

















# At a Glance

Foundation

1916

**Number of Employees** 

30,378 (consolidated)

#### Market Share

### Number of Global Sites

Headquarters.... .....6 Sales sites, etc......112 Production sites ·······66 R&D centers ······21

(As of March 31, 2021)

### Major Competitive Advantages of NSK's Business

- ▶ Extensive product lineup as a comprehensive bearing manufacturer
- ▶ Accumulated expertise in customer needs and technology for a wide range of industries and applications
- ▶ Diverse business relationships/customer base including machinery manufacturers, automakers, auto component manufacturers, distributors, sales outlets, and suppliers, etc.
- ▶ Technological capabilities in technical development, proposals, and problem-solving based on our Four Core Technologies plus One
- ▶ Global manufacturing, supply, and technical support capabilities delivered via a global network
- ▶ Global management system

#### NSK Report 2021 Editorial Policy

The NSK Report 2021 is designed to provide readers with a deeper understanding of how the Company works with stakeholders to create collaborative value that meets the expectations of the world over the midto long-term based on its Motion & Control™ concept, and of the processes that will achieve both social contribution and corporate development.

This Report provides a concise summary of all information deemed important in the Group's efforts to create collaborative value. For more detailed

to form the Value Reporting Foundation (VRF).

information about the NSK Group's products, business and financials, we ask that you refer to the Company's website. Detailed information about NSK's sustainability can be found in the Sustainability Website. In putting together this Report, we referred to the International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC, currently the VRF\*) and the Guidance for Collaborative Value Creation formulated by Japan's Ministry of Economy, Trade, and Industry. \*In June 2021, the International Integrated Reporting Council (IIRC) merged with the Sustainability Accounting Standards Board (SASB)

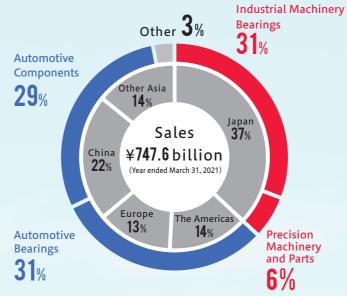
Guidance for Collaborative Value Creation

#### Disclaimer

Statements made in this integrated report with respect to plans, strategies. and future performance that are not historical facts are forward-looking statements, NSK cautions that several factors could cause actual results to differ materially from those discussed in forward-looking statements. This document is an English translation of NSK Report 2021 dated September 30, 2021, that was originally prepared in the Japanese language, and it is provided for convenience purp oses only. Therefore, this document does not include any event that has occurred, or has been found to have occurred, on or after September 30, 2021, NSK makes no representation or warranty that this document is a complete or accurate translation of the original Japanese text, and it is not intended to be relied upon. If there is a discrepancy between the Japanese and English versions, the Japanese version shall prevail. This document is not intended and should not be construed as an inducement to purchase or sell stock in NSK.

### Sales Breakdown by Business Segment/by Region

NSK is involved in two business segments: the Industrial Machinery Business, consisting of industrial machinery bearings and precision machinery and parts, and the Automotive Business, consisting of automotive bearings and automotive components.



# Industrial Machinery Business ¥275.2 billion

This business segment provides a variety of industrial machinery bearing types, ranging in size from miniature bearings to extra-large bearings, to meet a wide range of demands in all industries. Meanwhile, typical precision machinery such as linear motion products, including ball screws and linear guides, as well as mechatronics parts, including XY tables, play a key role in machine tools and semiconductor production equipment that require precision positioning.

This segment provides various types of bearings, automatic transmission products, electric power steering, ball screws for electric brakes, and other parts that are used in automobiles. Amid the accelerating innovation in automobile technologies, such as power source diversification and autonomous driving. the Company is advancing the development of new technologies and products, creating new value, and working on valuable proposals.

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# Top Message

The business environment in which NSK operates is undergoing rapid change. Against this backdrop, the Company has initiated steps to enter its next growth phase under a new leadership structure following the appointment of Akitoshi Ichii as President and Chief Executive Officer and Toshihiro Uchiyama as Chairman and Director in April 2021.

NSK has never wavered from its corporate philosophy, which is to contribute to a safer, smoother society and help protect the global environment through its innovative technology integrating Motion & Control™ while working across national boundaries to improve relationships between people throughout the world.

Guided by our corporate philosophy, we will continue to collaborate with stakeholders to create value with the aim of contributing to the resolution of social issues while achieving sustainable growth as a company.



Toshihiro Uchiyama Chairman and Director

Akitoshi Ichii President and Chief Executive Officer



### NSK Corporate Philosophy and NSK Vision 2026

The NSK Corporate Philosophy comprises four parts—the Mission Statement, Management Principles, Corporate Message, and Action Guidelines. It is based on creating the collaborative value on which all NSK Group employees rely. Moreover, NSK Vision 2026, formulated to mark the 100th anniversary of the Company's founding, expresses the vision that we aspire to achieve over the mid- to long-term, with 2026 as the target year. The NSK Group is committed to achieving further growth based on the NSK Corporate Philosophy and NSK Vision 2026.

Mission

**Statement** 

Management Principles /

**Action Guidelines** 

#### **Mission Statement -**

NSK contributes to a safer, smoother society and helps protect the global environment through its innovative technology integrating Motion & Control™. As a truly international enterprise, we are working across national boundaries to improve relationships between people throughout the world.

#### Management Principles

- 1.To provide our customers with innovative and responsive solutions through our world leading
- **2.**To provide challenges and opportunities to our employees, utilizing their skills and encouraging their creativity and individuality.
- **3.**To identify the needs of the present and future, and to meet these needs by being flexible, agile, and dynamic.
- 4.To contribute to the communities in which we operate.
- 5.To manage our business from an international perspective and to develop a strong presence throughout the world.

#### **Action Guidelines**

Beyond Limits, Beyond Today

**Beyond Frontiers** Beyond Individuals **Beyond Imagination Beyond Perceptions** Challenging the Future

### **Corporate Message**

NSK REPORT 2021 3

**Responsive and Creative** Motion & Control<sup>™</sup>

**NSK Vision 2026** 

**NSK Vision 2026** 

### SETTING THE FUTURE IN MOTION

We bring motion to life, to enrich lifestyles, and to build a brighter future. Dedicated to uncovering society's needs, we set ideas in motion, to deliver solutions beyond imagination. We're NSK.

And, we're setting the future in motion.

# Together with NSK Corporate Philosophy - Our History-

In 1916, NSK was established as Japan's first manufacturer of bearings in Osaki-cho, Ebara-gun, Tokyo (the site of its current headquarters: Osaki, Shinagawa-ku, Tokyo). With a history that spans more than 100 years, the Company has developed an array of innovative technologies and contributed to the reduction of energy loss through all of its products including bearings. In 1991, on the occasion of the 75th anniversary of its founding, NSK formulated its Corporate Philosophy, which defines the "spirit," "direction," and "ideal image" of NSK in the 21st century.



NSK headquarters and factory (circa 1930)

#### For more information on NSK's history, please refer to the following.

NSK Report 2020 PP. 2-3 NSK's History: Foundation for Collaborative Value Creation in https://www.nsk.com/investors/library/pdf/nsk\_report/ir202003e.pdf NSK Report 2019 PP. 4–5 History of NSK's Overseas Expansion 🛄 https://www.nsk.com/investors/library/pdf/nsk\_report/ir201903e.pdf NSK Report 2018 PP. 2-3 NSK's History of Creating Value 🛄 https://www.nsk.com/investors/library/pdf/nsk\_report/ir201803e.pdf NSK Report 2017 PP. 2–3 The Pioneering Spirit that Has Endured Throughout the 100 Years of NSK !! https://www.nsk.com/investors/library/pdf/nsk report/ir201703e.pdf NSK Report 2016 PP. 2–3 NSK's Business Development History: 100 Years of NSK 🛄 https://www.nsk.com/investors/library/pdf/nsk\_report/ir201603e.pdf

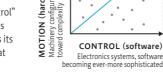
### NSK Corporate Philosophy — What Is the Purpose of NSK's Existence?

The NSK Corporate Philosophy comprises four parts—the Mission Statement, Management Principles, Corporate Message, and Action Guidelines. It is based on creating the collaborative value on which all NSK Group employees rely. Taking the view that NSK works diligently to support a variety of industries and to expand its business overseas, while further developing as a company that contributes to society through our technologies and the quality of our products, the Mission Statement sets the guidelines for what is needed and how to communicate so that NSK becomes a company that is needed by society, and as policy sets forth the following four concepts.

Mission Statement NSK contributes to a safer, smoother society and helps protect the global environment through its innovative technology integrating Motion & Control<sup>TM</sup>. As a truly international enterprise, we are working across national boundaries to improve relationships between people throughout the world.

### Motion & Control™

Each of these terms represents our business fields. Specifically, "Motion" symbolizes our complex hardware, machinery, and systems, whereas "Control" refers to our sophisticated software and electronics systems. NSK will foster this Motion & Control™ as its key value and asset, and strive to be a company that constantly works to fulfill society's needs.



### Contribute to a Safer, Smoother Society

The social role played by NSK is to ensure that moving objects such as automobiles, industrial machinery, and precision machinery operate properly and can accomplish whatever task they are designed for. This, in turn, supports a range of industries and makes society as a whole run smoother and safer.

Automobile HUB III

/third-generation

Non-Japan sales

3 Help Protect the Global Environment The NSK "spirit" and "direction" espoused in our Corporate Philosophy continues to be the starting point of NSK's efforts at sustainability. Prior to NSK envisions itself as contributing to the protection of the global the era of the terms "CSR" and "ESG," NSK clearly stated its engagement environment. To this end, NSK strives to develop products that contribute with society and efforts to protect the environment within its Corporate to the environment by enabling a longer service life span, that are more Philosophy as it carried out its corporate activities. compact, and that reduce friction. We seek to maximize our environmental contribution by conserving energy and resources at the customer usage So that each NSK Group employee will reflect on our Corporate

Non-Japan sales

Through NSK Corporate Philosophy

Philosophy and make it his/her own code of conduct, July 26 of every year has been designated as "NSK Corporate Philosophy Day" (see P. 55). NSK aims to balance its contribution to the resolution of social issues with sustainable growth as a company that is needed and trusted in the world based on its corporate philosophy.

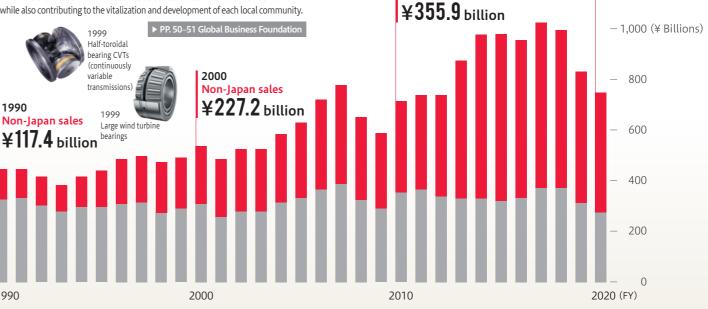
### 4 Work Across National Boundaries to Improve Relationships between People throughout the World

stage by promoting products. In addition, we promote energy and resource

in our own company, and strive to minimize the environmental burden.

conservation, as well as the reduction of environmentally harmful substances

NSK has long been promoting globalization. We create management, R&D, production, and sales systems that can fully utilize the characteristics of each region and make the most of human resources across countries. All of this has been done while also contributing to the vitalization and development of each local community.



### **NSK's History**

■Trends in NSK's Japan/Non-Japan Sales ■ Japan ■ Non-Japan



Non-Japan sales

1960

1958-1972 Business diversification and strengthening of the management

Full-fledged start of

1984-1993 Tackling the challenges of Motion & Control™ and deepening globalization

Promoting reform of the business

Looking toward NSK's 100th anniversary

2016– Embarking on a new chapter of evolution toward the next 100 years

NSK's History

World Trend

A period of intense economic growth for Japan

Ball screws for

1970s Two oil crises

1970

Non-Japan sales

Latter 1980s Trade friction First half of 1990s Burst of economic bubble Economic growth in emerging countries

2007-2008 Financial crisis

2009-2015

Great East Japan

Earthquake

2020 COVID-19 pandemic

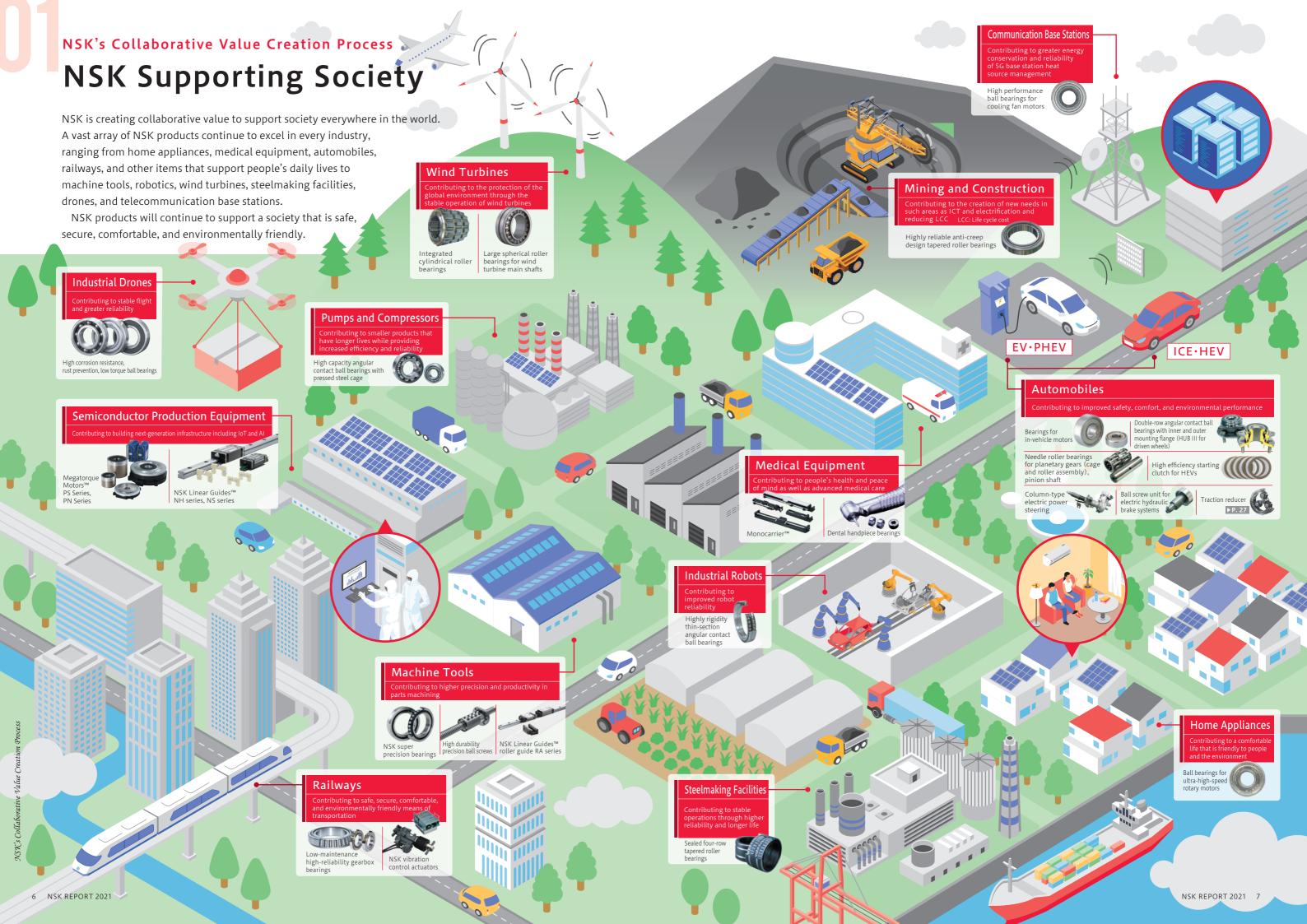
2020

Non-Japan sales

¥471.8 billion

► NSK Website Company History !! https://www.nsk.com/company/history/index.html

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8 NSK REPORT 2021

As communicated by our vision of "Change & Go Beyond to Set the Future in Motion," NSK is committed to continuously creating new value proposals.

At the time of my appointment as president and CEO in April of this year, I set "Change & Go Beyond to Set the Future in Motion" as my vision as president and as a new Companywide initiative. I envision NSK as a company that keeps society in motion 100 or even 1,000 years into the future, a company that is needed, trusted, and relied upon by society, and a company that is vibrant, energetic, and engaging as it works toward high future-oriented goals while continuing to take on new challenges and moving forward. Through a process of ongoing evolution, I would like to firmly pass the baton that has been entrusted to me to the next generation.

### Facing the Challenges of "Change & Go Beyond"

The world is constantly moving to the tune of such key themes as decarbonization, electrification, digital transformation, remote work, and AI, as well as falling birthrates and aging populations. A passive response to these changes and advancements will result in our falling behind the times and a loss of competitiveness in the marketplace. Maintaining a sense of crisis is both healthy and important. While the experience and knowledge we have cultivated over our 100-year history is irreplaceable, our traditional growth strategies, way of dealing with customers, and services will gradually become obsolete or impractical. Instead of considering things as an extension of conventional thought, there is a need to imagine the world 10 or 20 years down the line and to carefully consider what we need to do now to adapt accordingly. As we move forward, we must continue to set high goals for the future, take on new challenges, and go beyond what we have built in the past. I would like us to continue proposing new value to society by means of the concept of "Change & Go Beyond" and build the competitiveness necessary to survive in this era of change.

It is important to have a concrete image of the form and vision of what we hope to achieve by "Change & Go Beyond." If we communicate this vision in clearer, more expressive language, it can be shared by the entire working team. Amid ongoing discussions on what form NSK should take in the next 10 to 20 years, how we should go about achieving our goals, and given our new mid-term management plan, it is important for each division and department to have a more concrete vision of their

aspirations. To realize our vision, as a company we will create a form that can be shared together with a system that enables quick and flexible decision-making and the use of cross-sectional, agile resources without being tied up by precedent.

In fiscal 2020, the year ended March 31, 2021, the Company posted net sales of ¥747.6 billion, operating income of ¥6.4 billion, and an operating income margin of 0.9%. This represented a decrease in sales and profits for a third consecutive year. Amid the ongoing business environment deterioration brought about by U.S.-China trade friction and the COVID-19 pandemic, it will remain difficult to achieve the sales and profit targets set under the 6th Mid-Term Management Plan. In the fiscal year ending March 31, 2022, the final year of the Plan, we assume that the demand environment will recover from the previous year. However, we also recognize that uncertainties surrounding such issues as the supply chain, the spread of new COVID-19 variants, and soaring material costs will remain. The important thing is to continue improving even against the backdrop of this anticipated uncertainty. We will always operate while keeping an eye on the next year, the year after that, and beyond.

Even though the business environment surrounding NSK is changing, I believe that three areas—the environment, electrification, and digital transformation—will be key for the Company to continuously collaborate with its stakeholders to create value and grow.

#### **Environmentally Friendly Technologies**

Conservation of the global environment is part of our corporate philosophy and one of the reasons for our existence. We also position the environment as a core value that has the highest priority in management decision-making and activities, alongside safety, quality, and compliance. The key performance required of our products is low torque, that is, reduced friction for the smooth motion of machines and vehicles. The smooth motion of machines and vehicles in such industries as automobiles, home appliances, medical equipment, machine tools and robotics, wind power generation, communications base stations, and data centers will help increase efficiency and save energy. One of our core technologies is tribology, understanding and controlling

#### **NSK's Collaborative Value Creation Process**

### To Our Stakeholders



NSK will promote further advancements in environmentally friendly technologies as an additional strength.

friction. Improving the performance of each bearing and reducing torque leads to a reduction of energy loss in customers' products and machines. Moreover, when transmitting power not only with a single bearing but also in a complex manner with multiple shafts and gears, we aim to improve our proposal capabilities and how to combine and rotate bearings to achieve the optimum design for the entire power transmission system. Even in reducing CO₂ emissions at factories, I would like us to be a company that can work with its customers to create solutions that enable energy savings by means of its products, which support the motion of machine tool manufacturers' equipment and machines. With tribology at the core of our business, we have been working on improving and evolving this branch of engineering for some time. However, the concept of product design up to now has focused on quality, weight, and cost. In addition to these, awareness of the need to reduce CO₂ emissions is now on the rise. I would like all the Company's employees to feel proud that we are earnestly addressing environmental issues and that all our daily activities are making a difference for the betterment of the environment. For this reason, we have begun to introduce and share NSK's collaborative value efforts through training, e-learning, and the use of digital signage.

NSK has announced details of two environment-related milestone targets. The first is to substantially offset CO<sub>2</sub> emissions (Scope 1, 2, and 3) from its business activities by helping to reduce customers' CO<sub>2</sub> emissions through the Company's products by 2026. The second is to reduce CO<sub>2</sub> emissions in business activities by 60% compared with fiscal 2017 by 2050. With global environmental trends moving ahead

of schedule, it is imperative that we accelerate our efforts. Therefore, in June 2021, the Carbon Neutrality Department was established as an organization under my direct supervision. From a Companywide as well as mid- to long-term perspective, we will promote energy-saving activities to reduce CO<sub>2</sub> emissions; the reform of materials, parts, and construction methods; and the procurement of renewable energy. In addition, to further deepen employee awareness, our mission is to reduce CO<sub>2</sub> emissions and to produce indicators that visualize the amount of contribution. I believe that in the near future NSK's products will be produced in factories with zero environmental impact and that NSK's products and services will contribute significantly to reducing CO<sub>2</sub> emissions, which will enhance our competitiveness in the market. We will continue to promote further advancements in environmentally friendly technologies through our efforts toward carbon neutrality as an additional NSK strength.

PP. 21–23 NSK's Environmental Contributions
P. 37 Environmental Management

#### **Growth Strategy in the Era of Electrification**

The trend toward electrification is closely related to our business. In our Automotive Business, the shift from gasoline-powered vehicles to hybrid electric vehicles (HEVs) and battery electric vehicles (BEVs), as well as hydrogen and biofuel vehicles, is accelerating. Due to this change, the technical requirements for automotive parts are becoming higher in terms of their highspeed rotation, the need for compactness and lighter weight,

low noise, and durability. NSK will respond to these technical demands and contribute to the development and widespread use of environmentally friendly vehicles. Recognizing that the replacement by vehicles that contribute to the environment and that suit the characteristics of each region will spread globally, we currently expect the market share of both HEVs and BEVs to grow significantly by 2030. Depending on the design, the number of bearings used per unit in HEVs is generally expected to increase, whereas in the case of BEVs it is expected to decrease. In contrast, demand for small motors will increase due to electrification. Demand for bearings is expected to increase moderately over the next 10 years due to the growth of HEVs. Assuming, however, that bearing demand will decrease due to the further expansion of the BEV market thereafter, we are working on a strategy and will accelerate the development of new technologies and new products suitable for electric vehicles.

In our Industrial Machinery Business, bearing demand for use in small motors will continue to grow significantly due to increased connectivity as well as the accelerating need for electrification and automation as 5G and IoT become more widespread. Examples of this include the small motors for cooling fans in data center servers and communications base stations as well as industrial robots in the bid to save labor. In addition, the electrification of various functions in automobiles will dramatically increase the demand for in-vehicle motors, and the market for small ball bearings that support the rotation of motors will expand. In October 2020, we established the Electrical & Electrification (E&E) Headquarters within the Industrial Machinery Business Division Headquarters with the aim of expanding our business to meet this demand. In the past, we had dealt with each business segment for automobiles and industrial machinery separately. From now, we will unify technical development, production system, sales, and other departments and respond more flexibly to improve product capabilities, cost competitiveness, and quality.

Contributing to Technological Innovation
Aiming for Sustainable Growth

P. 24–25 Further Growth via "Electrification,"
"Automon, Ladbor-saving," and "Environment"

PD 26–27 Toward the Fra of Auto Electrification

# Aiming for Optimal Proposals by Utilizing Digital Twin Technology

Another of the key themes is digital transformation. NSK has been digitizing its business systems since the 1970s. We have created and utilized our own systems while improving them and making them compatible with external systems. First, by migrating the platforms of those systems to open software, we will proceed with system reconstruction and the inspection and standardization of business processes.

NSK is currently focusing on digital twin technology in its application of digital technology. Until now, it could be said that know-how accumulated through empirical engineering was for the most part responsible for the advances in the field of development and design. By further deepening the process

of digitization, I believe that it will be possible to analyze the phenomenon caused by friction more theoretically, shorten development lead times, and make more appropriate proposals. For example, we have been optimizing grease composition for use in rotating components mainly through real-world experiments. With the evolution of digital visualization technology, however, grease behavior can be theorized, regulated, and verified in a simulation. The torque of a single bearing varies depending on its size and specifications, and the efficiency of energy transmission and rotational precision vary depending on the combination of the two. Therefore, digital twin technology enables us to make proposals on how to best match bearings with specifications for an application or an overall system. We are aiming to create new value that leads to safer, more secure proposals that are better for the global environment.

It is also important to be able to properly explain the basis for NSK product designs. The fact that these can be explained makes it easy to propose that changing something in the design would be better even in cases where the customer's parts and usage conditions change. I believe that digital twins will also make it possible to further refine this strength.

Contributing to Technological Innovation
Aiming for Sustainable Growth

P 27 Application of Digital Technology

### No. 1 in Quality and Trust

Quality and reliability are essential for a company to be needed and selected by its customers and society. Quality and reliability are not just about the form and performance of the products and services we offer. Honest and sincere sales support, solid technical proposals, and on-site capabilities such as manufacturing know-how also require quality and reliability that are supported by all stakeholders involved in the supply chain and our employees. The important thing is to accurately understand and meet customers' evaluations and expectations. I am now telling employees to take a closer look and to reaffirm this. Our strength lies in our precision processing technology and on-site engineering capabilities that enable us to continue to manufacture products, from high-mix, lowvolume production to mass production, in a stable manner and to guarantee their quality. But of course, our competitors are also working to produce good products. In fact, these competitors might be responding more quickly than NSK. The quality and accuracy levels required by customers are increasing, and in the competitive environment of our business, competitors in China are gradually building up their capabilities. Previously, customers who have had a long relationship with us might have forgiven us even if our response was somewhat tardy, but that should not be the case. As our competitors will probably continue to raise the bar, if there are parts for which another company is superior or if there are parts that are inferior with respect to the demands of the market, we will dutifully admit that we are losing the game and will have to work hard to become even better. At such times, it is easy for precedents and successful experiences of the past

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automotive parts are becoming higher in terms of their high
application of digital technology. Until now, it cou
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was for the most part responsible for the advances

### To Our Stakeholders

to get in the way. Rather than stagnate, we must accept what is in front of us and be prepared to start over and further refine our strengths, especially the strengths of quality and reliability. I want there to be a healthy sense of urgency throughout the Company and an understanding that our competitors will catch up with and overtake us in 5–10 years. In addition, quality and reliability that support the brand power of NSK are important assets that form the pillars of our business domains. For the very reason that our reliability is backed by quality, we can face the challenges of new things and keep changing. It is important that this pride and self-confidence is resolutely passed on to the next generation. To that end, we will again pursue quality and reliability while daring to stick to the goal of remaining No. 1.

P. 31 6th Mid-Term Management Plan Targets and Progre

### Being a "Fulfilling Company to Be a Part Of"

One of my missions as president is to ensure that NSK is a "fulfilling company to be a part of." It is important for NSK to be a company where employees find value in the work they do and the people they meet, a company where the experience of working at NSK becomes a learning experience, and a company where employees find it interesting to work. This applies not only to employees but also to customers, distributors, and suppliers. It is vital that all stakeholders are happy to work with NSK and that the Company is respected by local communities.

To that end, I will work to create a culture where we can accept diversity while mutually respecting and being considerate of each other. I consider it my duty to nurture a culture in which people can freely discuss various ideas and thoughts with peace of mind, and to create an environment where we can take on challenges. In addition, the fact that the experience of working at NSK is valuable to a person means that his or her career will be recognized by society. Whether a salesperson or an engineer, working at NSK is credible and worthwhile. There are opportunities to build a lot of experience and to receive education in the Company. This education is not just a case of completing a program, as the skills gained can also be applied to the outside world. For example, this can take the form of a qualification and an asset that is considered to have value. In terms of experience, it is important for the Company to firmly establish and implement systems, such as job rotations. There are also those who study at NSK and seek opportunities to play active roles elsewhere. I am delighted to hear what they are doing outside NSK. On the other hand, if working at NSK increases people's value, good people will gather at NSK. Increasing the value of human resources is essential for NSK to continuously create value, and I will continue to focus on this aspect in the years to come.

In terms of human resources, we have been selected as a Nadeshiko Brand for the second consecutive year. Recognizing the promotion of career advancement for women as one of its management issues, NSK is advancing initiatives across all levels, including recruitment and training as well as promotion. In addition to gender, I believe that we have promoted diversity and inclusion in a wide range of areas, such as nationality, LGBTQ +, career recruitment, and support for work-life balance, as well as promoting work-style reforms such as remote working.

Historically, NSK has had a small number of female employees, so the number of female managers remains small. However, our many talented women are playing active roles. It might take a little longer, but the number of female managers will steadily increase. As role models, our current female managers will serve as a goal and encouragement for the younger employees who will follow. In the meantime, as far as support for work-life balance is concerned, it is becoming more natural for male employees, as well as female employees, to take childcare leave. Childcare leave for men not only is about supporting a work-life balance but also serves as a touchstone for a culture that expands workstyle options and accepts diverse values as a matter of course. In terms of employee health, our efforts regarding both mind and body have been highly evaluated. NSK has been certified as a White 500 company, which is in recognition of our outstanding health and productivity management organization, for the fourth consecutive year.

As president, I think the most important thing I can do when interacting with employees is engage in direct communication. Considering the COVID-19 pandemic, business trips in Japan and overseas have unfortunately been beyond our control, with communications with overseas employees in particular limited to video messages. In the months ahead, as restrictions on travel are eased, I would like to take as much time as possible and put more effort into dialogue with employees. I also believe it is important to take seriously the questions and problems received through communications and how we respond to them.

#### **Deepening of Corporate Governance**

Last year, the Board of Directors consisted of five outside directors and four internal directors. With the outside directors thus forming the majority, we have been further strengthening the monitoring functions of the Board. In addition, we are discussing NSK's mid- to long-term management and direction while also making efforts to utilize those discussions in execution. At about half of the year's Board of Directors' meetings a time frame is set for discussing mid- to long-term themes and to actively exchange opinions. The outside directors are structured in accordance with their experience, knowledge, and diversity, such as corporate managers with expertise in finance or accounting and are not bound by accepted and customary practices within the Company. With a variety of opinions exchanged from logical and objective points of view, I think this will lead to the improvement of NSK's mid- to long-term corporate value.

Among the things that have become more and more talked about in discussions with institutional investors are the evaluation metrics regarding executive compensation and ESG. Compensation for the Company's executives is determined by the Compensation Committee, which is chaired by an outside director. The compensation package for executive officers consists of fixed basic compensation and performancebased compensation that fluctuates depending on business performance. The compensation ratio is approximately 4:6, with ESG evaluation metrics also incorporated into performancebased compensation. For a company to continue to be needed

and trusted by society, not only financial sustainability but also non-financial strength is important. We have therefore set targets for safety, quality, compliance, and the environment, which are our core values, and are working on them as the evaluation metrics of executive officer compensation. Moving forward, we will continue to set goals and evaluate such non-financial value in the years to come.

▶ PP. 60–63 Corporate Governance

#### Mission Statement and SDGs

Our mission statement is to contribute to the realization of a safer, smoother society, which is a social issue, and to help protect the global environment through Motion & Control™. Under this mission statement, the SDGs Declaration stipulates that we respect all 17 goals of the SDGs, select seven businessrelated goals as important issues, and actively promote related initiatives. Our tribology technology contributes to the reduction of CO<sub>2</sub> emissions and the development of the industrial society. I also believe that it is necessary to openly create new value in collaboration with customers, universities, and research institutes to contribute as a company in response to the greater movements of society. For example, the wording adopted in the Declaration of NSK's Initiative 1 states that "we will contribute to a safe and resilient social infrastructure through innovation." In addition to contributing to the mobility society and renewable energy through our products, we are participating in a research project (open innovation) that enhances the convenience of electric vehicles by enabling wireless power supply while the electric

vehicle is running. These efforts will lead to the achievement of Goal 11 of the SDGs, "Sustainable Cities and Communities."

PP. 4–5 Together with NSK Corporate Philosophy – Our History – P. 20 Collaborative Value Creation and SDGs Declaration P. 49 Collaboratively Creating Sustainable Value through Open Innovatio

#### **Toward Collaborative Creation of** New Social Value

Incorporated into our customers' products, such as bearings, automotive components, and linear motion products, our tribology technology supports their functions and improves efficiency to save energy but is not limited to our customers' products alone. For example, our technology is utilized on the production lines of products such as automobiles and in the machines for making the equipment used on production lines. NSK's products are involved in the entire value chain of industrial systems and have contributed to the reduction of energy loss throughout industry. As the movement toward a carbon neutral society accelerates, NSK believes that it can make further contributions, and I personally would like to lead in the collaborative creation of new social value with our stakeholders.

To be a company that keeps society in motion 100 or even 1,000 years into the future, a company that is needed, trusted, and relied upon by society, and a company that is vibrant, energetic, and engaging that works toward high future-oriented goals while continuing to take on new challenges and moving forward, we will endeavor to "Change & Go Beyond." As we work toward achieving our goals, we ask for your continued support and cooperation.

For a company to be needed and trusted by society, it is vital to exhibit financial sustainability together with non-financial strength.



#### **NSK's Collaborative Value Creation Process**

### NSK's Business Model for Collaborative Value Creation

Under its Corporate Philosophy, NSK presented "NSK Vision 2026" and "Vision for 2026," and is currently implementing the 6th Mid-Term Management Plan (6th MTP), which is positioned to cover the first three years for realizing these visions.

The business environment encompassing NSK is continuously changing. The Company therefore aims to balance its contributions to resolving social issues with its sustainable growth as a company by continuing to create collaborative value with stakeholders throughout the value chain. This effort will rely on effectively and efficiently utilizing a diverse range of capital while capturing global megatrends and the direction of progress.

