

NSK Sustainability Report 2020





NSK Sustainability Report 2020

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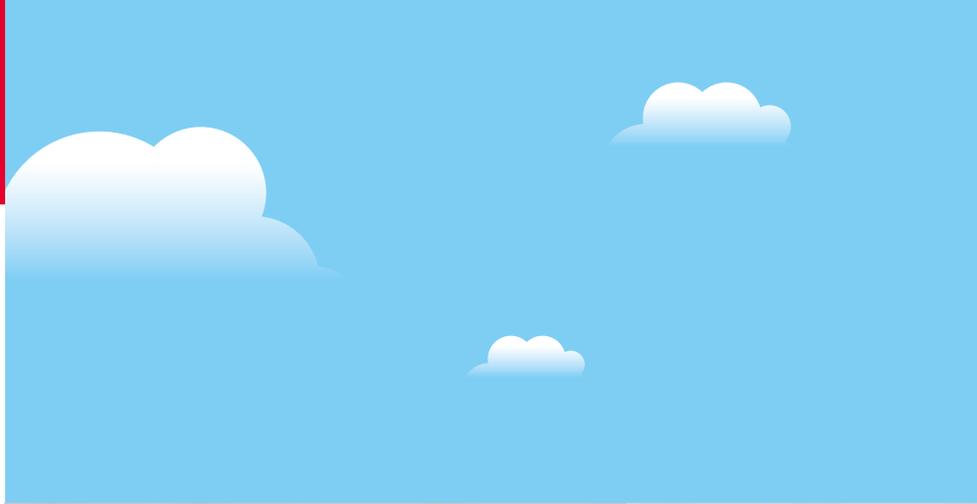
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■ Editorial Policy

The NSK Group carries out a variety of governance, social, and environmental initiatives to do its part in creating a sustainable society. We produce the Sustainability Report to explain these initiatives in detail. With this report, care was taken to facilitate understanding of the overall picture and progress of each initiative by including the policy, system, targets and performance, the activities in fiscal 2019, and data measuring progress.

■ Scope of Coverage

Period of Coverage	Primarily fiscal 2019 (April 1, 2019 to March 31, 2020). Activities conducted outside this period are indicated with the inclusion of a date.
Organizations Covered	NSK Ltd. and its consolidated subsidiaries (89 companies in all). Affiliates accounted for using the equity method (16 companies).
Scope of Performance Data	All sites in the NSK Group. Some data relates to initiatives carried out with customers and suppliers. In addition, the scope is indicated separately for information with a different scope.
Reporting Cycle	Published annually.
Date Published	March 2021

■ Reference Guidelines

Sustainability Reporting Standards 2016/2018/2019 by the Global Reporting Initiative (GRI)
ISO 26000: 2010 Guidance on Social Responsibility by the International Organization for Standardization (ISO)
Environmental Reporting Guidelines (2018 edition) by the Ministry of the Environment of Japan

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.



■ Third-Party Assurance and Verification

In order to improve the reliability of this report, we received third-party assurance of fiscal 2019 performance in governance, social, and environmental areas. Third-party assurance of the lost-worktime injury rate was obtained from Sustainability Accounting Co., Ltd. In addition, we also received third-party verification of emissions of greenhouse gases, energy use, water withdrawal, total waste, and VOC emissions from the Japan Quality Assurance Organization.

■ Disclaimer

Statements made in this Sustainability Report 2020 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.

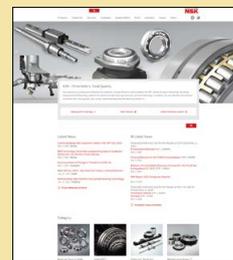
This document is an English translation of NSK Sustainability Report 2020 dated December 31, 2020, that was originally prepared in the Japanese language, and it is provided for convenience purposes only. Therefore, this document does not include any event that has occurred, or has been found to have occurred, on or after December 31, 2020. 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. In the event that 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.

■ Related Methods of Disclosure

See the NSK Report 2020, the NSK ESG Data Book 2020, and NSK's website for financial and non-financial information about the NSK Group.



NSK Report 2020



Website
<https://www.nsk.com/>



NSK ESG Data Book 2020

NSK Corporate Philosophy and NSK Vision 2026

The NSK Corporate Philosophy is comprised of four parts—the Mission Statement, Management Principles, Corporate Message, and Action Guidelines. It articulates the mindset all NSK executives and employees strive to live up to and their guiding principles for action. 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 medium 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

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 technologies.
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

Responsive and Creative
MOTION & CONTROL™



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.

Four Key Initiatives for Setting the Future in Motion

Aiming for Further Growth: Activities to Promote the Corporate Philosophy and NSK Vision 2026

NSK has been holding executive workshops every year since 2015 to discuss ways to achieve the NSK Vision 2026. The 2020 workshop was held in September in socially-distanced and online formats. Similar workshops and activities are also held at each organizational level, for managers, general employees, and plant operators. We have also been holding other events every July since 2016 to discuss the importance of our Corporate Philosophy.



Online executive workshop



Group activity with physical distancing

Steadily Pursuing Vision Initiatives Across the World

The NSK Group holds a semi-annual meeting where global Vision Leaders gather to report, share, and discuss the measures they are taking to promote the NSK Vision 2026 in each world region.

After learning at this meeting about the executive workshop in Japan, leaders from outside Japan expressed the wish to hold similar workshops in their respective regions. As a result, they held their own workshops in fiscal 2019 without relying on outside speakers. In addition, new initiatives such as the full-scale roll-out of the “Innovation Station” intranet portal are progressing. The site was developed in the Americas and allows NSK members to post and discuss ideas. Online leader meetings are also being considered for the future.



Workshop for department heads in ASEAN



Workshop for leaders at an NSK site in India

“SENSE OF MOTION” – Future Forum 4

Started in fiscal 2016 as part of the NSK Vision 2026 project, the “SENSE OF MOTION” —Future Forum aims to support, nurture, and create networks of those who want to promote innovation for society through new ideas.

Under the theme of “A discussion on the relative nature of motion,” participants in the fiscal 2019 Future Forum 4 considered how even the largest-scale motion can seem invisible depending on your perspective. On the day of the event, researchers and content creators from various fields gave keynote speeches and took part in the discussions. A total of 155 people from in and outside NSK participated. We will continue to hold these events each year through fiscal 2026.



Senior Executive Vice President Saimon Nogami delivers his message at Future Forum 4



“SENSE OF MOTION” logo

Idea Dojo Project

NSK established the Idea Dojo Project as a means of bringing the innovative ideas of employees to life. The project solicits ideas from within the Company regardless of area or field, and the Company supports selected ideas for application to concrete projects. Two ideas were selected in fiscal 2019, and efforts were made to pursue them. The first idea was to develop a toy for children using bearings, the “Hand-Spun Dynamo Flashlight,” in order to allow the public to better appreciate the power of bearings, NSK’s main product. The second idea was an initiative to create employment for persons with disabilities in agriculture. It was conceived out of the wish to help achieve the SDGs.



Hand-Spun Dynamo Flashlight (prototype)



Harvesting at the pilot farm

NSK Supporting Society

NSK is creating collaborative value to support society everywhere in the world.

A vast array of NSK products continues to excel in such fields as motion and machinery from the home appliances, medical equipment, automobiles, railways and other items that support people's daily lives and in all industries including machine tools, robotics, wind turbines and steelmaking facilities.

NSK products will continue to support a society that is safe, secure, comfortable and environmentally friendly.

Mining and Construction

Contributing to the creation of new needs in such areas as ICT and electrification and reducing LCC

LCC: Life cycle cost

Highly reliable anti-creep design tapered roller bearings



Steelmaking Facilities

Contributing to stable operations through higher reliability and longer life

Sealed four-row tapered roller bearings



Semiconductor Production Equipment

Contributing to building next-generation infrastructure including IoT and AI

NSK Linear Guides™ NH series, NS series



Medical Equipment

Contributing to people's health and peace of mind as well as advanced medical care



Monocarrier™



Dental handpiece bearings

Railways

Contributing to safe, secure, comfortable and environmentally friendly means of transportation



Low-maintenance high-reliability gearbox bearings



NSK vibration control actuators

Automobiles

Contributing to improved safety, comfort and environmental performance



Bearings for in-vehicle motors



Double-row angular contact ball bearings with inner and outer mounting flange (HUB III for driven wheels)



Needle roller bearings for planetary gears (cage and roller assembly), pinion shaft



High efficiency starting clutch for HEVs



Column-type electric power steering



Ball screw unit for electric hydraulic brake systems



Traction reducer

Wind Turbines

Contributing to the protection of the global environment through the stable operation of wind turbines



Integrated cylindrical roller bearings



Large spherical roller bearings for wind turbine main shafts

Pumps and Compressors

Contributing to smaller products that have longer lives while providing increased efficiency and reliability



NSKHPS™ high load capacity angular contact ball bearings



High load capacity deep groove ball bearings

Industrial Robots

Contributing to improved robot reliability



Highly rigidity thin-section angular contact ball bearings

Machine Tools

Contributing to higher precision and productivity in parts machining



High durability precision ball screws



NSK super precision bearings



NSK Linear Guides™ roller guide RA series

Home Appliances

Contributing to a comfortable life that is friendly to people and the environment



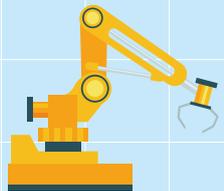
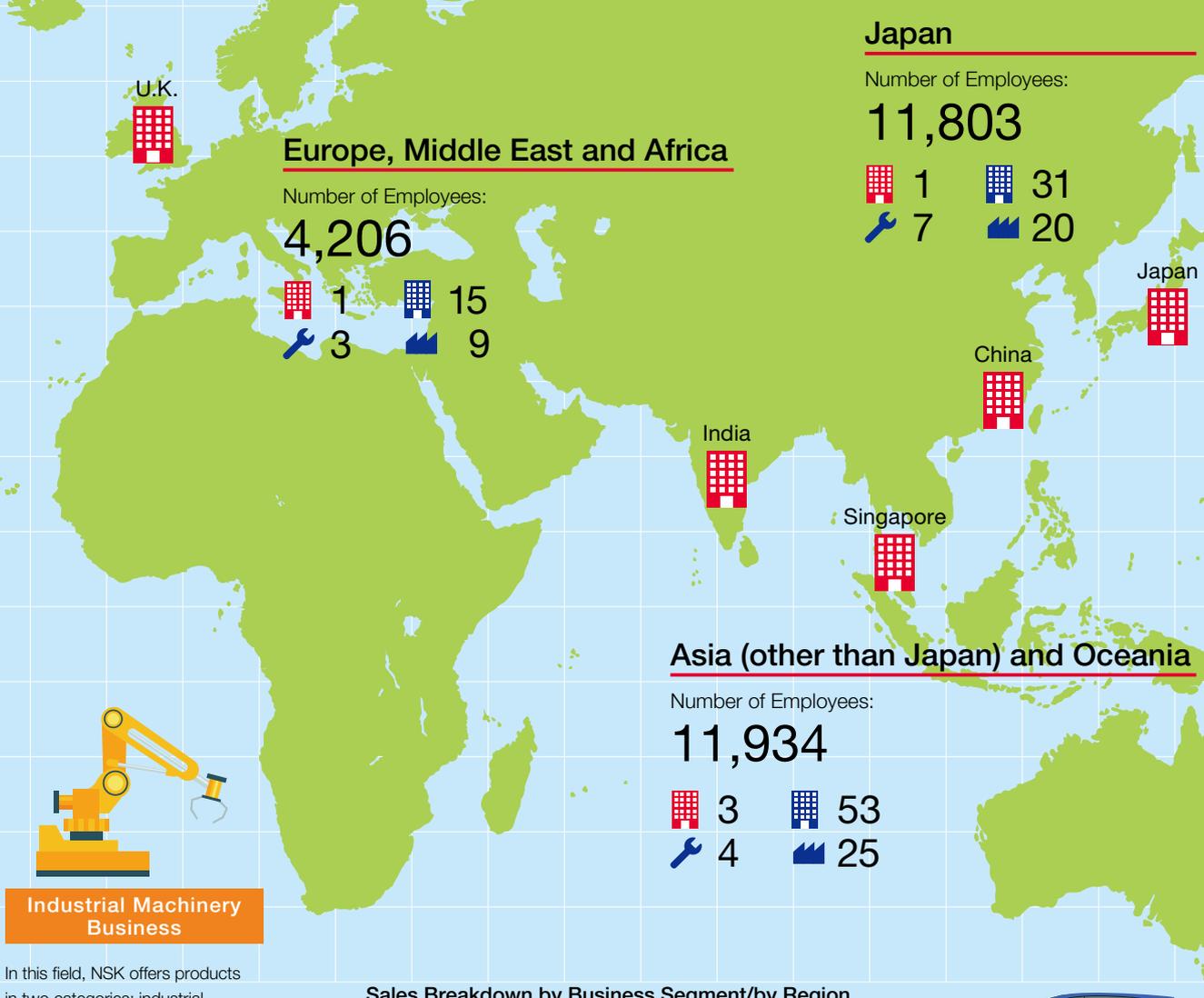
Ball bearings for ultra-high-speed rotary motors

Industrial Machinery Business
Automotive Business

Black print indicates mass-produced products.

