsidiaries

#### **Accounting Auditor**

Ernst & Young ShinNihon LLC

### **Stock Information**

(As of March 31, 2023)

#### Listed Stock Exchange

Tokyo Stock Exchange, Prime Market

Securities Code 4403	Number of Shareholders 12,577
Total Number of Authorized 347,000,000	Shares
Total Number of	Shares Issued
80,835,781 (Excluding 2,00	05,595 treasury shares)

#### Status of Major Shareholders

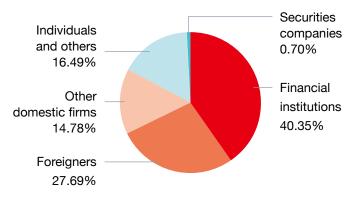
Name / Company Name	Number of Shares Owned	Percentage (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	17,173	21.24
Custody Bank of Japan, Ltd. (Trust Account)	5,180	6.40
Meiji Yasuda Life Insurance Company	3,128	3.86
NOF Shineikai	1,715	2.12
BNYM AS AGT/CLTS 10 PERCENT	1,521	1.88
Mizuho Bank, Ltd.	1,463	1.81
NOF Kyoeikai	1,331	1.64
NORTHERN TRUST CO.(AVFC) RE FIDELITY FUNDS	1,275	1.57
SUMITOMO LIFE INSURANCE COMPANY	1,245	1.54
Sompo Japan Insurance Inc.	1,110	1.37

\* The number of shares is rounded down to the nearest thousand shares.

\* Percentage of ownership excludes 2,005,595 shares of treasury stock.

\* Percentage of ownership is rounded down to the second decimal place.

#### Distribution of shares by type of shareholde



# **Editorial Policy**

To demonstrate the sustainable growth of the NOF Group to our broad range of stakeholders, this report mainly focuses on management strategies, business overview, financial information, and non-financial information (E: Environmental, S: Social, G: Governance), among other matters. Information that is not included in this report will be published on our website as the Sustainability Report, which complements the information in this report.

We regard this report as a tool for dialogue with our stakeholders and will strive to enrich the content.

#### Report profile (scope of the report)

Reporting period	FY 2022 (From Ap	FY 2022 (From April 1, 2022 to March 31, 2023) *Includes some activities, etc. after April 2023							
	NOF CORPORATION and its subsidiaries and affiliated companies (the following are indicated and covered in this report)								
Covered organizations	NOF Group	NOF CORPORATION and its 25 consolidated subsidiaries *Financial information is marked for the NOF Group, and environmental information is based on the NOF Group, with each individual data item marked for its subject.							
	Domestic Group	NOF CORPORATION and its 13 domestic consolidated subsidiaries							
	NOF/NOF CORPORATION/ Non-consolidated	NOF Corporation only *Society-related information is centered on NOF and includes some of its subsidiaries and affiliated companies.							
Reporting cycle	Published annua	ally as an annual report							
Issuance	September 20	23 (next report: September 2024)							
Guidelines Referenced	ISO26000: 2010 Guidance on Social Responsibility, Japanese Standards Association GRI Sustainability Reporting Standards								

#### Disclaimer

This Report contains forward-looking statements based on management plans and expectations at the time of publication, as well as past and present facts regarding the NOF Group. These forward-looking statements comprise assumptions and judgments based on currently available information, and thus the actual events and outcome of future business activities may differ from those predicted due to changes in various conditions.

# For more information

#### **NOF** website

#### www.nof.co.jp/english



#### **Investor Information**

www.nof.co.jp/english/ir

#### **Sustainability Information**

www.nof.co.jp/english/csr

#### Naruhodo NOF!

www.nof.co.jp/contents/about/

#### **Corporate Governance Report**

www.nof.co.jp/files/ir/english/home/corporate\_governance.pdf

#### **Annual Securities Report**

www.nof.co.jp/english/ir/library/financial-statements

#### **Sustainability Report**

www.nof.co.jp/english/csr/detail/518 Please see the Sustainability Report for the GRI Standards Content Index.



#### About the cover art

The cover art of this report is "Alps Village and Hot Air Balloon" by Magari Oishi, a member of the Shougaisha Jiritsu Suishin Kikou Association. The NOF Group supports the social participation and independence of artists with disabilities.



# **Solution Solution**

- Yebisu Garden Place Tower, 20-3 Ebisu 4-chome, Shibuya-ku, Tokyo, 150-6012, Japan
- https://www.nof.co.jp/english

0

#### Inquiries : Corporate Communications Department

#### 

- Our corporate name and marks are registered trademarks of NOF CORPORATION in Japan and several
   other countries.
- The product names which are marked "®" in this Report are registered trademarks of NOF CORPORATION in Japan except for those with notices.

0

\_ \_ I