### **NSK Vis**

Corporate

ion 2026

Sales/

**Aftermarket** 

**Philosophy** 

### **Global Megatrends**

Decarbonization, Electrification, Automation, Renewable Energy, IoT, AI, Digitalization, Remote, Distributed, Non-contact, Falling Birthrates, Aging Populations



Sustainable Growth of NSK

#### **Collaborative Value** with Stakeholders

Outcomes

Environmental contribution

(low friction, high efficiency, improvement of transmission efficiency) Contribution to an advanced technological society

Realization of a more prosperous society Growth of a wide range of industries

Improvement of shareholder value



# Advancement of a mobility society

# NSK's Seven Key SDGs

### **Diverse Capital and Inputs**

### Manufacturing Capital

- Raw materials: Steel, greases and oils, externally procured components
- Global production sites, manufacturing facilities
- Process set-ups, process

### Intellectual Capital

- 100 years of accumulated
- Four Core Technologies plus
- Knowledge/expertise in specialist fields
- R&D centers

#### **Human Capital**

- Highly qualified engineers, skilled workforce, sales personnel, globally minded talent
- Corporate governance structure (Three Committees system, global compliance



#### **Financial Capital**

Capital, interest-bearing debt, cash reserves



#### Social/Relationship Capital

- Relationships of trust with external parties (customers. distributors, sales outlets, users, suppliers, local communities)
- R&D structures with external
- Globally recognized and trusted NSK brand



### **Natural Capital**

• Minerals (e.g., iron ore, coal), water, energy

Production sites (plants)

Japan: 20 Overseas: 46

R&D centers

At 21 locations in 11 countries

Technology-related expenses

#### ¥28.6 billion

Ratio of new employees with science backgrounds (annual average over the past five years) 79.5%

Number of employees worldwide (consolidated)

30.378

and caregiving (Japan) Total: 39 times Participants: 2,183

Seminars on balancing work

Total equity

¥573.4 billion

Interest-bearing debt

¥332.4 billion Cash and cash equivalents

¥176.6 billion

Customer access points

Number of customer inquiries to NSK sales people

3,046 cases/year

Number of product and service page views on corporate website

3.94 million/year

Energy input (per year)

6,845 TJ\* (7,330 T) in the previous fiscal vear)

(As of March 31, 2021) \*Calculation criteria have been revised relative to the previous year

### Provide Values through the

### Evolution of Motion & Control™

# **Output and Outcomes**

Manufacturing

Procurement

▶ P. 50

▶ P. 60

#### Output

#### ▶ Products/Services

- Industrial Machinery Bearings
- Precision Machinery and Parts
- Automotive Bearings
- Automotive Components • Maintenance & Repair, Aftermarket
- Services Condition Monitoring Technology
- ▶ Financial Outcomes from

### **Provision of Added Value**

- Cash generation
- Improvement in ROE
- Improvement in share price/market capitalization/TSR
- Internal reserves for investment in growth
- Maintenance of stable ratings

### Impact on Society/Environment

- Reduction of investment resource/energy usage through improved production processes
- Promotion of human resource diversity and inclusion • Improvement of compliance
- awareness Compliance with varying
- regulations in each country (e.g., avoiding use of conflict minerals, Modern Slavery Act)

(Output as a burden on the environment)

• Greenhouse gases (GHG), industrial waste, water discharge

### Outcomes

Share of bearings market Ranked third in the world

Number of EPS\*1 mounted on vehicles (cumulative total)

Approx. 100 million

Number of patents held 8.172 patents (8,052 patents in the previous fiscal year

Net cash provided by operating activities ¥53.8 billion

Dividends/Payout ratio ¥10.4 billion/2,885.8%

Lost-worktime injury frequency rate (global)

0.43 (0.35 in the previous fiscal year)

Diversity (global) Ratio of female employees 18.0%

(19.0% in the previous fiscal year) Number of employees who took childcare leave

Men: 185 Women: 42

Japan Management College Total number of graduates over 18 terms: 397\*2 (including graduates of the former Management School)

Global Management College Total number of graduates over all nine terms: 111 Number of regions: Graduates from 21 countries

Number of employees who have attained a TOEIC score of 730 or higher 660 (631 in the previous fiscal year)

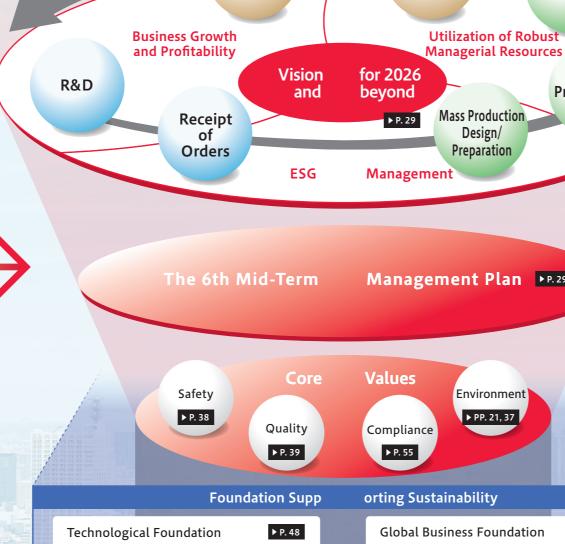
Amount of CO<sub>2</sub> emissions avoided during use of NSK products 2.51 million t-CO<sub>2</sub>

Development of environmentally friendly products 238 products (cumulative total)

**GHG** emissions 31.0% decrease (compared with FY2017)

\*1 EPS: Electric power steering

\*2 Figures revised following recalculation NSK REPORT 2021 15



**Feedback** 

# Management Plan ▶P.29



Global Business Foundation

Corporate Governance

Risk Management

▶ P. 56

#### **NSK's Collaborative Value Creation Process**

# NSK's Business Activities and Corporate Collaborative Val

Each activity in the value chain shown in the collaborative value creation model strengthens NSK's business activities by effectively and efficiently utilizing various forms of capital and leveraging NSK's unique strengths. In this section, we showcase the key capital inputs into each activity, NSK's strengths, and the tasks that are being addressed with the aim of further deepening the value chain.



#### R&D

Based on our Four Core Technologies plus One 2.48, which comprise tribology, materials, numerical simulation, and mechatronics plus manufacturing engineering technologies, NSK's R&D activities in fundamental research, advanced development, application development, and manufacturing engineering lead to the further development of existing technologies as well as the creation of new products, technologies, and businesses.

	Key Capital	Utilization of Capital/Creation of NSK's Strengths	Tasks Being Addressed to Deepen the Value Chain
Human	Technical staff	<ul> <li>Systematic education programs and unique educational institutions, including the NSK Institute of Technology (NIT), for training and enhancing technical staff Ref. Number of participants in NIT (FY2020) 518</li> </ul>	<ul> <li>Establishment and promotion of proactive R&amp;D themes for rapid technological changes (e.g., electrification, automation, IoT, environment)</li> </ul>
		<ul> <li>High ability to respond to technical issues based on the depth of technical human resources and the accumula- tion of technology based on knowledge and experience</li> </ul>	Training and retention of engineers to hand down and evolve the Four Core Technologies plus One
Intellectual	Four Core Technologies plus One, R&D centers	<ul><li>Global structure and network for R&amp;D centers</li></ul>	<ul> <li>Improvement of development and evaluation efficiency by utilization of digital twin technology</li> <li>Improvement of "plus One = manufacturing engineering" that emphasizes and optimizes quality from the development stage</li> <li>Development of technologies and products to help protect the global environment and contribute to help reduce CO<sub>2</sub> emissions</li> </ul>
Social/ Relationship	R&D structure with external parties	<ul> <li>System to quickly obtain product and technology needs and work on development based on close relationships with customers</li> <li>Reflection of feedback in product development through collaboration and joint development with customers, suppliers, external research institutes, and others (e.g., steel materials, grease, motors, and electronic control units [ECUs])</li> </ul>	● Further utilization of open innovation ➤ P. 49
<b>¥</b> Financial	Financial foundation for funding R&D Reference: R&D expenses on a managerial basis (FY2020) ¥28.6 billion	<ul> <li>Technology-related investment for growth (3%–4% of sales)</li> <li>Stable financial base</li> </ul>	• Sustainably achieve growth with profitability Pursuit of capital efficiency that exceeds the cost of capital (ROE of at least 10%)  • P. 40



### **Receipt of Orders**

Having worked together to ascertain customer needs and social needs, the sales and technology divisions then make technical proposals and demonstrations that culminate in the receipt of orders. The timing of orders received, lead times, and other aspects of order-taking activities depend on the customer's business, products, and components used. For global products, the sales divisions coordinate with the relevant sites in other countries.

	Key Capital	Utilization of Capital/Creation of NSK's Strengths	Tasks Being Addressed to Deepen the Value Chain
Manu- facturing	Experience and track record in QCDDSM	<ul> <li>NSK's global development and supply capabilities help to win a variety of orders (e.g., orders for newly devel- oped, improved, and existing/standard products).</li> </ul>	● Proposals for supply from optimal locations that leverage global production sites  ▶ P. 50
Human	Sales personnel	<ul> <li>Global Account Managers (GAMs) and Key Account Managers (KAMs) working together.</li> </ul>	
0	Technical proposal capabilities	NSK engineers and sales representatives communicate closely with customers, and internal systems support	<ul> <li>Based on changing customer and social needs, improvement in the level of proposal capabilities utilizing existing and newly developed technologies</li></ul>
Intellectual	Strong relationships of trust with customers	those communications.	
Social/ Relationship	NSK brand recognition	NSK focuses on high-quality, environmentally friendly products that are trusted by customers.	Conventional methods



# Mass Production Design/Preparation

Mass production design entails the design of large-lot products delivered to customers. Mass production includes both newly designed products and standardized products that do not require new designs. Mass production preparation involves the setting up of processes and production equipment at plants, once specifications have been finalized. In many cases, customer approval is required for product specifications, equipment, and processes.

	Key Capital	Utilization of Capital/Creation of NSK's Strengths	Tasks Being Addressed to Deepen the Value Chain	
Manu- facturing	nu- Mass production equip-	Lowering of mass production costs by NSK developing	Utilization of core assets (capitalized differentiation technology) aimed at streamlining mass production design and reducing lead times	
Financial	investment	its own, specialized production equipment.	Equipment and process settings to achieve stable mass production quality and reduced workload	
Human	Design engineers	Having a framework in place to manage the entire process, from order receipt to the mass production launch, NSK performs detailed inspection and confirmation of specifications, quality, and cost at each process milestone (NPDS).  P.39	● Ascertainment of required quality level of markets (end users) and reflection in products ▶ P.39 ● Installation of mass production equipment that helps protect the global environment and contributes to help reduce CO₂ emissions ▶ P.37	
	NIT	<ul> <li>Design quality is a key factor in manufacturing quality. Accurately understanding the specifications required by custom-</li> </ul>		
Intellectual —	Accumulation of a wide variety of technologies	ers and reflecting them in product design improves product development, design proposals, and project management.  NSK carries out timely and cost-conscious preparations,	<ul> <li>Improvement of development and evaluation efficier cy by utilization of AI and simulation</li> </ul>	
	R&D centers	from product design to mass production.		

# ue Creation - Deepening of the Value Chain-















### Sales/Aftermarket to Feedback

Sales activities span the delivery of products to customers and distributors, inspection and acceptance of the delivered products, and final recording of the sale.

Aftermarket services entail the maintenance and repair of equipment and machinery for customers and end users. Feedback from customers is reflected in production plan reviews, product improvements, and the development of new products.

	Key Capital	Utilization of Capital/Creation of NSK's Strengths	Tasks Being Addressed to Deepen the Value Chair
Human	Human resources to undertake sales, production, and inventory (SPI) management	<ul> <li>NSK aims to maintain appropriate levels of inventory and undertakes strict inventory controls with advanced SPI man- agement.</li> </ul>	<ul> <li>Ongoing strengthening of efforts to reduce the environmental impact of logistics</li> <li>Building of a supply chain that can respond rapidly to demand fluctuations</li> </ul>
	Technical proposal and support capabilities for aftermarket customers	<ul> <li>Promotion of Asset Improvement Program (AIP) activities to provide added value to customers through products and technical services</li> </ul>	• Further service improvements through AIP activity efforts, the accumulation of know-how, and global expansion
Intellectual	Product-related survey and analytical data	<ul> <li>Feedback is used to improve products and propose solutions with new technologies.</li> <li>NSK advanced analysis capabilities and accumulated technologies from its access to a wide range of data fields, such as for defects and damage at customers and end users</li> </ul>	Design and development that leverages custome and market field data
Social/ Relationship	Aftermarket service distribution channels (customers, distributors, and sales outlets)	<ul> <li>NSK responds quickly and meticulously through its global sales network (112 locations).</li> <li>NSK maintains strong relationships with its distributors and sales outlets as well as its extensive network.</li> <li>In addition to responding to repair and maintenance demand for other companies' products, NSK leverages its advanced network to respond quickly to occasional demand outside of routine maintenance.</li> </ul>	• Further improvement in customer satisfaction (strengthening of channel management, cultivating of specialists)



### Manufacturing

The manufacture of products takes place at the NSK Group's manufacturing plants. A wide range of business collaborators, including in manufacturing, quality assurance, manufacturing engineering/equipment management, production control, plant accounting, and general affairs work, is necessary to ensure stringent management concerning quality, cost, and delivery (QCD). Both the Industrial Machinery Business and the Automotive Business maintain their own manufacturing plants.

	M	achinery Business and the Automotive Business maintain their own man	ufacturing plants.	
	Key Capital	Utilization of Capital/Creation of NSK's Strengths	Tasks Being Addressed to Deepen the Value Chain	
C	Production technical skills	<ul> <li>Excellent equipment development capabilities as well as on-site and maintenance capabilities to facilitate use of that equipment for many years</li> <li>Promoting "Production Innovation (APS) activities" at each plant, continuously implementing improvement efforts in workplace processes</li> </ul>	<ul> <li>Training and retention of human resources to hand down and evolve monozukuri, creation of comfortable workplace</li> </ul>	
Human		The NSK Manufacturing Education and Training Center provides hands- on training to engineers from plants around the world with the aim of passing down technical skills and improving technical capabilities.	<ul> <li>NSK's innovative monozukuri that combines on- site capabilities and digital technology</li> </ul>	
Intellectual	Various manufacturing engineering, accumulated know-how	turing have established support systems, such as for launching over-	Improvement of productivity using IoT (smart factory, expansion of next-generation line)     Introduction of mechanism for sharing produc-	
Intellectual		<ul> <li>Efforts for the building of smart factories and next-generation lines</li> <li>Development of a facility management system and a smart system for facility maintenance (PM-Ai)</li> </ul>	tion technology and know-how (PM-Ai) at each global plant	
Manu- facturing	Production plants and facilities	<ul> <li>Operating 20 plants in Japan and 46 plants overseas; possesses a production system able to meet global demand in a timely manner</li> </ul>	<ul> <li>Strengthening the effectiveness of BCP in produc- tion (strengthening building and equipment toler- ance, improving complementary supply capacity)</li> </ul>	
Natural	Steel used as a raw mate- rial, components, oil, etc. Electrical power, water, etc., used in production activities	<ul> <li>Development of manufacturing facilities and technologies that enhance energy and resource saving</li> </ul>	<ul> <li>Shift to production facilities and production pro- cesses that help protect the global environment and contribute to help reduce CO<sub>2</sub> emissions.</li> </ul>	
Social/ Relationship	Suppliers and local communities	Continuing to maintain and strengthen good and strong relationships with suppliers and local communities	▶ PP. 23, 37	
▶ For P	M-Ai, please see NSK Repo	rt 2020 (P. 19). !! https://www.nsk.com/investors/libr	rary/pdf/nsk_report/ir202003e.pdf	



### Procurement

Based on the specifications determined by the development and design departments, activities to procure the raw materials/components used in products, production facilities, sub-materials, etc. The Company realizes high-level QCD and stable procurement through fair, impartial, transparent, and socially and environmentally friendly transactions with its suppliers.

			* * *
	Key Capital	Utilization of Capital/Creation of NSK's Strengths	Tasks Being Addressed to Deepen the Value Chain
Social/ Relationship	Relationships of trust and coordination with suppliers	Continuously maintaining and strengthening favorable and strong relationships with its suppliers     In the event of a natural disaster, has in place a system to quickly ascertain the damage status and supplier problems and take the necessary measures in cooperation with them     Promotes CSR activities throughout the supply chain toward	<ul> <li>Stable procurement (ensuring the flexibility of supply, strengthening the effectiveness of supply chain BCP)</li> <li>Enhance level of CSR management throughout the supply chain</li> </ul>
Intellectual		the realization of a sustainable society  Achieves a high level of QCD through continuous improvement activities and joint development in collaboration with suppliers	Optimization of the supplier portfolio (thorough collaboration and competitive principles)
Human	Development purchasing	A structure that enables in-house development and manufacturing as well as the procurement of facilities and equipment from within the Group     Strengthening its tolerance to foreign exchange rate fluctuations by expanding the localization of procurement	<ul> <li>Reduce environmental impact throughout the value chain (appropriate management of environ- mentally hazardous substances, global warming countermeasures)</li> </ul>
	Buyer skills	● Encouragement of supplier BCP activities	• Strengthening effectiveness of supply chain BCP

# **Creating Collaborative Value with Stakeholders**

NSK's business is built on relationships of trust with its stakeholders. As a partner in the creation of collaborative value, nurturing increasingly positive ties through two-way communication and promoting a genuine understanding of NSK's direction and value created is of the utmost importance.

In line with our Mission Statement, NSK upholds the SDGs in working to realize a sustainable society and has selected seven goals that are particularly interlinked with our business. NSK must work together with each of our stakeholders in targeting these key goals.

By collaborating with each stakeholder to create a range of value, NSK aims to contribute to the resolution of social issues while achieving sustainable growth as a company.

### Collaborative Value with Stakeholders

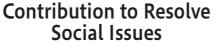
Environmental contribution (low friction, high efficiency, improvement of transmission efficiency)

> Contribution to an advanced technological society Realization of a more prosperous society

Growth of a wide range of industries

Advancement of a mobility society Improvement of shareholder value











NSK's Seven Key SDGs

Sustainable Growth of NSK

#### Relationships with Stakeholders (related capital categories)

NSK's customers and sales destinations encompass the machine manufacturers, auto and automotive components makers, distributors, and sales outlets that purchase our products directly, as well as the end users who utilize our products in the various machines produced by direct customers. (social/relationship capital) NSK works to deepen our understanding of the needs of manufacturers, distributors, and sales outlets; strives to envision the future expectations of the end users; and reflects these expectations into our business activities, products, and services with the aim of creating various forms of collaborative

#### Main Engagement Channels

- · Everyday sales activities
- · Technological exchanges
- Exhibitions

and services, are created by employees working all over the

NSK is working to revitalize a constructive labor-management

world. In addition to fostering creativity and individuality.

dialogue, employee communications, and exchanges with

external stakeholders. (human and intellectual capital)

Through these efforts, NSK raises the awareness of our

employees and enhances their capabilities, while creating

workplaces that enable our employees to set the future in

· Objective-based management, performance review

Main Engagement Channels

· Internal financial results briefings

· Training, self-improvement seminars, etc.

· Manager/team dialogue

Third highest share of the global bearings market, · Joint research/joint development, etc. environmentally friendly products, amount of CO<sub>2</sub> emissions avoided during use of NSK products, etc. NSK's advanced technologies, as well as world-class products

 Offering engaging workplaces (respect of fundamental rights at work, equal opportunity, creating safe and inspiring workplaces, and health and productivity management) Leveraging a diverse workforce, diversity and inclusion, work-life balance, and flexibility with

Stakeholder Expectations, Interests,

and Values (outcomes) Examples

Q: Quality—Offer high-quality products and

supply chain management, and strict

adherence to laws and regulations

D: Development—Leverage technology innovation,

find solutions to issues, develop partners,

S: Service—Support customers at our global

sites in each region with reliability.

security, and troubleshooting

M: Management—Provide management

capabilities that support the above

and develop products and technologies that

D: Delivery—Ensure stability in delivery.

high-quality services

C: Cost—Use appropriate pricing

contribute to the environment

 Providing opportunities for growth, selfdevelopment, and educational opportunities

#### Outcomes >>

Outcomes %

Number of patents held, environmentally friendly products, lost-worktime injury frequency rate, diversity (e.g., ratio of female employees, number of employees who took childcare leave), number of management college graduates, etc.

Examples of Themes for More Meaningful Collaborative Value between Stakeholder and NSK, Specific SDGs That Can Be Supported, and Further Collaborative Value Creation



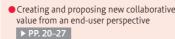












 Developing proposals for supply from optimal locations that leverage global production sites





- management, enhance two-way communication Reviewing systems to achieve more diverse work styles.
- Promoting situational understanding and improvement activities through regular employee engagement surveys

• Further enhancing educational and training programs

NSK's businesses, which reach all corners of the globe, as well as their competitiveness, are underpinned by the reliable supply of raw materials and components from suppliers around the world, (social/relationship capital, natural capital) NSK strives to develop mutually beneficial relationships through frank and open exchange of opinions in daily procurement activities and mutual improvement initiatives. For example, NSK works with suppliers to raise the level of quality assurance, develop new technologies, protect the environment, and ensure that human rights are fully respected. These sincere efforts are essential for environmental conservation and mutual prosperity along the entire global supply chain.

#### Main Engagement Channels

- · Daily procurement activities
- Procurement Policy Briefings
   NSK Supplier CSR Guidelines "self-diagnosis sheet," etc.

Stakeholder Expectations, Interests, and Values (outcomes) Examples

- Offering reliable transactions that are proper, fair, and
- Utilizing transactions that consider society and the
- Engaging in joint development (e.g., materials,
- components, grease) that is mutually beneficial Implementing initiatives to enhance quality
- Promoting CSR activities throughout the supply chain
- Collaborating when disasters occur

#### Outcomes >:-

Green procurement, greenhouse gas emissions, etc.

Examples of Themes for More Meaningful Collaborative Value between Stakeholders and NSK, Specific SDGs That Can Be Supported. and Further Collaborative Value Creation









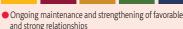












 Enhancing the level of CSR management throughout the supply chain toward realizing a sustainable society



NSK's global business depends on building harmonious relationships with local communities and fulfilling our corporate responsibility to contribute to the development of those communities. (social/ relationship capital, natural capital) NSK aims to grow as a company that is needed, loved, and respected by communities around the world. We strive to respect cultures, customs, and needs by engaging, communicating, and working closely with each community to achieve mutually beneficial development and the protection of local environments.

#### Main Engagement Channels

- · Activities to contribute to local communities (e.g.,
- donation drives, cleanup activities)
- · Cooperating in community events, welfare programs, etc.

As providers of financial capital, shareholders and investors play a critical role in supporting NSK's growth and monitoring company management. (financial capital) NSK aims to grasp and meet the expectations of shareholders and investors by increasing the transparency of management based on appropriate disclosure, building relationships of trust through constructive dialogue, and promoting sound, sophisticated management.

- Main Engagement Channels
- · Shareholders' meetings
- · Plant tours for shareholders
- Financial conferences
- Business briefings

- Striving for mutual harmony and benefit with Contributing to the creation of employment/regional
- development Preserving the global environment and the local
- Reducing environmental impact (curbing emissions
- from business activities) Giving consideration to noise reduction
- Ensuring safe operations

Improving corporate value

#### Outcomes >

capital costs

Outcomes >

Environmentally harmful substance countermeasures, environmentally friendly products, amount of CO2 emissions avoided during use of NSK products, etc.

Maintaining proper stock prices
 Realizing shareholder returns that exceed

Providing information in a proper, fair, and

Proactively taking initiatives and making

disclosures for global social issues, and

timely manner, and having sincere dialogue

A TSR that exceeds the expected rate of return,

reduced share price fluctuation risk, etc.

and raise the degree of trust

Increasing the opportunities for exchange to

promote an understanding of safety and security

Engaging in ample activities to contribute to communities











- capital market participants regarding management policy, business strategy, and financial strategy Expanding support of shareholders that contributes to fair determination of share prices and sustainable growth, and
- realizing a balanced shareholder composition Amply engaging with shareholders and investors, and strengthening the tools to accomplish that ▶ P. 68
- Enhancing disclosure and heightening the appeal of efforts regarding CSR/ESG issues
- ▶ PP. 20–27, 30–31, 35–39, 52–54, 60–67



Shareholders and Investors

Realizing a safe and prosperous society that will last long into the future is indispensable not only for NSK but also for the growth and development of society overall. (social capital, natural capital)

To support the healthy development of the next generation that will be responsible for future society, we conduct science classes, offer internships, and provide scholarships as efforts geared toward long-term growth. Through these activities, we aim to realize a prosperous society for the future not only by conveying the enjoyment and importance of *monozukuri* to children and students but also by developing future generations of human resources.

#### Main Engagement Channels

- · NSK Foundation for the Advancement of Mechatronics
- NSK Scholarship Foundation
- · Science classes for children
- Materials for children (e.g., comic book, picture book, and technology introduction), etc.

- Generating and providing opportunities for the growth of the next generation that will be responsible for the future Conveying the enjoyment and importance of
- monozukuri Passing down a safe society and an abundant
- natural environment

Environmentally harmful substance countermeasures, environmentally friendly products, amount of CO2 emissions avoided during use of NSK products, etc.















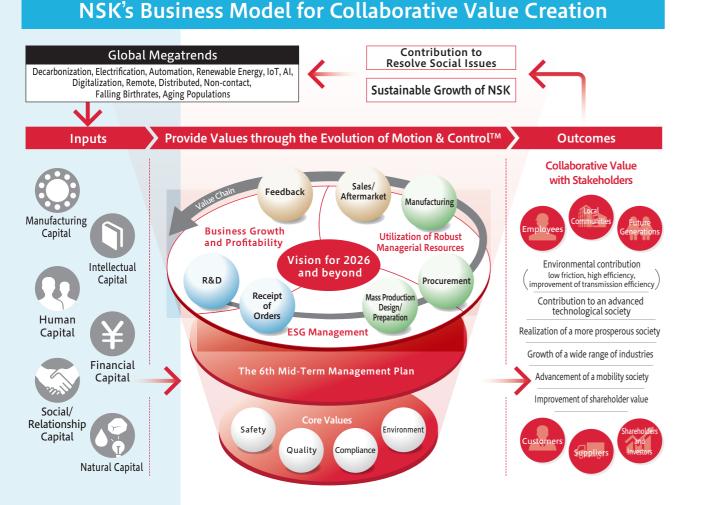
Ongoing implementation of support to nurture the next generation of human talent from a long-term standpoint Working through the NSK Scholarship Foundation

to provide aid in the invigoration of the Asian region by supporting Asian exchange students and Japanese nationals who will play an active role on the international stage and contribute to the world

In this special feature, we showcase what initiatives NSK will take to realize sustainable growth amid trends toward decarbonization,

electrification, automation/labor saving, and digitization.

In keeping with its Mission Statement, NSK has formulated an SDGs Declaration that respects the spirit of the SDGs to realize a sustainable society and has selected seven key goals that are particularly interlinked with our business. In addition, we have formulated the Declaration of NSK's Initiatives as more concrete strategic measures. NSK is continuing to create collaborative value with our stakeholders through business activities to achieve sustainable growth while making a contribution to solving social issues and achieving the goals of the SDGs.



#### SDGs Declaration

In line with our Mission Statement, NSK will work to resolve societal issues by conducting sincere and responsible business operations and achieving innovation in our products and services, in order to help realize a sustainable society. We will uphold the spirit of all 17 SDGs, and have selected seven goals that are particularly interlinked with our business, which we will place priority on tackling.

NSK's Sever **Key SDGs** 



















SUSTAINABLE GOALS







### **Declaration of NSK's Initiatives**

- 1 We will contribute to a safe and resilient social infrastructure through innovation. 4 We will form richly diverse organizations where both employee We will contribute to climate change countermeasures by reducing the
- impact of our business activities on the environment.
- We will contribute to the creation of a waste-free society and reduce impact on the global environment through environmentally friendly products and reuse of resources.
- motivation and value creation are fulfilled.
- (5) We will enhance our dialogue through multi-stakeholder partnerships to increase the effectiveness of our SDGs initiatives.

### **NSK's Environmental Contributions**

Contributing to the environment is one reason why NSK exists. Formulating "help protect the global environment" in its Mission Statement, NSK's environmental policy states that our commitment to environmental management forms the basis of our existence and our pursuits. In addition, in 2019, we positioned the "environment" as one of NSK's core values, along with "safety," "quality," and "compliance" (common value standards given the highest priority in management decision-making and actions).

NSK will contribute to the development of environmentally friendly industries and the reduction of the environmental impact of society as a whole by using its environmentally friendly technologies to grasp the essence of the issues at hand, as well as by providing and widely disseminating solutions that can meet every requirement for function, energy conservation, and cost. We will also leverage these environmentally friendly technologies as our strength to create products and services that will be increasingly selected, and to increase our competitiveness in the market.

As a specific environmental goal, NSK targets a 60% reduction in CO<sub>2</sub> > Please see our website for information on the NSK Environmental

Value with





**Related SDGs** 

emissions from its business operations in 2050 (compared with fiscal 2017, Scope 1 + 2). At present, we are vigorously pursuing these initiatives and looking into ways to further accelerate them.

As one milestone toward carbon neutrality, NSK has set the goal of effectively offsetting the CO<sub>2</sub> emissions from all its business operations (Scope 1+2+3) by fiscal 2026 by helping to reduce customer CO<sub>2</sub> emissions through its products. To this end, NSK is promoting the following two measures: 1 help customers reduce CO<sub>2</sub> emissions by using NSK products that help reduce CO<sub>2</sub> emissions and 2 reduce CO<sub>2</sub> emissions from NSK's business operations.

### Policy and Environmental Code of Conduct.

! https://www.nsk.com/sustainability/environment/action01/index.html

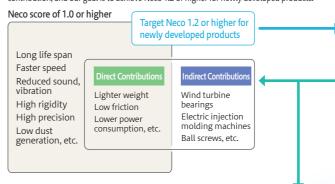
NSK Eco-efficiency Indicators (Neco)

### Indicators for NSK Environmentally Friendly Products

NSK's products are installed into automobiles and industrial machinery to control friction and reduce energy consumption, thus all NSK products contribute to global environmental protection. To contribute further to the environment, NSK has established and currently uses the following two indicators to show the environmental contribution of its products: ① Neco and ② CO2 emissions avoided.

#### 1 Neco (NSK Eco-efficiency Indicators)

NSK's original indicators quantify the degree of environmental contribution of a product compared to conventional products based on factors such as life span, low torque, power consumption, and weight reduction. The higher the number, the higher the degree of contribution, and our goal is to achieve Neco 1.2 or higher for newly developed products.





#### (2) CO<sub>2</sub> Emissions Avoided

We designate as "products that help reduce CO<sub>2</sub> emissions" those items that achieve this at the customer-use stage in such areas as weight, friction, and power consumption reduction as well as the amounts of these reductions are expressed as CO<sub>2</sub> emissions avoided.

NSK product performance directly contributes to the reduction of CO<sub>2</sub> emissions NSK product applications indirectly contribute to the reduction of CO<sub>2</sub> emissions

### ■ Offsetting CO<sub>2</sub> Emissions from Business Operations by Reducing Product Environmental Impact



As to reducing CO<sub>2</sub> emissions at the product-use stage, we are promoting initiatives in two categories: A direct contributions and B indirect contributions. To maximize the contribution, we are not only improving the performance of individual products but also collaborating with the development, design, production, and sales departments.

The total contribution to CO<sub>2</sub> emissions avoided in both categories was 2.51 million tons in fiscal 2020.

Some typical examples in each category are as follows.



2020 (FY)

■ Concepts for Products Helping to Avoid CO<sub>2</sub> Emissions During Use

Category	Examples of Contributions to CO₂ Reduction
A Direct contributions	<ul><li>Reducing friction loss</li><li>Downsizing through longer life</li><li>Smaller size and less weight</li></ul>
B Indirect contributions	Responding to the shift from hydraulics to electrification     Responding to the spread of renewable energies     Developing new environmentally friendly products.

A Direct Contributions

■Friction Ratio

100

Direct contributions to CO<sub>2</sub> emissions reduction through individual NSK product performance

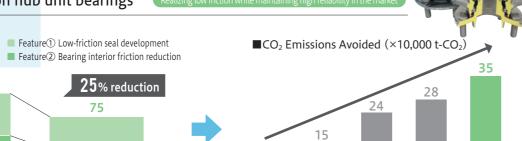
Contribution calculation formula: CO₂ emissions avoided by a single NSK product × sales volume × years of operation

Lower friction of bearings → Reduced energy loss → Direct contribution to avoid CO<sub>2</sub> emissions

Example Low-friction hub unit bearings

Conventional products —— Developed products

75



B Indirect Contributions

Indirect contributions through CO₂ emissions avoided by installing NSK products into customer

Contribution calculation formula: CO₂ emissions avoided per unit × rate of contribution of NSK products × sales volume × years of operation

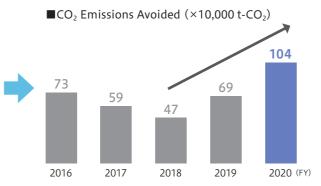
CO₂ emissions avoided by equipment (e.g., wind turbines) → NSK product contributions → Indirect contribution to avoid CO₂ emissions

Example Wind turbine bearings

Substantial CO₂ emissions avoided by replacing conventional thermal power generation with wind power



Wind turbines are used in harsh environments, operating for about 20 years at 100 meters above the ground, so high reliability is required.



Reducing CO<sub>2</sub> emissions from NSK business operations

In June 2021, NSK established the Carbon Neutrality Department directly under the president to reduce CO<sub>2</sub> emissions from its business operations in the following three categories: A technological innovation, B energy conservation/fuel conversion, and @renewable energy. This department will further accelerate these initiatives by organically collaborating with related departments from companywide and mid- to long-term perspectives.

In addition to these initiatives, we are considering the implementation of internal carbon pricing\* to visualize the value of CO<sub>2</sub> emission reductions.

\*Internal carbon pricing: a mechanism for companies to independently assign prices to their CO<sub>2</sub> emissions and use it to make investment decisions

A Technological innovation

- ●IH heat treatment
- Bearing reuse Plant-based resins, etc.
- Energy visualization

reduction, etc.

- Solar panel installation Renewable energy Insulation coating procurement Air leak repair, usage
  - Purchasing renewable energy certificates, etc.

**Special Feature** 

fuel conversion

B Energy conservation/ Renewable energy

### (A) Technological Innovation

### Development of the World's First Biomass Plastic Heat-Resistant Resin Cage

NSK has a long history of developing environmentally friendly materials and products, including the development of biodegradable plastics in 2008 and food-derived grease in 2013. In 2021, NSK created the world's first biomass plastic heat-resistant resin cage for rolling bearings made mainly from plant-based biomass materials. We will continue to accelerate R&D focused on practical applications for biomass plastics by making full use of NSK's material, analysis, molding, and evaluation technologies.