NSK Group Businesses

 Headquarters
  R&D centers
  Sales sites
  Production sites

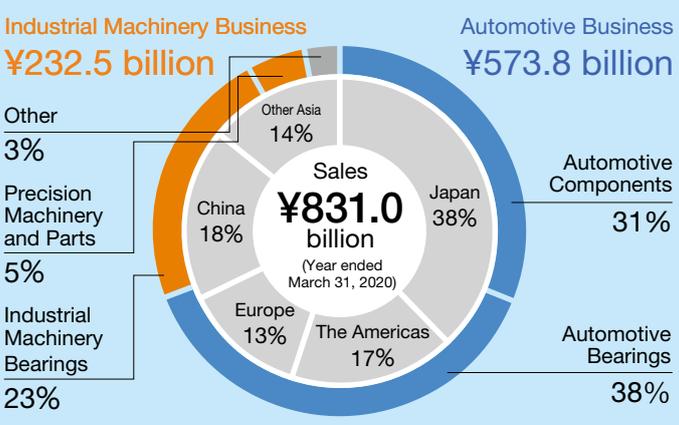


Industrial Machinery Business

In this field, NSK offers products in two categories: industrial machinery bearings, and precision machinery and parts.

We offer industrial machinery bearings in a range of sizes, from miniature to ultra-large, in order to meet a broad spectrum of needs in all kinds of industries. Our precision machinery and parts include linear motion products such as ball screws and linear guides, as well as mechatronic products such as XY Tables and Megatorque Motor™. These are used in applications that require precise positioning such as machine tools, and in semiconductor or LCD manufacturing equipment.

Sales Breakdown by Business Segment/by Region (Based on Customer Location)



Automotive Business

In this field, NSK offers products in two categories: automotive bearings, and automotive components. NSK has developed a wide range of important functional components that enable vehicles to run, turn, and stop properly. Our automotive bearings include various types such as hub unit and needle bearings. In the category of automotive components, we make components for automatic transmissions, electric power steering, and ball screws for electric brake boosters.

Company Overview (As of March 31, 2020)

Company Name	NSK Ltd.	Group Companies	89
Established	November 8, 1916	Head Office	Nissei Bldg., 1-6-3 Ohsaki, Shinagawa-ku, Tokyo 141-8560, Japan
Capital	67.2 billion yen	Number of Employees (Consolidated)	30,747

208 business sites in 30 countries and regions

Numbers of employees and sites (as of March 31, 2020)

The Americas

Number of Employees:

2,804

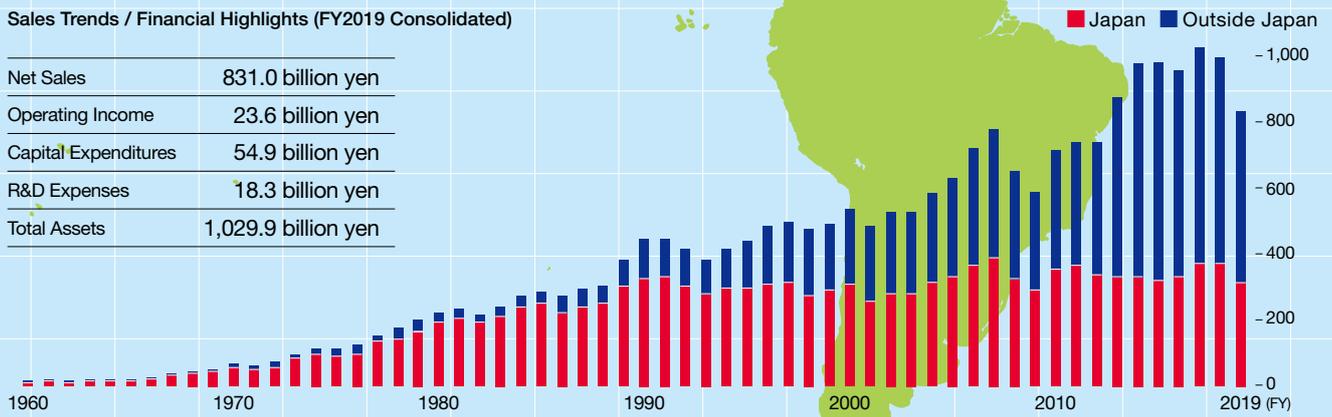


U.S.



Sales Trends / Financial Highlights (FY2019 Consolidated)

Net Sales	831.0 billion yen
Operating Income	23.6 billion yen
Capital Expenditures	54.9 billion yen
R&D Expenses	18.3 billion yen
Total Assets	1,029.9 billion yen



Global Sites (as of March 31, 2020)

Countries and Regions	Headquarters	Production Sites	Sales Sites	Representative Offices	R&D Centers
The Americas					
U.S.	1	7	9		1
Canada			2		
Mexico		2	1		
Brazil		1	5		1
Peru			1		
Argentina			1		
Sub-total	1	10	19		2
Europe, Middle East and Africa					
U.K.	1	4	2		1
Germany		1	2	2	1
France			1		
Italy			1		
Netherlands			1		
Spain			1		
Poland		4	3		1
Russia			1		
Turkey			1		
UAE			1		
South Africa			1		
Sub-total	1	9	15	2	3

Countries and Regions	Headquarters	Production Sites	Sales Sites	Representative Offices	R&D Centers
Asia and Oceania					
Japan	1	20	31		7
China	1	11	18	1	1
Taiwan			3		
South Korea		2	2		1
Singapore	1		2		
Indonesia		3	2		
Thailand		2	5		1
Malaysia		2	4		
Philippines				1	
Vietnam			2		
India	1	5	10		1
Australia			4		
New Zealand			1		
Sub-total	4	45	84	2	11

Global total	6	64	118	4	16
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Message from the President



Pursuing Sustainability with and for the World through MOTION & CONTROL™

Toshihiro Uchiyama
President and CEO



NSK's Commitment to a Sustainable World

The COVID-19 pandemic spread from China to the rest of the world in the blink of an eye, resulting in city-wide lockdowns, restrictions on movement, curfews, and pressure to stay home, all of which had a great impact on people's lives as well as on economic activities. With no sign of the number of cases being brought under control, at NSK we continue to prioritize the health and safety of our employees and their families, while doing our best to prevent the outbreak of clusters of workplace infections, so as not to cause any concern in local communities, while also fulfilling our responsibility to maintain a stable supply of products to customers.

In fiscal 2019, we saw an exacerbation of friction between the U.S. and China, which became known as the New Cold War. It is amid this environment that NSK's business environment is becoming increasingly uncertain. In addition, the spread of COVID-19 is accelerating the transformation of daily life in society with the shift to remote work, and digital and cyber technologies are increasingly gaining attention.

In addition, there is a movement toward subscription-based services and Mobility as a Service (MaaS), which is about not only selling physical products but also selling services. Even amid this era of change, we want to maintain our commitment as a manufacturer. The origin of NSK's identity and strength lies in its position as a manufacturer, and this is something we must never forget. The core value of our existence lies in how much we can reduce the friction of mechanical elements and how much we can control their movement, in other words, providing the world with solutions based on Motion & Control™. Focusing on the concept of manufacturing and the idea of being a manufacturer, we will explore every avenue for creating smoother movement in order to create a frictionless world, as well as the kind of technical services which are required and the kind of value which can be provided in addition to products. We will explore these from the perspective of end products, equipment, and the end user.

Another important point is to set the four core values of safety, quality, compliance, and environment, as our code of conduct. On top of this, we will simultaneously pursue operational excellence and take on the challenge of innovation, as stated in our Mid-Term Management Plan. In a world that is changing so rapidly, it is essential to be prepared for innovation and to

adopt new perspectives when necessary. In order for this to take shape, we must have a solid revenue base. This will require operational excellence in the constant pursuit of competitiveness.

Reference

pp. 2-3 NSK Corporate Philosophy and NSK Vision 2026
pp. 94-95 Response to COVID-19 and Other Pandemics from Infectious Diseases
Website The Sixth Mid-Term Management Plan
<https://www.nsk.com/investors/library/mtp.html>

Working to Achieve SDG Objectives

We see the SDGs set forth by the United Nations as a logical extension of our business goals, and we aim to create a positive cycle in which pursuing our goals will contribute to the SDGs. In other words, we aim to achieve both the growth of our own company and contribute to the resolution of social issues.

For example, one of our seven focus SDGs is Goal 9, "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation." Remote control of manufacturing sites and smart factories, for instance, can help achieve SDG 9. In this area, we are trying to save manpower, free up skills, and make the work of repairing and maintaining equipment at NSK's 64 global plants more remote by introducing NSK's AI-based preventive maintenance system for equipment. At the moment, we are mainly focusing on the Ohtsu and Fujisawa plants in Japan, where we have installed Smart Factory pilot lines; however, we plan to expand the project to plants outside Japan in the future. We would like to see this project evolve into a smart factory platform that can serve as a foundation for industrial and technological innovation, and not just for our own plants, but for our suppliers and other business partners to use as well. In this way, this initiative will also contribute to SDG 17, "Strengthen the means of implementation and revitalize the global partnership for sustainable development." We don't want to do things just for the sake of the SDGs; rather, we want to be oriented towards adding an SDG perspective to the initiatives in our business and in the way we go about business. I am sure this will also give new meaning to the work our employees perform. This means finding social meaning in our work, not just meeting sales and profit targets.

Message from the President

Reference

pp. 12-13 CSR Management
 p. 18 SDGs Declaration
 pp. 18-22 Realizing the World Envisioned by NSK and the SDGs

Environmental Initiatives

In recent years, Japan has been hit by torrential rains and large typhoons that have caused tremendous damage like never before. Looking at the world, there have been record-breaking heat waves in Europe, forest fires in Australia and North America, and floods in India, China, and other parts of Asia. All of these events have shown the increasing importance of fighting climate change caused by global warming.

NSK also has manufacturing sites located near rivers. We are conducting risk assessments at each of these sites, but in the face of increasingly severe abnormal weather, we will endeavor to strengthen our response by assuming there are even more severe risks. If there is any sign of danger, we will cease operations at affected plants and evacuate our employees, prioritizing their safety above all else. We are strengthening our efforts to prevent secondary disasters such as oil and waste spills in the event of a plant being flooded.

With regard to CO₂, which is a cause of global warming, the NSK Group's overall emissions in fiscal 2019 were below the target due to a decrease in production in the second half of the fiscal year. However, they worsened in terms of emissions intensity, which was not the result we were aiming for. Emissions intensity is the amount of CO₂ emitted by production, and it is an indicator that reflects production efficiency. We need to achieve our emissions reduction goals by lowering emissions intensity.

In addition to the goals of our Mid-Term Management Plan through fiscal 2021, we have set a goal of significantly reducing CO₂ emissions by fiscal 2050. In order to achieve this goal, we will need to make major investments that will fundamentally change our facilities. As society as a whole transitions to a decarbonized society, production processes with high CO₂ emissions may be subject to operational restrictions and cost penalties, so we must steadily implement measures while setting our sights on the future.

On the other hand, regarding products, for more than 100 years we have placed bearings at the core of our business and have put reducing friction at the center of our existence. However, I think it is difficult for employees at manufacturing sites to imagine how much the products they produce are helping reduce CO₂ emissions all around the world. Because nobody can actually see CO₂ emissions being reduced, "Environment" is the only one of NSK's four core values that we cannot really

experience first-hand. Therefore, we are trying to make it so those involved in sales, technology, management, and other operations, including those at manufacturing sites, can see how much NSK products contribute to reducing CO₂ emissions when they are incorporated into customers' machines and are actually used. We hope this will provide a clear picture of the value we are creating for environmental conservation.