#### Developed cage features (1)

They exhibit the same strength and heat resistance as conventional polyamide 66 (66 nylon) cages made from fossil

#### Developed cage features ②

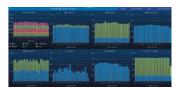
Plants are biomass resources that grow by absorbing CO<sub>2</sub> from the atmosphere, therefore incinerating biomass plastics does not increase the amount of CO<sub>2</sub> in the atmosphere. As a result, a 91%\* reduction in CO<sub>2</sub> emissions is expected over the entire cage life cycle by switching from a conventional cage.

\*Material manufacturer estimates

### Energy Conservation/Fuel Conversion

### Visualization and Reduction of CO<sub>2</sub> Emissions at Production Plants

In fiscal 2020, we introduced a system at NSK's Saitama Plant that enables us to visualize CO2 emissions at each bearing production process and the operational status of production lines. Using this system, we can detect unnecessary CO2 emissions and pursue efficient improvement activities. Currently, we are working to improve the efficiency of heat treatment furnaces and reduce compressed air consumption in production facilities. We will expand these activities to other plants while continuing to make improvements at the Saitama Plant.



### Reduction of CO₂ Emissions from Bearing Production Grinding Machines

NSK plants consume a large amount of electricity to power facilities during production, and we are working to reduce CO₂ emissions under the following two themes: "improving productivity" and "reducing facility power consumption." First, "improving productivity" is an initiative to reduce the energy required to produce a single product by increasing processing capacity and operating rates. In the second theme, "reducing facility power consumption," we are lowering the power consumed at the facilities themselves by using power control innovations and new technologies. An example of this is introducing inverter technology to reduce power consumption without lowering the rotation speed of grinding wheel motors for bearing-production grinding machines. While grinders repeatedly grind and replace workpieces, we have been able to reduce the amount of power wasted during the short time it takes to replace the workpiece by instantly reducing the power consumption of grinding wheel motors. We will continue such activities to reduce environmental impact through the focused application of NSK technologies.

■ Introduce energy-saving inverter

Grinder

Reduces power waste in the short time it takes for replacement

### Renewable Energy

### Accelerate Introduction of Renewable Energy

NSK is actively promoting the installation of solar and wind power generation equipment and switching to electricity derived from renewable energy sources. In fiscal 2020, 9.6% of all electricity consumption was provided by renewable energy sources. This corresponds to an increase of about three times compared with the previous year.

#### Install solar and wind power generation equipment at business sites

Currently, this equipment is installed at 23 business sites globally, generating a total of around 7,000 MWh of electricity annually and reducing CO<sub>2</sub> emissions by approximately 3,900 tons per year. In fiscal 2020, we newly installed the system in three plants outside Japan (Mexico, China, and Indonesia).

#### Expand use of green electricity

To date, we have switched to green electricity at our factories in Japan, Germany, Poland, and China, currently using about 120 GWh of green electricity per year and reducing CO₂ emissions by about 95,000 tons per year. In Germany and the Netherlands, we have switched power supply for offices. Going forward, we will plan and implement more conversions in Europe.

Please see our website for more information. https://www.nsk.com/sustainability/environment/action03/index.html

In the business environment surrounding NSK, technological innovation is rapidly advancing in all industries, including the spread of AI, IoT, and 5G, as well as automotive electrification and automation. In particular, the issues that NSK is working to address are ever expanding. These include efforts in the renewable energy field and the accelerated shift to eco-friendly electric vehicles given the increased importance of addressing climate change and environmental issues, as well as rapidly increasing remote and non-contact needs due to the COVID-19 outbreak. NSK aims for sustainable growth by contributing to technological innovation in









these areas.



Increased importance in addressing climate change, environmental issues

Renewable & Shift to EVs

Rapid progress in technological innovation

### More new needs







### Further Growth via "Electrification," "Automation, Labor-saving," and "Environment"

Technological innovations such as AI, IoT, and 5G are transforming the world into a safer and more comfortable place. With awareness of climate change and environmental issues increasing globally, NSK believes that "electrification," "automation, labor-saving," and the "environment" will be the keywords for further growth. To realize a decarbonized society and safe, comfortable, and convenient lifestyles, the "electrification" of automobiles and various other items is progressing, and this is expected to lead to an explosive increase in demand for motors. In addition, "automation and labor-saving" at facilities is accelerating to meet increased efficiency needs and enable sophisticated manufacturing. In the "environment," we see a greater need for renewable energy such as wind power and mass-transport railways that contribute to decarbonization. Together with stakeholders, NSK will achieve further growth through the collaborative creation of value that contributes to the environment, an advanced technological society, and growth in a wide range of industries.



The "electrification" of various applications is progressing with the automotive industry shifting from conventional gasoline and diesel vehicles to hybrid and electric vehicles. For example, just as power steering has switched from hydraulic to electric power, electrification is expected to progress in brakes and other areas. Elsewhere, higher demand for onboard motors looks promising as functions increase in such areas as headlights that change lighting direction while driving and electric sliding doors. In the field of industrial machinery, automation and electrification are advancing based on overall connectivity through the spread of 5G

and IoT. As a result, cooling fan demand is expected to rise as data centers and communication base stations increase.

Against the backdrop of this demand growth, NSK expects demand for small ball bearings to increase. NSK established the E&E DHQ to expand its core ball bearings business. In so doing, NSK will integrate production, sales, technology, and management departments to keep up with its rapidly changing customers. Along with strengthening its supply system, NSK will contribute to electrification by improving product appeal, cost competitiveness, and quality.

The need for automation and labor-saving at production sites is increasing with working populations shrinking mainly in developed countries and COVID-19 increasing the need for remote and non-contact services. Improving machine tool and robot performance is essential to achieve "automation and labor-saving." Particularly for machine tools, there has been a progressive shift from 3-axis to multi-axis (e.g., 5-axis) and combined machine tools to consolidate processes and improve machining accuracy. Further growth looks likely as this is an area of demand where NSK can provide value by leveraging its strengths in precision technology (precision machinery products centered on precision

bearings and precision ball screws). In addition, the adoption rate of NC (numerical control) for machine tools is expected to increase in China, the largest producer and seller of machine tools. Ball screw accuracy will become more important as NC takes hold, so we expect demand for NSK products to grow further in the Chinese market.

**Special Feature** 

NSK's precision bearings and precision ball screws will become important as elemental technologies for high-performance machine tools. NSK will continue contributing to advanced manufacturing by making proposals to customers that utilize its precision technology.

#### **Environment**

- Expand wind power generation and railway markets amid higher environmental awareness
- ▶ Meet advanced technological needs that include strong durability and high reliability

**Key Points** 

Contribute to the expansion of growth sectors and the realization of a decarbonized society

CO<sub>2</sub>-free and highly efficient wind power generation has been growing steadily in Europe—where environmental awareness is high—and in China—where demand for electricity is brisk while in Japan growth looks promising as one green energy growth strategy. Along with expectations over such market growth, the level of technical difficulty for bearings is also increasing. For example, wind power generation is being used on a larger scale and more offshore to improve power efficiency, but the conditions under which bearings are used have become more severe, thus requiring high durability and high reliability. To address these difficult technical challenges, NSK will apply the "digital twin" concept for proposing optimal designs not only for bearings but also for peripheral components, with the aim of realizing a decarbonized society.

Railways are also expected to grow as a market that contributes to decarbonization. Railways have established a foothold as a means of transportation with lower CO<sub>2</sub> emissions than airplanes and automobiles in Europe. Railways are also expanding in China and Southeast Asian countries amid economic development there. Leveraging its expertise accumulated over many years, NSK will continue to develop products and technologies that contribute to rolling stock safety, comfort, reliability, and environmental impact reduction.

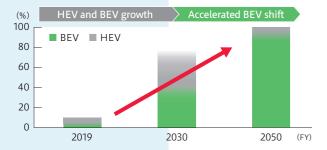


### **Developments in Auto Electrification**

In addition to the mega-trend known as CASE (C: Connected, A: Automated Driving, S: Sharing, E: Electrification), the automotive industry has seen environmental issues gather momentum. In August 2021, the European Union announced a policy to end sales of new gasoline and diesel vehicles (ICE), including hybrid electric vehicles (HEV), by 2035 to achieve carbon neutrality by 2050, and the United States has issued an executive order that more than half of new vehicle sales by 2030 be electric and fuel cell vehicles, including BEVs and plug-in hybrids. Japan and China have also announced policies to shift their new car sales to electric vehicles such as HEVs by 2035.

Against this backdrop, the global auto electrification rate is expected to rise rapidly. In 2019, the electrification rate was around 10%, but this will surpass 50% by around 2030, when regulations in various countries start to take effect, and could approach 100% by around 2050. Until 2030 or so, however, the electrification rate will likely increase due to significant growth in both HEVs and BEVs, though with some regional differences.

#### ■Auto Electrification Rate (NSK Forecast)



### The Impact of Electrification on NSK

With the shift from ICE to BEV, the number of bearings installed in a vehicle decreases. The major reasons for this are the engine used in gasoline vehicles being replaced by a motor in BEVs, and the transmission changing from a complex multistage gearbox to a simple reduction gear. However, there are zones where the number of bearings will increase, as electrification results in the use of more on-board motors. In summary, bearings are expected to decrease by about 20% in BEV compared to ICE. While depending on the mechanism, in HEVs, however, bearings will rise by roughly10% due to the increase in motors.

With electrification accelerating, NSK expects sales to grow steadily until around 2030 as both HEVs and BEVs increase. However, we are pursuing the development and release of new products for electric vehicles as we see potential for bearings sales to subsequently decrease as BEVs become mainstream.

#### ■Trends in Individual Countries (as of August 2021)

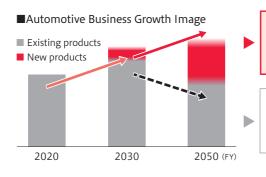
Japan	Shift mainly new vehicles sales to electric vehicles by 2035
United States	Executive order targeting more than half of new vehicle sales be electric vehicles and fuel cell vehicles by 2030
EU	Sales of new gasoline and diesel vehicles (including HEV) will stop by 2035
China	New energy vehicles will account for more than 50% of auto sales volume by 2035

#### ■Bearing Swings with ICE as 100 (NSK forecasts)

	<b>₽</b> § ICE	<b>€</b> HEV	BEV
	100	110	80
Motors	→ STAY	<b>≯</b> UP	<b>≯</b> UP
Engines/ ransmissions	→ STAY	→ STAY	DOWN

### New Products for Growth in the Electrification Era

As electric vehicles are equipped with many batteries, technological issues and needs include "downsizing powertrains," "improving driving power and maximum speed," and "increasing cruising range." NSK aims to achieve sustainable growth in the age of electrification by proposing new technologies and products to our customers that meet these needs. As the mobility society evolves, we will continue to proactively create value and, in turn, expand our automotive business.



Develop and release new products to hedge risks of a decline in existing products from 2030

Existing products to steadily rise until around 2030 but could decrease afterward

#### **Traction Reducer**

- Compact, lightweight, ultra-high-speed rotation EV drive units with optimized deceleration mechanism
- Quiet operation with traction drive mechanism

Instead of using gears, the Traction Reducer uses a special oil that hardens only at the moment of compression, enabling efficient power transmission through "rolling" for superior quietness. Combining a traction drive speed reducer

with a high-speed motor enables smaller and lighter weight automotive electric drive systems, helping to reduce electric vehicle power consumption through the smooth transfer of power.

### **Non-Contact Torque Sensor**

- Sensor used to measure torque without making contact while helping to deliver shock-free gear shifting
- Improves power consumption and fuel economy of automobiles and provides a smooth and comfortable ride

Automobiles transmit engine and motor power to the tires through the drive shaft. It is essential to measure the torque of the drive shaft and efficiently achieve optimal power transmission to improve environmental performance, comfort, and safety (e.g., detect malfunctions). NSK torque sensors absorb the shock of shifting gears in two-speed transmission electric vehicles to improve power consumption by 7% and softens fluctuations in torque when changing gears to achieve a comfortable ride.



**Special Feature** 

### **Power Flow Switching Device**

- Multifunctional shift actuator module
- Reduces size of 2-speed transmissions; enables design 2-speed transmission systems capable of meeting diverse customer

The Power Flow Switching Device is a multifunctional shift actuator that enables three shifting modes: Low, High, and Park. In addition to the low- and high-speed shifting functions for improving cruising range and driving performance, the park function replaces parking mechanisms installed in conventional reduction gears, contributing to the development of smaller 2-speed transmission units. This device also enables the design of 2-speed transmissions to meet diverse customer requirements.



### Third Generation Ultra High Speed Ball **Bearing for EV Motors**

 Helps meet the need for higher speeds in EV motors Contributes to smaller, lighter weight EV motors

Bearings used in powertrains, especially in electric motors, are being subjected to increasingly higher speeds and performance demands.

NSK completed development of the second generation ultra high speed ball bearing (over 1.4 million dmN\*) in March 2020. The second generation design featured significant advancements in cage and anti-seizure technology. However, NSK engaged in further development aligned with demand for bearings capable of even higher speeds in electric motors for EVs, developing in March 2021 the third generation ultra high speed ball bearing capable of operating at over 1.8 million dmN.



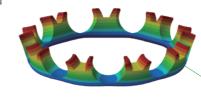
\*dmN: A measure of bearing rotational performance. The product of bearing pitch diameter (dm) in millimeters and rotational speed (N).

#### Application of Digital Technology Bearing design and development based on the "digital twin," a concept that emphasizes the real

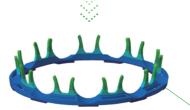
As performance requirements accelerate, "digital twin" is being promoted as a concept that emphasizes realism to ensure efficient and high-quality development. One such initiative is the third generation ultra high speed ball bearing for EV motors developed in March 2021. The product's cage utilizes "topology optimization" technology. Conventional cages are thick to prevent deformation and breakage due to centrifugal force. Using topology optimization, however, we have succeeded in decreasing weight while increasing strength and rigidity, potentially enabling highspeed rotation of more than 200% compared to conventional products. In addition, we were able to quickly solve problems and develop the product in a short period by conducting evaluation tests using high-speed cameras to observe the behavior of the cage during high-speed rotation.

#### What is topology optimization?

Topology optimization aims to find a given product's optimal geometric shape under specific usage conditions. For example, in an airplane, unnecessary parts that do not impact rigidity can be cut down to more aerodynamic shapes that are both strong and lightweight.



Conventional cages are significantly deformed by the centrifugal force of rotation and worn out by coming into contact with the outer ring



The new cage is lighter, stronger, and more rigid to control deformation and avoid contact with the outer ring

NSK has raised "the establishment of a corporate foundation for sustainable growth" as its vision for 2026, the 110th anniversary of the Company's founding. NSK has also positioned the 6th Mid-Term Management Plan (6th MTP) as the first three years for realizing this vision, has put in place the target of "building a business base and strengthening resources in preparation for the next growth phase," and is promoting a variety of initiatives.

The following is a retrospective look at the past 10 years of Mid-Term Management Plans, from the 3rd to the 5th. (Note: Mid-Term Management Plan is abbreviated as MTP) Year to March 31, 2017–Year to March 31, 2019 Establishing corporate Embark on New Chapter in Responding to paradigm shifts fundamentals appropriate for a company Reorganizing business foundation with net sales of ¥1 trillion Next 100 Years **Build Business Base and Strengthen Resources** toward net sales of ¥1 trillion • Initiate mid- and long-term policies for Establish corporate fundamentals appropriate for a company with sales of ¥1 trillion in 2016, realizing sustainable growth Period to establish and consolidate corporate fundamentals appropriate for a company with the 100th anniversary of NSK's foundation • Introduce resources for the future Continue to implement basic strategies (focus on profitability, growth in emerging countries Continue measures to become No. 1 in total quality global management) Two Pillars of the Plan Growth with focus on profitability Operational excellence A. Enhancement of business-based management Growth in emerging countries . Constant pursuit of competitiveness Sales & marketing, production and technological divisions Enhancement of customer and sector strategies Innovate and challenge brought under business headquarters management Production and technological innovation capabilities Creation of new value Autonomous management by integrated business Strategic alliances management and the clarification of divisional responsibilitie Achieve sustainable growth Operational B. Growth strategies Develop management capability to handle • Reconstruct the profit base Increase presence in emerging markets excellence ¥1 trillion in sales volume Expand into new growth fields Expand environmental, infrastructure, and resource businesse Enhancement of corporate governance and Respond to technological innovation compliance C. Profitability improvement Reform of the business structure Industrial Machinery Business Proactive sales strategy (strengthen proposal- Advancement of global management competitiveness Respond to changes in the business based sales capabilities environment and expand target fields Basics of MTP (Priority Issues) Reorganize global production sites Automotive Business Accelerate new product development Safety, quality, and compliance Reinforce the profit base and establish a platform for future growth Under an environment of robust demand, the Industrial In the severe business environment immediately after the collapse Against a backdrop of improvements in the of Lehman Brothers, we achieved some measure of success. profitability of the Automotive Business and Machinery Business recovered as the powertrain business assisted by an underlying weakness in yen grew during the fiscal year ended March 2018, the second year focusing on emerging markets and technological innovation. • Established a production system for a exchange rates, the Company achieved all its of the MTP, and the Company achieved sales of ¥1 trillion, as numerical targets, including those for sales and profit, a year ahead of schedule in the full product lineup, built an autonomous targeted. Both operating income and net income achieved management system within China new record highs. We also strengthened shareholder returns Exceeded the MTP target for global second year of the fourth MTP. The Company that led to a total return ratio of 57% over the three years. expansion of the EPS business also improved on the targets in the MTP's final However, due to a downturn in the economic cycle Enhanced profitability following the reorganization fiscal year. Significant growth was recorded in starting in the second half of the fiscal year ended March of the Precision Machinery and Parts Business the Chinese business and in the EPS business in 2019, the final year of the MTP, and the impact of the U.S. Advanced local production and local procurement China trade friction, the business environment deteriorated With regard to profitability, the Company Nevertheless, the upheaval in the business environment. Full-year performance during the final year of the MTP achieved an operating income margin of 10.0% in experienced a year-on-year decline in sales and profits, including a sharp appreciation of the yen and fluctuations in global demand, continued to intensify, and the the fiscal year ended March 2015 and maintained which resulted in failure to achieve the MTP targets. a high level of 9.7% in the final fiscal year. In Meanwhile, amid technological changes including the expanding use of IoT, AI, and robots, as well as autonomous driving and numerical targets of the final year were not achieved. Furthermore, having been found guilty of violating contrast, sales and profitability in the Industrial the Antimonopoly Law in a 2013 case involving a bearing Machinery Business were on a declining trend, product cartel, the Company received a cease-and-desist order and was ordered to pay financial penalties. buffeted by the slowdown in global economic

of the yen and inadequate responses to changes in the business environment, including extreme fluctuations in demand Decrease in the Industrial Machinery Business sales ratio Strengthening of the compliance system to

restore trust and prevent any reoccurrence following the cartel incident

As a priority and urgent task, the Company undertook

measures to strengthen its compliance system toward the

early restoration of trust and to prevent any reoccurrence.

 Declines in profitability levels due to the extremely high value Continue to build our foundation as a company with ¥1 trillion in sales

 Establish profitability not greatly affected by business cycles or fluctuations in the amounts of raw materials or exchange rates Promote new products and development in

growth, including the deceleration in China.

management structure and strengthen and enhance compliance.

We also worked to evolve the global

electrification, the Company developed new technologies and products and released ball screws for brakes, industrial actuators. and others to the market while it started smart-factory model-line operations. The steering business entered a transitional period, making activities aimed at returning to growth important.
We expanded initiatives to address social issues (ESG, SDGs)

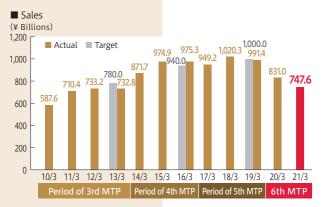
• Firmly achieve ¥1 trillion in sales and a doubledigit operating income margin

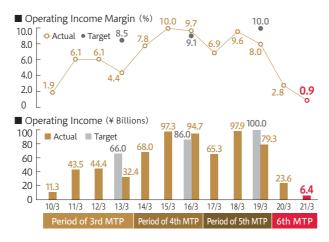
Restart growth in the EPS business

Productivity improvements leveraging ICT

#### **Business Trends**

### (JP-GAAP up to and including the 4th MTP, IFRS from the 5th MTP onward)





Grow by delivering value that meets the needs of a future society 1. Expand NSK core products in the growth segments of electrification, automation, environment, and Io 2. Grow by commercializing new products in growth segments 3. Expand the product lineup for and restart growth in the EPS business 4. Utilize M&A and strategic alliances

■ Net D/F Ratio ◆ Actual • Targe 0.8 10/3 11/3 12/3 13/3 14/3 15/3 16/3 17/3 18/3 19/3 20/3 21/3 Period of 3rd MTP | Period of 4th MTP | Period of 5th MTP | 6th MTP

**And Beyond** 

**NSK Vision 2026** 

sion for 2026 Establish a corporate foundation for sustainable growth Provide value through the evolution of Motion & Control<sup>TI</sup>

### Three key management tasks

**Business** growth and profitability

Utilization of robust

ESG management

 Balance investment in future growth with shareholder returns under a stable financial structure

Personnel. Technology, Organization, and Information

Safety, Quality, Environment

Compliance, and

Corporate governance

### Secure sales of ¥1 trillion and profitability



Personnel, Technology, Organization, Information

New initiatives targeting growth

**■**ROE

(%)

20.0

The 6th MTP

Year to March 31, 2020 – Year to March 31, 2022

in Preparation for Next Growth Phase

#### **NSK Core Values** Safety, Quality, Compliance, Environment

#### **Collaborative Value** with Stakeholders

Environmental contribution (low friction, high efficiency, provement of transmission efficiency

Outcomes

Contribution to an advanced technological society

Realization of a more prosperous society Growth of a wide range of industries

Advancement of a mobility society Improvement of shareholder value

NSK's Seven Key SDGs











### Three Initiatives

### ▶ P. 35

2 Enhance managerial resources 1. Evolve personnel development 2. Evolve manufacturing (*Monozukuri*)

3. Evolve technology development 4. Utilize digital technology

**3** Contribute to the environment and society ▶ PP. 37–39

Address environmental and societal issues by strengthening managerial

resources and NSK's core values + corporate governance

15.0 10/3 11/3 12/3 13/3 14/3 15/3 16/3 17/3 18/3 19/3 20/3 21/3 iod of 3rd MTP | Period of 4th MTP | Period of 5th MTP | 6th MTP

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### 6th Mid-Term Management Plan Targets and Progress

### 1 Financial

	6th Mid-1	Term Management	Plan Targets	Progress
			Industrial machinery: Achieve sales growth that surpasses market growth	■■ Sales(¥ Billions) ◆ Operating income margin(%) 831.0
Growth	Sales/growth ratio	Sales growth 2%/year	Automotive bearings: Achieve sales growth that surpasses growth in global vehicle production volume	2.8
			Automotive components: Secure orders to restart growth in the steering business	0.9
Profitability	Operating income margin	8% or more	Secure stable profitability	2019 2020 (FY)
Efficiency	ROE	10% or more	ROE exceeding cost of capital	3.3% 0.1%
Financial Stability	Net D/E ratio Equity ratio	0.3 times 50%	Maintain an A-level credit rating	Maintained an A-level credit rating even amid the COVID-19 pandemic
Shareholder Returns	Payout ratio Share buyback	30%–50% Three-year total return ratio Around 50%	Continue stable dividends Acquisition of treasury shares Agile capital policy	Continued stable dividends
Capital Expenditures	Capital expenditures	Three-year total ¥180.0 billion	Investments to underpin sustainable growth	Controlled capital expenditures in light of the business environment
R&D	R&D expenses	versus Sales 3%–4%	Continue developing technologies for further growth	Hovered between 3% and 4%

### **2** Evolve Personnel Development

Policy	6th Mid-Term Management Plan Targets	FY2020 Targets	FY2020 Results
		Raise awareness of D&I	President's Diversity Message 2020 published     Conducted unconscious bias training
		Improve the paternal leave acquisition rate	Improved 23.5 points against previous fiscal year (Acquisition rate 50.3%)
		Continue to run caregiving seminars	<ul> <li>Employees taking courses increased by 1.6 times</li> <li>Held training courses for human resource consultation desk staff</li> </ul>
Leverage a diverse	Promote more diversity and inclusion (D&I)	Create a work environment that empowers foreign nationals (Japan) Develop management personnel (global) Support the empowerment of mid-career hires	<ul> <li>Started cross-cultural training planning, expanded support for language learning</li> <li>Completed Global Management College FY2019 course (Total number of graduates for all nine terms: 111)</li> <li>Conducted follow-up interviews/training for mid-career hires</li> </ul>
workforce		Raise awareness of LGBTQ+ issues	<ul><li>Held internal seminars</li><li>Jointly held an external collaborative event</li></ul>
		Raise external awareness of our initiatives to promote D&I	<ul> <li>Selected again as a Nadeshiko brand</li> <li>Retained Kurumin certification (certification recognizing companies with parent-friendly HR policies and programs)</li> </ul>
	Promote the advancement of women Increase the ratio of	Continue supporting women in career-track positions	Conducted third round of training for women in career-track positions
	women among managers and managerial candidates by <b>1.6 times</b> (compared with the year ended March 31, 2019)	Promote a higher ratio of women among career-track position hires (administrative and sales staff: 40%; engineers: 10%)	Administrative and sales staff: 40%; Engineers: 10% achieved
Build more	Promote work-style reforms	Expand remote work	<ul> <li>Newly established rules for remote work</li> <li>Environment improvements (e.g., loaning of communication terminals, switched to mobile PCs)</li> </ul>
engaging workplaces	Promote health and	Raise external awareness of our initiatives to improve the health of our employees	Retained certification as an Outstanding Health and Productivity Management Organization (White 500)
	wellness	Centralize the management of employee health checkup results	Commenced centralized management and analysis by installing a health checkup results management system
Provide	Support the career	Train young employees at an early stage	Implemented young employee rotations
opportunities for growth	advancement of every employee	Provide ongoing growth opportunities	In addition to conventional face-to-face training, we expanded the number of participants and opportunities to attend by making full use of online options and HyFlex*

#### \*HyFlex: Hybrid-Flexible (face-to-face and online training simultaneously)

### 3 Environmental Management

Policy	6th Mid-Term Management Plan Targets	FY2020 Targets	FY2020 Results
Contribute to the	Avoid at least 2 million t-CO <sub>2</sub> emissions during the use of NSK products	1.8 million t-CO₂ or more	2.51 million t-CO <sub>2</sub>
establishment of a low- carbon society	Reduce CO <sub>2</sub> emissions in manufacturing, offices, and technology centers by 7% versus FY2017 levels	5% reduction	31% reduction
Contribute to the establishment of a	Reduce industrial waste per unit of sales by 4% versus FY2017 levels	3% reduction	11.8% increase
recycling-oriented society	Recycling ratio of 99% or higher	98.9%	98.9%
Contribute to the establishment of an environmentally symbiotic society	Expand social contribution activities related to biodiversity conservation	Continued activities	Continued activities based on the impact of the COVID-19 pandemic

### 4 Safety Management

Policy	6th Mid-Term Management Plan Targets	FY2020 Targets	FY2020 Results
Prevent fatal and	Each production site manages its own PDCA cycle for identifying dangerous spots and their improvement	Raise the level of risk extraction and inspection at each site and support self-driven risk-reduction activities	Having completed extracted risk reduction up to the previous fiscal year by continuing to improve the serious accident risk assessment criteria and their operation, improved level of self-driven risk reduction at each production site
serious accidents	accidents  Enhance the safety management guid	Business inspection and improvement guidance for contractors, subcontractors, and outside contractors	Established and started operation of the Outside Construction Rule Guidebook     Established operation of an outside construction management web system
Increase safety awareness	Train and implement behavior that increases safety awareness, including KYT* and the safety practice of pointing and calling	Plan and launch a safety culture workshop at sites in Japan to raise the NSK safety culture to an interdependent (mutually-enlightening) model	Completed construction of a safety culture workshop management system     Commenced workshop operations at sites in Japan
Prevent accident reoccurrence	Identify risks through risk assessment of equipment and work procedures and implement measures against those risks	Implementation/evaluation/countermeasures for risk assessment of existing equipment (Promotion of a three-year plan from FY2019 to FY2021)	Promoted risk assessment of the existing equipment as planned while implementing risk-reduction measures

\*KYT: Kiken Yochi (hazard prediction) Training

### 5 Supply Chain Management

Policy	6th Mid-Term Management Plan Targets	FY2020 Targets	FY2020 Results	
	Stable procurement	BCP audits of 30 major companies (Cumulative total of 100 companies since FY2018)	On-site inspections not carried out due to the effects of the COVID-19 pandemic, efforts implemented centered on remote follow-ups of inspections conducted on 70 companies in FY2018 and 2019	
Ensure stable supply and optimize supplier portfolio	Sustainable and responsible procurement	Implementation of self- assessments based on the NSK Supplier CSR Guidelines (every other year)	Implemented to additionally reflect the assessment items pointed out in the CSR audit conducted by a third party in FY2018 Obtained responses from 416 companies in Japan (response rate 95%) and implemented verification of level of progress of efforts	

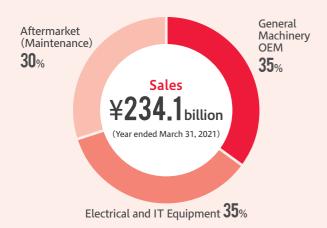
### **6** Quality Management

Policy	6th Mid-Term Management Plan Targets	FY2020 Targets	FY2020 Results
NSK Product Development System (NPDS) This is NSK's proprietary quality management system for quickly transforming new orders into reliable, stable production.	Verify performance with a complete grasp of the level and conditions required by the field     Improve field quality	<ul> <li>Improve NPDS quality (achieve KPI target value)</li> <li>Construct a global system addressing design <i>kakotora</i> (quality problems experienced in the past)</li> </ul>	<ul> <li>Established a feedback system and achieved design review (DR) KPI scores in all business divisions</li> <li>Achieved 100% NPDS participation rate for DR experts</li> <li>Established specifications for a global system addressing design kakotora (quality problems experienced in the past)</li> </ul>
NSK Quality No. 1 (NQ1) Program NSK is promoting initiatives to	<ul> <li>Improve procurement quality</li> <li>Dantotsu improvement activities (ongoing activities for zero defects)</li> </ul>	<ul> <li>Establish supplier audit teams</li> <li>Improve supplier quality concern (SQC) issues by means of <i>Dantotsu</i> activities (ongoing activities for zero defects)</li> </ul>	Established supplier audit teams and commenced activities     Commenced construction of a unified SQC system at domestic plants     Achieved global expansion of <i>Dantotsu</i> activities and implemented an internal awards scheme
realize stable production and ensure zero defects.	● Identify gemba (frontline) 4Ms <sup>-1</sup> quality risks, review good product conditions ● Enhance reoccurrence prevention	Strengthen cooperation with regional quality assurance departments     Improve the reoccurrence prevention method	Held global quality conferences online     Held regional quality conferences online     Held study sessions by Reoccurrence Prevention Promotion Committee members at each plant
Human Resource Development NSK is promoting the human resource development to build a stronger foundation for quality creation.	• Foster quality-first human resource development	<ul> <li>Effectively utilize Quality-dojo<sup>2</sup></li> <li>Establish Quality-dojo in technological divisions for design quality training</li> <li>Effectively utilize quality engineering</li> </ul>	<ul> <li>Established Quality-dojo at all major global bases and commenced training of all employees</li> <li>Commenced establishment of Quality-dojo in technological divisions</li> <li>Implementation of companywide FMEA education</li> </ul>

\*1 4M: Man, Machine, Material, Method \*2 Quality-dojo: A dedicated area for quality training put in place at each plant. Established in FY2019.

▶ PP. 40–41 Financial Strategy/Policy on Shareholder Returns, PP. 42–47 Financial and Non-Financial Highlights

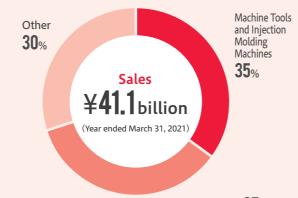
#### ■Industrial Machinery Bearings



which includes home appliances, PCs, and in-vehicle motors; and the aftermarket business, which provides maintenance and repair services. Industrial machinery bearings come in a range of sizes, from bearings with an outer diameter of approximately 2 mm that are incorporated into ultra-small motors to bearings with an outer diameter of more than 2 m that are utilized in wind turbines. The typical household contains around 100 bearings, which are used in general appliances such as vacuum cleaners and washing machines.

Meanwhile, the precision machinery and parts business supplies linear motion parts including ball screws and NSK Linear Guides™ that play an important role in linear motion and mechatronic products

#### ■Precision Machinery and Parts

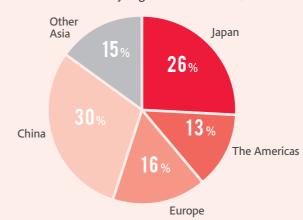


Semiconductor and LCD Production Equipment 35%

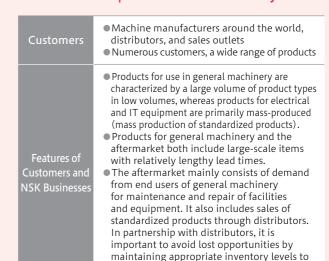
such as XY tables and Megatorque Motor™ that employ ultra-high precision positioning and controlling technologies. In this way, the Company supports a wide range of fields, including machine tools, injection molding machines, industrial robots, semiconductor and LCD production equipment, conveying machines, and medical devices.

Leveraging the synergistic effect of bearings and precision machinery, NSK is developing new proposals that will contribute to the greater performance of industrial equipment, as well as sophisticated solutions based on the condition monitoring system for greater machinery and equipment reliability and preventive maintenance.

#### ■Sales Breakdown by Region (Year ended March 31, 2021)



### Characteristics Unique to the Industrial Machinery Business





• Extensive product lineup as a comprehensive bearing manufacturer

ensure immediate delivery.

- Technological capabilities based on our Four Core Technologies plus One
- Accumulated expertise in customer needs and technology for a wide range of industries and applications
- Manufacturing, supply, and technical support capabilities based on a global network framework

### **Automotive Business**

**Business Overview** 

Comprising the two categories of automotive bearings and automotive components, the Automotive Business delivers various products that support the three critical elements of automobiles, namely running, turning, and stopping.

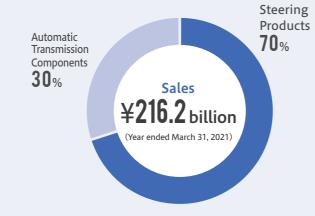
Automobiles utilize many different types of NSK bearings, including hub unit bearings and needle roller bearings. As automobiles have evolved, automotive bearings have come to demand a greater level of performance, including less



friction loss, smaller size, lighter weight, higher speed, and less noise. Through more sophisticated automotive bearings, including bearing grease and seals backed by its exceptional core technologies of tribology, materials, and numerical simulation, NSK continues to develop products that contribute to the evolution of automobiles.

Meanwhile, in the automotive component field, NSK delivers a wide range of core functional components, including electric power steering (EPS) and automatic transmission (AT) products, as well as ball screws for electric brake boosters. In addition to the primary column-type EPS, the Company

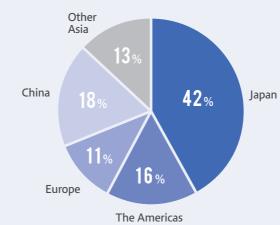
#### ■ Automotive Components



has developed pinion-type and rack-type EPS in a diverse product lineup. AT products are seeing greater demand against the backdrop of improved automobile fuel efficiency and comfort, whereas ball screws are seeing greater demand against the backdrop of improved safety.

Structural changes in automobiles from a technical standpoint, such as power source diversification and the evolution of vehicle dynamics controls geared toward autonomous driving, are currently accelerating. By building on the elemental technologies the Company has accumulated thus far and by developing new technologies, NSK will contribute to technical innovation for automobiles.

#### ■Sales Breakdown by Region (Year ended March 31, 2021)



### Characteristics Unique to the Automotive Business

NSK Business

 Automobile manufacturers around the world Automotive components manufacturers around the world

 Opportunities to win orders are basically when automobile manufacturers introduce new models or undertake a full model change. In accordance with their new model project schedule, we receive a designation as a development supplier and collaborate on development. Development suppliers are generally also responsible for supplying massproduced products and prepare for mass production in line with the new model launch schedule.

 A single project's quantity will increase due to largescale increases in the planned number of units as a result of standardization with car platforms.

 NSK's sales fluctuate in line with the sales volume of car models in the market. Just-in-time delivery is standard, and this alleviates burdens of inventory. However, customers often require that production is close to where demand is located, therefore the ratio of local production is relatively high.

NSK's Competitive Advantages

- Diverse business relationships/customer base with automakers and first-tier automotive components manufacturers
- Global supply capabilities
- Developmental capabilities and technical expertise to address advanced automobile functionality
- Global management system that takes the lead when responding to overseas demand and expanding overseas

#### **Industrial Machinery Business**

Business Environment A Look Back at the Business Conditions for the Year Ended March 31, 2021, and the Forecast for the Year Ending March 31, 2022

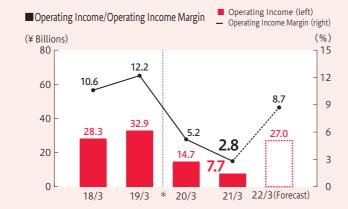
In the Industrial Machinery Business, the cautious approach in capital expenditures across the world was seen in the first quarter against the backdrop of the contraction of economic activities due to the global spread of COVID-19. Thereafter, production activities in China returned toward normal before other regions, and demand in regions other than China also started to recover toward the end of the fiscal year. However, the full-year sales in the Industrial Machinery Business decreased year on year due to sluggish demand in the first half.

Looking at the Company's results by geographic breakdown, overall sales in Japan decreased due to slumping demand in every sector although the machine tools sector started to show recovery toward the end of the fiscal year. In the Americas, overall sales declined due to a sales decrease in the aftermarket sector as well as the impact of the foreign exchange factor, while sales in the

semiconductor sector increased. In Europe, overall sales declined due to a sales decrease in the electrical and electrical accessory sectors. On the other hand, sales in China increased thanks to robust demand in the wind power, machine tools as well as electrical and electrical accessory sectors.

As a result, sales in the Industrial Machinery Business totaled ¥275,226 million (year-on-year decrease of 3.2%). Operating income was ¥7,697 million (year-on-year decrease of 47.8%) as sales fell in each region except for China.

The Company will continue to flexibly address changes in demand trends. As needs grow in society for IoT and 5G, robotics, and renewable energy, the Company is working to expand its mid- to long-term presence in the market and expand businesses that add to sales by building a new business foundation that addresses these growth areas.



#### **Automotive Business**

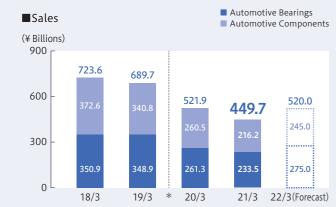
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Business Environment \*A Look Back at the Business Conditions for the Year Ended March 31, 2021, and the Forecast for the Year Ending March 31, 2022

Global vehicle production in the first quarter dropped substantially due to restrictions on movement, disruption in the supply chain, and suspension of production because of the global spread of COVID-19. From the second quarter onward, although the automotive market changed to a recovering trend, the full-year sales in the Automotive Business decreased year on year due to the significant drop in the first quarter.

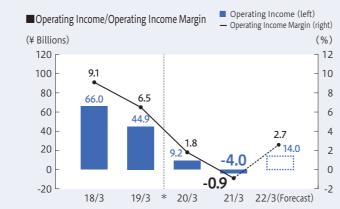
Looking at the Company's results by geographic breakdown, sales in Japan decreased due to a sluggish automotive market. In the Americas and Europe, sales dropped due to stagnant vehicle sales caused by a restriction on economic activities. In China, while sales in electric power steering (EPS) systems decreased, overall sales increased due to stronger sales of bearings and products for the automatic transmission (AT) systems.

As a result, sales in the Automotive Business totaled ¥449,722 million (year-on-year



decrease of 13.8%). The operating loss amounted to ¥4,018 million (operating income of ¥9,174 million in the previous fiscal year), reflecting the impact of lower sales in all regions, excluding China.

In the Automotive Business, NSK aims to expand the powertrain business by addressing the need for the electrification of automobiles, as well as multi-step AT and the increasing percentage of automobiles with AT. The Company is also focusing on electric brake systems, which are expected to become mandatory in vehicles, and restarting growth in the steering business. Moreover, NSK will contribute to electrified and autonomous driving cars, and other automobile-related technical innovation by employing existing technologies and new technologies to be developed in the future. We will also work to improve profitability by raising productivity and reducing fixed costs.



### New Initiatives Targeting Growth

### Build and expand the condition monitoring system (CMS) business

#### -Acquisition of a leading specialist in the CMS market, becoming a driver of growth in the CMS business-

On December 10, 2020, NSK signed an agreement to acquire the CMS business brand Brüel & Kjær Vibro (BKV) and completed the deal on March 1, 2021. BKV is a worldwide leader in facility maintenance and condition monitoring solutions for rotating machinery such as pumps, turbines, compressors, and generators.

In recent years, there have been expectations that the analysis of data, gained through condition monitoring of facilities and manufacturing lines, followed by diagnostics, would contribute to enhanced maintenance, productivity, and quality, and this has been garnering attention as a means to achieving production innovation.

NSK products are important components that have a direct impact on the functionality and performance of machinery. The



synergies that arise with NSK's wealth of data and associated technology, matched together with BKV's exceptional customer base, technology, brand, human resources, and access to big data will accelerate CMS business development and will address societal needs such as for automation, labor-saving, smart technology, and environmental measures.

As trends toward a higher ratio of renewable energy, including wind power, gain momentum on a global basis, the technologies held by NSK and BKV will underpin the stable operation of wind power, hydropower, the manufacturing industry, and other essential infrastructure that supports people's daily lifestyles.



# Steering & Actuator Business Higher power single pinion electric power steering

#### -New product jointly developed with Volkswagen-

Electric power steering (EPS) handles the turning function that is necessary for vehicles and enables higher fuel efficiency and as-desired steering for essential safety and a comfortable driving experience.

The assist power required for EPS differs in accordance with factors such as vehicle size and weight. For compact vehicles, the most appropriate is our mainstay column-type EPS, which provides power assistance near the wheel. For medium to large vehicles that require a high level of assist power, pinion- and rack-

type EPS serve to provide assistance from near the tires.

Based on the experience and expertise in development and production gained from column-type EPS, NSK has worked jointly with VW to develop a higher power single pinion EPS and has secured an order for a next-generation electric vehicle. Initial production will start in 2023 at an NSK plant with supply to VW's electric vehicle plants globally. Taking advantage of jointly developed technology, we will propose outstanding products to other customers as well and aim for growth in the EPS business.

#### Product Features

### Securing a balance between each of the diverse compact and high output perspectives

Conventional single pinion EPS assist capabilities served comparatively compact vehicles. The new jointly developed single pinion EPS realizes assist power that can meet the needs of medium to large vehicles as well. In addition, it offers a simple, compact construction.

#### **2** Quietness

Compared to conventional gasolinepowered vehicles, EVs require exceptional silence. The new jointly developed single pinion EPS goes far beyond the level of quietness conventionally offered.



Higher power single pinion EPS

### 2 Enhance Managerial Resources

# **Evolve Personnel Development**



#### NSK's Approach

In our Management Principles, NSK clearly states that our aim is "to provide challenges and opportunities to our employees, channeling their skills and fostering their creativity and individuality." In acknowledgment of the fact that each employee is a priceless asset, we have committed ourselves to creating a "fair workplace that empowers the individual." This commitment features three key areas of focus: leveraging a diverse workforce, building more engaging workplaces, and providing opportunities for growth.

### Examples of Fiscal 2020 Initiatives

#### Diversity as a Driving Force of the Organization

In fiscal 2020, NSK was selected as a "Nadeshiko Brand," an honor that is jointly determined by Japan's Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange. NSK has made women's career advancement one of its important management objectives. Accordingly, we have been focusing on diversity and inclusion measures, such as providing training for women who are candidates for management positions. The Nadeshiko Brand selection recognizes NSK's extensive efforts to promote employee diversity and flexible work styles.



#### Transforming Learning: Expand Educational Opportunities, Location, and Scheduling Options

Work styles are experiencing a tectonic change, as seen with trends toward working from home and remote meetings. Educational activities are also becoming more diverse, shifting from face-to-face to online training, video streaming, and other formats.

There are also advantages to revising the approach we take to education, namely, the changing of programs, formerly implemented in conventional face-to-face training formats, in accordance with objective or attribute. Take, for example, video streaming where a course is available without needing to lock in a time, or online training, where employees who had found it difficult to attend in person because they needed to take care of their children, or other circumstances, have become able to participate. These are formats that enhance convenience and expand opportunities for participants.

As one such educational tool there is a new video program initiative called "Act Active Agent." Under this program, employees make and present their own video of themes relevant to business efficiency enhancement, the honing of skills, or raising motivation from among the initiatives they worked on at the internal training. Employees will share within the Company what they have learned; moreover, diversifying how they learn it promotes the transformation of work styles throughout the Company.



Online training

#### Initiatives to Promote Wellness in Both Body and Mind

NSK's outstanding efforts in health management have been widely recognized. In 2021, the Company was certified as an Outstanding Health and Productivity Management Organization in Japan for the fourth consecutive year. NSK also was named to the "White 500" list of the top-performing 500 companies with this certification.

NSK recognizes that the health of each of our employees and their families is an invaluable asset to the Company and promotes initiatives with the aim of improving their physical and mental health. Based on the results of stress checks conducted on an annual basis, the Company holds organizational analysis feedback briefings for managers at each workplace, and improvement goals for each respective organization are formulated and put in place. In terms of physical health, by September 2020, NSK had eliminated smoking spaces within all NSK business sites, with the goal of preventing exposure to secondhand smoke. Moreover, by using a system to centrally manage the results of health checkups, we will be offering data-backed health support measures.



#### Opportunities for Growth through Diverse Experiences (Rotations)

Based on our conviction at the NSK Group that people grow through experience, young employees up to age 30 are considered to be in a training phase. We carry out job rotation for these young employees in career-track positions to broaden their outlook through a variety of experiences and to give them a better perspective. They are interviewed every three years to check their career plans. Transfers are performed to promote career development, as well as to acquire the ability to adapt to changing environments, build relationships, and hone communication skills. This reflects our efforts to offer opportunities to be active as future NSK people and to nurture growth as the human talent that will become responsible for managing the Company.

### **3** Contribute to the Environment and Society



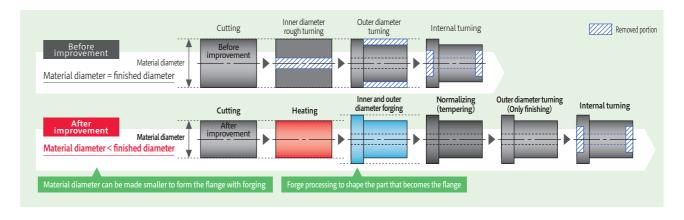
#### NSK's Approach

NSK's mission statement is to contribute to a safer, smoother society and help protect the global environment through its innovative technology integrating Motion & Control™. The environment is one of our core values. We aim to contribute to the realization of a sustainable society and improvement in NSK's corporate value through initiatives to maximize environmental contributions through products and reduce the environmental impact from our own business activities based on NSK's mission statement.

#### Examples of Fiscal 2020 Initiatives

#### Improved Steel Consumption Efficiency through Nut Forging of Large-Size Ball Screws

Ball screws used in machine tools, electric injection molding machines, and other machinery are machined to the shape of a nut that meets customers' specifications and are shipped together with the screw's shaft. Previously, when manufacturing nuts, a machine was used to shave off the excess portion from a cylindrical piece of steel that matched a flange with the nut's largest diameter. NSK has now reduced the volume of steel used by 44% from that prior to the improvement by employing a forging process with a smaller-diameter piece of steel.



#### Reducing Grinding Waste Liquid and Reusing Water

The process of grinding metal parts with a whetstone entails the use of grinding fluids made by adding a solvent to water. After repeated use, the grinding fluids become degraded and are disposed of as waste. Such waste liquid accounts for about 40% of the NSK Group's waste emissions, and we have therefore promoted countermeasures with the aim of reducing such waste.

At Amatsuji Steel Ball Mfg. Co., Ltd.'s plant in Shiga Prefecture, in February

2021 we deployed a waste liquid distillation concentrator to enable the performance of an on-site process in which by distilling waste liquid we could separate "water" and "concentrated waste liquid." This equipment is capable of distilling 250 tons of water per year, and this amount is equivalent to roughly 30% of the waste liquid volume emitted in the grinding process that takes place at the Shiga plant. The distilled water is reused to cool the facilities with the aim of effectively utilizing resources, and furthermore, the concentrated waste liquid is recycled outside the Company as fuel or another resource.



The waste liquid distillation entrator deployed to Amatsu Steel Ball Mfg. Co., Ltd. (Shiga plant)

#### Reducing Waste Materials in Distribution

Reduce, reuse, and recycle constitutes an initiative that the distribution division undertakes on a global scale as the Company endeavors to reduce waste

In the Americas, after unpacking imported items, the packaging materials had previously been treated as waste, which became landfill. From fiscal 2020, this waste has been sold to a vendor, and through incineration it is reused as energy (thermal recycling).

In Europe, the wooden pallets used in shipping from Japan, being of a different size than standard European pallets ("EUR-pallet"), had been unable to be reused and were disposed of as waste. From fiscal 2020, however, the

Company commenced returning these wooden pallets to the Japan, Asia, or Oceania regions, and subsequently they are being reused for inter-regional shipping. In this way, our operations in Europe were able to cut wasted pallets by around 70% from the previous fiscal year.



A reused wooden pallet

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<sup>▶</sup> Please see our website for more information. ☐ https://www.nsk.com/sustainability/environment/index.html

#### NSK's Approach

NSK has positioned safety as one of its core values. While continuously striving to further increase employee awareness, employees rely on safety as the basic judgment for all their actions. To protect the safety and health of every employee, and to guarantee the safe conduct of all employees, NSK is implementing various measures based on its Safety Philosophy. Never content with the status quo, NSK is constantly working to further raise the level of safety.

#### Examples of Fiscal 2020 Initiatives

#### Raising the Safety Management Level for Construction by Outside Contractors

By using a web system to manage the work performed by outside contractors, NSK was able to lighten the workload of people in charge and substantially improve operational speed. In addition, it enabled the smooth confirmation of various preparatory tasks, and this system was used to expand and develop safety management for internal construction as well.

#### Activities to Foster an Interdependent (Mutually-**Enlightening**) Safety Culture

As activities to foster a culture of safety at production bases, NSK began conducting safety culture workshops. These workshops seek to facilitate an understanding of current levels of safety culture at production bases, and department managers discuss and set tasks geared toward raising that level, which leads to a cascading knowledge according to rank.

In addition, as an opportunity to learn about "felt leadership" (leadership that enables workers to understand and "feel" management's thoughts on safety), from fiscal 2020 NSK commenced the holding of a core value workshop for executive management and the rollout of this is ongoing.



The Fiscal 2020 Executive Management Core Value Workshop (while taking measures against COVID-19)

#### Introduction and Operation of Video Risk Assessment to Raise the Level of Work Risk Assessments

By utilizing videos of actual work for the risk assessment of operations, the risky tasks and actions, as well as dangerous spots that had typically been difficult to discern, have now come to be easily identified. Having

plant operators participate in the video risk assessments effectively enables the reduction of operational risks and leads to putting in place safe standardized tasks.



Conducting the risk assessment by video (Fujisawa Plant)

▶ Please see our website for more information. !! https://www.nsk.com/sustainability/hs/index.html

# **Supply Chain Management**

#### NSK's Approach

NSK is supported by many suppliers. We consider suppliers to be essential business partners and will seek mutual development while building relationships of trust.

#### Examples of Fiscal 2020 Initiatives

#### Supplier CSR Self-Assessment

The NSK Group distributes the "NSK Supplier CSR Guidelines" to its suppliers and asks them to ensure compliance with competition laws and anti-bribery laws, to respect the basic human rights of workers by prohibiting child labor and forced labor and maintaining occupational safety and health, to make efforts to preserve the environment through activities such as managing environmentally harmful substances, and to assess and mitigate risks that could impact business activities at their own company.

Based on these guidelines, the NSK Group asks its suppliers to perform CSR self-assessments and monitors the condition of their operations (every two years). We then report the results of our evaluation of their activities back to suppliers.

In fiscal 2018, we implemented audits conducted by a third-party organization

in five areas—labor, ethics, safety and health, the environment, and management systems—in accordance with Responsible Business Alliance Standards. Based on the results, for fiscal 2020 assessments covering approximately 930 companies in Japan and China, we strengthened initiatives to reduce risk, revising content by adding new items to the assessment form on a whistleblower system that concerned human rights and labor, the status on workplace accidents that require time off work, and the record of labor time management.

At NSK Group companies in the United States and Europe, China, and around the world, Supplier CSR Guidelines are posted to websites in efforts to effectively

We will continue to take on CSR issues that society needs to strengthen, such as the transition to a carbon-neutral society.

▶ Please see our website for more information. 🕌 https://www.nsk.com/sustainability/supplier/index.html

### NSK's Approach

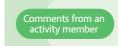
With quality as one of its four core values, NSK aims to become "No. 1 in Total Quality." In other words, we are working to achieve the industry's best quality in everything we deliver—not only products and services but also information. We believe that this commitment to quality ensures that our products will satisfy customers all over the world.

To achieve its Quality Assurance Vision 2026 (100% quality products that put the customer first), we engage in activities based on the Three Pillars of NSK Quality Assurance.

#### Examples of Fiscal 2020 Initiatives

#### Introduction of the "Dantotsu" Global Award System

In fiscal 2020, we implemented *Dantotsu* (improvement activities) efforts for zero defects at 42 plants around the world in a total of 61 categories, more than doubling from the previous fiscal year the number of items where we achieved our goals, and took this activity from Japan to points across the globe. Covering all locations worldwide, we newly instituted the "Dantotsu Global Award," which honors activities covering a wide range of categories in addition to the achievement of the conventional consecutive zero-defect goals. Through the awards and the sharing of positive case studies, employee motivation is heightened and activities are energized.



We were able to bring to the surface errors in equipment specifications and troubles experienced by operators, and to reveal what each specific cause of a problem was by going over things at morning meetings. This strengthened the bonds between team members.



Group at NSK Kyushu Co., Ltd., recipient of the Dantotsu Global Award

#### Implementation of FMEA Education with First Internal e-Learning Regarding Quality Training

In the risk analysis that takes place while establishing new development projects, amendments to processes, and other points to change, NSK looks at FMEA as an item for assessment. The goal is to understand the objective of FMEA and to utilize it effectively. This is not just for the development, design, or manufacturing departments; we have conducted this as basic e-learning, covering approximately 9,000 employees in all major departments in Japan.

The focus was placed on typical daily themes, and commentary in line with the flow of FMEA, from customer orders to completed product, was provided in an easy-to-understand manner that participants were able to take to heart. Based on an understanding of the importance of FMEA, there was an explanation of the strict scoring on degree of importance (degree of impact, seriousness, and severity), degree of occurrence (frequency), and detectability (difficulty in detection). The course helped participants understand the effectiveness of assessments.

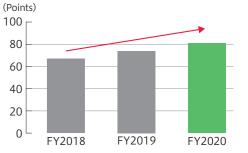
By conducting a survey at the conclusion of the course it was understood that course participants had a sufficient understanding. In addition, we were able to collect opinions from a wide range of departments about quality, and this generated hints on the next measures to be taken to raise quality. As an effective tool in upcoming quality training sessions, we aim to make further use of e-learning.

#### NPDS Design Review (DR) Quality Improvement Activities

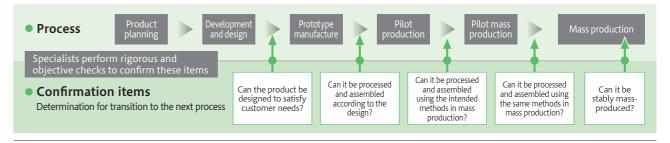
NPDS is an acronym for "NSK Product Development System." Having in place a mechanism to implement "a series of operations to create quality, from the start of a project to launch of mass production," NSK recognizes that enhancements through these activities lead to a greater degree of customer satisfaction.

At each stage of NPDS—design, preparation for production, or other task—those people engaged in a project gather and perform design reviews (DRs). In tandem with this, DR experts with a wealth of experience conduct an evaluation of the DR quality. At each stage of a DR, experts assess to what extent the items to be considered were effective, and the results obtained are provided by management to participants. This cycle repeats itself so that every year DR quality improves. We will continue to make further advances, utilizing DR to eliminate oversights and omissions, and will strive to take this to a higher level to be able to offer firm product assurances at the product planning stage.

#### ■DR Quality (score) Assessment Trends



#### ■Outline of NPDS



▶ Please see our website for more information. !! https://www.nsk.com/sustainability/qa/index.html

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# Financial Strategy/Policy on Shareholder Returns

#### Looking Back on the Financial Results of the Year Ended March 31, 2021

The year ended March 31, 2021, saw lower sales and profits, as well as a commensurate decline in ROE, due to the curtailment of economic activity and the decline in demand that coincided with the manifestation of the COVID-19 pandemic starting in the second half of the previous fiscal year. As a result of efforts focused on securing liquidity on hand and maintaining the stability of the financial base during the COVID-19 pandemic, however, NSK has ensured its financial health in terms of its ratio of net worth to total capital, net D/E ratio, and A-level credit rating. Despite a reduction in dividends owing to lower profits, NSK maintained a stable total return ratio.

	March 2020	March 2021	Comparison	Evaluation and Comments
Total assets	¥1,029.9 billion	¥1,167.5 billion	+¥137.6 billion	Maintained a stable financial base and saw a recovery in the business environment
Total equity attributable to owners of the parent (Shareholders' equity)	¥505.5 billion	¥554.4 billion	+¥48.9 billion	Posted higher net income and saw an increase in other components of equity (foreign currency translation adjustments, etc.)
Cash and cash equivalents	¥137.3 billion	¥176.6 billion	+¥39.3 billion	Secured an appropriate level of liquidity on hand as a COVID-19 measure
Interest-bearing debt	¥279.2 billion	¥332.4 billion	+¥53.3 billion	Increased to secure liquidity on hand
Ratio of net worth to total capital	49.1%	47.5%	-1.6% points	Maintained near the MTP target of 50% despite the COVID-19 pandemic
Net D/E ratio	0.28 times	0.28 times	0.00 points	Maintained at less than the MTP target of 0.3 times
Total return ratio	88.2%	2,885.8%	+2,797.6 percentage points	Despite a reduction in dividends owing to lower profits, provided stable shareholder returns
ROE	3.3%	0.1%	-3.2 percentage points	Declined due to lower profits

### The 6th MTP Financial Strategy/Policy on Shareholder Returns Overview

NSK's fundamental financial strategy policy is to balance investment in future growth with shareholder returns under a stable financial structure.

#### 1 Maintenance in Stabilization of Financial Base

"Maintenance in Stabilization of Financial Base" is a prerequisite for supporting NSK's sustainable growth and withstanding economic fluctuation impacts. P. 42 Financial Highlights

NSK has been able to steadily improve its ability to generate cash flow compared with the past and has stabilized its financial base.

In addition, the Company has received high evaluations from two rating agencies despite the COVID-19 pandemic, namely a bond rating of A from Rating and Investment Information, Inc. (R&I), and a bond rating of A+ from Japan Credit Rating Agency, Ltd. (JCR). NSK recognizes that maintaining an A bond rating while continuing to keep its net D/E ratio around 0.3 times and its ratio of net worth to total capital at roughly 50% will enable the Company to ensure financial stability.

Rating and Investment	Japan Credit Rating Agency,
Information, Inc. (R&I)	Ltd. (JCR)
Α	A+

#### 2 Growth with Profitability

Sustainably achieving "Growth with Profitability" is essential for generating cash flows and making capital expenditures and R&D investments that lead to future growth, as well as for paying stable dividends to shareholders. We believe achieving a rate of return that exceeds the cost of capital expected by shareholders and investors can be considered the "mission" of a publicly listed company. NSK has set a target for ROE of at least 10% in its 6th Mid-Term Management Plan, which exceeds its cost of capital (roughly 8%–9%) as estimated based on past share trends, business characteristics, and the current state of the stock market. We believe maintaining this target over the mid-term could contribute to further improvement in shareholder value.

#### 3 Stabilization of Shareholder Returns

One of NSK's core management policies is "Stabilization of Shareholder

As part of the 6th Mid-Term Management Plan, NSK is working to further enhance shareholder returns, and has thus established a dividend payout ratio of 30%-50% and raised the target to ¥40 or higher for the per share dividend.

In addition to returning profits through dividends, NSK recognizes



that agile capital policy execution based on share buybacks is another option. NSK intends to appropriately and flexibly execute share buybacks considering its cash position and stock market trends. During the three-year period covered by the 6th Mid-Term Management Plan, NSK is targeting a total return ratio of 50%.

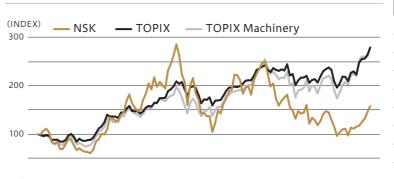
#### Total Shareholders' Return (TSR)

Along with achieving an ROE that exceeds the cost of capital over the mid-term, increasing TSR acquired through dividends and a rising stock price is also important. NSK's TSR has been affected by demand adjustments over the past three to four years and a depressed stock price due to lower steering-related sales. Although this has unfortunately led NSK's TSR to underperform TOPIX and TOPIX Machinery, looking at the most recent year. NSK's TSR has outperformed comparative companies owing to a recovery in the stock price. The stock price is based on various factors beyond just the Company's performance, such as market trends, the state of the economy and the impact of the COVID-19 pandemic during the current fiscal year, however, and NSK will therefore continue to strive to deliver stable dividends to its shareholders and improve its corporate value.

Investment	1 Year 3 Years			5 Ye	ears	10 Years		
Period	Cumulative/Annual Rate	Cumulative	Annual Rate	Cumulative	Annual Rate	Cumulative	Annual Rate	
NSK	66.4%	-14.1%	-4.9%	26.5%	4.8%	95.8%	6.9%	
TOPIX	42.1%	22.1%	6.9%	62.3%	10.2%	179.4%	10.8%	
TOPIX Machinery	59.9%	23.8%	7.3%	89.6%	13.6%	178.4%	10.8%	

<sup>\*</sup>TSR (Total Shareholders' Return): Total return on investment including capital gains and dividends \*Each index includes dividends.

### NSK's Share Price Trends (10-Year Period)



<sup>2011/3 2012/3 2013/3 2014/3 2015/3 2016/3 2017/3 2018/3 2019/3 2020/3 2021/3</sup> \*Share price index trends including dividends (March 31, 2011 = 100)

#### ■ Share Price Trends by Fiscal Year

total capital: 50%

2011     815     458     637     36.79       2012     758     414     715     36.59       2013     1,360     646     1,062     45.79       2014     1,815     1,023     1,758     32.69       2015     2,120     910     1,030     39.09
2013     1,360     646     1,062     45.79       2014     1,815     1,023     1,758     32.69
2014 1,815 1,023 1,758 32.69
2015 2,120 910 1,030 39.09
2016 1,739 691 1,592 44.39
2017 1,916 1,261 1,426 28.59
2018 1,488 885 1,037 26.19
2019 1,208 579 694 33.79
2020 1,202 581 1,135 43.29

<sup>\*</sup>Volatility refers to the standard deviation annualized rate based on the

#### Policy on Cross-Shareholding

NSK aims to reduce the crossholding of shares deemed to have little benefit in increasing mid- to long-term corporate value. Conversely, if the Company believes that there is a valid rationale for holding such shares, it will continue to do so. Regarding the appropriateness of cross-shareholdings, NSK conducts quantitative and qualitative evaluations on an annual basis to determine whether each individual shareholding is delivering acceptable benefits in relation to the Company's capital cost. We will promote the sale of any cross-shareholdings for which possession cannot be justified, considering stock prices and market trends.

The number of cross-shareholdings (disclosed in the Annual Securities Report) totaled 136 stocks as of the end of March 2010. However, this number had been reduced to 67 stocks as of the end of March 2021 (a reduction of five stocks in the year ended March 2021 and 69 stocks over the 11 years from the year ended March 2010).

nual rate based on the geometric mean \*Created by the Company, based on Bloomberg data

# Financial and Non-Financial Highlights

### **Financial Highlights**

\*1 In accordance with segment changes in the business domains (part of operations transferred from the Industrial Machinery Business to the Automotive Business) in the fiscal year ended March 31, 2017, data from the fiscal year ended March 31, 2016, to the fiscal year ended March 31, 2018, are presented under the changed categories.
\*2 In accordance with segment changes in the business domains (part of operations transferred from the Automotive Business to the Industrial Machinery Business) in the fiscal year ended March 31, 2021, data from the fiscal year ended March 31, 2020, onward, are presented under the new categories.
\*3 The breakdown of the ¥38.0 per share dividend paid in the fiscal year ended March 31, 2017, is a normal dividend of ¥28.0 per share and a ¥10.0 per share dividend to commemorate the 100th anniversary of the Company's founding.

\*4 Total return ratio = (Dividends paid + Acquisition of treasury shares) ÷ Net income attributable to owners of the parent.