The trend toward decarbonization throughout the world is continuing to progress steadily. NSK will continue to analyze the risks and opportunities of climate change from a mid- to long-term perspective in line with the TCFD final report, and reflect them in our business plans and enhance the information we disclose.

Reference

pp. 24-43 Environment
 p. 27 Endorsement of TCFD Recommendations
 pp. 90-97 Risk Management

Social Initiatives

Based on the principle of providing products of superior quality made in safe workplaces, at NSK we aim to further enhance our contributions to a safer, smoother society in line with our corporate philosophy, by encouraging employees to work with enthusiasm and continuing to create new solutions that meet the needs of the world. This will help us contribute to achieving the SDGs, such as "Decent work and economic growth," "Industry, innovation and infrastructure," and "Sustainable cities and communities."

To achieve this, it is important that all of our employees—more than 30,000 around the world—are behind NSK's corporate philosophy and core values, and that they engage in their work with a firm awareness of the value that NSK's business creates and can create, and that each employee's individuality and potential are utilized. As a company, it is important not only to secure employment and appropriate remuneration, but also to ensure that employees know they are participating in the creation of value for society. I believe that this will further increase their motivation to work.

An outside director once asked me, "How much are you working on ER^{*1}?" Up to that point, I had been aware of various IR^{*2} and SR^{*3} activities, but when I thought about it, there was still room for improvement in two-way communication with employees about the importance of our corporate philosophy and core values. Therefore we have been enhancing opportunities for communication over the last two years. In Japan, management liaison meetings in which group companies participate are held three times a year. These meetings help provide information to the heads of each department on the status of activities such

as the business environment, business performance, budget policies, safety, quality and so on. However, these meetings are rather one-way in nature. There existed no platform for employees to share opinions and ask why we do things the way we do, or why we even do certain things to begin with. This is why I personally visit plants and sales offices and talk directly with team leaders and assistant managers at their workplaces. We also hold results briefings for employees to provide a forum for communication between management and employees and to improve their understanding of our financial results and business strategies. We now also provide English-language videos on our intranet for our employees outside Japan.

Regarding **diversity and inclusion**, NSK is promoting various initiatives based on its corporate ethics rules, which clearly stipulate that we respect human rights and prohibit discrimination. These initiatives are essentially about having a diverse workforce with different genders, nationalities, ages, and careers in the workplace, and being able to exercise everybody's abilities based on the idea that each person is a member of the organization. With both diversity and inclusion firmly in place, we can create a challenging and creative workplace where everyone feels a sense of fulfillment in their work. We need to create mechanisms and policies to achieve this. For example, we are actively working to support women's activities by holding numerous training sessions and events for female employees in multiple regions, including outside of Japan. In Japan, it is also necessary to devise ways to support the balance between childcare, nursing care and medical treatment in response to the demands of society. However, the key to true inclusion is to reform the culture in the workplace itself.

NSK is creating places where people with disabilities can work. Some of our employees came up with the idea of creating a farm on the plant grounds and providing the vegetables grown there to the plant cafeteria. Their idea is to help people with disabilities who work in the same plant become more aware than ever that they are working together with other employees, and thus achieve true inclusion. Although this initiative is still in the trial phase, we hope to further advance this and many other activities.

*1 ER (Employee Relations)

*2 IR (Investor Relations)

*3 SR (Shareholder Relations)

Reference

pp. 48-51 Occupational Health and Safety
 pp. 52-57 Quality Assurance
 pp. 62-73 Human Resources
 pp. 65-67 Promoting More Diversity and Inclusion
 pp. 74-75 Human Rights

Governance Initiatives

As a Company with Three Committees, NSK entrusts a wide range of management tasks to executives. The executive side must fulfill its accountability and responsibility for results to the Board of Directors. At the same time, the Board of Directors, taking a mid- to long-term perspective, discusses and decides how the world will change three, five, and ten years from now, and what NSK should aim for and achieve in that time, drawing on the extensive knowledge and experience of outside directors.

Also, with regard to executive officer compensation, we have increased the number of ESG metrics. What is easy to understand within the company from an ESG perspective are our core values of safety, quality, compliance, and the environment. Since we consider these to be our values, NSK's management naturally has to take responsibility for how much they are improving and whether awareness of them is increasing. Until now, quality performance has been included in the evaluation of business results, but now that we are emphasizing the importance of safety and the environment, these will be added as well. It is important to set metrics (KPIs) to include in the evaluation of compensation to make sure that we are conducting thorough evaluation. By doing so, I believe we will become more rigorous and more aware of our efforts.

Reference

pp. 82-83 Directors/Officers' Compensation

Aiming to Contribute to the Development of Society through NSK's Sustainable Growth

In May 2019, NSK formulated the SDGs Declaration, in which seven goals closely related to our business were selected as key goals, in order to provide solid guidelines for the resolution of social issues. In addition, we have formed an internal project team, "Team SDGs," and are working to create a story for the future of our contribution through our business and products, in order to both create innovation and resolve social issues through Motion & Control™. To ensure that the vectors for the development of our business and the resolution of social issues continually move upward, we at NSK will continue to value our commitment as a manufacturer, and hope to continue being a presence that society values. I would like to ask for your continued understanding and cooperation with the NSK Group's activities.

CSR Management

Pursuing Value Creation to Address Social Issues and Deliver Sustainable Growth as a Company

Under its mission statement calling for “a safer, smoother society,” “protection of the global environment” and “improved relationships between people,” NSK aims to balance its contribution to resolutions for social issues with sustainable growth as a company by creating collaborative value with all stakeholders. With the goal of realizing this aim in mind, NSK established NSK Vision 2026 on the occasion of its 100th anniversary.

Moreover, the Sixth Mid-Term Management Plan (Sixth MTP) continues to target “the establishment of a corporate foundation for sustainable growth and the provision of value through evolution of Motion & Control™” as its vision for 2026. It is thus formulated to undertake the three key management tasks of “business growth and profitability,” “utilization of robust managerial resources” and “ESG management.” The Sixth MTP is positioned as the first three years for realizing this vision.

Under a governance framework that raises the efficiency, flexibility and fairness of management and strengthens the supervisory function, NSK’s approach to ESG is based on the core values of safety, quality, compliance, and environment. NSK’s approach also defines contribution to resolutions of social issues as a responsibility of the Company. Similarly, upon advancing initiatives, the Company formulated the SDGs Declaration that respects the spirit of the SDGs and selected NSK’s seven key goals based on this approach. While keeping these seven material issues in mind, the Company has drawn up the Declaration of NSK’s Initiatives as strategic initiatives with more clarity. Through its business activities, NSK will contribute to the achievement of the SDGs by continuing to create collaborative value with stakeholders.



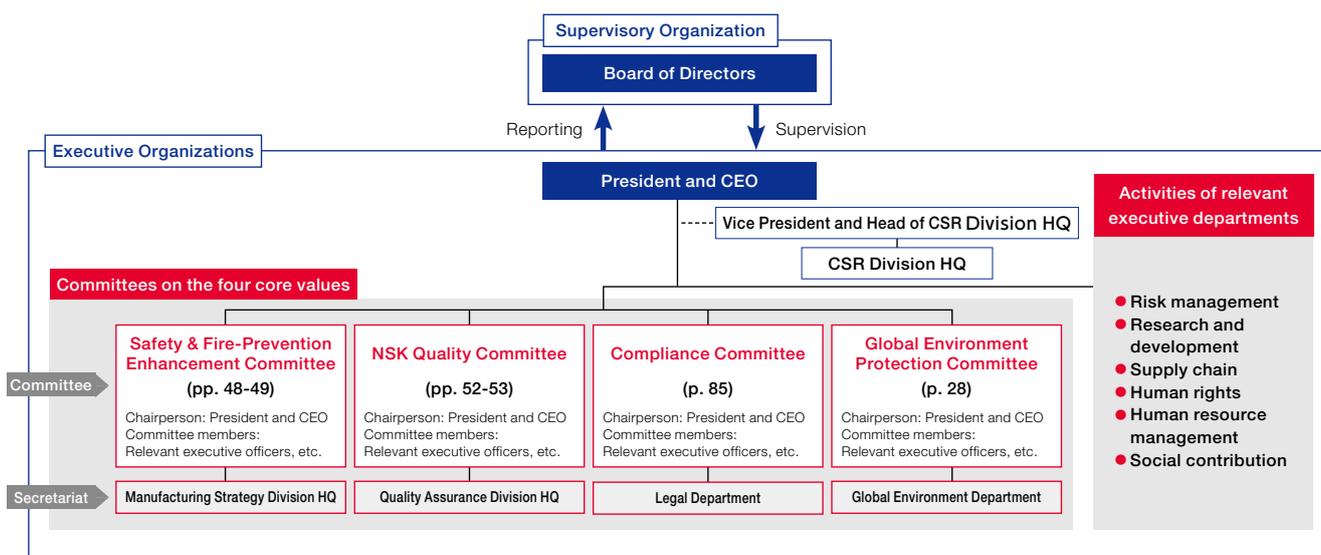
NSK’s SDGs Declaration

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 Seven Key SDGs

CSR/ESG Management Execution System

To uphold the four core values of safety, quality, compliance, and environment, NSK has established a CSR and ESG management system. It is comprised of various committees with members including the President and relevant officers. They deliberate and make decisions on ESG policies for the entire Group, check and review the progress of initiatives, and share information across departments. In other areas, relevant executive departments are working together every day to improve the effectiveness of their activities.



For details, see p. 78, "NSK's Corporate Governance Structure."

ESG Initiatives

The NSK Group considers it important to select issues to address and to set policies and attainment targets by taking into consideration such matters as regulatory requirements, the expectations and needs of stakeholders, potential risks and opportunities, and relevance to the NSK Group's business endeavors. We work through the PDCA cycle, setting Mid-Term Management Plan targets, including for environmental (E), social (S) and governance (G) activities, and monitoring management indicators for assessing progress. The importance of activities as recognized by NSK is explained in the "NSK's Approach" part of each section.

Environment	Environment	<ul style="list-style-type: none"> Maximize the environmental contribution through products Minimize the environmental impact from business activities 	Environmental management	P.28
			Creating environmentally friendly products	P.30
Social	Occupational health and safety	Create safe, secure, and comfortable workplaces where safety is the first and foremost priority	Fighting global warming and climate change	P.34
			Resource conservation and recycling measures	P.38
	Quality assurance	Market and customer-centric quality that delivers safety and security	Reducing use of environmentally harmful substances	P.40
			Biodiversity conservation	P.42
	Supply chain	Ensure stable supply and optimize supplier portfolio	Preventing fatal and serious accidents	P.48
			Increasing safety awareness	
Human resources	Create a fair workplace that empowers the individual	Preventing accident recurrence	P.52	
		Promoting NPDS activities		
Human rights	Promote initiatives in line with international human rights norms	Promoting the NQ1 Program for stable production with zero defects	P.74	
		Developing human resources to build a stronger foundation for quality systems		
Governance	Corporate governance	Realize a transparent, fair, and timely decision-making system for sustainable growth and improvement in our corporate value over the mid- to long-term	Stable procurement	P.58
			Sustainable and responsible procurement	
	Compliance	Increase trust from international society and local communities by adhering to the laws and regulations, and by taking actions based on high ethical standards	Leveraging a diverse workforce	P.78
			Building more engaging workplaces	
Risk management	Implement appropriate risk management to maintain the soundness and transparency of executive management, to increase confidence among business partners and markets, and to improve corporate value	Providing opportunities for growth	P.84	
		Human rights of employees		
			Supplier-related human rights	P.74
			Further enhancing the effectiveness of the Board of Directors	P.78
			Strengthening Group governance	P.78
			Further strengthening the global compliance system	P.84
			Improving sophistication of compliance risk management	P.84
			Heightening employee compliance awareness	P.90
			Identifying risks and taking appropriate measures based on changes in the social environment, the frequency of risk occurrence, the size of impact, etc.	P.90

Message from the Head of CSR Division HQ



“The starting point of NSK’s efforts in sustainability is the realization of our corporate philosophy.”

Tamami Murata

Vice President, Head of CSR Division HQ

Where All of NSK’s Sustainability Initiatives Begin

As symbolized by the SDGs, expectations that companies play a role in resolving various social issues are increasing. Sustainability is an important keyword for companies since they can only achieve sustainable growth in a sustainable world—where the natural environment and ecosystems are maintained and the resources necessary for people’s daily lives are preserved for future generations.