Financial Highlights							*4 Total return ratio = (Divi	n anniversary of the Compan dends paid + Acquisition of		come attributable to own	ers of the parent.		(¥ Millions)
NSK Ltd. and Con	solidated Subsidiaries					JP-GAAP				IFR	S		
Years ended Marc	h 31		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Financial	Sales		710,431	733,192	732,842	871,742	974,885	975,319	949,170	1,020,338	991,365	831,034	747,559
Data	[By segment]	Industrial Machinery Business	259,095	255,835	216,142	242,969	276,361	243,395*1	226,924	266,249	269,974	284,426*2	275,226
		Automotive Business	424,157	444,585	490,545	590,545	656,998	705,511	696,271	723,564	689,658	521,857	449,722
		Others/Adjustments	27,178	32,772	26,154	38,226	41,525	26,411	25,974	30,524	31,732	24,750	22,611
	[By region]	Japan	354,542	363,754	333,348	329,136	328,837	318,434	330,512	372,134	367,537	314,281	275,777
	(Based on customer location)	The Americas	85,466	86,267	103,352	134,483	164,821	183,652	165,177	155,498	157,581	139,249	107,829
		Europe	102,176	107,958	102,667	124,590	133,752	131,830	121,920	137,856	130,127	110,075	94,800
		Asia (excluding Japan)	168,246	175,213	193,473	283,532	347,475	341,403	331,559	354,849	336,119	267,427	269,153
		China	82,587	89,068	91,442	167,239	210,237	204,361	201,185	212,097	194,994	148,525	166,660
		Other Asia	85,658	86,143	102,030	116,293	137,238	137,042	130,373	142,752	141,124	118,902	102,492
	Operating inco	me	43,524	44,417	32,361	68,049	97,327	89,534	65,341	97,875	79,279	23,604	6,364
	Ordinary incom		38,572	42,004	30,310	66,785	91,002	_	_	_	_	_	_
	Net income att owners of the p		26,110	28,514	15,739	31,167	61,962	65,719	45,560	69,312	55,809	17,412	355
	Capital expend	itures	41,294	54,619	48,025	45,448	49,197	54,996	58,602	68,788	81,102	54,927	37,303
	Depreciation ar	nd amortisation	34,943	35,807	34,598	35,079	38,568	43,048	43,354	46,785	48,801	53,926	54,527
	R&D expenses		10,515	10,373	10,432	9,919	10,660	11,155	13,858	17,059	19,023	18,265	16,820
	Net cash provided by	operating activities (A)	64,973	57,158	53,797	70,342	67,709	108,622	67,936	83,746	92,617	72,387	53,842
	Net cash used in ir	nvesting activities (B)	(33,348)	(56,090)	(45,262)	(42,402)	(46,335)	(45,212)	(54,243)	(53,001)	(72,673)	(39,784)	(51,096)
	Free cash flows	(A) + (B)	31,625	1,068	8,534	27,940	21,374	63,410	13,692	30,744	19,943	32,602	2,745
	Dividends paid		5,950	6,491	5,943	8,650	15,161	18,425	20,174	21,245	20,737	15,550	10,367
	Acquisition of t	-	_	_	_	_	_	_	14,999	_	19,999	_	
	of the parent (Sh	butable to owners nareholders' equity)	257,012	280,312	319,286	359,201	456,046	454,661	461,350	537,175	536,676	505,505	554,375
	Total assets		788,626	845,073	882,547	1,000,932	1,129,164	1,032,374	1,043,955	1,092,310	1,086,456	1,029,884	1,167,498
	Interest-bearing		274,585	296,750	305,102	315,532	326,400	278,152	267,399	250,908	274,780	279,170	332,440
Per Share Data (Yen)	Earnings (Net i		48.30	52.75	29.14	57.70	114.56	121.38	86.08	131.16	107.46	34.00	0.69
Data (Tell)	parent (Shareho	ole to owners of the lders' equity)	475.45	518.56	591.36	664.74	842.69	839.56	873.11	1,016.30	1,048.18	987.01	1,081.60
	Cash dividends		11.0	12.0	11.0	16.0	28.0	34.0	38.0*3	40.0	40.0	30.0	20.0
Financial	Operating inco	-	6.1	6.1	4.4	7.8	10.0	9.2	6.9	9.6	8.0	2.8	0.9
Indices	-	eholders' equity (ROE) (%)	10.3	10.6	5.2	9.2	15.3	14.3	9.9	13.9	10.4	3.3	0.1
	-	ge assets (ROA) (%)	3.3	3.5	1.8	3.3	5.8	6.1	4.4	6.5	5.1	1.6	0.0
	of the parent to to		32.6	33.2	36.2	35.9	40.4	44.0	44.2	49.2	49.4	49.1	47.5
	Net D/E ratio (		0.60	0.58	0.51	0.41	0.31	0.23	0.28	0.22	0.27	0.28	0.28
	Dividend payou		22.8	22.7	37.7	27.7	24.4	28.0	44.1	30.5	37.2	88.2	2,885.8
	Total return rat		22.8	22.7	37.7	27.7	24.4	28.0	77.1	30.5	73.1	88.2	2,885.8
	Period-end sha	•	717	637	715	1,062	1,758	1,030	1,592	1,426	1,037	694	1,135
	•	atio (PER) (Times)	14.8	12.1	24.5	18.4	15.3	8.5	18.5	10.9	9.7	20.4	1,644.9
		ratio (PBR) (Times)	1.5	1.2	1.2	1.6	2.1	1.2	1.8	1.4	1.0	0.7	1.0
	Dividend yield	(%)	1.5	1.9	1.5	1.5	1.6	3.3	2.4	2.8	3.9	4.3	1.8
Exchange Rate Data	US\$1		85.63	79.02	83.10	100.24	109.93	120.14	108.42	110.86	110.91	108.75	106.06
	€1		112.92	109.40	107.14	134.37	138.77	132.58	118.84	129.70	128.40	120.83	123.70

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<sup>\*1</sup> NSK Ltd. and main group companies in Japan \*2 The Company receives third-party assurances. P. 83 \*3 Cancelled due to the spread of COVID-19

*4 Number of times Centra	l Labo	or-Managemen	t Conference meetings held	*5 Conducted as a comp	iance awareness surve	ey until the fiscal year ended March 2018

	As of June 30		Unit	2017/6	2018/6	2019/6	2020/6	2021/6
vernance )	Composition of the Board of Directors	Number of directors	Persons	12	12	12	9	9
		Ratio of independent outside directors	%	33.3	41.7	41.7	55.6	55.6
		Ratio of males	%	100	91.7	91.7	88.9	88.9
		Ratio of females	%	0	8.3	8.3	11.1	11.1
	Years ended March 31		Unit	2017	2018	2019	2020	2021
	Attendance at Board of	Number of times convened	Meetings	10	10	10	10	10
	Directors meetings	Number of times convened	Meetings	10	10	10	10	
	Directors meetings	Average attendance rate	%	98	100	99	99	98
	Directors meetings		U					

<sup>\*</sup>The appointment of one independent outside director took place in July 2018.

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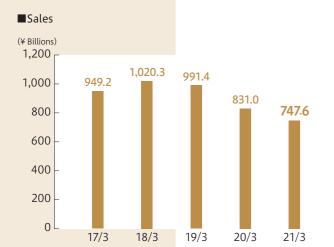
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<sup>\*2</sup> Third-party verification is performed. > P. 83

<sup>\*3</sup> Adjusted for the purpose of greater accuracy.

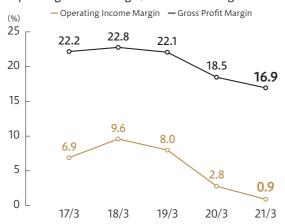
### Financial and Non-Financial Highlights

#### Trends in Major Indices The comments under the charts apply to the actual results for the fiscal year ended March 2021.



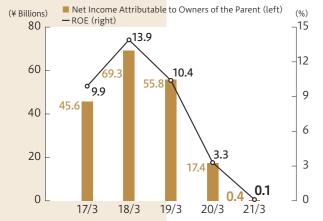
In FY21/3, sales totaled ¥747.6 billion, a decrease of 10.0% from the previous fiscal year due to the significant impact of lower demand amid the COVID-19 pandemic in the first half of the fiscal year.

#### ■Operating Income Margin/Gross Profit Margin



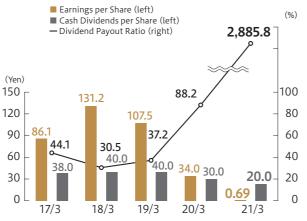
Despite efforts aimed at reducing costs centered on personnel expenses, the operating income margin declined to 0.9% (down 1.9 percentage points year on year). This was largely due to the downturn in sales.

#### ■Net Income Attributable to Owners of the Parent/ROE



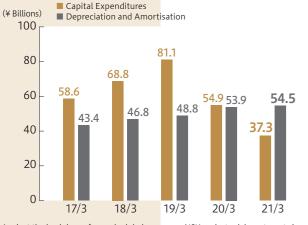
The ROE for FY21/3 came to 0.1% due to the decrease in net income attributable to owners of the parent as a result of the decrease in sales.

#### ■ Earnings per Share/Cash Dividends per Share, Dividend Payout Ratio



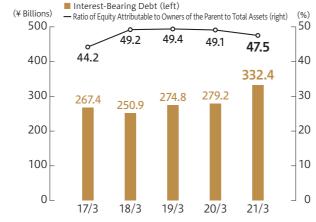
NSK set its cash dividend per share at ¥20 for FY21/3, down ¥10 from the previous fiscal year due to the downturn in earnings per share. From the perspective of continuously undertaking shareholder returns, however, the dividend payout ratio came in at 2885.8%, well above the 6th MTP target of 30%-50%.

### ■Capital Expenditures/Depreciation and Amortisation



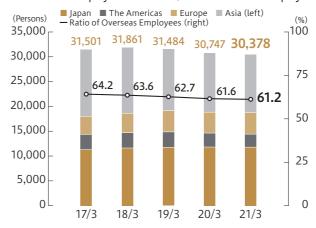
Against the backdrop of a weak global economy, NSK undertook investments in projects related to safety, quality, and the environment; essential projects aimed at improving productivity; and the replacement of equipment. In FY21/3, capital expenditures totaled ¥37.3 billion, down ¥17.6 billion from the previous fiscal year.

#### ■ Interest-Bearing Debt/Ratio of Equity Attributable to Owners of the Parent to Total Assets



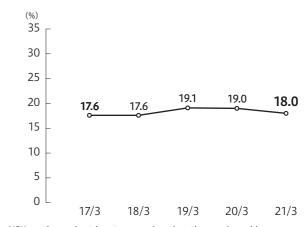
Interest-bearing debt increased in FY21/3 due to borrowing in preparation for liquidity risks from COVID-19 and other unforeseen events. However, it is not at a level that affects NSK's financial base, and the Company is working to realize both stable shareholder returns and financial soundness.

#### ■Number of Employees Worldwide/Ratio of Overseas Employees



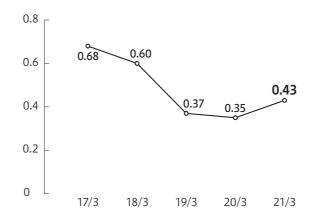
NSK made progress in adjusting its workforce to an optimal level that best suits its business activities. As a result, the number of employees worldwide at the end of FY21/3 was 30,378, a decrease of 369 from the end of the previous fiscal year.

#### ■Ratio of Female Employees



NSK continuously strives to expand work options and provide career advancement programs for female employees. Nevertheless, the ratio of female employees at NSK was 18.0% in FY21/3, down 1.0 percentage point year on year.

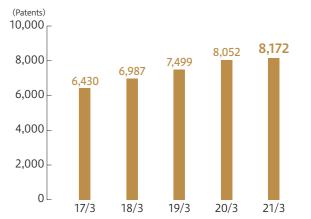
#### ■Lost Time Injury Frequency Rate



Although NSK has been strengthening its occupational safety initiatives Group-wide, the lost time injury frequency rate for FY21/3 increased slightly to 0.43 from the previous fiscal year.

▶ P. 38 Safety Management

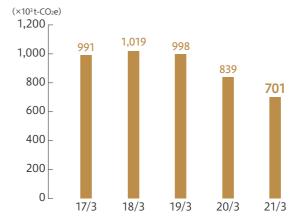
#### ■Number of Patents Held



NSK is focusing on R&D aimed at sustainable growth. The number of patents held in FY21/3 reached 8,172, an increase of 120 patents from the previous fiscal year.

▶ PP. 48–49 Core Technologies and Taking Up the Challenge of Creating New Collaborative Value

#### ■Greenhouse Gas Emissions



While production volume declined due to COVID-19, NSK steadily expanded the use of renewable energy sources, and emissions came to 701 thousand tons. ▶ P. 23 Reducing CO<sub>2</sub> Emissions from NSK Business Ope

Note: Due to a change in calculation criteria, the data were recalculated

### ■Number of Environmentally Friendly Products Developed

#### (Accumulated No. of Products) 250 238 232 226 224 200 150 100 50 0 | 17/3 18/3 19/3 20/3

Six new products were developed, bringing the total number of environmentally friendly products developed to 238.

▶ P. 21 Indicators for NSK En

Note: Cumulative data from the year ended March 31, 2003.

# Core Technologies and Taking Up the Challenge of Creating

### \*\* NSK's Four Core Technologies, and Giving Them Shape Is Manufacturing Engineering

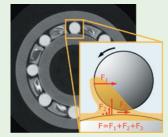
NSK has relentlessly pursued innovative technologies and focused on improving quality in order to contribute to a safer, smoother society and to protect the global environment, in line with its corporate philosophy. NSK leads the world in the product fields of bearings, automotive components, and precision machinery and parts. The foundation that underpins those technologies consists of tribology, materials, numerical simulation, and mechatronics, which are NSK's Four Core Technologies.

Then there is manufacturing engineering, another important technology and strength of NSK that gives shape to our Core Technologies. The technologies and products that have been created based on our Four Core Technologies, with the "plus One" of manufacturing engineering, are contributing both to the development of industry across the world and to people's abundant lifestyles. NSK will continue to engage in advanced technological development and provide highly functional, high-quality products that meet market needs for years

### Four Core Technologies + 1

### **Tribology**

#### Studying, Clarifying, and Controlling Friction



Tribology is the study of friction and wear of contact surfaces in relative motion, such as rotating parts that endure enormous forces with a thin oil film. Severe operating conditions are mitigated through lubrication and surface treatments developed by NSK, resulting in superior performance for applications requiring low friction, high-speed rotation. quiet operation, or enhanced durability.

### **Materials**

Materials research and development affects nearly every aspect of product performance. Through careful selection of material composition, heat treatment, and ceramic materials. NSK enables optimization of application performance. This may result from improvements in function, endurance, or reliability, or through advancements in cost-effectiveness or production efficiency.



Durability testing machines

FOUR Core Technologies

### Mechatronics

#### Simulated Recreation in Cyberspace to Predict Performance

**Numerical Simulation** 



Simulated example of an automotive component

In the past, accuracy and reliability in product development were achieved with experience-based design and longer testing periods. NSK's simulation technology allows virtual validation to accelerate design and production. Extreme conditions or innovative designs that defy previous expectations can also be evaluated and analyzed.

Mechatronics integrates machine elements technology with control technology. By combining bearings, ball screws, and linear guides, together with motors, sensors, and computers, greater mechanical functionality is elicited with computer control. This technology applies new functions and performance to a range of industrial machinery, such as for automobiles and biomedicine. It also contributes to greater reliability, as well as to convenience and safety in daily life.



NSK vibration control actuator for train cars

### **Manufacturing Engineering**

Giving Shape to Four Core Technologies

Contributing to the environment and heightening safety and security through our Four Core Technologies requires something to breathe life into these technologies. In addition, it is essential to consistently produce with high quality. NSK tackles these issues by applying AI to its equipment, utilizing IoT, and optimizing its overall production framework while it works to realize the creation of smart factories that economize on space, save on energy, and reduce manpower requirements.



Cheonan Plant in South Korea

### New Collaborative Value

### Collaboratively Creating Sustainable Value through Open Innovation



#### Building a Sustainable Mobility Society with Dynamic Wireless Charging

The need to reduce automotive CO<sub>2</sub> emissions means that electric vehicles (EVs) will soon be mainstream. That said, cruising range and time needed to charge are issues to be addressed. One potential solution is gaining ground: dynamic wireless charging, which can charge vehicles as they move down the road.



### **Dynamic Wireless Charging**

Wireless charging uses a magnetic field to transmit electricity with no hardwired connection. One common use for it today is charging smartphones. In collaboration with the University of Tokyo, NSK continues to conduct research to apply this technology. In 2015, we developed the first-generation system for wirelessly charging in-wheel motors; in 2017, the second generation successfully charged motors in motion, and in 2019 the third generation provided greatly improved performance.

If future EVs can be charged on the road with dynamic wireless charging, drivers could get where they need to go without worrying about the battery dying. This would dramatically increase convenience



Third-generation dynamic wireless charging in-wheel motor



### Growing the Value of EVs

Renewable energy, namely solar and wind power, is becoming increasingly important as a means of generating power, but the challenge is that the power generated fluctuates greatly depending on the weather. Technologies for balancing power supply and demand by utilizing the batteries in EVs are therefore in the spotlight. Realizing dynamic wireless charging would offer the capability of utilizing not only EVs connected to charging equipment but also utilization as batteries of EVs while being driven, making it possible to cope with larger fluctuations in power generation. In this way, EVs will be more than simply another means of transportation and will come to offer society a new way to provide value.

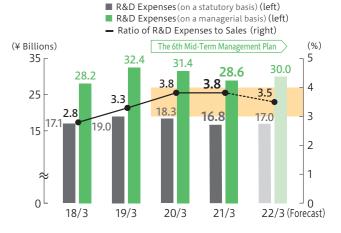


### **Open Innovation**

NSK participates in joint research projects primarily with the University of Tokyo, and in tandem with that, has together with Bridgestone Corporation, Denso Corporation, and ROHM Co., Ltd., established a social cooperation program titled "Open Innovation of Mobility Technologies to Achieve the SDGs," which commenced in December 2020. Under this program, the companies will carry out R&D on technologies for the electrification of mobility, chiefly dynamic wireless charging, and will endeavor to find a way to accelerate the practical use of research results by making part of such results publicly available to support open innovation.

### R&D Expenses

Along with R&D expenses based on institutional accounting, NSK recognizes that all expenses involved in the technology divisions are R&D expenses in a broader sense. As part of the 6th Mid-Term Management Plan, NSK intends to make R&D expenses equivalent to 3%-4% of sales (¥30.0 billion-¥40.0 billion annually). This level of R&D investment, which even rivals that of Japanese and overseas bearing competitors, will enable us to quickly supply sophisticated products with new features to the market. Moreover, we will contribute to the realization of a more abundant, sustainable society by engaging in activities to save energy, reduce CO2 emissions, and conserve the global environment



### **Global Business Foundation**

In expanding business globally, NSK maintains the necessary sites, human resources, and management structure as an essential foundation, and strives to expand business in each region while promoting global projects through collaboration between regions. In addition, the Company has made contributing to the development of each country and region the highest priority while emphasizing such issues as job creation and environmental protection. Looking ahead, NSK will give exhaustive consideration to being a good corporate citizen and will endeavor to further enhance and strengthen its global business foundation.

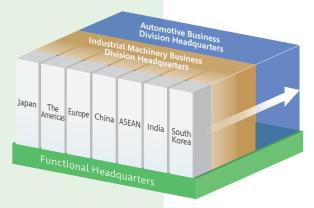
### **Global Management**

#### **Organizations That Support Global Management**

Underpinned by the two Industrial Machinery and Automotive business axes, NSK employs a "matrix"-type organizational structure supported by regional headquarters that execute operations in each region and functional headquarters that buoy business in a crosssectional manner from a functional standpoint.

From the business execution standpoint, a regional headquarters is positioned to oversee a region under each business headquarters, and each business site is positioned beneath each regional headquarters. Orders and directions on business planning and strategy implementation flow from the business headquarters to regional headquarters and then to individual sites. On the other hand, each functional headquarters located at headquarters in Japan supervises and supports shared Groupwide functions such as human resources, legal affairs, and accounting at sites worldwide from the perspective of policy and standardization.

Adopting this type of organization is aimed at effectively 1) reducing overlapping operations and costs under a policy of making shared Group-wide functions consistent and 2) speeding up business execution responsiveness by entrusting decision-making to lower-tier organizations based on a broad framework decided by upper-tier organizations.



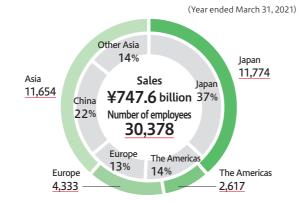
Note: Individual sites are divided by regions they have a presence in: Japan, The Americas, Europe, China, ASEAN, India, and South Korea.

#### **Global Management Evolution**

NSK has worked to localize management with the aim of building a system able to undertake locally oriented, agile business management in each region as it expands operations overseas. Currently, the Company is expanding business under local leadership by placing numerous local employees in key posts that include regional managers.

With the perspective of fostering global management cooperation, NSK has held the International Management Committee (IMC) meeting, where top regional managers discuss mid-term management plans, business strategies, and fiscal year business budgets biannually at the Tokyo headquarters. The IMC goes beyond simply strengthening collaboration across regions and headquarters to serve as a platform for all regions to participate in global management. IMC meetings have been held for around 30 years.

■ Sales Breakdown by Region (based on customer location) / Number of Employees Breakdown by Region (consolidated)



■ Global Sites

205 locations in 32 countries and regions

Head- Production Sales Sites R&D

The Americas		Head- quarters	Production Sites	Sales Sites, etc.	R&D Centers
U.S.		1	7	8	3
Canada		1			
				2	
Mexico			2	1	
Brazil			1	2	1
Peru				1	
Argentina				1	
6 countries and regions		1	10	15	4
Europe/Middle East/Afri	ca				
U.K.		1	4	2	1
Germany			2	4	2
Denmark					1
France				1	
Italy				1	_
Netherlands				1	
Spain				1	
Poland			4	3	1
Russia				1	
Turkey				1	
UAE				1	
South Africa				1	
Morocco			1		
13 countries and regions	Total	1	11	17	5
Asia/Oceania					
Japan		1	20	31	7
Singapore		1		2	
Indonesia			3	2	
Thailand			2	5	1
Malaysia			2	3	
China		1	11	19	1
Taiwan				3	
South Korea			2	2	1
Philippines				1	
Vietnam				2	
India		1	5	7	2
Australia				2	
New Zealand				1	
13 countries and regions	Total	4	45	80	12
Global	Total	6	66	112	21
				(As of Marc	th 31, 2021)

### **Evolution of the Mother Plant System**

Based on NSK's 100-year history

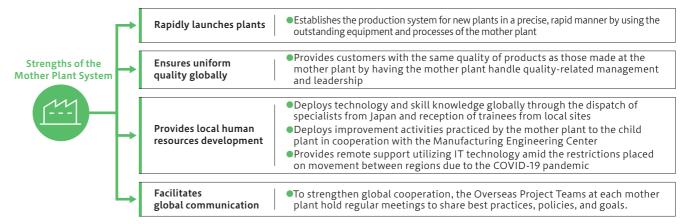
### What is the Mother Plant System?

The mother plant system is one of the schemes that NSK uses as a foundation to support global production. The mother plant system employs a model plant (mother plant), primarily a site in Japan, to provide support for plant operations when launching a new plant outside Japan (child plant) and to ensure production continuity thereafter. NSK links mother plants and child plants for each product, whereby the "Overseas Project Team" at each mother plant acts as the contact point for providing actual support and the mother plant as a whole conducts support activities.

The mother plant system (originally called the Lead Plant System) got its start in 1970 when NSK introduced an approach whereby we assigned the Tamagawa Plant (closed in 1999) to take responsibility for leading the establishment of the Geelong Plant in Australia (closed in 1977). As part of this effort, the Tamagawa Plant formed a project team whose members provided direction on machinery installation and technology, thereby playing the role of a mother plant. This mother plant system has served as a major strength in ensuring the success of plant construction and setup ever since.



NSK Manufacturing Australia's Geelong Plant manufacturing line



### Mother Plant System Initiatives — Expanding the diverse capital of NSK globally—

#### ■ Strengthening human resources development — Establishment of the Hefei Plant, China

As part of the launch of the Hefei Plant in China (production commenced in 2012), along with the Ohtsu Plant, the Kunshan Plant in China provided support as the first plant outside of Japan to serve as a mother plant. In preparation for launch, the Kunshan Plant systematically provided training before the Hefei Plant buildings were completed, thereby shortening the period from completion of construction to actual production. Moreover, the Kunshan Plant currently serves as an engineer development site and provides technical training on maintenance and other tasks to trainees from around China. Even after the launch of the Hefei Plant, this initiative continued to aim for training independence as a child plant, for example, by focusing efforts on educating local trainers to enable skill education and training locally when installing additional equipment.

#### ■ Support from global sites — Establishment of the Mexico Plant

The launch of the Mexico Plant (production commenced in 2014) received support from several global sites in addition to the mother plant in Japan and was characterized by an attempt to utilize production know-how acquired over many years and globally minded talent. The plant is operated entirely by locally hired staff from Mexico and relies on staff from outside of Japan; for example, those from NSK Brasil are involved in support for plant management. Moreover, because the plant utilizes machinery built by the Kunshan Plant and equipment built in South Korea to enhance cost competitiveness, the plant was launched using staff from the Kunshan Plant and the Changwon Plant in South Korea. This move also minimized support from employees at Japanese plants during the plant launch. Although the establishment of the Mexico Plant was a new approach that was supported by various sites, including plants outside Japan, it serves as an example of success in overcoming language and cultural barriers.

Over the 50 years since its introduction, the mother plant system has undergone changes as NSK has expanded overseas. Along with transforming from a system originally led entirely from Japan to one in which each site is independent and works together today, this approach is leading to the further evolution of NSK's global production system.

■ Example of the spread of NSK capital through the mother plant system 

- → Support from sites in Japan to sites outside Japan (First phase)
- → Support between sites outside Japan (Second phase)



# Climate Change-related Risks and Opportuniti

### Endorsing and Addressing the TCFD Recommendations

In January 2020, NSK endorsed the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. In accordance with the recommendations of the TCFD, NSK identifies business risks and opportunities, adapts management plans, and enhances information disclosure with the aim of contributing to both the sustainable development of society and the sustainable growth of NSK, while endeavoring to take its environmental activities to the next level.

### Climate-related Governance

As a Company with Three Committees, NSK proactively delegates to executive officers decision-making authority with regard to the execution of operations and strives to increase the efficiency and agility of management. The Board of Directors oversees the proper and fair execution of duties by the executive officers.

#### ▶ P. 60 Corporate Governance

Based on its core values of safety, quality, compliance, and the environment, NSK has set forth its two policies of "operational excellence," representing the constant pursuit of competitiveness, and "challenging innovation," or the creation of new value. Moreover, we are tackling three management issues, namely new initiatives targeting growth, enhancing managerial resources, and contributing to the environment and society. The Board of Directors determines the Mid-Term

Management Plan, and executive organizations report on the plan's progress to the Board of Directors.

The Global Environment Protection Committee, chaired by the President & CEO with relevant executive officers serving as committee members, deliberates on activity policies, including for climate change, considers promotion systems, and assesses and revises activity progress as an organization that comprehensively advances issues pertaining to NSK's efforts to preserve the global environment.

Together with having a good grasp of ongoing changes to the social environment, as well as stakeholder needs and expectations, NSK evaluates the risks and opportunities that arise along with climate change, reflects countermeasures to management strategy and business plans, and strengthens the actions it takes.



### Climate-related Risk Management

NSK works to build a risk management system based on clearly stipulated fundamental principles aimed at effectively enabling global Group management and internal control functions. Every year, all the business sites perform their own risk assessment classifying, analyzing, and evaluating risks in accordance with changes in the social environment, the frequency of risk occurrence, the size of impact, and other factors to identify risks that should be addressed. The Corporate Planning Division Headquarters and the Finance Division Headquarters coordinate with business and regional and functional headquarters regarding risks at each division and each business site, which

are managed in accordance with prescribed reporting systems. While putting in place preventive measures, the Company devises steps to swiftly and appropriately act in the unfortunate event a risk is actually manifested, and then works to mitigate the impact.

• P. 56 Risk Management

We had been treating climate-related risk, which is among the risks associated with the environment, across businesses or divisions as a risk of high importance. However, from fiscal 2021, we have been working to enhance climate-related risk management by also making use of the scenario analysis recommended by the TCFD while analyzing changes in the business environment and the impact on NSK's business.

### Strategy

With the goal of considering the future impact climate change will have on NSK's value chain, as well as the effectiveness of climate change countermeasures, NSK looked at the period up to the year 2050, and performed two scenario analyses, one scenario with a temperature increase of 1.5°C to 2°C and another scenario of 4°C.

Given the results achieved, NSK determined that its basic strategy would be to contribute to the realization of the 1.5°C to 2°C scenario, so as to have a hand in building a sustainable society. NSK will act to address transition risks associated with CO<sub>2</sub> emissions regulations; indeed, NSK will seize upon the opportunities

to advance its business field of Motion & Control™ by addressing society's needs, namely decarbonization throughout a product's life cycle, promoting measures to deal with climate change during its overall business activities.

On the other hand, NSK is also promoting measures in the event of an anticipated 4°C scenario against natural disasters that are caused by climate change. Based on the results of this analysis, NSK will formulate a strategy and build

a framework in which it can continue to achieve sustainable growth, even with a different climate and social environment.

#### Scenario Analysis

#### ■Analysis targets and prerequisites

Region	Period	Scope	Main Scenarios Adopted
Countries/regions with NSK presence	2021–2050	Value chain	RCP2.6 (1.5°C), RCP4.5, RCP6.0 (2°C), RCP8.5 (4°C), WEO2020, etc.

#### ■Image of anticipated 2050 society in which NSK operates its business for the scenario analysis (outline)

	Society Where Temperature Rises 1.5℃ to 2℃	Society Where Temperature Rises 4°C
Anticipated	<ul> <li>Aggressive environmental policies put in place by governments and other entities fix the price of carbon at a high level, and more than 80% of the power supply is from non-fossil fuels.</li> </ul>	<ul> <li>Only mild environmental policies are put in place by governments and other entities, and the ratio of non-fossil fuels in the energy source composition edge up only slightly.</li> </ul>
image of society	<ul> <li>Fuel economy regulations for the automobile industry become more stringent, and almost all new cars sold are EVs.</li> </ul>	<ul> <li>Technological innovation in the automobile industry is lackluster, an internal combustion vehicles that use conventional fossil fuels remain</li> </ul>
	The frequency and impact of natural disasters caused by climate	in the mainstream for a large number of new cars sold.
	change are greater than current levels but are less severe than in the	<ul> <li>The average temperature continues to rise, and natural disasters</li> </ul>
	4°C scenario.	caused by climate change increasingly escalate in severity.

# es: Addressing the TCFD Recommendations

#### **Risks and Opportunities**

Classification		ation	Iden	tified Risks/Opportunities	NSK Countermeasures	Industrial Machinery Business	Automo Busine
	Physical	Increasingly severe Physical Acute natural disasters caused by climate change*		Production suspension due to in-house flood damage	<ul> <li>Making regular confirmations using hazard maps, etc.</li> <li>Implementing appropriate countermeasures against flooding and other risks</li> </ul>	0	0
			by climate change	Supply suspension due to flood damage at suppliers	Source diversification of suppliers	0	0
			Transition to	Introduction and strengthening of automobile fuel efficiency regulations and ZEV regulations lowers demand for products geared toward internal combustion engines and transmissions.	Strengthening development, sales, and production of products for ZEV		0
Legal		decarbonization/ electrification	Decreased demand for machinery and facilities that produce automotive internal combustion engines and transmissions	Strengthening product development for machine tools that address the processing of core components that replace automobile internal engines and transmissions and of materials that lower automobile weight, and the electrification of automobile parts	0		
			More stringent regulations pertaining to greenhouse gas emissions	Rising carbon prices lead to increased costs for components, raw materials, and energy procurement, and in line with this, higher costs for developing new materials and methodologies, and for capital investments.	● Promoting decarbonization in NSK business activities ▶ P. 23	0	C
Reputation decarbonization		Increasingly sophisticated decarbonization requests from customers	Rising development costs and capital investments for decarbonization, as well as stagnation of efforts results in reduced credibility and not being selected by customers.	<ul> <li>Employing self-help efforts to cut costs and appropriately reflect in pricing</li> </ul>	0	C	
Products and		cts and	Rising decarbonization	Increasing needs to cut CO <sub>2</sub> emitted when users operate automobiles, machinery, etc. (final goods manufacturer Scope 3 downstream)	Constantly generating environmentally friendly products, enhancing low friction, achieving lighter weight ▶ PP. 21–22  Generating new technologies and new products that arise from the Four Core Technologies plus One ▶ P. 48	©	0
services	vices	needs throughout the life cycle	Increasing needs to cut CO2 on components purchased by automobile, equipment, etc., manufacturers (final goods manufacturer Scope 3 upstream)	Reflecting decarbonization in NSK's business activities in product pricing	0	C	
				Accelerating action to reduce CO <sub>2</sub> emitted in the manufacturing process of automobile, equipment, etc., manufacturers (final goods manufacturer Scope 1 + 2)	Offering new solutions utilizing tribology technology	0	C
	Markets		Electrification progress	<ul> <li>Expanding demand for products/solutions geared toward automobile electrification applications</li> <li>Growing need for electrification of industrial machinery mobility such as tractors and bulldozers, and machine tools, etc.</li> </ul>	<ul> <li>Strengthening development, sales, production, and solutions for products that address electrification (actuators, etc.) in mobility (automotive, industrial machinery) and machine tools, etc.</li> <li>Shortening development speeds by utilizing digital twin technology</li> </ul>	0	©
סאלסו נמווונופא	IVIG	ircts		Rising demand for storage/charging technology	Helping to solve the issue of EV prevalence through participation in open innovation  P. 49		©
			Growing air- conditioning demand*	Expanding demand for products/solutions for air-conditioning equipment	Bolstering products/solutions that contribute to eliminating the need for maintenance	0	
			Expanding railway demand	Growing demand for products/solutions for railways	Strengthening development, sales, production,	0	
				Increasing demand for wind power generation	and solutions for products geared toward railways and wind power generation P. 25	0	
				Rising demand for storage/charging technology	Developing high-speed rotary bearings for cooling fans	0	
	Energy source		Growing renewable energy demand	Increasing needs for failure diagnostics/ residual life diagnostics	Strengthening and expanding the condition monitoring system (CMS) business for facilities and equipment   P. 35	0	
				Expanding demand for products/solutions associated with hydrogen energy	Promoting the development of products for harsh and special environments	0	
	Resil	lience	Increased investment into addressing BCP*	As countermeasures for disaster prevention and mitigation, rising demand for construction equipment, etc., necessary for infrastructure maintenance	Strengthening development and production of products for construction machinery	0	
			Expanding demand for hydrogen energy	Growing demand for power generators in line with disaster countermeasures	Promoting product development for household compact power generators	0	

Created based on the 1.5°C to 2°C scenario. However, \* is assumed to be for a 4°C scenario.

### Metrics and Targets

NSK takes a dual approach to CO<sub>2</sub> reduction, both with expanding on the volume of CO<sub>2</sub> emissions avoided at the product usage stage owing to products that help reduce CO<sub>2</sub> emissions, and CO<sub>2</sub> emissions cut during our business activities. We set respective long-term goals while advancing various efforts to mitigate the impact of climate change. Moreover, considering current conditions where there is increasing urgency to address the dangers of climate change, we are considering bringing our goals forward.

P. 21 NSK's Environmental Contributions (Efforts Toward Carbon Neutrality)

In addition, in terms of  $CO_2$  emissions reduction goals, as one goal that is consistent with raising corporate value, we are using them as a metric for short-term performance-based compensation for executive officers.

Targets		FY2020 Results
Target for FY2026: Offset CO <sub>2</sub> emissions volume through products that help reduc Note: Surpass the CO <sub>2</sub> emissions volume from NSK Group business activities (Sc with the volume of contribution generated with products that help reduce	FY2020 results: Offset ratio (②÷①) = 89% ① CO <sub>2</sub> emissions volume (Scope 1 + 2 + 3): 2.83 million t-CO <sub>2</sub> ② Volume avoided through products that help reduce CO <sub>2</sub> emissions: 2.51 million t-CO	
CO <sub>2</sub> emissions volume from business activities (Scope 1 + 2) reduction ta • FY2020 5% reduction* • FY2026 16% reduction*	argets	CO <sub>2</sub> emissions volume from business activities (Scope 1 + 2) reduction results  • FY2020 results: 31% reduction*  (Ref.) Emissions per sales unit equivalent to a 6.1% improvement
FY2030 25% reduction*     FY2050 60% reduction*     The above targets were announced in FY2019. *From FY2017 levels		n Management Plan starting in FY2022, the Company plans to announce w goals and efforts to be taken toward realizing carbon neutrality.

# **Human Rights and Labor Initiatives**

#### NSK's Approach

NSK creates value that contributes to solving social issues, such as outstanding products and services that help create a smoother, safer society and protect the global environment. For the Company to grow sustainably, we believe that it is important to respect the individuality and potential of each employee and to create engaging workplaces.

To that end, NSK supports and respects international norms, such as the Universal Declaration of Human Rights and the Guiding Principles on Business and Human Rights. Also, the NSK Code of Corporate Ethics stipulates items related to human rights and labor, with which officers and employees are requested to comply. We also promote initiatives, such as diversity and inclusion (D&I), to create an organization and culture in which diverse employees can demonstrate their abilities.

Furthermore, we aim to reflect the content stipulated in the NSK Code of Corporate Ethics in the NSK Supplier CSR Guidelines and work with our suppliers to address human rights and labor issues.