It is natural that companies will show diversity in their sustainability activities, as society requires different things of each company. When asked what sustainability means to NSK, I would say that our sustainability initiatives are nothing other than living up to our corporate philosophy—“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.” I have always believed that the starting point for all of NSK’s sustainability initiatives is this corporate philosophy.

For details, see pp. 2-3, “NSK Corporate Philosophy and NSK Vision 2026.”

Specifically, “Motion” symbolizes our complex hardware, machinery, and systems, while “Control” refers to our sophisticated software and electronics systems. Each of these terms represents our business fields. The social role that NSK has played in these business fields 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 industry and makes society as a whole run smoother and safer. For example, the study of the movement of vehicles and other means of transportation, such as driving, turning, and stopping, could help to halve the number of deaths and injuries caused by traffic accidents worldwide, which is one of the targets of **SDG 3**, while also

improving the safety of transportation when considering the needs of women, children, people with disabilities, and the elderly, which is one of the targets of **SDG 11**. This is one way NSK can contribute to sustainable transport systems.

From the perspective of protecting the global environment, NSK has been striving to improve the wear resistance and reduce the size and weight of its products, as well as to develop and promote environmentally friendly products that use less energy and fewer resources. NSK has also been moving forward with energy and resource conservation and reducing the environmental impact of products by improving fuel efficiency and pursuing longer service life. We expect these efforts to contribute to research and technology in the areas of renewable energy, energy efficiency, and advanced, low-environmental-impact clean energy, which are areas included in **SDG 7**, and in turn contribute to measures to mitigate climate change and its effects, a part of **SDG 13**.

NSK has been promoting globalization from early on, creating management, R&D, production, and sales systems that can fully utilize the characteristics of each region, and making 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. In this way, we aim for coexistence and co-prosperity with local communities. Above all, we believe that the adoption of NSK’s products by customers around the world means we are succeeding with our philosophy of “working across national boundaries to improve relationships between people throughout the world,” both inside and outside our organization. Doing this will help lead to the implementation and activation of global partnerships, a topic included in **SDG 17**.

Moving Toward Implementation of ESG Management

If sustainability is living up to NSK’s corporate philosophy, then NSK Vision 2026 provides an image of the type of company

NSK must become to achieve this ideal. In formulating our Sixth Mid-Term Management Plan, we set the goal of “Establish a corporate foundation for sustainable growth” as our vision for 2026, and we designated “ESG management” as one of our management issues. At NSK, we position ESG management as a driver of our contributions to the resolution of social issues, while viewing our governance system as an indispensable mechanism for sustainable growth and upholding safety, quality, compliance, and the environment as core values. We are currently working to steadily implement the PDCA cycle in order to achieve the ESG-related goals of our Sixth Mid-Term Management Plan.

 For details, see **pp. 12-13, “CSR Management.”**

First of all, looking at **governance**, which underpins ESG management, we have been continuously working on the issues of further improving the effectiveness of the Board of Directors and strengthening Group governance. Last year, we were chosen as a “Winner Company” in the 2019 Corporate Governance of the Year Awards conducted by the Japan Association of Corporate Directors. We believe this award shows that our efforts have been highly evaluated.

With regard to **safety**, NSK aims to transform, on a global basis, from a culture in which actions are undertaken after an accident has occurred, to a culture in which everyone who works at NSK takes responsibility for safety and is considerate of fellow employees.

In terms of **quality**, with our Quality Assurance Vision 2026, NSK aims to realize “NSK Quality” that contributes to the safety, security and trust of our customers. To this end, we are promoting human resource development through the *Quality-Dojo* and other programs.

Compliance is an extremely important issue to ensure that the lessons learned from the cartel incident in 2011 are not forgotten. Every year on July 26, NSK Corporate Philosophy Day, in addition to keeping the cartel incident fresh in our memories, we encourage each employee to think about the corporate philosophy and make it a guideline for our actions.

The **environment** is an important issue that is positioned at the center of today’s sustainability themes, and NSK is also working to further improve its response to climate change issues as well as reducing its impact on the environment. Indeed, bearings reduce energy loss, and so our products themselves contribute to conserving the global environment. NSK is working to reduce CO₂ emissions throughout its value chain, aiming to reduce CO₂ emissions from business activities over the mid- to long-term, and to offset the amount of remaining emissions with a larger amount of reduction in emissions from NSK products themselves.

In January 2020, NSK expressed its support for the

recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Going forward, we will identify the risks and opportunities that climate change presents to our business, incorporate our response to these risks and opportunities into our business strategy, and move forward to disclose financial information in line with the TCFD recommendations.

With regard to **human resources**, which are the source of our competitiveness, we recognize that further promoting diversity and inclusion, and respecting human rights, are extremely important issues. In addition to identifying the risks of human rights issues related to our business activities, we will continue to ensure that our employees understand international human rights norms such as the United Nations International Bill of Human Rights and the OECD Guidelines for Multinational Enterprises, and we will also set a clear path for respecting human rights within NSK.

Leveraging NSK’s Strengths to Contribute to the Achievement of SDGs

In May 2019, NSK announced its SDGs Declaration, in which, along with respecting all 17 SDGs, seven goals closely related to its corporate philosophy and business were selected as key goals of focus. We aim both to contribute to a sustainable society and to achieve our own development by generating wide-ranging value together with our stakeholders.

In August 2019, we formed a cross-divisional project team, Team SDGs, to address specific initiatives on key tasks for contributing to the SDGs, and active discussions have already begun. Thinking about the social issues which NSK is specifically positioned to resolve through our business—something which is the goal of the SDGs—is a good opportunity for our employees to reevaluate our strengths, such as our technological and product creation capabilities. Through these activities, we hope that employees will feel more familiar with the SDGs and take proactive action, and we believe that as they do so, this will lead to the creation of new ideas.

 For details, see **pp. 18-22, “Realizing the World Envisioned by NSK and the SDGs.”**

The “ESG management” that we are aiming for is not a slogan to be passed on in a top-down fashion, but rather an initiative that contributes to the enhancement of corporate value and the sustainable development of society by encouraging each employee to address our goals as his or her own. Right now, as society is undergoing a dizzying transformation, companies need to take a clear look at the path they are taking toward sustainability. NSK’s corporate philosophy—something we hold extremely high—is the very essence of NSK’s sustainability, and I believe that maintaining an unwavering commitment to our corporate philosophy will ensure that NSK helps to build a sustainable world.

Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets (FY2019–2021)		
Environment	Maximize the environmental contribution through products Minimize the environmental impact from business activities	● Creating environmentally friendly products
		● Fighting global warming and climate change
		● Resource conservation and recycling measures
		● Reducing use of environmentally harmful substances
		● Biodiversity conservation
For details, see pp. 24–25 “Executive Summary on the Environment.”		
Research and Development	Unrelenting pursuit of NSK’s Four Core Technologies +1	—
Occupational Health and Safety	Prevent fatal and serious accidents	● Each production site manages its own PDCA cycle for identifying dangerous spots and their improvement
	Increase safety awareness	● Further enhance safety management through continuous ISO 45001 certification
	Prevent accident reoccurrence	● Expand the “Look Across Activities” to operators on the shop floor
Quality Assurance	Market and customer-centric quality that delivers safety and security — Minimize quality risks	<ul style="list-style-type: none"> ● Verify performance with a complete grasp of the level and conditions required by the market ● Improve field quality ● Improve procurement quality ● Identify front-line (<i>gemba</i>) 4 Ms quality risks, review good product conditions ● Enhance reoccurrence prevention ● Foster quality-first human resources development
Supply Chain Management	Ensure stable supply and optimize supplier portfolio	<ul style="list-style-type: none"> ● Stable procurement ● Sustainable and responsible procurement
Human Resources	Create a fair workplace that empowers the individual	<ul style="list-style-type: none"> ● Leverage a diverse workforce ● Build more engaging workplaces ● Provide opportunities for growth
Human Rights	Promote initiatives in line with international human rights norms	—
Corporate Governance	Realize a transparent, fair and timely decision-making system for sustainable growth and improvement in our corporate value over the mid- to long-term	<ul style="list-style-type: none"> ● Further enhance the effectiveness of the Board of Directors ● Strengthen Group governance
Compliance	Increase trust from international society and local communities by adhering to the laws and regulations, and by taking actions based on high ethical standards	<ul style="list-style-type: none"> ● Further strengthen the global compliance system ● Improve sophistication of compliance risk management ● Heighten employee compliance awareness
Risk Management	Implement appropriate risk management to maintain the soundness and transparency of executive management, to increase confidence among business partners and markets, and to improve corporate value	—

FY2019 main targets	Main initiatives and performance in FY2019	Page
● Create environmentally friendly products with a Neco score of 1.2 or higher (ongoing)	● Developed six environmentally friendly products	pp.30-31
● Avoid 1.7 million tons or more of CO ₂ emissions during use of NSK products	● 1.57 million tons of CO ₂ emissions avoided during use of NSK products	pp.30,32-33
● Manufacturing, technology, offices: reduce CO ₂ emissions by 3% from FY2017	● Reduced by 17.6% from FY2017	pp.34-37
● Resource conservation and recycling initiatives in development and design, manufacturing		
Achieve a recycling rate of at least 98.7%	Recycling rate was 98.6%	pp.38-39
Reduce industrial waste per unit of sales by 2% from FY2017	Increased by 15.8% from FY2017	
Reduce water withdrawal per unit of sales by 2% from FY2017	Increased by 13.0% from FY2017	
● Development and design, procurement, manufacturing: Full response to the 10 prohibited EU RoHS2 substances	● Fully responded to the 10 prohibited EU RoHS2 substances for developed products ● Continued efforts to completely eliminate from manufacturing processes	
● Response rate for Inclusion in NSK Survey of Environmentally Harmful Substances		pp.40-41
In Japan: Maintain 100%	In Japan: Maintained 100%	
Outside Japan: Obtain 95%	Outside Japan: Obtained 99%	
● Identify the factors in operations that could have a negative impact on biodiversity Develop initiatives for preserving biodiversity Educate employees on biodiversity	● Worldwide expansion of biodiversity risk assessment, employee education, and conservation activities	pp.42-43
—	● Developed smaller and lighter technologies ● Developed smoother technologies ● Utilized expertise and technology from outside the Group	pp.44-47
● Raise the level of STOP6 + 2 activities	● Used manuals and evaluation sheets at each site	
● Acquire ISO 45001 certification at 3 sites in Japan and 8 global sites	● Obtained ISO 45001 certification and began implementing it at 3 sites in Japan and 8 global sites	pp.48-51
● Advance the "Look Across Activities" up to the operator level	● Started implementing the use of "Look Across" sheets in Japan and started an evaluation system for improvement suggestions outside Japan	
● Strengthen NPDS activities	● Enhanced design reviews	
● Prevent quality problems at customers caused by suppliers	● Established the Global Quality Audit Office	pp.52-57
● Prevent irregular procedures attributable to a lack of process capability	● Optimized Quality Investments	
● Enhance awareness of quality	● Established "Quality-Dojo" globally	
● BCP audit (40 companies)	● Audited 40 suppliers in fiscal 2019 (total of 73 suppliers since fiscal 2018)	
● Take follow-up action on the CSR audit conducted by a third party in fiscal 2018	● Based on fiscal 2018 audit results, follow-up action was undertaken for 5 suppliers.	pp.58-61
● Raise awareness of diversity and inclusion such as women's empowerment, LGBTQ+	● Held lectures to promote understanding of diversity and inclusion	
● Paternal leave acquisition rate of 20%	● Achieved paternal leave acquisition rate of 26.8%, exceeding the target	
● Raise external awareness of our initiatives to support women's empowerment and work-life balance	● Selected as a <i>Nadeshiko</i> brand and retained <i>Kurumin</i> certification	
● Expand remote work and reform work styles in sales divisions	● Gradually expanded work from home by setting remote work periods, and introduced satellite offices on a trial basis	pp.62-73
● Conduct health awareness-raising activities for employees and promote external awareness of these efforts	● Held a health fair for employees, and retained certification as an Outstanding Health and Productivity Management Organization (White 500)	
● Develop the next generation of global leaders	● Implemented a mentorship program for employees newly appointed to core posts, and a leadership program through collaboration with a major business school outside Japan	
● Provide career development support for young employees	● Revised seminar curriculum and implemented general education testing with liberal arts focus Achieved job rotation implementation rate of 79.7%	
—	● Continued conflict minerals survey in the supply chain ● Maintained process of labor-management discussions and improvements ● Continued to respond to inquiries and reports from employees concerning workplace harassment, etc. and implement corrective measures ● Maintained initiatives to protect LGBTQ+ rights, etc.	pp.74-75
—	● Made progress in discussions on technology and global management	pp.78-83
—	● Revised risk management system for global business operations	
● Monitor compliance plans and their progress outside Japan	● Monitored compliance plans outside Japan and their progress through global and monthly meetings ● Conducted employee engagement surveys	pp.84-89
● Assess bribery risk (worldwide)	● Conducted bribery risk assessment to ascertain risks (worldwide)	
● Establish and implement a compliance training system for factory operators (Japan)	● Established a system where department managers serve as training instructors in Fujisawa and Fukushima plants, and provided training to all factory operators	
—	● Identified key risks and mitigated them	pp.90-97

Realizing the World Envisioned by NSK and the SDGs

Our Mission Statement states that “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.” The world today is faced with various social issues. To resolve these issues, they must be addressed not only by international organizations and governments, but also by companies and individuals. At NSK, we believe that helping to solve social issues through our business activities will help us to deliver on our Mission Statement. That is why NSK supports the achievement of the UN Sustainable Development Goals (SDGs).

Promoting the Achievement of the SDGs with NSK's SDGs Declaration and Declaration of NSK's Initiatives

NSK respects all 17 of the Sustainable Development Goals. We examined the SDGs closely to find the ones that are particularly relevant to NSK's business, and gradually narrowed down our list until we arrived at seven key goals. We did this while keeping in mind the company's roles and responsibilities as a member of society, as stipulated in our Mission Statement. We also considered contributions that can be made through our main business fields, the industrial machinery and automotive businesses. In determining these key goals for NSK, we declared our intention to work actively to help achieve the SDGs.



Based on NSK's Mission Statement, Management Principles and Action Guidelines, as well as our core values such as safety, quality, compliance, and the environment, we first narrowed down the 17 SDGs to 11.



We then narrowed down the 11 goals to seven based on our two main business fields, the automotive and industrial machinery businesses, as well as based on NSK's Four Core Technologies plus manufacturing engineering that gives shape to them. We adopted these seven as our key goals, and expressed our commitment in our SDGs Declaration and Declaration of NSK's Initiatives.



NSK's 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.



Declaration of NSK's Initiatives

1 We will contribute to a safe and resilient social infrastructure through innovation. Key SDGs 9 11	2 We will contribute to climate change countermeasures by reducing the impact of our business activities on the environment. Key SDGs 7 12 13	3 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. Key SDGs 7 9 11 12 13	4 We will form richly diverse organizations where both employee motivation and value creation are fulfilled. Key SDGs 8	5 We will enhance our dialogue through multi-stakeholder partnerships to increase the effectiveness of our SDGs initiatives. Key SDGs 17
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Raising Internal Awareness of the SDGs to Strengthen Our Efforts

Since issuing the SDGs Declaration, the seven key goals, and the Declaration of NSK's Initiatives, we have been working to promote understanding of the SDGs among all NSK employees. We have also created a permanent SDG site on the company intranet with the aim of further promoting SDG initiatives through our business activities. This intranet site has been updated 12 times in total (as of October 2020). We are working to promote employee awareness of the SDGs by encouraging relevant activities that even individuals can undertake, with reference to current trends in SDG activities. We will continue to provide SDG information within the NSK Group.

In fiscal 2020, an e-learning module is being provided to employees in Japan to further enhance their SDG awareness.

In order to raise SDG awareness among employees at subsidiaries outside Japan and encourage their efforts, we are creating an English version of our intranet site to share SDG materials in that language.

Intranet Site Updates

No.	Details	Date
1	What are the SDGs?	January 2018
2	Why were the SDGs adopted?	February 2018
3	What can we do to help achieve the SDGs?	February 2018
4	NSK's SDG initiatives	July 2019
5	SDG initiatives of other companies	September 2019
6	What we can and are doing now	November 2019
7	Examples of initiatives by the Needle Bearing Division	December 2019
8	Climate change issues the world faces now	January 2020
9	Marine plastic pollution problem	March 2020
10	Best practice from NSK Steering Systems Europe (Polska) Sp. Z O.O.	April 2020
11	Problems relating to food	June 2020
12	Poverty problem	August 2020

Launch of "Team SDGs" at NSK: Documenting SDG Stories

In order to take more concrete steps to deliver on our SDGs Declaration and the Declaration of NSK's Initiatives, we decided to look at the SDG stories of our businesses and products helping to achieve the SDGs. In August 2019, we launched a task force called "Team SDGs" in order to promote SDG activities company-wide. To help identify the stories about SDG contributions made across business and product activities, Team SDGs is composed of a cross-section of NSK members, including representatives from the core Automotive Business

Division HQ and Industrial Machinery Business Division HQ, as well as the Technology Development Division HQ, and the Global Environment Department. There are also representatives from the Corporate Planning Division HQ and the CSR Division HQ. The team members have been taking the lead in considering the stories to highlight from each department.

Process for Documenting Stories



“Team SDGs” Finds NSK Products Making SDG Contributions (SDG Stories)

Team SDGs has organized NSK business areas and products where SDG contributions can be made. It did this based on global issues such as climate change and the main ways NSK solutions help to solve these issues. We share some of these products here as examples that are expected to make SDG contributions.

Industrial Machinery Business
Helping to Create Convenient Cities by Promoting Seamless Use of Public Transport

8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION

Social Issue

- Climate change due to greenhouse gas emissions
- Traffic congestion

Solution Method

Expansion of MaaS*

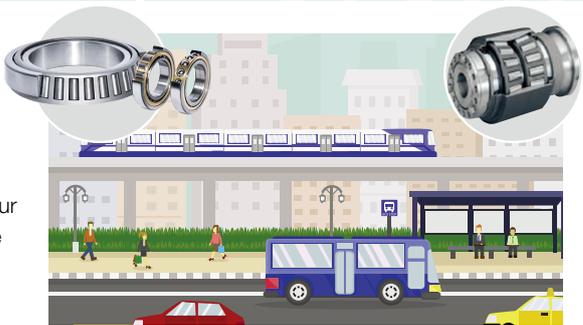
* Mobility as a Service. With this type of service, ICT and cloud computing allow users to enjoy seamless urban mobility. Without needing their own cars, users are able to seamlessly take a combination of transport modes including trains.

NSK's Contribution

Helping to build social infrastructure through its railway business

Through the development and supply of bearings for railway vehicles, we are contributing to the creation of cities where everyone can get around easily.

In recent years, NSK has been providing railway vehicle bearings to China, Europe and other locations, reflecting customer confidence in our considerable technological capabilities. We will continue to support the development of railway infrastructure worldwide by supplying bearings for railway vehicles. Our aim is to help reduce traffic congestion and CO₂ emissions.



Automotive Business
Helping to Create a Safe, Clean Automotive Society

3 GOOD HEALTH AND WELL-BEING
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
13 CLIMATE ACTION

Social Issue

- Climate change due to greenhouse gas emissions
- Increasing death toll from road accidents worldwide

Solution Method

Automotive innovation through CASE* development

* Connected, Autonomous, Shared, and Electric vehicles. An acronym coined using keywords that indicate the future direction of vehicle technology development

NSK's Contribution

Contribution to autonomous driving and vehicle electrification

By developing and supplying automotive parts that support autonomous driving and electrification, we are helping to reduce greenhouse gas emissions and promote motoring societies with fewer traffic accidents.

We aim to promote more efficient use of energy, limit global warming through traffic congestion reduction, and help realize safer roads with minimal accidents by supplying parts that support the development of autonomous driving and vehicle electrification technologies.



Technology Development

Making Daily Life Safer and More Convenient Through NSK's Robotics / Actuator Business



Social Issue

- Super-aged society
- Eliminating labor shortages
- Realizing safe and secure work styles

Solution Method

Products based on robotics, IoT, and AI technologies can provide personal support and create a more convenient, safe, and comfortable future.

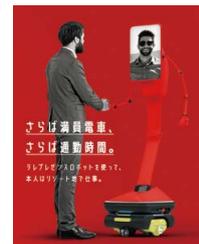
NSK's Contribution

Contributing through the robotics/actuator business

STORY

NSK has entered robotics as a new field. Our aim is to help create caring societies where robots can provide personal support and assistance to people.

NSK mechatronics technology uses computer-control to further promote the advantages of mechanical component technologies such as bearings and ball screws. Utilizing the knowledge we have amassed in the field of industrial machinery, we aim to help solve the challenges faced by super-aged societies. We are doing this by developing our robotics/actuator business, which promotes safe and comfortable living. This includes care robots to assist people in the healthcare field.



Technology Development

NSK innovation is contributing to the effective use of food oil and the conservation of rivers and oceans



Social Issue

- Destruction of the natural environment including river and ocean pollution

Solution Method

Promoting resource recycling and reuse

NSK's Contribution

Contributing with material technologies

STORY

Utilizing our material technology, we are slowing the deterioration of oil used for frying foods, while helping to protect river and ocean environments.

NSK has developed a food oil deterioration suppression filter by combining paper with additives used to prevent the oxidative deterioration of oil. Since this filter helps prevent food oil deterioration, it allows oil to be used more times before disposal (saving resources). This, in turn, is expected to reduce the amount of used food oil that ends up polluting rivers and oceans. The product is currently being readied for mass production.



SDG Initiatives at NSK Plants

NSK has 64 production sites worldwide, some of which are independently engaged in initiatives that contribute to SDG achievement. Here are examples from one plant in Europe and another in Japan.

NSK Steering Systems Europe (Polska) Sp. Z O.O.
Initiative to Reduce the Use of Disposable Plastics

In May 2019, the Polish city of Wałbrzych, where NSK Steering Systems Europe (Polska) (NSSP) is located, launched a Stop Plastic Campaign to reduce plastic use. In response to this, NSSP launched three initiatives in September 2019: reducing the use of plastic beverage bottles, eliminating products with plastic packaging in the canteen, and reducing the use of disposable cups. In recognition of these efforts, the company received a certificate from the city in January 2020.



Campaign poster



Receiving Stop Plastic Certification from the city

Photographer: Bartosz Szarafi / Media outlet: Radio Wrocław



Gajdziński Andrzej
 Vice President,
 NSK Steering Systems Europe (Polska) Sp. Z O.O.

NSK Steering Systems Europe (Polska) was the first company in Wałbrzych to support the initiative of the Stop Plastic Campaign, at the same time becoming an inspiration for building responsibility for the environment among employees, as well as for the surrounding society. NSSP's Stop-Plastic Certification is just an example of the importance of environmental protection in NSK's management system.

Achievements in October–December 2019

Reduction of plastic bottle waste	Elimination of plastic packaging in the canteen	Reduction of disposable cup usage <small>(change of cup material and encouraging employees to bring their own reusable cups)</small>
Total amount of plastic bottle waste: 587 kg	Approx. 2,500 packages / month for use and sale in the canteen	Paper cups (mixed materials) Approx. 14,000 cups / month
109 kg <small>(81.4% reduction year-on-year)</small>	0 packages	0 cups

Needle Bearing Operation Division (Takasaki Plant and Haruna Plant)
Promoting Both NSK Vision 2026 and the SDGs

As part of activities to achieve the NSK Vision 2026, the company is implementing the “Your Work in Your Own Words Project” at plant worksites. In fiscal 2019, the Needle Bearing Operation Division determined the theme of its project: “Ensuring that all employees can work safely and with peace of mind.” As part of SDG efforts, it installed more AEDs in workplaces, and gave all employees basic resuscitation training. It also created special cards to promote communication with employees who have hearing impairments, and worked to conserve resources such as water, paper, and electricity.



AED training



Masashi Ogawa
 Project Leader, Automotive New Business Development Office,
 Needle Bearing Operation Division

After an incident that required AED use in our workplace, we discussed what we should do for our current project theme, “Ensuring that all employees can work safely and with peace of mind.” While creating workplaces where co-workers do not hesitate to help each other, we also wanted to help achieve the SDGs, a global initiative.

◀ This gesture means, “Would you like help?” in Japanese sign language.