### **NSK Group Initiatives**

well as affiliates

In addition to stipulating "prohibition of discrimination, cultivation of a sound workplace" and "respect of fundamental rights at work" in its Code of Corporate Ethics, NSK publishes the NSK Compliance Guidebook, which explains the matters to be observed in the languages of each country. The Guidebook is distributed to officers and employees. We also regularly hold in-house training to promote understanding.

Matters to Be Complied With (NSK Compliance Guidebook 2018)
1. Prohibition of discrimination
2. Prohibition of harassment
1. Prohibition of forced labor
2. Prohibition of child labor
3. Management of working hours
4. Appropriate wages
5. Safe workplaces
6. Labor-management dialogue

Compliance Hotline (Whistleblowing System), Corrective Mechanisms

NSK aims to identify and correct illegal and fraudulent activities at an early stage. If an employee or officer discovers illegal or potentially fraudulent activity, the Company requests that he or she makes a report to the internal or external whistleblowing points of contact. The whistleblower can make a report anonymously so that he/she will not face any repercussions. Any act that violates relevant laws and regulations or the NSK Code of Corporate Ethics will be subject to disciplinary action based on company regulations.

In addition, the risk assessments conducted annually for all business establishments include items such as risks related to acts that violate laws and regulations and the NSK Code of Corporate Ethics, occupational safety, and risks related to the supply chain. As a result of these assessments, we take measures to mitigate the risk for items that are judged to be of high importance.

▶ P. 55 Compliance, PP. 56–57 Risk Managen

NSK website

https://www.nsk.com/company/compliance/index.html

### Labor-Management Relations Based on Dialogue

For NSK to grow sustainably as a corporate group committed to high-quality manufacturing, we believe it important to look at employment from a long-term perspective and to continuously hire and develop outstanding human resources in the countries and regions where, for example, our production, sales, and development sites are located.

Hiring employees in an appropriate manner in accordance with international norms and local laws, the NSK Group regards a healthy relationship between labor and management as indispensable. We guarantee the right of employees to communicate directly with management (labor-management dialogue) without fear of retaliation, intimidation, or harassment. Also considering it important to create a work environment where each employee feels motivated and can develop, we carry out employee awareness surveys, which are aimed at measuring employee engagement and compliance awareness and take measures to address identified issues.

### Creating Workplaces Where Diverse Human Resources Can Demonstrate Their Abilities

NSK clarifies its prohibition of all forms of discrimination, including that on the basis of sexual orientation and gender identification (SOGI<sup>\*1</sup>), in the NSK Compliance Guidebook, which explains the items stipulated in the NSK Code of Corporate Ethics. The NSK Guidelines on Creating Accommodating Workplaces for Transgender Employees encourage understanding of LGBTQ+ (SOGI) issues and explain considerations to prevent outing 2 and SOGI-related harassment. In fiscal 2020, we also promoted awareness through in-house newsletters and held online events on LGBTQ+ issues to help create a culture that is accepting of hidden diversity.

- \*1 The English abbreviation for Sexual Orientation, Gender Identity. LGBT is an abbreviation that indicates personal attributes, but SOGI refers to sexuality-related concepts.
- \*2 Without consent, communicating someone else's sexual orientation or gender identity to a third party.

▶ NSK website ! https://www.nsk.com/sustainability/hr/index.html

### Supply Chain Initiatives

NSK distributes copies of its NSK Supplier CSR Guidelines, which contain the matters to be observed regarding human rights and labor, to all its suppliers and requests implementation by them. In addition to asking all suppliers who have a direct business relationship with the NSK Group to take their own actions and promote procurement activities that take human rights into consideration, by means of these guidelines we are aiming to further advance our efforts to upstream suppliers.

In addition, we regularly conduct CSR self-assessments and provide feedback to everyone about any issues that have come to light so that they can help improve the level of their activities.

▶ NSK website !! https://www.nsk.com/sustainability/supplier/index.html

# Compliance

#### NSK's Approach

NSK has positioned compliance as one of its core values. For NSK, compliance goes beyond adherence to laws and regulations. It also entails acting in accordance with internal rules, social norms, and the Corporate Philosophy in a sincere and fair manner. Moreover, compliance means earning the trust of society and contributing to the development of the economy and society in Japan and around the world.

The NSK Group aims to continue developing as a company that is trusted by international society and local communities by adhering to the laws and regulations of each country in its corporate activities around the world, and by taking actions based on high ethical standards as a corporate citizen.

#### ■NSK's Efforts to Enhance Compliance Key initiatives to enhance compliance to date are as follows.

Item	NSK Group Initiatives
	Established the Compliance Committee (meetings held 3 or 4 times a year)
Cturn oth anima Customs	Established the Compliance Enhancement Office (a dedicated organization)
Strengthening Systems	Holds Global Legal and Compliance meetings (once or twice a year) with legal and compliance representatives outside Jap
	Holds a Compliance Conference (twice a year) with compliance representatives in Japan
	Operates a system for examining whether to participate in meetings attended by competitors
	Distributed the NSK Compliance Guidebook to officers and employees (revised in 2018)
	Established the Rules for Compliance with the Competition Law
Establishing Relevant Regulations & Systems	Revised the Hotline Operational Rules to reflect the Consumer Affairs Agency's guidelines concerning the operation of internal reporting systems
Regulations & Systems	Revised Internal Regulation for Preventing Insider Trading, introduced a prior approval system for selling NSK stock and prohibited buying of NSK stock on the open market
	Established Anti-Bribery Standards
	Formulated Personal Information Management Regulations
	Regularly distributed the president's message calling for thorough compliance
	Implemented compliance e-learning for officers and employees
Strengthening Education and	Conducted compliance training at sales divisions, plants, engineering sections, and Group companies
Awareness Raising Activities	Started a regular Compliance Newsletter
	Designated July 26 as "NSK Corporate Philosophy Day"
	Internally shared compliance violation information
	Conducted internal audits of sales divisions relating to Antimonopoly Act compliance
Strengthening Monitoring	Inspected specific categorical risks in compliance for the NSK Group
Strengthening Monitoring	Conducted an employee engagement survey for the NSK Group (compliance awareness survey)
	Has in place and operates a compliance hotline (whistleblowing system) in each region

#### Examples of Fiscal 2020 Initiatives

#### 1 NSK Corporate Philosophy Day

To revisit the lessons learned from past incidents, reconfirm the resolve of all NSK Group employees that no anti-competitive incident will ever occur again and ensure that all employees review the Corporate Philosophy and make it their own code of conduct, July 26 has been designated as "NSK Corporate Philosophy Day."

In fiscal 2020, employees at our domestic and overseas bases watched videos titled "Message from the President," "Understanding Our Corporate Philosophy," and "A Look Back at the Cartel Incident." Thereafter, in Japan, officers explained the Corporate Philosophy and practical examples are introduced. Overseas, after a message from the management of local bases, each site held its own events that included lectures by outside experts and discussions on compliance.

#### Employee Engagement Surveys (Compliance Awareness Surveys)

An employee engagement survey is conducted with the Human Resources Department. The objective is to assess the level of compliance awareness and the condition of work environments, in terms of motivation and opportunities for growth for each employee. In fiscal 2020, the sixth time the survey was conducted in Japan, 14,963 officers and employees responded. Overseas, we continued to work on issues identified in the fiscal 2019 engagement survey, such as further improving the reliability of the compliance hotline (whistleblowing system).

#### ■NSK Group Compliance System (As of August 2021)





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# **Risk Management**

NSK works to build a risk management system based on clearly stipulated fundamental principles aimed at effectively enabling global Group management and internal control functions. Every year, all the business sites perform their own risk assessment, classifying, analyzing, and evaluating risks in accordance with changes in the social environment, the frequency of risk occurrence, the size of impact, and other factors to identify risks that should be addressed. The Corporate Planning Division Headquarters and the Finance Division Headquarters coordinate with business and regional and functional headquarters regarding risks at each division and each business site, which are managed in accordance with prescribed reporting systems. While putting in place preventive measures, the Company devises steps to swiftly and appropriately act in the unfortunate event a risk is actually manifested, and then works to mitigate the impact.

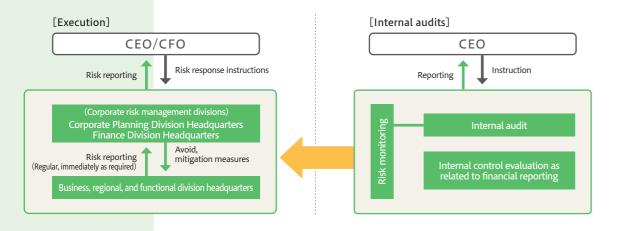
In addition, the internal audit division coordinates with the Audit Committee to monitor the tasks carried out by executive divisions, build an internal control system and audit operational status.

As NSK's business activities spread to more areas, the range of anticipated risks also widens. However, the Company has identified 10 types of representative risks deemed of high importance according to what they entail and likelihood of occurring, their degree of impact, and mitigation measures. Among the risks we present, the three types outlined in 1, 6, and 7 could lead to business opportunities for NSK, and we include details concerning these as well.

#### Risk Management Flow

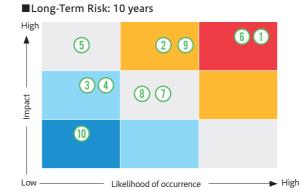


### Risk Management System



#### Risk Heat Map





### Representative Risks and Mitigation Measures

Risk Types	Details of Representative Risks	Risk Mitigation Measures	
Risk associated with changes to technology innovation, and the market or competitive landscape	Risk of delayed product engineering response to market changes and customer technology demands brought on by technological innovation such as CASE and IoT Risk of being unable to respond to an increasingly competitive market populated by rival companies and new market entrants  Opportunity Create and expand new businesses through new products, technologies and services  P.P. 24–27, 35	Understand the needs through close relationships with a broad range of customers Continually allocate resources to develop new products and new technology Leverage open innovation and alliances	
Risk related to local situations and dependency on specific region	<ul> <li>Risk of change in the economic environment of a specific region in which the Company conducts business, and of the impact of falling into political instability</li> <li>Risk associated with halt in operations on account of deteriorating public order, outbreak of riot, or terrorism</li> <li>Risk of business losses and declined earnings due to changes in the trade rules of individual countries</li> </ul>	<ul> <li>Expand and enhance a balanced presence in other regions</li> <li>Get an early grasp of information on dangers by strengthening ability to gather information from each region</li> <li>Leverage and optimize the allocation of our global network based on the principle of local production and local procurement</li> <li>PP. 50-51</li> </ul>	
Risks associated with safety, prevention of fire and disaster, and pandemics	<ul> <li>Risk of major industrial accident occurring</li> <li>Risk of halt in operations due to mistaken BCP measures to address fires or natural disasters</li> <li>Risk of being unable to secure a comfortable and safe working environment in neighboring regions, or for employees</li> <li>Risk of decreased ability to accomplish objectives due to suspended operations and extended periods of movement restrictions caused by the outbreak of new infectious diseases</li> </ul>	Strengthen and nurture safety awareness, thoroughly educate and enlighten employees Share case studies from other locations introducing what went righ and what went wrong Conduct simulations of anticipated scenarios, prepare disaster countermeasures, formulate a business continuity plan Implement thorough measures to prevent infection and strengther remote collaboration between business sites including the promotion of remote work and online meetings and training  PP. 38, 58, 59	
Risk associated with quality	<ul> <li>Risk of compensation claims due to significant quality defects</li> <li>Risk associated with insufficient response due to improper quality assurance system or quality control management</li> <li>Risk of spoofed, falsified quality data</li> <li>Risk of being unable to respond to increasing quality requirements from customers</li> </ul>	Secure high quality by strengthening process management aimed a enhancing design and product quality Realize zero defects through continued quality improvement activitie Create a system to prevent data falsification and conduct thorough trainin Bolster reoccurrence prevention by leveraging the quality information system Ensure the execution of investments for quality improvement	
Risk with regard to compliance	<ul> <li>Risk of violating laws and regulations due to employee carelessness or misunderstanding, etc.</li> <li>Risk of further losing the trust of society due to bearing responsibility for criminal, civil, and administrative acts associated with the above</li> </ul>	Undertake education on strict adherence to laws and regulations, create a corporate culture and atmosphere interwoven with morals and manners Review compliance systems, policies, and related rules on an as needed basis to strengthen and improve Promote specific measures related to strengthening compliance, follow up to confirm on status of implementation  P.5	
Risk concerning the environment	Risk of being unable to respond to changes in environment-related laws and systems, or to evolving environment-related technologies and market needs Risk of a leak of environmentally harmful substances or overrun of emissions standards Risk of lost business opportunities and damage to NSK's corporate value due to the inability to keep up with the accelerating movement toward a post-carbon society  Opportunity Improve competitiveness in the market through environmentally friendly technologies  PP. 21–23, 37, 52–53	Ascertain information on legislation and the needs of the market related to the environment in order to establish and implement an environmental response road map     Thoroughly implement environmental accident prevention measures, promote the elimination of environmentally harmful substances, and strengthen the environmental assurance system     Promote CO₂ emissions reduction through activities such as energy conservation initiatives, the transformation of manufacturing, and renewable energy procurement     ▼PP. 21–23, 37, 52–5	
Risk associated with human resources and labor	Risk of being unable to secure globally competent human resources, consequently hindering business expansion and execution of strategy Risk of impact on operations due to deteriorating labor relations Risk of delayed human resources and labor management response to the work-style changes that have been accelerated by the COVID-19 pandemic  Opportunity Enhance competitiveness and avoid risks by promoting diversity and inclusion  P.P. 36, 54	Strengthen and thoroughly implement human resource manageme policies such as leveraging a diverse workforce, building more engaging workplaces, providing opportunities for growth Undertake measures to bolster engagement and systems, includir support for females, elderly, and people with disabilities to play are active role, conduct employee awareness surveys and Employee Relations (ER) Create and implement human resources and labor management rules and standards corresponding to diverse work styles	
Risk with regard to procurement	Risk of procurement of raw materials or components being hindered by dependency on a specific source of supply, occurrence of quality issues, insufficient supplier production capacity, etc.     Risk of impact from rising costs for raw materials or components     Risk of impact from rising costs for raw materials or components     Risk of being unable to procure some parts and materials due to environmental changes during the COVID-19 pandemic and disasters	Build a firm understanding of the Company's basic policy through procurement policy briefings, NSK Supplier CSR Guidelines, procureme standards, use of whistleblowing system, and other measures     Cultivate and educate new suppliers based on high and increasingly sophisticated assessed purchasing capabilities     Conduct supplier BCP inspections, as well as quality, environmenta and CSR audits, and support supplier improvement     Ensure flexibility in procurement and carry out strategic inventory management in order to agilely respond to environmental changes     P.P. 38, 5.	
Risk associated with information and communication technology (ICT)	<ul> <li>Risk of decline in competitiveness due to delayed digitization of management resources</li> <li>Risk of decline in business efficiency due to loss of stability in IT system that underpins business operations</li> <li>Risk of halt in operations or loss of trust from society on account of insufficient measures or lack of IT security to defend against cyberattacks and other external threats</li> </ul>	Reform and bolster IT system infrastructure and improve ICT literal based on trends in digital technology Ensure stability through backup and redundancy of IT system infrastructure and standardized system support Build and strengthen a management structure relevant to cybersecurity risks and educate and enhance knowledge internally with regard to information security, acquire external certifications	
Risk related to finance	Risk relating to the collection of accounts receivable due to sales destination trust problems Risk of cost burden from problems that arise related to quality, litigation concerning business activities Risk of procurement of necessary funds, cash flow Risk related to mistakes in accounting estimates and accounting procedures	<ul> <li>Identify issues early by ascertaining information from the risk reporting system in a timely manner, and respond to issues swiftly through close collaboration with relevant divisions</li> <li>Perform Group management and increase effectiveness based on the internal control system</li> </ul>	

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# **Disaster Risk Management**

Crisis Management and BCP (Business Continuity Plan) Responses to natural disasters, pandemics, serious accidents/incidents, etc.

#### NSK's Approach

NSK's basic policy is to protect lives as a top priority, and to resume business activities as soon as possible in the event of crisis. On that basis, we are working to formulate and improve a Business Continuity Plan (BCP) to prevent crises from occurring as well as to minimize damage and shorten the recovery period if a crisis materializes.

### NSK Group Crisis Management System

#### **Disaster Risk Management System**

By establishing and improving crisis management systems to prepare for relevant risks, such as natural disasters, pandemics, and serious accidents/ incidents, etc., the Crisis Management Committee helps to minimize the damage in the event of an actual emergency, while playing a role in

addressing such situations swiftly and effectively.

Organizations have also been established in each region outside Japan to supervise crisis management in their respective locations. When a relevant emergency occurs, the Crisis Management Committee in Japan works with the organizations concerned to deal with the crisis.

#### ■Crisis Management Structure

#### **Normal Times**



### **Emergencies**



#### ■6th Mid-Term Management Plan Targets (FY2019–2021) and the FY2020 Targets and Performance

6th Mid-Term Management Plan Targets		FY2020 Targets	FY2020 Performance	
Development of group crisis	Strengthen function linkage with regional headquarters outside Japan	Strengthen reporting and information sharing systems	Organization of emergency response organization to prevent the spread of COVID-19 infections, formulation of the Group's basic policy, sharing of	
management systems	Optimize crisis management system	Review the management system reflecting from the crisis response results	countermeasures implemented in each region	
BCP creation and effectiveness	Japan: Improve BCP effectiveness assuming earthquake, wind, and flood damage	Enhance capabilities to continue product supply	Strengthening of emergency response capabilities through training at the Group Crisis Response Task Force and Site Crisis Response Task Forces	
enhancement	Outside Japan: Establish a BCP against serious risks	Formulate a BCP assuming serious risk	Expansion of BCP formulation basis, start of cross-regional BCP formulation	

#### Examples of Fiscal 2020 Initiatives

#### Development of group crisis management systems

The Crisis Management Committee receives rule-based reports from each region and responds quickly and accurately to cross-regional disasters such as the ongoing pandemics. In addition, we are reviewing our response to frequent typhoons and heavy rains to optimize our systems and contingency response procedures.

#### BCP creation and effectiveness enhancement

Reflecting the impact of past disaster responses, we are implementing thoroughgoing measures to minimize damage in the event of a disaster, such as preventing block walls from collapsing as well as flooding into buildings and oil and grease from spilling while promoting earthquake resistance and flooding measures for product warehouses in Japan. Moreover, we are working to secure power in the event of power supply restrictions, formulate methods to continue important operations in the event of a data center switchover, and strengthen supply continuity through supplier BCP diagnosis to ensure business continuity in the event of a disaster.

Turning to regions outside Japan, we are formulating BCPs for our business sites based on the assumption of region-specific risks and verifying the effectiveness of the BCPs we have developed in Asia.

▶ Please see our website for more information. 🗓 https://www.nsk.com/sustainability/disasterRiskmanagement/index.html

# **Information Security Management**

#### NSK's Approach

Recent advances in information and communications technology (ICT) have dramatically enhanced the convenience of information handling. However, in addition to the risk of mishandling information, there is a greater risk of information being stolen or leaked through sophisticated cyberattacks or due to the growing number of people working from home. Positioning information security management as one of its important management tasks, NSK is working to reduce risk and strengthen its response to relevant laws

and regulations. Having started efforts to acquire ISO 27001 certification in fiscal 2019, we succeeded in gaining certification in the Information System Department in fiscal 2020. To respond to customer requests, we are also working to revise and further strengthen our security regulations.

Moreover, we are promoting initiatives for more robust mechanisms and organizational structures, such as network countermeasures, against increasingly sophisticated cyberattacks.

#### ■6th Mid-Term Management Plan Targets (FY2019-2021) and the FY2020 Targets and Performance

6th Mid-Term Management Plan Targets	FY2020 Targets	FY2020 Performance	
Enhance information security infrastructure	Continue PDCA cycles for the Information Security Management System (ISMS)	Implemented ongoing ISMS activities	
Obtain ISO 27001 certification	Obtain certification in the Information System Department	Obtained certification in November 2020	
Strengthen incident response capability (including the C-SIRT system)	Establish C-SIRT organization and commence activities	Appointed person to C-SIRT and conducted incident response training	
Enhance ID and access management	Complete preparations for building an ID and access management system	Continued work to build the system and implemented preparations for switching production	

Note: SIRT is the abbreviation for Security Incident Response Team. For example, C-SIRT is an organization that responds when an event occurs that poses a security threat to computer systems.

#### Examples of Fiscal 2020 Initiatives

In contrast to conventional information security management activities that focus on preventing information leaks, we are working to build and enhance a management system to respond to the sophistication of cyberattacks and the expansion of attack targets. Not only computer systems but also factory production equipment control devices and the controllers fitted to products are the targets of attacks, so management systems are required in each field. Specifically, we are putting in place an organizational structure as measures for computers (C-SIRT), factory production equipment control devices (F-SIRT), and product security (P-SIRT). In addition to preventing security incidents, these organizations are working on early detection and early recovery with the support of tools and external vendors.

The positioning of in-house training and the raising of awareness

as important security activities have not changed, and we are continuing to carry out e-learning for employees and activities to raise awareness through our in-house intranet and digital signage. In fiscal 2020, e-learning was conducted by preparing training content geared toward directors and executive officers, security administrators, and employees. Including domestic Group companies, 96.7% of the target participants completed the course.

In our external certification acquisition activities, we acquired ISO 27001 in the Information System Department. In Europe, we gained registration in a security assessment mechanism called TISAX, which has been widely adopted in the German automobile industry, in our German subsidiary. We will continue our efforts to expand the number of departments that have acquired these official certifications.

### For diverse work styles

#### Promotion of web-based remote work, meetings, training, etc.

The COVID-19 pandemic has significantly changed employee work styles. Even before the COVID-19 outbreak, NSK had in place remote connections and a virtual PC usage system for remote work, and the rules and mechanisms had been established. Due to COVID-19, a much larger number of employees have moved to work from home, and we have, for example, expanded our network in response to the rapid increase in users and are now arranging for environments in which they can carry out their duties without any major difficulties.

As employee work styles continue to diversify, we are aiming to maximize the power of ICT to realize more efficient and convenient work styles. Therefore, we are organizing issues from the perspectives of urgency and impact, drawing up a response road map, and proceeding with initiatives. In addition, diverse work styles can be achieved not only by introducing new ICT technology but also by having that very technology mastered by employees. We will promote the necessary training and activities to raise awareness for employees and respond quickly to changes in the environment surrounding ICT.

▶ Please see our website for more information. ☐ https://www.nsk.com/sustainability/infoSecurity/index.html

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# **Corporate Governance**

#### NSK's Approach

NSK believes that the establishment and maintenance of systems that ensure transparent, fair and timely decision-making is essential in order to achieve sustainable growth and increase our mid- to long-term corporate value. To realize this objective, we are working to construct our corporate governance systems based on the following four guiding principles.

#### Policy on Development of Corporate Governance Systems

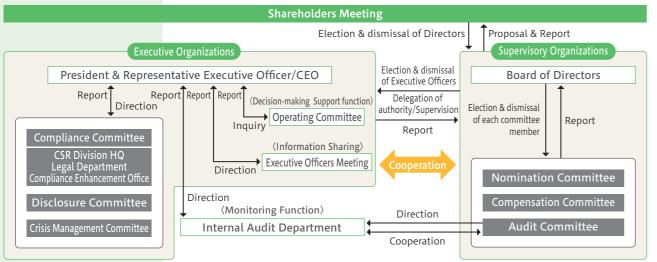
- 1. To increase the efficiency and agility of management by proactively delegating decision-making authority regarding the execution of operations from the Board of Directors to the Company's executive organizations.
- 2. To ensure that supervisory organizations have oversight of executive organizations by clearly separating the two.
- 3. To strengthen supervisory organizations' oversight of the executive organizations by ensuring cooperation between the two.
- 4. To improve the fairness of management by strengthening compliance systems.

### **Corporate Governance Systems**

#### ■ Current Systems and Operating Status

NSK has adopted a Company with Three Committees (Nomination, Audit, and Compensation) as its form of corporate organization to better achieve the basic approach. NSK's Board of Directors determines basic management policies, etc., with the aim of achieving the Group's sustainable growth and increasing mid- to long-term corporate value. The Board proactively delegates decision-making authority regarding business execution to executive organizations, while supervising the status of implementation in an appropriate manner. The CEO has the ultimate authority and responsibility for all decision-making and operational executive functions delegated by the Board. Under the direction of the CEO, executive officers are responsible for executing their respective duties in accordance with the division of duties.

#### ■ NSK's Corporate Governance Structure



# Roles and Structure of Supervisory Organizations (As of August 2021) Internal director Outside director (Women) Outside director

Organizations	Board of Directors	Nomination Committee	Nomination Committee	Compensation Committee
Structure	Chair 9 members (4 internal directors, 5 outside directors)  Majority outside directors  Chaired by a non-executive director	Chair 3 members (2 outside directors, 1 internal director)  Majority outside directors  Chair: Outside director	Chair 4 members(3 outside directors, 1 internal director)  Majority outside directors  Chair: Outside director	Chair 3 members (2 outside directors, 1 internal director)  Majority outside directors  Chair: Outside director
Objectives and Authority	Passes resolutions related to basic management policies, etc. (including delegation of duties to executive officers)     Supervises execution of duties by executive officers	Determines the content of proposals submitted to the Shareholders Meeting regarding the appointment or dismissal of directors	Audits the duties of directors and executive officers     Creates audit reports     Determines the content of proposals related to appointment or dismissal of the auditor, and other matters	Determines policies on the compensation of directors and executive officers     Determines the individual compensation provided to directors and executive officers, and other matters
Secretariat	Corporate Planning Division Headquarters, Secretariat Office	Human Resources Management Division Headquarters, Corporate Planning Division Headquarters	Internal Audit Department	Human Resources Management Division Headquarters
Number of times convened in FY2020	10	5	16	4

#### ■ Changes to NSK's Corporate Governance Systems

	1999~	2004~	2006∼	2015~
Form of Corporate Organization	1999 ● Adopted an executive officer system	2004 ● Transitioned to a Company with Committees System	2006 ■ Transitioned to a Company with Committees	2015 ■ Transitioned to a Company with Three Committees (Nomination, Audit, and Compensation)
Committee	1999  ● (Voluntary) Established a Compensation Committee 2003  ● (Voluntary) Estal Audit Committee		committees based on	2017  ● Chairs of three committees all outside directors
Outside Director	1999 2003 ●1 outside	2004 2005 ● 3 outside directors	<ul> <li>Each of the Company's out:</li> </ul>	2018 • 5 outside directors  independence of NSK's outside directors side directors registered ange as an independent director
Others	2002 ● Established the Crisis Management Committee	2004 ■ Established the Internal Audit Office (current Internal Audit Department) to undertake auditing functions and monitor the operations of the Company 2005 ■ Established the Info	2006  ■ Established the Internal Control P into the current Internal Audit De ormation Disclosure Team (current Disclosure Team)  ■ Esta	partment)  June 2020  Outside directors a majority on the Board of Directors

### Initiatives to Further Enhance the Effectiveness of the Board of Directors

### Officer Training

NSK provides training to its directors and executive officers to enhance their knowledge regarding relevant laws such as the Companies Act of Japan, corporate governance, its business, and financial status.

#### Active Board Deliberations

To achieve active Board deliberations, the Company believes that it is important to provide information to directors in advance of the meeting date. We provide information in an appropriate manner, including distributing materials to all directors in advance, and prior explanation by officers and the Board secretariat.

#### Assessment of Effectiveness of the Board of Directors

To achieve sustainable growth and increase our mid- to long-term corporate value, NSK conducts annual assessments of the effectiveness of its Board function and works to further enhance performance. To maintain the objectiveness of these assessments, they are commissioned to external experts and conducted based on questionnaires and interviews. Findings are subsequently discussed by the Board.

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Assessment Process	<ul> <li>Conduct a questionnaire for each director</li> <li>Conduct a one-hour interview for each director</li> <li>Note: The interviews were done in person or on a remote basis in fiscal 2020.</li> </ul>
Main Content of the Questionnaire	The main content of the questionnaire conducted in fiscal 2020 is outlined below.  Management strategies and risk control  Composition, roles, and processes of the Board of Directors  Stakeholder engagement  CEO succession planning  Operation of advisory committees (Nomination/Audit/Compensation Committees)
Assessment Results	An assessment conducted in 2020 by external experts concluded that the Board of Directors maintained a high level of effectiveness with the purpose of sustainable growth and mid- to long-term corporate value.  • All the directors including outside directors who have extensive knowledge keep contributing to active discussions, backed by a close relationship of mutual trust.  • The structure of the Board of Directors was changed to consist of a majority of outside directors. Furthermore, the Board of Directors delegated more authority to the executive organization, which enabled the Board to focus on monitoring and discussing mid- to long-term strategies.

We will continue to improve the effectiveness of our Board of Directors, consisting of a majority of outside directors, to further enhance corporate value by strengthening our corporate governance system, focusing on improved monitoring function, and placing more emphasis on discussions regarding the direction of long-term management.

### Composition of the Board of Directors

The Company believes that the Company's Board of Directors should be well versed in the Company's businesses and be capable of supervising important managerial judgments related to business execution, with the aim of enhancing the sustainable growth and mid- to long-term corporate value of the NSK Group. Career diversity in field of expertise and business experience are considered to ensure that the Board maintains a well-balanced composition, in light of the Company's mid- to long-term business strategy or managerial issues, and the size of the Board is also considered to enhance the effectiveness of deliberations.

In appointing individual directors, in addition to selecting based on experience in business and management in general or experience in their area of expertise, high ethical standards in management and their insight into corporate governance is also in the selection criteria.

#### Outside Director Attendance and the Three Committees System

<ul><li>Chair</li><li>O Member</li></ul>
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Name	Date Appointed as			f Directors' Meetings eetings in FY2020		Composition of Each Committee from June 2021		
	Director	Board	Nomination	Audit	Compensation	Nomination	Audit	Compensation
Hajime Bada	June 2018	O 90% (9/10)	100% (5/5)			•		
Akemi Mochizuki	July 2018	O 100% (10/10)		100% (16/16)			•	
Toshio Iwamoto	June 2019	0 100% (10/10)			0 100% (4/4)	_	_	_
Yoshitaka Fujita	June 2019	O 100% (10/10)	O 100% (5/5)	0 100% (10/10)		0	0	
Mitsuhiro Nagahama	June 2020	O 100% (8/8)		O 100% (10/10)	100% (3/3)		0	•
Koichi Obara	June 2021	_	_	_	_			0

- 1. Each of the outside directors has been registered with the Tokyo Stock Exchange as an independent director.
  2. As Yoshitaka Fujita was appointed to the Audit Committee, and Mitsuhiro Nagahama was appointed to the Board of Directors, the Compensation Committee, and the Audit Committee on June 30, 2020, the numbers of Board of Directors' meetings and meetings of the three committees attended differ from the actual number of Board of Directors' meetings and meetings of the three committees held in fiscal 2020.

  3. Toshio Iwamoto retired from the Board of Directors on June 25, 2021.

#### Supporting System for Outside Directors

To deepen their understanding of NSK's business and knowledge of matters specific to NSK, outside directors visit business facilities in Japan and overseas every year. (These were not carried out in fiscal 2020 due to the spread of the COVID-19 pandemic.)

In addition, NSK holds meetings comprised of outside directors to facilitate information exchange and foster shared understanding among outside directors and executive officers. While valuing these meetings as an opportunity to freely share opinions, the Board secretariat follows up on any relevant matters as appropriate to improve the effectiveness of the Board of Directors.

#### **Internal Control**

Having stipulated its basic policy on the establishment of internal control systems, which forms its basic policy for the appropriate and effective functioning of global Group management and internal control functions, NSK is working to strengthen its Group-wide internal control systems. This basic policy consists of matters relating to the development of the systems necessary for ensuring that the NSK Group's operations are conducted in an appropriate manner and that executive officers comply with laws, regulations, and the Articles of Incorporation when performing their duties and matters necessary for the Audit Committee in the performance of its duties.

Based on this policy, executive officers establish the specific systems (covering the organization, personnel, decision-making, reporting, and auditing, as well as the internal rules and regulations system that supports them) while reporting on the status of those operations to the Board of Directors. Reporting directly to the CEO, the Internal Audit Department is responsible for conducting audits to determine the legality, adequacy, and efficiency, etc., of operations and for the monitoring of business execution from a standpoint independent from the auditees.

The Audit Committee utilizes the internal control system to audit the performance of operations and conducts audits to ensure that the internal control system is constructed and operated in a satisfactory manner. The Internal Audit Department shall collaborate with the Audit Committee and provide support

### Response to Japan's Corporate Governance Code (as of August 2021)

NSK complies with all principles of the Corporate Governance Code and outlines its policies in the Corporate Governance Report that it submits to Tokyo Stock Exchange, Inc. Please access the website below for NSK's corporate governance reports in English.

In response to the revised Corporate Governance Code of June 2021, NSK plans to submit a Corporate Governance Report to the Tokyo Stock Exchange by the end of December 2021.

► English !! https://www.nsk.com/company/governance/index.html

### **Group Governance**

NSK has established the NSK Group Companies Governance Standards, which among other matters set out the basic operating policies of Group companies. In accordance with these standards, we strive for smooth business management by thoroughly implementing internal control at Group companies while enhancing management transparency and fairness. In addition, the Business Division Headquarters, Functional Division Headquarters, and regional headquarters provide management support to each Group company from multiple perspectives, and the corporate auditors of each Group company carry out regular monitoring in cooperation with the Internal Audit Department.

### Directors/Officers' Compensation

#### Compensation for Directors and Executive Officers, Policy on Determining Compensation Amounts and Calculation Methods

As a Company with Three Committees (Nomination, Audit, and Compensation), NSK makes decisions on executive compensation structure, compensation levels, and individual compensation, etc., at a Compensation Committee chaired by an independent director, and based on advice from external consultants as well as objective information on compensation levels and trends at other companies.

The Company will determine compensation for director and executive officer positions separately. When a director also serves as an executive officer, the total of each respective compensation amount shall be paid. For directors who also serve as executive officers, stock-based compensation will not be provided for the director position.

#### 1 Executive Officers' Compensation

The compensation package for executive officers consists of a fixed basic compensation and a performance-based compensation that fluctuates with performance. The Company will target a compensation ratio of roughly 4:6 of fixed compensation to performance-based compensation.

#### ■ Executive Officer Compensation Package

	② Performance-ba	ased compensation
1) Basic compensation	a. Short-term performance-based compensation	b. Mid- to long-term performance-based stock compensation
4	•	6

(1)Basic compensation

The amount of basic compensation is determined according to the title of the executive officer. Moreover, an additional amount will be paid to executive officers with representative rights.