Help Card created for employees with hearing impairments

ESG Initiatives



E nvironment

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S ocial

44

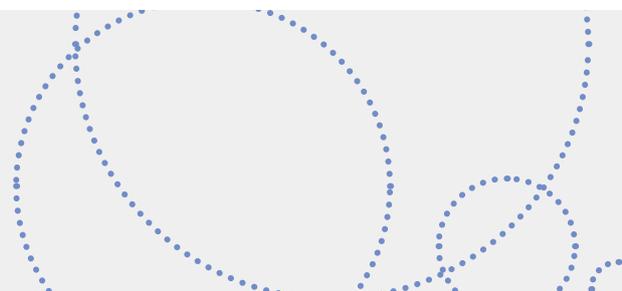
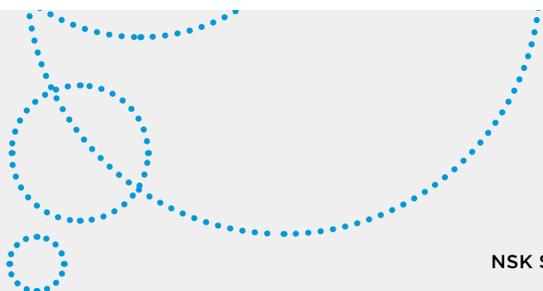
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G overnance

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Executive Summary on the Environment

NSK's Environmental Policy

A sense of crisis is growing over the advance of global warming and climate change, depletion of resources, chemical pollution of air and water, and loss of biodiversity. All of humanity faces the challenge of learning to live sustainably while protecting the global environment. Back in 1997, the NSK Group established the NSK Environmental Policy to

reflect its commitment across all of its business operations to help protect the global environment, as stated in the NSK Mission Statement. In line with this policy, we strive to develop products and services that help reduce environmental impact, and we work to reduce the impact of our own operations and throughout our value chain.

NSK Environmental Policy

Our commitment to environmental management forms the basis of our existence and our pursuits. We are determined to take independent and assertive actions, aiming to establish sustainable societies.

1. Prevention of Global Warming
To actively support efforts to prevent global warming by developing environmentally friendly manufacturing processes and technologies.

2. Reduction of Negative Environmental Impact
To establish and continually improve environmental management systems and systems for the management of chemical substances in products; to comply with regulations, to prevent pollution, and to reduce environmental impact.

3. Contribution to Societies
To be actively involved in the social development of local communities where we operate by promoting our global corporate activities, to create affluent societies that are in harmony with the environment, and to promote the biodiversity conservation.

Environmental Code of Conduct

- To promote the development of manufacturing technologies through the use of our Tribology (friction control and lubrication technologies) in order to create environmentally-oriented products.
- To ensure energy and resource conservation within all spheres of our business operations.
- To reform environmental management organizations by improving operational systems and clarifying chains of responsibility.
- To more aggressively tackle environmental protection by setting and adhering to high internal standards, in addition to complying with laws, ordinances, and agreements.
- To reduce environmental impact by promoting the switch from chemical substances that adversely affect the environment to environmentally friendly alternative substances, waste reduction, and recycling.
- To encourage employees to understand our environmental policies and to ensure an environmental mindset in the company through education and internal communications.
- To contribute to societies by conducting social environmental activities and addressing issues related to the preservation of ecosystems and human health.
- To actively communicate with environmental authorities and local communities in order to receive insightful and constructive opinions, and to disclose the ongoing status of our environmental management activities to the public.

Established: December 12, 1997, Revised June 25, 2015

The NSK Group practices global environmental management and is careful to ensure environmental compliance. We are making a difference by helping the world reduce its carbon footprint, maximize recycling, and honor the natural environment. Take, for instance, bearings that decrease energy loss. Through these kinds of advancements, NSK products are helping to reduce environmental impact around the world. The NSK Group is also committed to supporting the achievement of the Sustainable Development Goals (SDGs) by reducing the environmental impact of its business operations to zero.

NSK Group Environmental Action Plan (Sixth Mid-Term Management Plan)

Contribute to the realization of a sustainable society, the SDGs, and the Paris Agreement, and grow as a sustainable company



Long-term indicator	Contribute to the establishment of a low-carbon society	Contribute to the establishment of a recycling-oriented society	Contribute to the establishment of an environmentally symbiotic society
Maximize environmental contribution through products Zero energy loss	Reduce CO ₂ emissions through environmentally friendly products <ul style="list-style-type: none"> ● Improve base performance ● Contribute to energy diversification applications 	Effectively utilize resources through lightweight products and long-life design Reduce environmentally harmful substances contained in products	Provide assurance that products are free of environmentally harmful substances <ul style="list-style-type: none"> ● Establish an assurance system ● Promote green procurement
Reduce environmental impact from our own business activities to zero	Reduce CO ₂ emissions from business activities <ul style="list-style-type: none"> ● Technological innovation ● Increase production capacity of existing equipment, implement thorough energy conservation measures, make energy consumption visible, increase business and logistics efficiency ● Use renewable energy ● Reduce manufacturing emissions through product design 	Implement waste reduction measures <ul style="list-style-type: none"> ● Promote the 3Rs (reduce, reuse, and recycle) ● Effectively use water resources ● Apply cyclic usage, switch to air cooling ● Effectively use steel resources ● Improve efficiency through existing technology/upgrade tools and dies ● Practical applications of new processing technology and innovative technology 	Biodiversity conservation <ul style="list-style-type: none"> ● Promote social contribution activities ● Reduce the use of environmentally harmful substances in manufacturing ● Reduce VOCs and PRTR-designated substances Prevent environmental pollution <ul style="list-style-type: none"> ● Repair underground tanks

Environmental compliance

Global environmental management

NSK Group business activities in all regions/divisions



Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

● Achieved ▲ Partially achieved ✕ Not achieved

Sixth Mid-Term Management Plan targets		FY2019 targets	Performance in FY2019	Evaluation
Environmental Management P.28	Maintain ISO 14001 certification at all subject sites	(Same as left)	Maintained at all subject sites	●
	Obtain ISO 14001 certification within three years of starting full-scale operations at a site	Target did not apply to any plants	Obtained ahead of schedule at two sites	●
	Zero instances of exceeding emissions standards	(Same as left)	No exceedances of emissions standards	●
	Zero instances of oil or other leakage-related environmental accidents	(Same as left)	Zero leakage-related environmental accidents	●
Creating Environmentally Friendly Products P.30	Create environmentally friendly products with a Neco score of 1.2 or higher (ongoing)	Continue with new developments	Developed six environmentally friendly products	●
	Avoid at least 2 million t-CO ₂ emissions during use of NSK products	1.70 million t-CO ₂	1.57 million t-CO ₂	✕
Fighting Global Warming and Climate Change P.34	<small>Manufacturing, technology, offices</small> CO ₂ emissions:* 7% reduction from FY2017	3% reduction	Reduced by 17.6%	●
	<small>Distribution (Japan)</small> CO ₂ emissions by transport volume: 4% reduction from FY2017	2% reduction	Increased by 0.6%	✕
Resource Conservation and Recycling Measures P.38	<small>Development and design, manufacturing</small> Reduce waste of materials by changing processing methods (ongoing)	Continue reduction initiatives	Conducted reduction initiatives	●
	Achieve a recycling rate of at least 99%	98.7% or higher	98.6% recycling rate	✕
	<small>Manufacturing</small> Industrial waste per unit of sales: 4% reduction from FY2017	2% reduction	Increased by 15.8%	✕
	<small>Manufacturing</small> Water withdrawal per unit of sales: 4% reduction from FY2017	2% reduction	Increased by 13.0%	✕
<small>Distribution (Japan)</small> Packaging waste per production unit: 15% reduction from FY2017	4% reduction	Reduced by 31%	●	
Reducing Use of Environmentally Harmful Substances P.40	<small>Development and design, procurement, manufacturing</small> Full response to the 10 prohibited EU RoHS2 substances	Full response	Ensured full response in newly developed products Continued efforts to completely eliminate hazardous substances in manufacturing processes	▲
	<small>Procurement</small> Obtain consent to NSK Group Green Procurement Standards In Japan: Maintain 99% or higher Outside Japan: Obtain 99% or higher	In Japan: Maintain 99% or higher Outside Japan: Obtain 95% or higher	In Japan: Maintained 99% Outside Japan: Obtained 97%	● ●
	<small>Procurement</small> Response rate for inclusion in NSK Survey of Environmentally Harmful Substances In Japan: Maintain 100% Outside Japan: Obtain 100%	In Japan: Maintain 100% Outside Japan: Obtain 95%	In Japan: Maintained 100% Outside Japan: Obtained 99%	● ●
	<small>Manufacturing (Japan)</small> Handling of PRTR-designated substances per unit of sales: 1% reduction year on year	1% reduction	Increased by 1.6%	✕
Biodiversity Conservation P.42	Identify the factors in operations that could have a negative impact on biodiversity (new)		Started identifying factors	●
	Educating employees on biodiversity (ongoing)		Provided education on biodiversity	●
	Develop initiatives for preserving biodiversity through social contribution activities (ongoing)		Continued developing initiatives for preserving biodiversity through social contribution activities	●

* Greenhouse gas emissions (CO₂ equivalent) are calculated by multiplying emissions from use of an amount of electricity, fuel, etc., by its respective global warming coefficient. In Japan, the global warming coefficients used are given in the Ministry of the Environment's and the Ministry of Economy, Trade and Industry's Greenhouse Gas Emission Calculation and Reporting Manual. Outside Japan, the global warming coefficients used are released by electricity providers or given in the International Energy Agency's CO₂ Emissions from Fuel Combustion.

For details, see p. 2 "Environmental Management," in NSK ESG Data Book 2020.

Executive Summary on the Environment

Environmental Risks and Opportunities

The international community has accelerated its efforts to build a sustainable world with the Paris Agreement, ESG Investments, and the Sustainable Development Goals (SDGs). While upholding its commitment to protection of the global environment, the NSK Group pursues continued growth by analyzing and responding to risks and opportunities associated with these developments. We identify and assess environmental risks and opportunities in each phase of the value chain, reflecting them in our management strategies and environmental action plans. We conduct this analysis of risks and opportunities on a regular basis.

Value Chain	Development and design	Procurement	Manufacturing	Transport	Usage	Disposal/recycling
Relevant Stakeholders	Customers/employees	Suppliers	Employees/partner companies	Transport companies	Customers/society	
Environmental Issues	<ul style="list-style-type: none"> ● Need to help build low-carbon societies: Depletion of fossil fuels, progression of global warming and climate change, occurrences of large-scale disasters ● Need to help build recycling-oriented societies: Depletion of resources and deterioration of the natural environment due to waste ● Need to help build environmentally symbiotic societies: Decline and loss of biodiversity due to climate change, environmentally harmful substances, ocean plastic pollution, etc. 					
Opportunities	<ul style="list-style-type: none"> ● Increase market share by commercializing environmentally friendly products ● Increase market share by developing products that do not contain environmentally harmful substances 	<ul style="list-style-type: none"> ● Ensure a stable supply of fuel and raw materials by promoting alternatives ● Increase engagement with environmentally friendly suppliers 	<ul style="list-style-type: none"> ● Improve environmental efficiency and reduce costs through energy conservation and resource circulation ● Improve environmental efficiency and reduce costs by developing energy-efficient production lines 	<ul style="list-style-type: none"> ● Contribute to CO₂ reductions by improving transport efficiency ● Strengthen engagement with environmentally friendly transport companies 	<ul style="list-style-type: none"> ● Expand market share and business opportunities through environmentally friendly products ● Expand efforts to reduce energy loss 	<ul style="list-style-type: none"> ● Help reduce disposal costs and environmental impacts by extending product life and improving recycling rates
	<ul style="list-style-type: none"> ● Establish production systems not reliant on fossil fuels ● Increase corporate value through environmental protection activities 					
Risks	<ul style="list-style-type: none"> ● Inadequate response to environmental requirements 	<ul style="list-style-type: none"> ● Environmental impact of resource consumption ● Violating environmental laws and regulations by suppliers ● Supply chain disruption due to severe natural disasters 	<ul style="list-style-type: none"> ● Increased cooling costs due to rising temperatures ● Adverse impact on biodiversity from construction and renovation of facilities ● Increased waste disposal costs ● Depletion of fossil fuels 	<ul style="list-style-type: none"> ● Disruption of transport networks due to severe natural disasters 	<ul style="list-style-type: none"> ● Recalls due to inclusion of restricted substances ● Reduced competitiveness due to products being inferior to competitors' in terms of environmental performance 	<ul style="list-style-type: none"> ● Inadequate response to needs related to disposal and recycling of products and packaging materials
	<ul style="list-style-type: none"> ● Delays in producing energy savings and CO₂ reductions, including at suppliers ● Tightening of environmental regulations ● Violating environmental laws and regulations ● Growing calls from stakeholders to address environmental issues 					
Main Initiatives	<ul style="list-style-type: none"> ● Develop environmentally friendly products (highly efficient, smaller, lighter, with longer life, and related to renewable energy) ● Develop and design products that do not contain environmentally harmful substances 	<ul style="list-style-type: none"> ● Promote green and CSR procurement ● Make raw materials common across products 	<ul style="list-style-type: none"> ● Adopt renewable energy ● Reduce and dispose of waste properly ● Reduce usage of and properly manage environmentally harmful substances ● Conduct environmental assessments ● Innovate in production technologies ● Invest in high-efficiency equipment 	<ul style="list-style-type: none"> ● Improve distribution efficiency ● Shift to modes of transport with a lower environmental footprint and switch to eco-friendly cars ● Encourage joint transport ● Reduce and reuse packaging 	<ul style="list-style-type: none"> ● Maximize reductions in CO₂ emissions during product use ● Provide information on environmentally harmful substances ● Create environmentally friendly products (highly efficient, smaller, lighter, with longer life, and related to renewable energy) 	<ul style="list-style-type: none"> ● Improve recycling rates ● Use biodegradable plastic for packaging materials
	<ul style="list-style-type: none"> ● Undertake energy conservation activities, including with suppliers ● Advance conversion to and use of alternative fuels ● Use recycled materials ● Use resources effectively ● Management based on the NSK List of Environmentally Harmful Substances ● Comply with regulations for environmentally harmful substances 					
	<ul style="list-style-type: none"> ● Operate an environmental management system ● Comply with environmental laws and regulations ● Strengthen preparedness for risks from natural disasters with a business continuity plan (BCP) ● Improve environmental education and awareness 					
Office Initiatives	<ul style="list-style-type: none"> ● Reduce electricity consumption by promoting no-overtime work styles ● Take advantage of remote conferencing ● Switch to eco-friendly cars, use public transportation, and encourage car sharing 					



Endorsement of TCFD Recommendations



Note: The Task Force on Climate-related Financial Disclosures was established by the Financial Stability Board (FSB) in 2015 to promote the disclosure of climate-related financial information. In 2017, the TCFD released its latest report recommending that corporations disclose information on climate change-related risks and opportunities that impact finance in order to facilitate the investment decisions of investors.

NSK announced its endorsement of recommendations from the Task Force on Climate-related Financial Disclosures (TCFD).

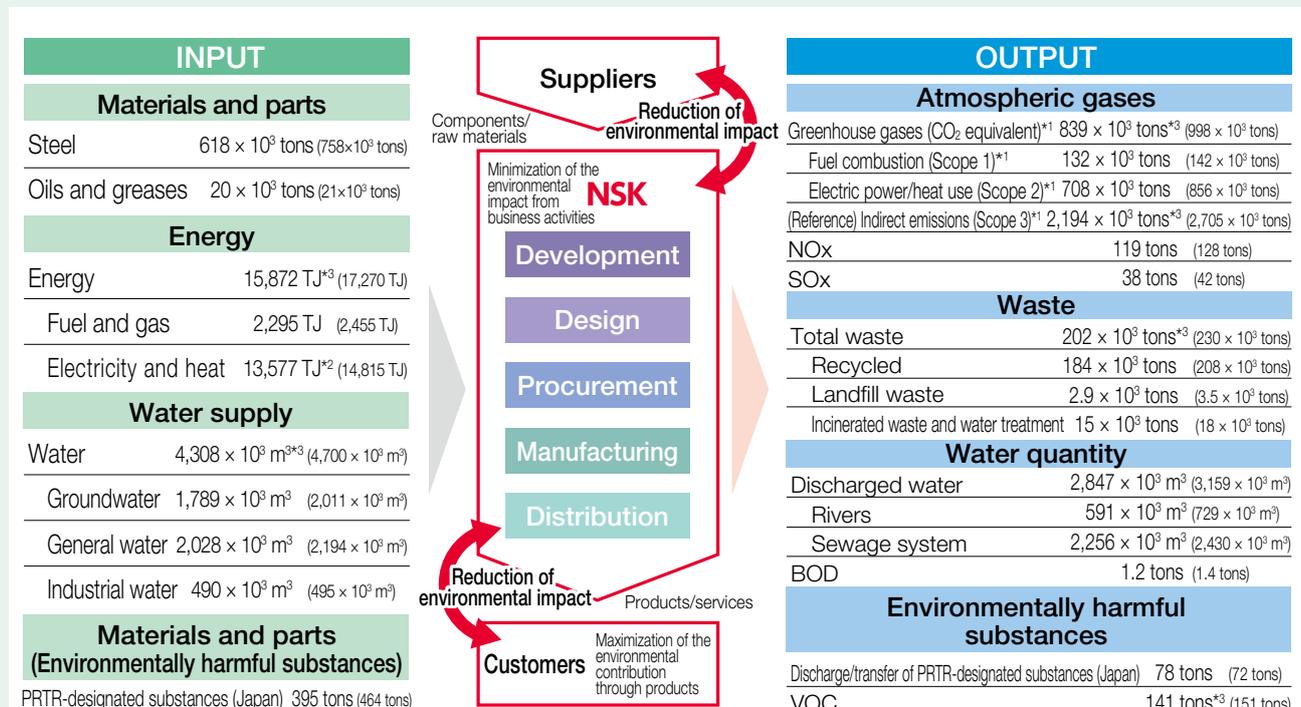
In accordance with the recommendations of the TCFD, NSK will identify business risks and opportunities, adapt management plans, and enhance information disclosures with the aim of contributing to both the sustainable development of society and the sustainable growth of NSK. NSK aims to use this endorsement as an opportunity to take its environmental activities to the next level.

Material and Energy Balance

The NSK Group works with suppliers to reduce environmental impact via green procurement and other initiatives. We also strive to reduce the environmental impact of our customers and of society as a whole by providing environmentally friendly products.

Input and Output of Global Business Activities (FY2018 and 2019)

Figures within parentheses indicate fiscal 2018 data



*1 Total greenhouse gas emissions are obtained by multiplying each type of gas by its global warming coefficient. Emission factors for electricity are variable market standards. These emission factors, which change every year, are published by power companies with which we have contracts, or are given in the International Energy Agency's CO₂ Emissions from Fuel Combustion.

The amount of greenhouse gas emissions for Scopes 1 to 3 are calculated based on GHG Protocol calculation standards. Scope 1 refers to emissions from a company's own fuel use; Scope 2 to the amount of emissions from power plants, etc., due to the external supply of electric power and heat (consumed by a company); and Scope 3 to the amount of indirect emissions, such as emissions from supplier manufacturing processes for procured components and raw materials.

*2 Energy use accounted for by purchased electricity is the primary energy input of power companies that corresponds to the NSK Group's electricity usage.

*3 Verified by a third-party. See p. 98 for details.

Environmental Management

NSK's Approach

The NSK Group is determined to deliver sustained increases in corporate value and to help build a sustainable world by proactively pursuing advanced environmental practices. In January 2019, we added the environment as one of NSK's core values and devised a vision for 2050. In April 2019, we established a mid-term

environmental action plan through fiscal 2021 as well as a long-term environmental action plan through fiscal 2026 by backcasting from this vision. The long-term plan specifies the SDGs that will be the focus of the NSK Group's contributions: Goals 6, 7, 12, 13 and 15.

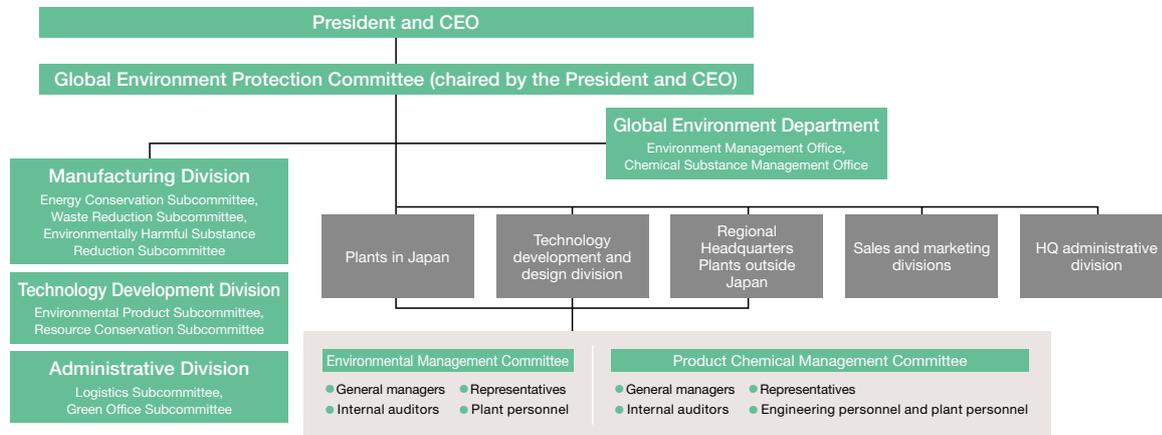
System

The NSK Group has established a Global Environment Protection Committee under the supervision of the Board of Directors and designated it the top decision-making body for environmental management in order to reflect social expectations in the Group's environmental decision making.

The Global Environment Protection Committee discusses mid- to long-term environmental action plans and

environmental initiatives. Particularly important matters are referred to the Board of Directors after their deliberation in the Operating Committee. Based on the Global Environment Protection Committee's decisions, theme-based specialized subcommittees, working with the Head Office's Global Environment Department, drive progress Group-wide by promoting daily environmental protection activities.

Environmental Management System Organizational Structure



Responsibilities of Specialized Subcommittees

Manufacturing Division	
Energy Conservation Subcommittee	Sets policy and confirms progress of energy conservation activities and greenhouse gas reductions
Waste Reduction Subcommittee	Promotes the 3Rs (reduce, reuse, and recycle) and appropriate disposal of waste
Environmentally Harmful Substance Reduction Subcommittee	Promotes reductions of environmentally harmful substances used in manufacturing processes
Technology Development Division	
Environmental Product Subcommittee	Promotes development/design of products that contribute to conservation of energy and resources
Resource Conservation Subcommittee	Promotes reductions in resource consumption through efficient use of primary and secondary materials
Administrative Division	
Logistics Subcommittee	Monitors and promotes reduction of energy use during transport
Green Office Subcommittee	Promotes waste management and the conservation of energy and resources in offices

Membership of the Global Environment Protection Committee and Main Achievements in FY2019

Membership	
Chair	President and CEO
Members	10 officers (The heads of each business division headquarters, the Technology Development Division HQ, the CSR Division HQ, etc.) Key members from other related departments (Global Environment Department and business division headquarters, etc.)
Meetings in FY2019	
Met five times (three times in FY2018)	
Main Agenda	
<ul style="list-style-type: none"> Strengthening of the environmental management system Confirmation of the progress of global warming countermeasures Confirmation of the progress of measures to reduce environmental risks Expression of support for TCFD Instructions for raising awareness and measures for overall activities 	



Acquiring and Maintaining Environmental Management Certification

The NSK Group implements the PDCA cycle for environmental management at all sites.

Environmental initiatives are important at sites involved in development, design, manufacturing, and distribution because these processes have especially large environmental impacts. We require these sites to obtain external ISO 14001 certification—the international standard for environmental management systems—within three years of full-scale operation, such as the start of mass production. In fiscal 2019, we again maintained ISO 14001 certification at all subject sites,* which is one of the targets in our Sixth Mid-Term Management Plan. We increase the effectiveness of our management system by obtaining certifications for each site and undergoing regular reviews by third-party organizations.

* Sixty-eight sites, including two that newly obtained certification ahead of schedule, within three years of full-scale operation

Environmental Audits

Regular internal audits and third-party audits are conducted at each site around the world. Additionally, the NSK Head Office's environment-related divisions and regional headquarters conduct audits designed to prevent oil leakages and spills, ensure compliance with environmental laws, and properly manage waste and environmentally harmful substances.