②Performance-based compensation

The performance-based compensation consists of short-term performance-based compensation and mid- to long-term performance-based stock compensation. a. Short-term performance-based compensation

The short-term performance-based compensation will be determined based on metrics consistent with management goals to increase profitability, raise efficiency of shareholders' equity, and improve corporate value: metrics related to the operating income margin, ROE, and cash flow, as well as an achievement target for ESG goals for CO<sub>2</sub> emission reductions and safety and quality improvement. The individual's level of achievement in their designated job duties is also evaluated when determining the amount of compensation paid to each executive officer.

b. Mid- to long-term performance-based stock compensation To further incentivize contributions to the sustainable improvement of corporate value, to ensure that executive officers share the interests of shareholders, and to further reinforce the link between executive officer compensation and the mid- to long-term stock price, the Company has introduced a performance-based stock compensation program using the Board Benefit Trust system.

Through the system, points are fixed after three years based on a relative evaluation of the Company's total shareholder return (TSR) through a comparison with the TOPIX growth rate, the equivalent for which Company shares are then distributed upon retirement. However, for a certain portion of the above, the NSK will compensate executive officers with the equivalent amount acquired by converting shares into cash.

#### 2 Directors' Compensation

The compensation package for directors consists of a fixed basic compensation and fluctuating stock compensation.

(1)Basic compensation

Basic compensation is determined based on whether the director is an outside director or an internal director in addition to the director's role on committees to which the director belongs and the Board of Directors. ②Stock compensation

To further incentivize contributions to the sustainable improvement of corporate value, to ensure that directors share the interests of shareholders. the Company has introduced a stock compensation program using a Board Benefit Trust system. The system distributes Company shares upon retirement based on points allocated each fiscal year, of which separate amounts are given for outside and internal directors. However, for a certain portion of the above, the Company will compensate directors with the equivalent amount acquired by converting shares into cash. For directors who also serve as executive officers, stock-based compensation will not be provided for the director position.

#### **3** Other

In addition, in the event a member of a management team of another company such as a subsidiary or an affiliate, etc., assumes an executive officer position, compensation will be determined separately.

#### Compensation Total by Classification of Directors/Officers and Compensation Type and No. of Directors/Officers The amount of compensation for directors and executive officers between April 1, 2020, and March 31, 2021, was as follows.

Classification	Compensation, etc., Total	Basic Com	Basic Compensation Short-term Performance- based Compensation		Stock Compensation		
Classification	(¥ Millions)	No. of Directors/ Officers	Amount (¥ Millions)	No. of Directors/ Officers	Amount (¥ Millions)	No. of Directors/ Officers	Amount (¥ Millions)
Directors (internal)	73	7	66	_	_	1	7
Directors (outside)	79	6	65	_	_	6	13
Executive Officers	1,851	31	939	30	277	43	634

- 1. Compensation (excluding stock compensation) for directors (internal) includes compensation for directors who also serve as executive officers.
- 2. The amount of performance-based compensation is the planned amount to be paid on July 1, 2021, based on the results for the year ended March 31, 2021.

  3. The amount of stock compensation is the amount recorded as expenses for the current fiscal year.

  4. Figures listed above are rounded down to the nearest one million yen.

#### Directors/Officers Receiving a Total of ¥100 Million or More in Consolidated Compensation

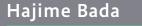
The amount of compensation for directors and executive officers between April 1, 2020, and March 31, 2021, was as follows.

	Consolidated			Amount for Each Item of Consolidated Compensation, etc. (¥ Millions)				
Name	Compensation, etc., Total (¥ Millions)	Title	Company	Basic Compensation	Short-term Performance-based Compensation	Stock Compensation	Retirement Benefit	
Toshihiro Uchiyama	157	Director	NSK	9	_	_	_	
TOSHIIIIO OCHIYAHIA	137	Executive officer	NSK	50	21	76	_	
Jean-Charles Sanchez	140	Executive officer	NSK	101	35	2	_	
Ulrich Nass	111	CEO	Consolidated subsidiary NSK Europe Ltd.	54	50	2	3	
Brian Parsons	204	CEO	Consolidated subsidiary NSK Americas, Inc.	63	116	2	22	

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# Interview with NSK's Outside Directors





Outside Director, Independent Director, Chair of the Nomination Committee

Honorary Advisor of JFE Holdings, Inc., Outside Director of Mitsui Chemicals, Inc.,



Akemi Mochizuki

Outside Director, Independent Director, Chair of the Audit Committee

Outside Director of Tsumura & Co., Outside Corporate Auditor of Asahi Kasei Corporation



Mitsuhiro Nagahama

Outside Director, Independent Director, Chair of the Compensation Committee

Outside Audit & Supervisory Board Member of Kuraray Co., Ltd., Outside Director of Azbil Corporation

NSK has adopted a "Company with Three Committees" system as its organizational design and is engaged in efforts to enhance its corporate governance system to increase sustainable growth and mid- to long-term corporate value. In fiscal 2020, the Company restructured its Board of Directors to include a majority of outside directors.

We asked outside directors Hajime Bada, Akemi Mochizuki, and Mitsuhiro Nagahama for their thoughts on corporate governance at NSK.

Mr. Bada and Ms. Mochizuki, you have both served as outside directors of NSK for three years now. Can you tell us how NSK has changed over this period and what challenges you see that still need to be addressed?

### Mr. Bada

NSK is a "Company with Three Committees" and has adopted a governance system that separates execution from supervision. Looking at two major changes, the Board of Directors transitioned to a monitoring function from the previous fiscal year, which by association has led to the significant delegation of authority to executive officers. In addition, there has been a rejuvenation in the makeup of officers, including the appointment of a new president.

Furthermore, with this change in the Board of Directors' role, steps have been taken to review the time allocated for meetings. As a result, discussions on future direction, largescale capital investment, and future research and development are held on a strategic basis.

As far as future issues are concerned, employee engagement surveys indicate a gap in perception of certain topics between employees at manufacturing sites and Group companies and those at the Company's headquarters that needs to be addressed to strengthen corporate governance.

The impression I had when first taking office—that NSK was steady, serious, and earnest in its approach to manufacturing — remains unchanged. One of the most visible changes is the increase in female executives. In this, I see considerable potential for further improvements from the perspective of human resource diversification. Effective from the current fiscal year, steps have been taken to look outside the executive function when appointing the chair of the Board of Directors. In this sense, efforts to strengthen the Board's monitoring function are evident.

With respect to future challenges, I believe it is important for NSK to become more free-thinking, less rigid, and more

flexible. This will allow employees to increasingly enjoy work, which in turn will help spur growth.

> Mr. Nagahama, it is now one year since you first took office. What do you think is expected of you as an NSK outside director?

#### Mr. Nagahama

Following a recent amendment to Japan's Corporate Governance Code, greater emphasis has been placed on the appointment of outside directors who possess experience in corporate management. On this point, the corporate management expertise of NSK's outside directors is a major characteristic of the Board's composition. Except for Ms. Mochizuki, who is a specialist in accounting and taxation, all the Company's outside directors have experience in corporate management. As the only person with a financial sector background, I believe that my role is to contribute from the perspective of finance and capital markets as opposed to general management.

Discussions at Board of Directors' meetings are free and open. A lot of time is spent on future strategies with in-depth discussions. Considering its monitoring function, the Board oversees the duties of executive officers. As an outside director, I am working to acquire more information and knowledge in related fields to add value to the Board's discussions.

How is the expertise and experience of the five outside directors being utilized in the context of NSK's governance and the effectiveness of the Board of Directors? Also, what specialized expertise, if any, is needed in the future?

#### Mr. Bada

This is the first time for me to serve on a Board where outside directors are in the majority, and I am finding it an interesting experience. I think it is important to see how information on the execution of business is brought to a Board that is mainly composed of outside directors. This is an issue that cannot be determined by rules alone. Information must be sorted in accordance with the culture of the company and past performance. In my three years of experience here at NSK, I can say that the Company has done a good job in this regard. For example, the Board is immediately advised when an employee is infected with COVID-19. While this is not necessarily information that needs to be conveyed to outside directors, I believe there is considerable merit in staying on top of trends regarding the pandemic. It is unfortunate that COVID-19 has restricted people's movement and prevented us from visiting plants and the Group's overseas bases. It is important for us to maintain a direct link to local information, which cannot be achieved through remote meetings. With this notable exception,

I believe that the information provided to management is both accurate and precise. I would assert that this is essential for a board of directors that consists mainly of outside directors and that NSK has cleared this prerequisite.

One other key element is how to connect the Board of Directors with the executive function. With the power to veto a project or transaction, a board with a majority of outside directors bears a heavy responsibility. It is vital that outside directors are aware of this responsibility and engage in discussions and make decisions accordingly.

Meanwhile, there are other issues that need to be considered and addressed. From the previous fiscal year, the Board of Directors has begun to hold strategic discussions on the Company's long-term policy goals and R&D themes. As a matter of course, NSK's midterm management policy is resolved by the Board of Directors. Accordingly, outside directors must address this important decision responsibly. As such, outside directors must take all necessary steps to study and improve their knowledge of the industry in which NSK operates and the directions taken by competitors to engage in fruitful deliberations. Of the Company's five outside directors, one or two are replaced each year. As a result, it is difficult for newly appointed outside directors to grasp the whole picture in the first year. When discussing strategy, we need to have a system in place so that outside directors, especially in their first or second year, can catch up. Without such a system, it will be difficult for every member of the Board to fully participate in deliberations.

Excluding myself, all the outside directors on NSK's Board have served as top executives at major companies. They have a wealth of experience and the ability to look ahead to see how matters should be managed and what problems might arise in certain cases. From a variety of perspectives, the Board continues to function extremely well. In addition to creating a forum that is conducive to the lively exchange of opinions, the Board has put in place an environment where these opinions can be well received throughout the Company. Steps have also been taken to better



### Interview with NSK's Outside Directors



organize the many items that were previously placed on the Board's agenda. Meetings are shorter than when I first took office, and we can now delve more deeply into the essence of each issue and discuss them in a concise manner. In this regard, I believe that NSK maintains a highly sophisticated Board of Directors.

As Mr. Bada mentioned, it is extremely important that information is relayed in an appropriate manner for outside directors to properly fulfill their role. While I am still in the process of figuring out how information should be conveyed, and how best to gather data, other outside directors with management experience are extremely adept at both.

As for the expertise needed in the future, I believe that the experience and skills inherent in NSK's current Board are more than sufficient to examine and deliberate on a variety of matters. Having said this, I suspect that if engineers and research scholars were to join the Board, NSK would be able to take on a host of new challenges.

#### Mr. Nagahama

The point made by Mr. Bada is an extremely important one. Given the 5:4 composition of NSK's current Board, the majority held by outside directors is extremely thin. Arguably, the burden that falls on this single director difference is extremely heavy. Considering the Board's primary monitoring function, it is vital that we obtain accurate information in a timely manner to make important decisions appropriately. Of course, we receive reports on important matters from executives throughout the Company in a timely and appropriate manner. I dare say, however, the potential still exists for information to fall between the cracks. Based solely on a healthy suspicion and a modicum of doubt, this is a difficult point to fully address as an outside director. Although it might sound like a bit of a cliché, I believe that the proper and timely receipt of accurate information is underpinned by NSK's unique corporate culture and climate nurtured over a long period. NSK's corporate culture of "dependability, honesty, and integrity" that runs throughout all levels of the organization,

including executive officers, employees, and affiliated company staff, is an extremely valuable asset. I am grateful to be able to fulfill my mission as an outside director based on an unwavering trust in this culture.

Looking at the expertise required of outside directors, NSK's current complement includes former executives from a wide range of industries. This enables the Board to point out and deliberate on issues from a variety of angles. Nevertheless, I think there is still some expertise that would benefit the Company. But I recognize that covering every base is unrealistic. I believe it is important to maintain a framework in which a limited number of outside directors can map out a path for NSK's future, while maintaining a balance in their composition, and provide appropriate advice on how to best navigate the external environment. In that light, I feel the current composition is ideal.

> What did the Nomination Committee focus on in the lead-up to the change in president this fiscal year? Also, what are the Compensation Committee's thoughts on the current compensation system?

#### Mr. Bada

The first major task for the Nomination Committee is to determine the Board's composition. Defining the function of the Board of Directors is critical in securing a majority of outside directors. As such, discussions were held with executive officers over the previous two fiscal years, which resulted in the current structure.

As far as the appointment of each president is concerned, deliberations on the Company's succession plan commenced in 2017 and have continued ever since I became a member of the Nomination Committee three years ago. Reflecting on the steps taken, we first looked at the essential requirement and attributes of a CEO. We then focused on identifying CEO candidates. Initially, the list exceeded 10 possible candidates. Through a process that included the evaluation of a consulting company, as well as further education and training, we finally narrowed the list to a few names.

Hearings were conducted at every stage of the process with members of the Nomination Committee including myself voicing their opinions on the results and all relevant information including the evaluation of the consulting company. Based on all the aforementioned, a decision was made on the current CEO.

Whether it is the selection of a director or the CEO, it is critical to put in place a system of checks that ensure that the selection process is codified and properly carried out. Another key factor is to ensure that each selection and the selection process are fair and that equal opportunities are provided.

Previously, the outgoing president would carefully examine the individual attributes of a candidate. This included his or her personality, attitude toward work, and ability to respond to a wide range of circumstances. The outgoing president was therefore the final arbiter. Taking into consideration potential issues regarding transparency and impartiality, steps were taken to establish the

current Nomination Committee. I am confident that the selection process NSK now has in place is appropriate and extremely effective.

#### Mr. Nagahama

The compensation system follows certain rules of the game so to speak, and as such does not change from year to year. In principle, the system remains the same for at least the period of each mid-term management plan.

NSK's current compensation system is well structured. One feature of the Company's system is its high fluctuating compensation ratio. The fact that compensation is so closely linked to business performance allows the fixed compensation portion to essentially remain unchanged even in the event of a deterioration in performance. I believe this feature of the compensation system should be highly evaluated. Second, ESG targets are incorporated into the performance evaluation indicators of short-term performance-based compensation. Taking the lead over its peers, NSK was quick to adopt this progressive approach. While we have recently witnessed an increasing number of investors and asset management companies calling for ESG targets to be incorporated into performance evaluation indicators, NSK has already taken this initiative. Third, the system is based on a relative evaluation of the Company's total shareholder return (TSR). In this manner, steps are taken to evaluate and set mid- to long-term performance-based stock compensation. NSK does not just look at fluctuations in its stock price. The Company conducts a relative evaluation compared to overall market trends.

Finally, what are your expectations of President Ichii and all employees of the NSK Group?

#### Mr. Bada

NSK is a company with a long history. We have many manufacturing sites and are well known in the local communities of each site. I believe there are families among our employees who are proud to have worked at these sites for two to three generations. We would hope that our employees around the world take great pride in working for a company that contributes to society through bearings. However, one cannot live on pride alone. It is vital that we continue to challenge ourselves if we are to take the next step. M&As in the condition monitoring system (CMS) business are also a challenge. I trust that we can become a company that takes pride in itself and takes on a variety of challenges.

I sometimes hear that bearings are indispensable for ensuring the smooth movement of equipment and machinery. But I wonder if a breakthrough item will emerge that can serve as a replacement. Naturally, there is nothing to support this conjecture. The achievements NSK has accumulated over its long history are important, but I would like to see the Company

use this as a base to take a further leap forward. As far as the Company and its employees are concerned, I would hope that NSK will consistently pursue avenues through which it can contribute to the world at large. While we might not always be in a position to bring our aspirations to fruition, it is vital that we never lose the energy to devise new technologies and product ideas, or the desire and passion to create something new. I believe it is important that we never lose sight of the fact that a forward-looking vision provides the wellspring for sudden innovation.

#### Mr. Nagahama

I feel confident that the demand for bearings, which are an essential product across all industries, will not disappear anytime soon. However, it is important that we avoid resting on our laurels and think about how we can expand the scope of our current work and business. Two factors are critical here. The first is "development." With a track record that spans more than 100 years, NSK has earned the trust of customers from the automotive and many other industries. I base this assessment on my observations of corporate activities in Japan over a long period of time from my vantage in the financial field. Building on this relationship of trust with its customers, I would hope that NSK will proceed with confidence in the development and internal incorporation of advanced technologies as it responds in a forward-looking manner to customer needs. In this regard, I have heard that the Company's technological development capabilities are outstanding. I would ask that NSK further refine its skills and take on the challenge of innovation that Mr. Bada mentioned. The second key factor is to strengthen human resources, NSK's greatest asset. This entails further increasing employee engagement and cultivating the ability to respond to change. Both factors are important foundation elements for the next 100 years. I hope that the Company will make further efforts in development and human resources and move forward with strength.



# Dialogue with Shareholders and Investors

#### NSK's Approach

NSK discloses management information promptly and fairly, and is actively engaged in dialogue with shareholders and investors. In addition, the Company strives to achieve stable shareholder returns and pursues sustainable growth together with higher corporate value over the mid- to long-term. In this way, we seek to continue to be a company that meets the expectations of our stakeholders, including shareholders and investors.

#### General Meeting of Shareholders

Being cognizant that the General Meeting of Shareholders is a venue for active dialogue with shareholders, we set its date to avoid periods concentrated with the shareholders' meetings of other companies (at least 2 days prior to such a concentrated period) and promptly issue and post convocation notices and reports (normally posted to our website 28 days prior to the date of the meeting), among other efforts we make to create favorable conditions for the meeting.

The 160th Ordinary General Meeting of Shareholders for the year ended March 31, 2021 (held June 25, 2021)

- Number of shareholders present: 17 (the number of participants was smaller than typical years in similar fashion to the 25 participants of the previous year to prevent the
- Ratio of shareholder voting rights exercised: 84.2%

### Dialogue with Investors

#### Dialogue with Institutional Investors

We hold financial conferences to discuss our financial results and the Mid-Term Management Plan where top management directly communicates a variety of topics. Moreover, we hold some 20 events every year to engage in constructive dialogue regarding our management strategy and ESG.

Not only did we discuss matters concerning our business strategy and finances but also held dialogues that covered our efforts for NSK's ESG management, as outlined in the 6th Mid-Term Management Plan. Institutional investors provided positive feedback regarding our initiatives concerning corporate governance and items regarding ESG as a mid- to long-term management issue, and we received their requests for ongoing dialogue and ample information disclosure.

#### ■Number of Dialogue Opportunities in Fiscal 2020 Total of 365 companies (excluding large meetings)

Financial conferences (large meetings)	4 times for a total of 427 companies
Individual IR interviews	Total of 261 companies
Institutional investor engagement visits	Total of 19 companies
President's small meetings	2 times for a total of 41 people
IR road shows outside Japan Europe/North America/Asia (Singapore, Hong Kong)	11 companies
Conference participation for investors outside Japan	4 times for a total of 33 companies

#### Dialogues with Individual Investors/Individual Shareholders

We hold briefings for individual investors multiple times a year, and in addition, with the objective of bolstering dialogue with NSK's individual shareholders, since 2018 we have been conducting plant tours. Unfortunately, we were unable to hold any such events in fiscal 2020 due to COVID-19, but we plan to hold events online and in other formats with an eye to the post-corona era. We have also created a website for individual investors to give them a better understanding of the Company, among other efforts, and proactively disclose information and respond to queries.





#### <Reference> Fiscal 2019

- Briefings for individual investors: Held 7 times, with 236 participants
- Plant tours for individual shareholders: Held 2 times (Haruna Plant, Ishibe Plant), with 49 participants
- "To Our Individual Investors" website (Japanese only) https://www.nsk.com/jp/investors/individual.html

NSK continues to properly convey management direction, business strategy, and other information, and strives for communication that facilitates accurate assessments and understanding.

At NSK, having determined our "Disclosure Policy," we strive to conduct the disclosure of information in a fair manner that does not give rise to discrepancies in information among market participants.

For further information on our Disclosure Policy, please access the link below to our website.

- https://www.nsk.com/investors/management/disclosurepolicy.html
- For further information on "Key Questions and Answers from Recent Meetings," please see the following website.
- https://www.nsk.com/investors/fag.html

# Management



Toshihiro Uchiyama Director, Chairman [Number of Shares Owned: 101,900]

Kenichi Yamana

[Number of Shares Owned: 19.379]



Director, Representative, President and Chief Executive Officer [Number of Shares Owned: 63,561]



Outside Director, Independent Director, Honorary Advisor of JFE Holdings, Inc., Outside Director of Mitsui Chemicals, Inc., Independent Corporate Auditor of Asagami Corporation [Number of Shares Owned: 6,700]



Outside Director, Independent Director Outside Audit & Supervisory Board Member of Kuraray Co., Ltd., Outside Director of Azbil Corporation [Number of Shares Owned: -]



Director, Representative, Senior Executive Vice President, Chief Financial Officer [Number of Shares Owned: 58.600]



Outside Director, Independent Director, Certified Public Accountant.

Partner of Akahoshi Audit Corporation Outside Director of Tsumura & Co., Outside Corporate Auditor of Asahi Kasei Corporation [Number of Shares Owned: 6,700]



Koichi Obara

Outside Director, Independent Director, Standing Advisor of Maeda Corporation [Number of Shares Owned: -]

### **Executive Officers and Group Officers**

#### President and Chief Executive Officer Akitoshi Ichii

Yoshitaka Fujita

Corporate Advisor of

Outside Director, Independent Director,

Murata Manufacturing Co., Ltd.

[Number of Shares Owned: 4,200]

Saimon Nogami

Tomoyuki Yoshikiyo Hideki Ochiai

#### Senior Vice Presidents Nobuaki Mitamura

Tatsuya Atarashi Kunihiko Akashi Masaru Takayama Guoping Yu Keita Suzuki Susumu Ishikawa Hayato Omi Narihito Otake Hiromichi Takemura Tatsufumi Soda

Hiroya Achiha Tamami Murata Hiroyuki Tsugimoto Jean-Charles Sanchez Hisakazu Tadokoro Ulrich Nass Michio Ozaki Masato Kitou Natsuki Sensui

Hidenori Oka Brian Parsons Shinji Miyata Gen Murayama Naoki Goto Michio Komaba Ruriko Yoshida

Hideaki Hayami

Seong-Il Jo Minoru Arai Katsumi Kobayashi Masami Shinomoto

N : Nomination Committee : Compensation Committee

A : Audit Committee

★ : Chairperson

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Notes: 1. For the career summary of each director, the independence of the independent directors and the reasons behind their appointments, please see the Notice of the fiscal 2020 (the 160th) Ordinary General Meeting of Shareholders of NSK and Independent Directors/Auditors Notifications published on the following websites of the Tokyo Stock Exchange. [Notice of the Ordinary General Meeting of Shareholders] (Japanese only) 🛄 https://www2.tse.or.jp/disc/64710/140120210524427193.pdf [Independent Directors/Auditors Notifications] (Japanese only) 🗓 https://www2.tse.or.jp/disc/64710/140120210524426791.pdf

2. Number of the Company's shares owned as of March 31, 2021

In Japan, although exports increased against the backdrop of a global recovery in vehicle production, consumer spending weakened slightly due to the second declaration of a state of emergency in response to COVID-19, and the economy remained in a severe condition. In the United States, the economy continued to pick up as additional economic measures began to take effect and economic activities resumed further with the rollout of COVID-19 vaccines. In Europe, although there were some signs of bottoming in capital expenditures and picking up in manufacturing activities after the easing of restrictions, the pace of

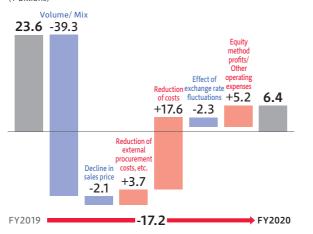
(¥ Billions)	FY2019 〈Actual〉	FY2020 〈Actual〉	Increase/ Decrease YOY
Sales	831.0	747.6	-83.5
Operating income (Operating income margin)	23.6 (2.8%)	6.4 (0.9%)	-17.2
Income before income taxes	24.1	5.9	-18.2
Net income attributable to owners of the parent	17.4	0.4	-17.1

recovery slowed due to the resurgence of cases. In China, manufacturing activities quickly resumed, and the economy continued to show signs of picking up. This included a recovery in new vehicle sales thanks to the government's vehicle subsidies.

In this economic environment, consolidated sales for the year ended March 31, 2021, came to ¥747,559 million, a year-on-year decrease of 10.0%, and operating income totaled ¥6,364 million, a year-on-year decrease of 73.0%. Income before income taxes was ¥5,889 million, a year-on-year decrease of 75.5%. Net income attributable to owners of the parent was ¥355 million, a year-on-year decrease of 98.0%.

▶ PP. 32–34 Business Overview and Business Environment by Segment

■Operating Income: Factors Behind Change (FY2019 ⇒ FY2020)



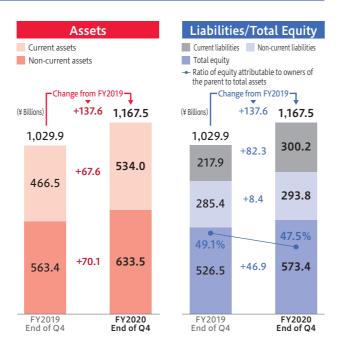
## **Analysis of Financial Position**

In the fiscal year ended March 31, 2021, other financial liabilities (current) increased by ¥58,398 million compared with other financial liabilities (current) as of March 31, 2020, due to the borrowing in preparation for liquidity risk posed by contingencies including the global spread of COVID-19. Meanwhile, outflow associated with the acquisition of the condition monitoring system (CMS) business was ¥20,118 million. Accordingly, cash and cash equivalents increased by ¥39,340 million.

Trade receivables and other receivables increased by ¥31,002 million and trade payables and other payables increased by ¥14,416 million as the business environment has recovered with the resumption of economic activities. Moreover, other financial assets (non-current) increased by ¥23,704 million due to the rise in stock prices.

As a result, total assets as of March 31, 2021, stood at ¥1,167,498 million, an increase of ¥137,614 million compared with total assets as of March 31, 2020. Total liabilities were ¥594,070 million, an increase of ¥90,704 million compared with total liabilities as of March 31, 2020.

Total equity totaled ¥573,428 million, an increase of ¥46,909 million compared with total equity as of March 31, 2020, mainly due to the increase in net income attributable to owners of the parent and other components of equity, which offset the decrease in cash dividends.



### Cash Flows

Total cash and cash equivalents as of the end of the period were ¥176,638 million, an increase of ¥39,340 million compared with total cash and cash equivalents as of March 31, 2020. Despite the decreases in profits and cash due to the outflow associated with the acquisition of the CMS business, free cash flow remained positive (¥2,745 million) owing to successful efforts to manage capital investment.

#### Net cash flow provided by operating activities

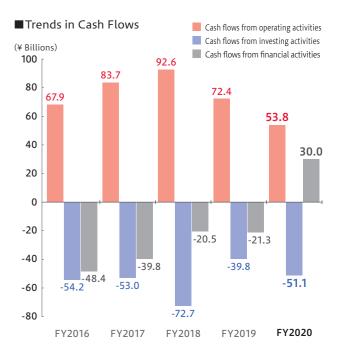
Net cash flow provided by operating activities totaled ¥53.842 million. a decrease of ¥18.544 million compared with the previous year. This includes net income before income taxes of ¥5,889 million with subsequent adjustments including depreciation and amortisation and movements in working capital.

#### Net cash flow used in investing activities

Net cash flow used in investing activities totaled ¥51,096 million, an increase of ¥11,312 million compared with the previous year. This includes purchases of property, plant and equipment of ¥33,797 million and acquisition of shares of subsidiaries of ¥20,118 million associated with the acquisition of the CMS business.

#### Net cash flow provided by financing activities

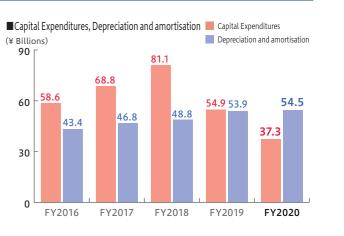
Net cash flow provided by financing activities totaled ¥29,992 million, an increase of ¥51,326 million compared with the previous year. The main cash inflows were a ¥39,194 million increase in shortterm loans in preparation for contingencies such as the spread of COVID-19 and ¥16,727 million in proceeds from long-term loans. Meanwhile, the main outflows were ¥10,142 million in repayments of long-term loans and ¥10,253 million in dividends paid.



### **Summary of Capital Investment**

NSK's basic policy is to sustain growth, enhance the competitiveness of its business, and strategically invest in the development of new technologies. In the year ended March 31, 2021, amid the continuing sluggish global economy caused by the COVID-19 pandemic, focusing on our core values of safety, quality, compliance, and the environment, NSK invested ¥37,303 million, a decrease of ¥17,623 million compared with the previous year, in needed productivity improvement and equipment upgrades.

In the Industrial Machinery Business, NSK invested ¥15,189 million, a decrease of ¥8,175 million compared with the previous year, for productivity improvements, equipment upgrades, production transfer, and so on. In the Automotive Business, the Company invested ¥20,643 million, a decrease of ¥7,746 million compared with the previous year, in new technology/product development in addition to productivity improvement and equipment renewal.



▶ P. 49 R&D Expenses

#### **NSK Group Tax Policy**

As the globalization of business advances, the NSK Group believes that the proper payment of taxes in the countries and regions where it operates is one of the most fundamental and important social responsibilities that it should undertake. With this understanding, the Group has established the NSK Group Tax Policy and is striving to ensure appropriate tax treatment. For more details, please visit the website noted below.

▶ Please see our website for more information: 및 https://www.nsk.com/investors/management/taxpolicy.html

<b>Consolidated Statements of Financial Position (IFR</b>	C	onsolidated	<b>Statements</b>	of Financial	Position (	(IFRS
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			(¥ Millions)
As of March 31,		2020	2021
Assets			
Current assets	Cash and cash equivalents	137,298	176,638
current assets	Trade receivables and other receivables	154,226	185,228
	Inventories	152,971	150,046
	Other financial assets	3,138	1,569
	Income tax receivables	3,513	4,670
	Other current assets	15,304	15,850
	Total current assets	466,452	534,004
Non-current assets	Property, plant and equipment	383,978	378,677
	Intangible assets	19,768	39,435
	Investments accounted for using equity method	26,785	29,773
	Other financial assets	55,498	79,203
	Deferred tax assets	9,698	10,962
	Net defined benefit assets	61,508	88,809
	Other non-current assets	6,193	6,632
	Total non-current assets	563,431	633,493
Total assets		1,029,884	1,167,498
Liabilities and equity Liabilities			
Current liabilities	Trade payables and other payables	97,193	111,609
	Other financial liabilities	71,806	130,205
	Provisions	159	318
	Income tax payables	3,474	3,203
	Other current liabilities	45,305	54,888
	Total current liabilities	217,939	300,224
Non-current liabilities	Financial liabilities	228,707	223,211
	Provisions	8,160	2,919
	Deferred tax liabilities	24,764	42,225
	Net defined benefit liabilities	18,345	17,349
	Other non-current liabilities	5,447	8,139
	Total non-current liabilities	285,426	293,845
Total liabilities		503,365	594,070
Equity	Issued capital	67,176	67,176
, ,	Capital surplus	80,456	80,338
		1 23, .20	20,230

Retained earnings

Other components of equity

Non-controlling interests

Total equity attributable to owners of the parent

Treasury shares

Total equity

Total liabilities and equity

# **Consolidated Statements of Income (IFRS)**

		(¥ Millions
Year ended March 31,	2020	2021
Sales	831,034	747,559
Cost of sales	677,511	621,318
Gross profit	153,522	126,240
Selling, general and administrative expenses	130,238	125,425
Share of profits of investments accounted for using the equity method	2,282	4,076
Other operating expenses	1,961	(1,472)
Operating income	23,604	6,364
Financial income	3,409	2,137
Financial expenses	2,948	2,612
Income before income taxes	24,065	5,889
Income tax expense	5,956	6,637
Net income (loss)	18,108	(748)
Net income attributable to:		
Owners of the parent	17,412	355
Non-controlling interests	696	(1,103)
(Earnings per share attributable to owners of the parent)		
Basic earnings per share (yen)	34.00	0.69
Diluted earnings per share (yen)	33.91	0.69

# Consolidated Statements of Comprehensive Income (IFRS)

		2020			2021	
Year ended March 31,	Before tax effect	Tax effect	Amount (net)	Before tax effect	Tax effect	Amount (net)
Net income (loss)			18,108			(748)
Other comprehensive income						1
Items that will not be reclassified to profit or loss	1 1					1
Remeasurements of net defined benefit liability (asset)	2,939	(1,194)	1,744	25,333	(10,127)	15,205
Net changes in financial assets measured at fair value through other comprehensive income	(11,941)	3,607	(8,333)	28,028	(8,561)	19,467
Share of other comprehensive income of investments accounted for using equity method	(63)	18	(44)	206	(61)	144
Total items that will not be reclassified to profit or loss	(9,064)	2,430	(6,633)	53,568	(18,751)	34,817
Items that may be reclassified to profit or loss						 
Exchange differences on translating foreign operations Cash flow hedges	(22,150) –	_ _	(22,150) –	23,642 404	– (123)	23,642 281
Share of other comprehensive income of investments accounted for using equity method	(459)	_	(459)	715	_	715
Total items that may be reclassified to profit or loss	(22,609)	-	(22,609)	24,762	(123)	24,639
Total other comprehensive income	(31,673)	2,430	(29,242)	78,330	(18,874)	59,456
Total comprehensive income for the period			(11,134)			58,708
Total comprehensive income for the period attributable to:	1 1					1
Owners of the parent			(11,075)			59,149
Non-controlling interests			(58)			(441)

72 NSK REPORT 2021 NSK REPORT 2021 73

405,842

(37,662)

(10,308)

505,505

21,013

526,518

1,029,884

397,837

(37,303)

46,325

554,375

19,052

573,428

1,167,498

	(¥ Millions)			
	Equit	y attributable to	owners of the p	parent
From April 1, 2019, to March 31, 2020	Issued capital	Capital surplus	Retained earnings	Treasury shares
Opening balance	67,176	80,426	400,720	(37,779)
Net income	-	-	17,412	-
Other comprehensive income	_	-	-	_
Total comprehensive income for the period	-	-	17,412	-
Purchase of treasury shares	-	-	-	(11)
Disposal of treasury shares	-	41	-	128
Share-based payment transactions	_	(11)	-	-
Cash dividends	-	-	(20,501)	-
Other	-	-	8,211	-
Total transactions with owners, etc.	-	29	(12,290)	117
Closing balance	67,176	80,456	405,842	(37,662)

	Equity attributable to owners of the parent							
		0	ther components of equ	ıity			Non-	
	Exchange differences on translating foreign operations			et changes in financial assets Remeasurements of easured at fair value through ther comprehensive income liability (asset)  Total		Total	controlling interests	Total equity
Opening balance	(12,598)	-	33,494	5,234	26,131	536,676	23,724	560,400
Net income	-	-	-	-	-	17,412	696	18,108
Other comprehensive income	(21,864)	-	(8,376)	1,753	(28,487)	(28,487)	(755)	(29,242)
Total comprehensive income for the period	(21,864)	-	(8,376)	1,753	(28,487)	(11,075)	(58)	(11,134)
Purchase of treasury shares	_	-	-	-	-	(11)	-	(11)
Disposal of treasury shares	-	-	_	-	- 1	169	-	169
Share-based payment transactions	-	-	-	- 1	- 1	(11)	-	(11)
Cash dividends	-	-	_	- 1	- 1	(20,501)	(2,652)	(23,154)
Other	-	_	(7,951)	-	(7,951)	259	-	259
Total transactions with owners, etc.	_	-	(7,951)	-	(7,951)	(20,095)	(2,652)	(22,748)
Closing balance	(34,462)	-	17,166	6,988	(10,308)	505,505	21,013	526,518

	Equit Equit			parent
From April 1, 2020, to March 31, 2021	Issued capital	Capital surplus	Retained earnings	Treasury shares
Opening balance	67,176	80,456	405,842	(37,662)
Net income	-	_	355	-
Other comprehensive income	-	-	-	-
Total comprehensive income for the period	-	-	355	-
Purchase of treasury shares	_	-	-	(8)
Disposal of treasury shares	-	30	-	367
Share-based payment transactions	-	(147)	-	-
Cash dividends	-	-	(10,256)	-
Other	-	-	1,896	-
Total transactions with owners, etc.	-	(117)	(8,360)	359
Closing balance	67,176	80,338	397,837	(37,303)

	Equity attributable to owners of the parent							
		0	ther components of equ	uity			Non-	
	Exchange differences on translating foreign operations		Net changes in financial assets measured at fair value through other comprehensive income			Total	controlling interests	Total equity
Opening balance	(34,462)	-	17,166	6,988	(10,308)	505,505	21,013	526,518
Net income (loss)	-	-	-	-	-	355	(1,103)	(748)
Other comprehensive income	23,705	281	19,509	15,298	58,794	58,794	662	59,456
Total comprehensive income for the period	23,705	281	19,509	15,298	58,794	59,149	(441)	58,708
Purchase of treasury shares	-	-	-	-	-	(8)	-	(8)
Disposal of treasury shares	-	-	-	- 1	-	398	-	398
Share-based payment transactions	-	-	_	- 1	-	(147)	-	(147)
Cash dividends	-	-	_	- 1	-	(10,256)	(1,519)	(11,775)
Other	-	(281)	(1,879)	-	(2,160)	(264)	-	(264)
Total transactions with owners, etc.	-	(281)	(1,879)	-	(2,160)	(10,279)	(1,519)	(11,798)
Closing balance	(10,757)	-	34,797	22,286	46,325	554,375	19,052	573,428

Year ended March 31,	2020	(¥ Millions)
Operating activities	2020	2021
Income before income taxes	24,065	5,889
Depreciation and amortisation	53,926	54,527
Increase (decrease) in net defined benefit liability and net defined benefit asset	(80)	(2,658)
Interest and dividend income	(2,145)	(1,763)
Interest expenses	2,523	2,739
Share of profits of investments accounted for using the equity method	(2,282)	(4,076)
Decrease (increase) in trade receivables	34,335	(20,822)
Decrease (increase) in inventories	579	9,155
Increase (decrease) in trade payables	(26,888)	13,800
Other	(1,127)	5,432
Subtotal	82,905	62,225
Interest and dividend received	4,693	3,895
Interest expenses paid	(2,581)	(2,398)
Income tax paid	(12,629)	(9,880)
Net cash provided by operating activities	72,387	53,842
Investing activities		
Purchases of property, plant and equipment	(47,876)	(33,797)
Proceeds from sale of property, plant and equipment	1,638	878
Purchases of other financial assets	(22)	(130)
Proceeds from sale of other financial assets	13,606	3,804
Acquisition of shares of subsidiaries	_	(20,118)
Other	(7,131)	(1,732)
Net cash used in investing activities	(39,784)	(51,096)
Financial activities	1	
Increase (decrease) in short-term loans	(62)	39,194
Proceeds from long-term loans	17,688	16,727
Repayments of long-term loans	(21,788)	(10,142)
Proceeds from issuance of corporate bonds	30,000	_
Payments for redemption of corporate bonds	(20,000)	_
Repayments of lease liabilities	(4,157)	(4,409)
Acquisition of treasury shares	(2)	(2)
Dividends paid	(20,483)	(10,253)
Dividends paid to non-controlling interests	(2,652)	(1,519)
Other	61	398
Net cash used in financial activities	(21,333)	29,992
Effect of exchange rate changes on cash and cash equivalents	(3,934)	6,602
Net increase (decrease) in cash and cash equivalents	7,333	39,340
Cash and cash equivalents at the beginning of the period	129,965	137,298
Cash and cash equivalents at the end of the period	137,298	176,638

# **Basic Knowledge of Bearings**

### What are bearings?

Bearings—the staple of industry. A surprisingly large number of them can be found all around us. Bearings are used in all kinds of machinery, such as automobiles, airplanes, washing machines, refrigerators, air conditioners, vacuum cleaners, photocopy machines, computers, and even in satellites far away in outer space. Bearings enhance the functionality of machinery and help to save energy. Around 100 bearings are used in the average household and 100–150 or more are in an automobile with an engine. They play an active role in making our lives smoother everywhere in the world, from everyday life to offices, factories, and cutting-edge science laboratories. Bearings are utilized in tough environments and in hidden places, such as inside machinery, so we do not usually get the opportunity to see them. Nevertheless, bearings are crucial for the stable operation of machinery and for ensuring top performance.





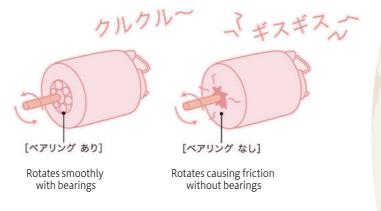


### In what way are bearings environmentally friendly?

While bearings support our lifestyles, a bearing is also a component that just on its own merit is said to be "eco-friendly." In this section, we will introduce how bearings are environmentally friendly, together with their functions.

### **Functions of Bearings**

The basic function of bearings is principally to reduce mechanical friction in rotating machinery. Friction is defined as the force that attempts to resist relative motion. Let us consider the example of a motor's housing (the motor's exterior cylindrical covering). Say that the shaft that runs through a hole in the housing begins to rotate. As the shaft steadily rotates, it rubs up against the edge of the hole, on account of the diameter of the hole in which the shaft runs through being barely larger than that of the shaft. This causes friction where the shaft comes



up against the hole's surface, and as the shaft rotates while incurring such resistance there is an enormous amount of effort expended.

The role of bearings is to suppress such friction. The installation of bearings keeps in check the friction between the housing and the axle, enabling smooth and continuous motion from the start of rotation.

The mitigation of the friction and wear that occurs between materials in relevant motion by controlling lubrication and material surface characteristics is known as "tribology." This term was coined by Professor H. Peter Jost in a report submitted in 1966 in response to a request by the British government. In his report, Professor Jost calculated that by researching tribology and actually applying it to industry, £500 million a year (equivalent to 1.3% of Britain's GNP at the time) could be saved throughout the country as a result of the energy that would be conserved. Tribology consequently came to be considered an important aspect for industrial development. As a truly foundational technology for bearings, tribology is now one of NSK's "Four Core Technologies plus One."

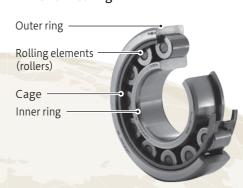
### Structure

The ball bearings and roller bearings pictured below represent two typical types of the most basic category of bearings, known as rolling bearings. Rolling bearings have a simple basic structure with four elements—an outer ring, an inner ring, a cage, and rolling elements.

■ Ball Bearing



■ Roller Bearing



Reasons why bearings are environmentally friendly

Bearings make three contributions by reducing friction.

The illustration to the right shows the three major contributions made by bearings. This content is described in simple terms, although for machinery, this is the reason that the contributions are so central and fundamental.

As we have introduced in the "Functions of Bearings," bearings reduce mechanical friction and enable smooth operations. This leads to efficiently conveying power. If friction can be suppressed through bearings, together with reductions to mechanical waste, it can give rise to results directly related to energy conservation.

Machinery will run more efficiently

There will be less frictional wear, extending the operating life of the machinery

**Prevention of heat** generated by friction will reduce mechanical breakdowns

This is why bearings are environmentally friendly.

Drawing fully on its concept of Motion & Control™. NSK contributes to preserving the global environment and presenting a diverse range of products the world over, chiefly products that reduce friction and that are leaders in terms of rolling bearing products. Please see the "NSK Supporting Society" on PP. 6–7 and the "Special Feature" on P. 22 for information about our representative products.

Column

In the distant past of ancient Mesopotamia, circa 8th Century BC, the principles of bearings were utilized to transport gigantic stones. To do this, the ancient Mesopotamians realized that it would be a good idea to place something beneath a heavy object so that it could be rolled along, thus reducing the effort required to convey such a heavy object. As reproduced in the relief, logs are being used under a giant statue. It is thought that such ancient wisdom gave rise to bearings.

**Data Section** 

### **Data Section**

# Glossary

Term	Meaning
Actuator	Actuators refer to mechanical components that, for example, play a role in the actuation of brakes and gear shifting of automobiles.
Aftermarket	Aftermarket refers to maintenance and repair demand. In NSK, aftermarket mainly means the demand and business for repair and replacement.
Ball Screw	A ball screw is a machinery part consisting of a screw shaft, nut and ball, etc. Ball screws convert rotation into linear motion and enable accurate positioning. In ball screws, a rolling element (ball) like the ones used in bearings is incorporated in the section where the groove of the screw and screw head contact each other and, similar to a bearing, the ball screw moves smoothly and features minute levels of friction resistance.
ВСР	BCP stands for <u>B</u> usiness <u>C</u> ontinuity <u>P</u> lan. In a BCP, companies determine activities in normal times and the methods and means for continuing business in times of emergency to minimize damage to business assets and to allow continuation or early recovery of the core business in the event of emergency situations such as natural disasters, large fires, and terrorist attacks.
Brake Boosters	One of the components of an automobile's brake is referred to as a brake booster. A system that helps reduce the amount of force needed from the driver to operate the brake. One type that makes use of the engine intake's negative pressure for its operation was mainstream, but the shift toward electrification is ongoing.
CMS	CMS stands for <u>C</u> ondition <u>M</u> onitoring <u>S</u> ystem. One example of a CMS is a system for understanding/analyzing the operational status of bearings (e.g., vibration, noise, rotational torque) based on various data by bearings with sensors installed.
Column-Type EPS	Column-type EPS is a type of Electric Power Steering that has a power assist element of a motor located on the steering column. The steering column is a component that conveys the turning of the steering wheel of vehicles to the steering gear, and the steering column adjusts the steering wheel position and mitigates the impact during a collision. NSK has been strong at steering column production and has the top-class record of column-type EPS in the world.
Conflict Minerals	Minerals that lead to sources of funds for armed groups and antigovernment forces that violate human rights, the procurement of which gives rise to concerns about complicity in conflicts. Under the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act, companies listed on the U.S. market are obliged to investigate usage and disclose information every year with regard to the four minerals (tin, tantalum, tungsten, and gold) mined in the Democratic Republic of Congo and adjoining countries.
CSR Procurement	CSR procurement refers to the procurement of raw materials and parts in consideration of compliance with laws and regulations, environmental protection, human rights, occupational safety, and health.
Design Quality/Manufacturing Quality	Design quality refers to "targeted quality" and is the quality realized by building it in at the design stage to achieve satisfying function and performance. Manufacturing quality is known as "performance quality." It is the quality of products that have actually been manufactured and is realized through management at the manufacturing stage.
Digital Signage	A system for transmitting information using digital video equipment. NSK conveys internal information to employees through monitors installed in the cafeterias and rest areas of domestic plants and engineering departments.
ECU	ECU stands for Electronic Control Unit. By using electronic circuits, ECU is a device that controls the operation of a motor, etc. Among NSK's products, ECU used for electric power steering is particularly important.
Environmentally Friendly Products	Environmentally friendly products are those products that, together with offering higher performance than conventional products, contribute to a greater reduction of negative environmental impact. At NSK, we emphasize the following for product manufacturing that contributes to the reduction of negative environmental impact:  1. Each product should contribute toward the energy and resource conservation of the machine in which it is installed;  2. The amount of energy and resources required during product manufacturing should be minimal;  3. Environmentally harmful substances should not be used in products or manufacturing processes; and  4. Products should contribute to the health and safety of end users by having low vibration levels and low noise and dust emissions.
EPS(Electric Power Steering)	EPS stands for <u>E</u> lectric <u>P</u> ower <u>S</u> teering. An EPS is a mechanism that supports the driver in controlling automobile steering wheels (enabling the turning of steering wheels with light force and providing driving assistance) by using an electric motor instead of hydraulic power. EPS can be divided into three types (column type, pinion type, and rack type) depending on the location of the motor to which the power assist is provided.
5G	5G stands for 5th Generation (5th generation mobile communication system). 5G is a next-generation wireless communication system with faster speed, larger capacity, fewer delays, and multiple connections when compared to the current mainstream 4G technology. Moving forward, full-scale introduction of 5G is scheduled in each country and region.
FMEA	An acronym for <u>Failure Mode and Effects Analysis</u> , which is a method used to predict and prevent potential malfunctions in advance.
Friction	Friction refers to friction resistance. Friction becomes an important factor when applying different types of movement in machinery and devices. In terms of bearings, friction affects the smoothness of movement when the inner ring and outer ring turn, so reducing and controlling friction is essential.
GAM/KAM	The <u>Global Account Manager</u> (GAM) refers to NSK's manager in charge of performing cross-regional coordination for global automobile platform projects. KAM stands for <u>Key Account Manager</u> at NSK. KAMs coordinate with GAMs for key customers in each region and build close relationships with customers as the contact person in individual regions. By taking advantage of such close relationships with customers, KAMs have a role in regional sales activities and responses in technological matters.

Term	Meaning
Hub Unit Bearings	A hub unit bearing is a type of bearing that integrates the part attached to the vehicle body and the part called a hub, to which the wheel is mounted. It supports the vehicle body while smoothly rotating the wheels.
ІоТ	IoT stands for the Internet of Things. IoT is a concept to generate new value by collecting data via the Internet from sensors embedded on various things such as automobiles, home appliances, industrial machines, and public infrastructure, and analyzing such data. IoT leads to such technological innovation as efficiency increases in machine control in plants, advertising according to individual tastes, detailed adjustment of power supply, and monitoring senior citizens through home appliances.
LGBTQ+	An acronym that is a general term for sexual minorities: <u>L</u> esbian, <u>G</u> ay, <u>B</u> isexual, <u>T</u> ransgender, <u>Q</u> ueer/ <u>Q</u> uestioning (people who do not belong to a certain category and/or are uncertain about their own sexuality, etc.). By adding + to this, the term represent the diversity of sexuality.
Linear Guide	A linear guide is a machinery part that is used for the section to support the linear motion of machines. Linear guides are one of the linear motion products and are used for machine tools, transfer machines, and platform screen doors at stations, etc.
Modern Slavery Act	The Modern Slavery Act has been established in the United Kingdom and Australia. The act was established to prevent crimes such as human trafficking, forced labor, and sexual exploitation.
Mother Plant	We position plants with outstanding capacity such as excellent technical ability and significant production capacity as mother plants. In NSK, mother plants have the role of transferring technology, etc., to child plants located overseas.
<i>Nadeshiko</i> Brand	Since fiscal 2012, the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE) have been jointly selecting listed enterprises for their outstanding efforts in encouraging women's success, with the aim of promoting investment in these enterprises and accelerating their initiatives by introducing them as attractive stocks for investors focused on corporate value growth over the mid- to long-term.
Needle Bearing	Bearing with needle-type rolling elements. Low cross-sectional height and high load capacity helps realize space-saving.
NIT	NIT stands for <u>MSK Institute</u> of <u>Technology</u> , which is an internal educational institute for our engineers to master more advanced technology
NPDS	NPDS stands for <u>NSK Product Development System</u> . NPDS, NSK's proprietary quality management system, is geared toward promptly and reliably responding to new projects and to the mass production of products that satisfy customers. Being rolled out globally, at each stage of the process, from product planning to development and design, prototype manufacturing, and mass production, dedicated staff perform stringent checks to confirm that any concerns are resolved and to build quality. Even after a product has entered mass production, we conduct thorough management to stably maintain high quality.
Open Innovation	Open innovation consists of initiatives used to create innovative new merchandise (products), services, or business models. These innovations are based on a wide range of knowledge and technology integrated during the development of new technologies and products. Specifically, a company performing open innovation combines the technologies, ideas, and know-how from other industries and fields such as other companies, universities, municipalities, and social entrepreneurs, in addition to its own.
Per Production Unit	Per production unit refers to the standard amount of raw materials, workforce, power, etc., that is necessary to produce a certain amount of industrial products. "CO2 emission per production unit" means CO2 (carbon dioxide) emissions discharged in the process of production of a certain amount of a product.
Pinion-type EPS	This is a type of electric power steering that loads the pinion with the assist force of an electric motor to reduce steering wheel operating force
Planetary Gear	Planetary gear refers to an epicylic gearing mechanism consisting of three elements—sun gear, planetary gears, and ring gear.
Powertrain	Powertrain describes the main components that generate power and deliver to the drive wheel in automobiles.
PRTR Act	The PRTR Act stands for the <u>Pollutant Release</u> and <u>Transfer Register</u> Act and refers to the Act on Confirmation, etc., of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof. This is a Japanese law intended to encourage the improvement of chemical substance management by requiring that the amount of chemical substances released to the environment is reported to the authorities.
QCDDSM	QCDDSM stands for <b>Q</b> uality, <b>C</b> ost, <b>D</b> elivery, <b>D</b> evelopment, <b>S</b> ervice, and <b>M</b> anagement. The QCDDSM elements are generally focused on by the manufacturing industry including NSK.
Rack-Type EPS	Rack-type EPS (electric power steering) is a type of lower assist EPS. It is an EPS that assists tire direction movement with a rack shaft in the steering gear section.
Smart Factory	Smart Factory in this report refers to NSK's new concept factory. The status of equipment and processing in each process during manufacturing is understood with data in real time, which is utilized for quality control, equipment maintenance, and product traceability. The understanding and management of big data are realized by advancements in Information Technology (IT). The evolution of the informatization of things such as IoT is the technology behind the Smart Factory.
SPI Management	SPI is an acronym for <u>Sales</u> , <u>Production</u> , and <u>Inventory</u> , and refers to the appropriate management and operation of sales, production, and inventory.
VOC	VOCs stands for <b>V</b> olatile <b>O</b> rganic <b>C</b> ompounds. VOCs are considered to be one cause of photochemical smog.
XY Table	The XY table refers to the positioning devices that move in the X-axis (left and right) and the Y-axis (forward and backward). By stacking mechanisms (tables) that can move in each direction, these devices can be positioned to the desired location. These devices are used for precision positioning of machine tools and semiconductor production equipment.

### **Data Section**

# **NSK Group**

Region	Company Name	Consolidated Equity	Outline of Business
Japan	NSK STEERING SYSTEMS CO., LTD.	100.0%	Manufacture of automotive components
	NSK MICRO PRECISION CO., LTD.	55.0%	Manufacture and sales of industrial machinery bearings, etc
	NSK MICRO PRECISION CO., LTD. (NAGANO)	100.0%	Manufacture of industrial machinery bearings, etc.
	AMATSUJI STEEL BALL MFG. CO., LTD.	100.0%	Manufacture and sales of steel balls
	AKS EAST JAPAN CO., LTD.	100.0%	Manufacture of steel balls
	NSK KYUSHU CO., LTD.	100.0%	Manufacture of precision machinery & parts
	ASAHI SEIKI CO., LTD.	73.8%	Manufacture of industrial machinery bearing parts, etc.
	SHINWA SEIKO CO., LTD.	82.4%	Manufacture of automotive bearing parts, etc.
	NSK TOYAMA CO., LTD.	100.0%	Manufacture of industrial machinery bearing parts
	NSK MACHINERY CO., LTD.	100.0%	Manufacture of machine tools, etc.
	KURIBAYASHI SEISAKUSHO CO., LTD.	73.5%	Manufacture and sales of automotive bearing parts
	NSK REAL ESTATE CO., LTD.	100.0%	Real estate management and rental, etc.
	NISSEI BLDG. MANAGEMENT LTD.	70.0%	Management of Nissei Building
	NSK HUMAN RESOURCE SERVICES LTD.	100.0%	Consignment services for salary and welfare
	NSK LOGISTICS CO., LTD.	100.0%	Distribution service
	NSK NETWORK AND SYSTEMS CO., LTD.	100.0%	Design and development for computer systems, etc.
	NSK-CHUGAI, LTD.	65.0%	Sales of electrical components and insurance agent, etc.
	ADTECH CORPORATION	100.0%	Research and development of automotive components
	NSK-WARNER K.K.		,
		50.0%	Manufacture and sales of automotive-related products  Manufacture of automotive-related products
	CHITOSE SANGYO CO., LTD.	50.0%	· ·
	INOUE JIKUUKE KOGYO CO., LTD.	40.0%	Manufacture and sales of industrial machinery bearings
THE AMERI	CAS		
U.S.A.	NSK AMERICAS, INC.	100.0%	Control of American subsidiaries and affiliates
	NSK CORPORATION	100.0%	Manufacture and sales of automotive bearings, etc.
	NSK PRECISION AMERICA, INC.	100.0%	Manufacture and sales of precision machinery & parts
	NSK LATIN AMERICA, INC.	100.0%	Sales of industrial machinery bearings, etc.
	NSK STEERING SYSTEMS AMERICA, INC.	100.0%	Manufacture and sales of automotive components
	NSK-AKS PRECISION BALL COMPANY	100.0%	Manufacture and sales of steel balls
	BK VIBRO AMERICA INC.	100.0%	Manufacture of condition monitoring equipment and sale and provision of condition monitoring services
Canada	NSK CANADA INC.	100.0%	Sales of industrial machinery bearings, etc.
Mexico	NSK RODAMIENTOS MEXICANA, S.A. DE C.V.	100.0%	Sales of industrial machinery bearings, etc.
	NSK BEARINGS MANUFACTURING, MEXICO, S.A. DE C.V.	100.0%	Manufacture of automotive bearings, etc.
Brazil	NSK BRASIL LTDA.	100.0%	Manufacture and sales of industrial machinery bearings, etc.
Argentina	NSK ARGENTINA S.R.L.	100.0%	Sales of industrial machinery bearings, etc.
Peru	NSK PERU S.A.C.	100.0%	Sales support of industrial machinery bearings, etc.
EUROPE			
U.K.	NSK EUROPE LTD.	100.0%	Control of European subsidiaries and affiliates
J. 1.	NSK BEARINGS EUROPE LTD.	100.0%	Manufacture of automotive bearings, etc.
	NSK PRECISION UK LTD.	100.0%	Manufacture of precision machinery & parts
	NSK UK LTD.	100.0%	Sales of industrial machinery bearings, etc.
	NSK STEERING SYSTEMS EUROPE LTD.  AKS PRECISION BALL EUROPE LTD.	100.0%	Manufacture of automotive components  Manufacture and sales of steel balls
Germany	NSK EUROPA HOLDING GMBH	100.0%	Holding company of subsidiaries in Germany
derinary	NSK DEUTSCHLAND GMBH	100.0%	Sales of industrial machinery bearings, etc.
	NEUWEG FERTIGUNG GMBH	100.0%	Manufacture of industrial machinery bearings
	BRÜEL & KJÆR VIBRO GMBH	1	I The state of the
	BRUEL & RIJEK VIDRU GIVIDH	100.0%	Manufacture of condition monitoring equipment and sale and provision of condition monitoring services
France	NSK FRANCE S.A.S.	100.0%	Sales of industrial machinery bearings, etc.
Italy	NSK ITALIA S.P.A.	100.0%	Sales of industrial machinery bearings, etc.

Region	Company Name	Consolidated Equity	Outline of Business
Spain	NSK SPAIN S.A.	100.0%	Sales of industrial machinery bearings, etc.
Netherlands	NSK EUROPEAN DISTRIBUTION CENTRE B.V.	100.0%	Distribution service
Poland	NSK BEARINGS POLSKA S.A.	95.5%	Manufacture of industrial machinery bearings, etc.
	NSK POLSKA SP. Z O.O.	100.0%	Sales of industrial machinery bearings, etc.
	NSK STEERING SYSTEMS EUROPE (POLSKA) SP. Z O.O.	100.0%	Manufacture of automotive components
	NSK NEEDLE BEARING POLAND SP. Z O.O.	100.0%	Manufacture of automotive bearings
	AKS PRECISION BALL POLSKA SP. Z O.O.	100.0%	Manufacture and sales of steel balls
Denmark	BRÜEL & KJÆR VIBRO A/S	100.0%	Development of condition monitoring equipment
Turkey	NSK RULMANLARI ORTA DOGU TIC. LTD. STI (NSK BEARINGS MIDDLE EAST TRADING CO., LTD.)	100.0%	Sales of industrial machinery bearings, etc.
South Africa	NSK SOUTH AFRICA (PTY) LTD.	100.0%	Sales of industrial machinery bearings, etc.
Morocco	NSK STEERING SYSTEMS MOROCCO S.A.R.L	100.0%	Manufacture of automotive components
ASIA			
China	NSK (CHINA) INVESTMENT CO., LTD.	100.0%	Control of Chinese subsidiaries and affiliates, sales of bearings, etc.
	KUNSHAN NSK CO., LTD.	85.0%	Manufacture of automotive bearings, etc.
	NSK STEERING SYSTEMS DONGGUAN CO., LTD.	100.0%	Manufacture of automotive components
	ZHANGJIAGANG NSK PRECISION MACHINERY CO., LTD.	100.0%	Manufacture of automotive bearing parts, etc.
	CHANGSHU NSK NEEDLE BEARING CO., LTD.	100.0%	Manufacture of automotive bearings
	AKS PRECISION BALL (HANGZHOU) CO., LTD.	100.0%	Manufacture and sales of steel balls
	SUZHOU NSK BEARINGS CO., LTD.	100.0%	Manufacture of automotive bearings
	NSK (CHINA) RESEARCH AND DEVELOPMENT CO., LTD.	100.0%	Research and development of automotive bearings, etc.
	NSK HANGZHOU AUTOMOTIVE COMPONENTS CO., LTD.	100.0%	Manufacture of automotive components
	NSK HANGZHOU AUTOMOBILE ELECTRONIC	1	' !
	TECHNOLOGY CO., LTD.	100.0%	Manufacture of automotive components
	SHENYANG NSK PRECISION CO., LTD.	100.0%	Manufacture of precision machinery & parts
	SHENYANG NSK CO., LTD.	100.0%	Manufacture of industrial machinery bearings
	HEFEI NSK CO., LTD.	100.0%	Manufacture of industrial machinery bearings, etc.
	TOHSHIN-NSK ROLLERS (SUZHOU) CO., LTD.	40.0%	Manufacture of automotive bearing parts
Hong Kong	NSK HONG KONG LTD.	70.0%	Sales of industrial machinery bearings, etc.
Taiwan	TAIWAN NSK PRECISION CO., LTD.	70.0%	Sales of precision machinery & parts
Singapore	NSK ASEAN AND OCEANIA PTE. LTD.	100.0%	Control of ASEAN and OCEANIA subsidiaries and affiliate
	NSK INTERNATIONAL (SINGAPORE) PTE LTD.	100.0%	Sales of industrial machinery bearings, etc.
	NSK SINGAPORE (PRIVATE) LTD.	100.0%	Sales of industrial machinery bearings, etc.
Indonesia	PT. NSK BEARINGS MANUFACTURING INDONESIA	100.0%	Manufacture of industrial machinery bearings, etc.
	PT. NSK INDONESIA	100.0%	Sales of industrial machinery bearings, etc.
	PT. AKS PRECISION BALL INDONESIA	100.0%	Manufacture and sales of steel balls
 Thailand	NSK BEARINGS MANUFACTURING (THAILAND) CO., LTD.	74.9%	Manufacture and sales of automotive bearings
· · · · · · · · · · · · · · · · · · ·	SIAM NSK STEERING SYSTEMS CO., LTD.	74.9%	Manufacture and sales of automotive components
	NSK ASIA PACIFIC TECHNOLOGY CENTRE (THAILAND) CO., LTD.	100.0%	Development of products, etc.
	NSK BEARINGS (THAILAND) CO., LTD.	49.0%	Sales of industrial machinery bearings, etc.
Malaysia	<u> </u>		
Malaysia	NSK BEARINGS (MALAYSIA) SDN. BHD.	51.0%	Sales of industrial machinery bearings, etc.
	NSK MICRO PRECISION (M) SDN. BHD.  ISC MICRO PRECISION SDN. BHD.	100.0%	Manufacture of industrial machinery bearings, etc.  Manufacture of industrial machinery bearings, etc.
\/iatmam		100.0%	
Vietnam	NSK VIETNAM CO., LTD.	100.0%	Sales of industrial machinery bearings, etc.
Australia	NSK AUSTRALIA PTY. LTD.	100.0%	Sales of industrial machinery bearings, etc.
New Zealand	NSK NEW ZEALAND LIMITED	100.0%	Sales of industrial machinery bearings, etc.
India	NSK BEARINGS INDIA PRIVATE LIMITED	100.0%	Manufacture and sales of automotive bearings, etc.
	RANE NSK STEERING SYSTEMS PRIVATE LTD.	51.0%	Manufacture and sales of automotive components
South Korea	NSK KOREA CO., LTD.	100.0%	Manufacture and sales of automotive bearings, etc.

# **Information for Investors/Company Data**

As of March 31, 2021

#### **▶** Corporate Address

#### NSK Ltd.

Nissei Bldg., 1-6-3 Ohsaki, Shinagawa-ku, Tokyo 141-8560, Japan TEL +81-3-3779-7111

#### **▶** Contact Information

#### IR Office, NSK Ltd.

Nissei Bldg., 1-6-3 Ohsaki, Shinagawa-ku, Tokyo 141-8560, Japan

<u>TEL</u> +81-3-5487-2564

<u>E-MAIL</u> ir@nsk.com

E-MAIL IT@NSK.CO

#### ▶ NSK's Website

https://www.nsk.com/

#### **▶** Common Stock

Authorized 1,700,000,000 shares

Issued 551,268,104 shares

(including 32,913,214 shares of treasury stock)

#### ► Number of Shareholders

48,910

#### **▶** Transfer Agent

Mizuho Trust & Banking Co., Ltd. 1-2-1 Yaesu, Chuo-ku, Tokyo 103-8670, Japan

#### **▶** Listing

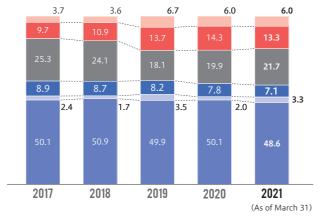
Tokyo

#### **▶** Security Code

647

### ■ Breakdown of Shareholders (%) (by shareholder type)





#### Other Information Concerning the Company

#### **IR-Related Information**

Please refer to the Company's IR website for other IR information including the latest news and detailed financial data.

https://www.nsk.com/investors/

#### Sustainability Information

Please refer to the Company's Sustainability website for information on sustainability.

https://www.nsk.com/sustainability/

#### Highly Evaluated by Outside Agencies (SRI/ESG)

Over and above their financial aspects, companies that merit high evaluations for their environmental and social contributions are being recognized for their promise of long-term sustainable growth. These companies are also attracting interest from a socially responsible investment (SRI) perspective while forging an increasingly important presence among a wide range of institutional investors. Acknowledged for its integrity, NSK has been included in the following internationally recognized SRI/ESG indices as of July 2021.



- \*1: FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that NSK has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social, and Governance (ESG) practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.
- \*2: FTSE Russell (FTSE International Limited と Frank Russell Companyの登録商標)はここにNSKが第三者調査の結果、FTSE Blossom Japan Index組み入れの要件を満たし、本インデックスの構成銘柄となったことを証します。FTSE Blossom Japan IndexはグローバルなインデックスプロバイダーであるFTSE Russellが作成し、環境、社会、ガバナンス(ESG)について優れた対応を行っている日本企業のパフォーマンスを測定するために設計されたものです。FTSE Blossom Japan Indexはサステナブル投資のファンドや他の金融商品の作成・評価に広く利用されます。「Japanese Only]

### **Third-Party Assurances**

To ensure the reliability and accuracy of NSK Report 2021 as an integrated report, NSK obtained assurances from an external third party for the following data information described in this report.

### Items Subject to Assurance

Energy usage

▶ P. 44

 Greenhouse gas emissions (Scope 1, Scope 2, Scope 3)

▶ P. 44

Water withdrawal

▶ P. 44

• Waste and valuables

▶ P. 44

Emissions of VOCs

▶ P. 44

• Lost time injury frequency rate

▶ P. 45



Independent Verification Report



Independent Assurance Statement

### At the Time of Publishing the NSK Report 2021

Thank you very much for your understanding and support of NSK's daily business activities.

The importance of ESG, sustainability, and corporate social responsibility to achieve the SDGs has been increasing in recent years. However, 30 years ago in 1991, NSK formulated its Corporate Philosophy, which clearly states that "NSK contributes to a safer, smoother society" and "helps protect the global environment" and is "working across national boundaries to improve relationships between people throughout the world." Based on these objectives, we have been conducting corporate activities to meet the expectations of society.

This year's "NSK Report" reaffirms the aspirations embodied in NSK's Corporate Philosophy, as well as showcases NSK's continuing collaboration with its stakeholders to create the value that society needs through its business activities and NSK's aim to contribute to

both solving social issues and achieving sustainable growth, under the new organization that began in April 2021. In addition, the "Sustainability Report" has been integrated into the "NSK Report," making it easier to understand in a single publication such NSK activities as "NSK's Collaborative Value Creation Process," "Strategies and Performance," and "Foundation Supporting Sustainability."

This report was produced primarily by the IR Office, which worked in cooperation with a broad range of departments involved. As the executive officer responsible for IR and thus the creation of this report, I expressly stated that the production process be valid and the information contained herein be accurate. We are making concerted efforts to further enrich the content of this report, so by all means read through this report. I would be delighted to hear your frank views and any requests for future content.



Vice President, Head of Corporate Planning Division HQ, Responsible for Investor Relations Office

Gen Muravama

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**Data Section** 