All audits conducted in fiscal 2019 found no serious problems, and minor findings were corrected. In China, environmental regulations have tightened rapidly in recent years. In fiscal 2019, as in fiscal 2018, environmental audits by external organizations familiar with Chinese environmental laws and regulations were conducted at all of the NSK Group's 11 plants in China to ensure complete compliance.



Environmental audit (Europe)

Environmental Education and Training

The NSK Group recognizes that the key to increasing the effectiveness of environmental protection initiatives is for every employee to take action based on sound knowledge. This is why we constantly work to raise employees' environmental awareness and provide rank-based training to deepen knowledge. In fiscal 2019, we conducted e-learning on the necessity of environmental initiatives. On a follow-up questionnaire, more than 99% of employees said that the e-learning had deepened their understanding.



Excerpt from the "Need for Environmental Initiatives" e-learning program

Environmental Compliance

The NSK Group does more than merely comply with environmental laws; we adhere to rigorous internal standards that go beyond legal obligations to prevent air and water pollution. In the event of an accident or legal violation that has a serious impact on the external environment, we promptly report the matter to administrative authorities, investigate the cause, and implement measures to prevent recurrence. In fiscal 2019, there were no serious legal violations or environmental pollution accidents.



For details, see p. 2 "Environmental Management," in NSK ESG Data Book 2020.

Creating Environmentally Friendly Products

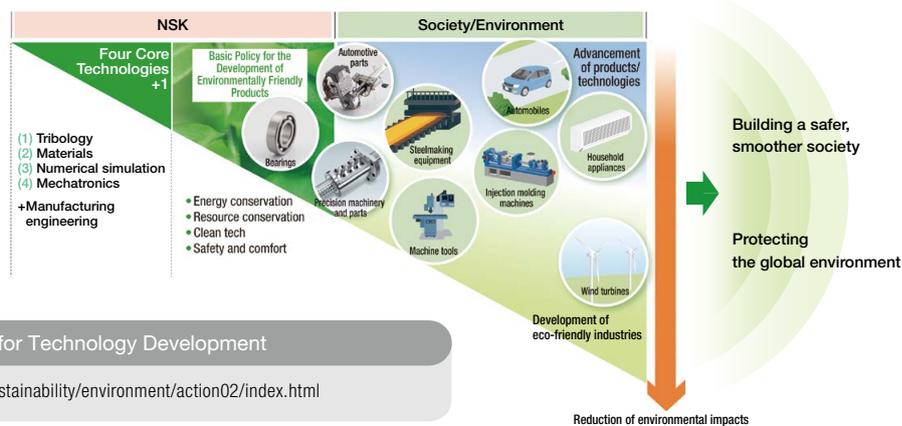
NSK's Approach

To further reduce environmental impact going forward, product performance will need to steadily improve. The NSK Group aims to contribute to a safer, smoother society and help protect the global environment, as indicated in our Corporate Philosophy. To achieve this, we seek to accurately identify the needs of customers and society as a whole and meet them by leveraging our “Four Core Technologies + 1.” These are tribology, materials, numerical simulation, and mechatronics, plus manufacturing engineering. We are working hard to develop environmentally friendly products and technologies based on our Basic Policy for the Development of Environmentally Friendly Products. The more NSK products are used around the world, the more we can help improve the performance of machinery, spur the development of environmentally friendly industries, and reduce the ecological footprint of human society.

The NSK Group's products are incorporated into automobiles, industrial equipment, and many other types of machinery, helping to control friction and reduce energy consumption. Leveraging these product characteristics, we develop environmentally friendly products designed specifically to save energy and resources and to provide comfort for end users. We also aim to minimize environmental impact at every stage—from R&D and design to production, usage, and disposal.

Basic Policy for the Development of Environmentally Friendly Products

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.
4. Products should contribute to the health and safety of end users by having low levels of vibration, noise, and dust emissions.



NSK's Targets for Technology Development
<https://www.nsk.com/sustainability/environment/action02/index.html>

Targets and Performance

Long-Term Targets

Offset CO₂ emissions by providing environmentally friendly products (target year: 2026)

CO₂ emissions avoided during use of NSK products are more than the CO₂ emissions of the NSK Group's business operations (Scope 1+2+3)

Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

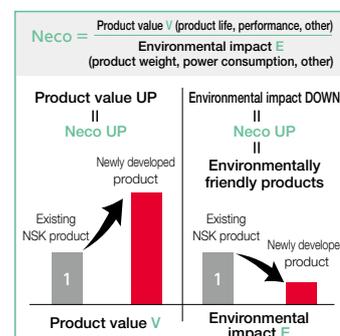
Sixth Mid-Term Management Plan targets	FY2019 targets	Performance in FY2019	Initiatives
Create environmentally friendly products with a Neco score of 1.2 or higher	Continue with new developments	<ul style="list-style-type: none"> Developed six environmentally friendly products 	<ul style="list-style-type: none"> Continued developments
CO ₂ emissions avoided during use of NSK products: 2 million t-CO ₂	CO ₂ emissions avoided during use of NSK products: 1.70 million t-CO ₂	<ul style="list-style-type: none"> CO₂ emissions avoided during use of NSK products: 1.57 million t-CO₂ 	<ul style="list-style-type: none"> Launched activities in the Japan Bearing Industry Association's Working Group to Establish Guidelines for Quantifying CO₂ Emissions Avoided Established standards to calculate CO₂ emissions avoided during use of NSK products



Assessment Indicators for Environmentally Friendly Products and Fiscal 2019 Results

The development of environmentally friendly products requires a balance of diverse performance improvements to save energy and resources and a comprehensive effort to reduce environmental impact. However, there are many trade-offs that must be considered in terms of performance, such as efficiency, friction loss, size/weight, and life. For this reason, in fiscal 2008, we introduced the NSK Eco-efficiency Indicators (Neco) as a standard to assess the eco-friendliness of our products comprehensively and quantitatively. We are working to develop new products with a Neco score of 1.2 or higher.

In fiscal 2019, six new environmentally friendly products were developed with Neco scores of at least 1.2.



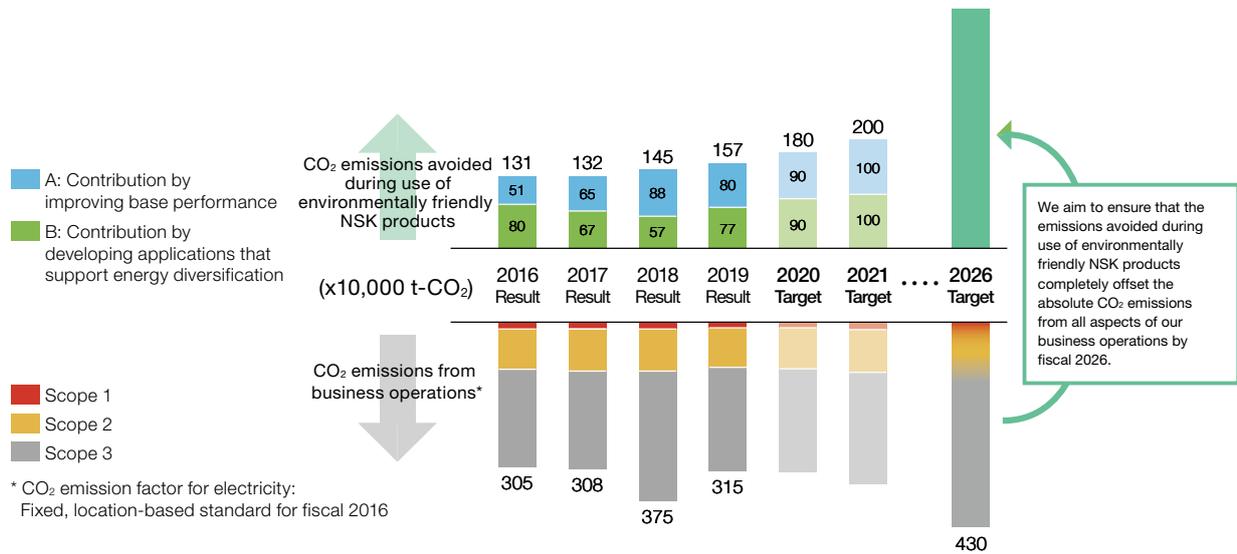
Environmentally Friendly Products Developed in Fiscal 2019

Eco-friendly product	Featured NSK technology	Customer benefits	Neco
For automobiles Anti-Fretting Grease for Wear-Resistant Deep Groove Ball Bearings 	<ul style="list-style-type: none"> ● Wear suppression Use of the developed grease suppresses fretting wear by forming a layer of thickener on the raceway surface ● Maintaining and improving heat resistance An additive that enhances heat resistance is added to preserve heat resistance performance 	<ul style="list-style-type: none"> ● Improved reliability Improved wear resistance contributes to longer life ● Low maintenance Contributes to lower maintenance frequency 	2.5
For EV gearboxes Tapered Roller Bearings for Lean Lubrication Conditions 	<ul style="list-style-type: none"> ● Improved seizure resistance Maintains lubrication near the roller end via capillary action in the cage, preventing seizure due to oil deficiency ● Reduced friction loss Reduces churning loss by saving lubricating oil ● Space-saving Reduced bearing width by optimizing cage shape 	<ul style="list-style-type: none"> ● Improved fuel economy (energy efficiency) Lower friction contributes to improved fuel economy (energy efficiency) ● Smaller and lighter ● Lubricant savings 	1.7
Press Release October 25, 2019 https://www.nsk.com/company/news/2019/1025a.html#			
General machinery and conveyance equipment Lubrication Unit for NSK Linear Guides™ NSK K1-L 	<ul style="list-style-type: none"> ● Significantly boosted lubrication capability A newly developed material supplies oil for nearly twice as long as the conventional NSK K1™ lubrication unit ● Reduced friction An optimized shape at the contact with the rail reduces dynamic friction force by about 20% ● Measures against damage and entry of foreign matter Housing the lubrication unit in a case maintains structural integrity and impedes entry of dust and particles 	<ul style="list-style-type: none"> ● Improved reliability Longer life contributes to stable operation of equipment ● Longer maintenance-free operation Reduces maintenance frequency and contributes to lubricant savings 	1.3
Press Release November 12, 2019 https://www.nsk.com/company/news/2019/1112a.html#			
For vertical equipment and machinery Lift-Rotation Z-θ Actuator 	<ul style="list-style-type: none"> ● All-in-one construction All-in-one structure that integrates a motor with a single axis unit (coaxial rotation and linear motion) ● Waterproof design A waterproof structure allows use even in water mist environments 	<ul style="list-style-type: none"> ● Small footprint An integrated structure contributes to space savings and more compact facilities 	1.7
Press Release December 18, 2019 https://www.nsk.com/company/news/2019/1218a.html			
For EV motors Ultra-High-Speed Ball Bearings 	<ul style="list-style-type: none"> ● Low heat generation grease Developed grease that provides superior seizure resistance ● Cage with new shape and material Achieved the world's fastest high-speed rotation* with a lighter and more heat-resistant cage <p>* Based on NSK survey of grease-filled automotive bearings</p>	<ul style="list-style-type: none"> ● Smaller and lighter ● Improved fuel economy (energy efficiency) A smaller and lighter weight achieved with higher motor speeds and output contributes to improved fuel economy (energy efficiency) ● Improved reliability Improved seizure resistance contributes to stable motor driving 	1.3
Press Release March 18, 2020 https://www.nsk.com/company/news/2020/0318a.html			
For train gearboxes Low-Maintenance High-Reliability Bearings 	<ul style="list-style-type: none"> ● Developed clearance adjustment technology Bearings are shipped with preset clearance, making it easy to achieve an optimal clearance just by mounting ● Significantly increased cage strength A newly developed high-strength cage reduces stress in the cage structure by 75% ● Enhanced suppression of bearing creep The inner ring is specially heat treated to ensure dimensional stability even under high temperatures, delivering excellent anti-creep performance 	<ul style="list-style-type: none"> ● Low maintenance No need to adjust clearance during mounting helps reduce gearbox maintenance ● Reduced life cycle costs Longer life contributes to reduced life cycle costs for rolling stock 	1.4
Press Release March 27, 2020 https://www.nsk.com/company/news/2020/0327a.html			

Creating Environmentally Friendly Products

Offsetting CO₂ Emissions from Business Operations through Environmentally Friendly Products

The NSK Group's products help customers to avoid CO₂ emissions. Our goal is to ensure that the emissions avoided completely offset the absolute CO₂ emissions from all aspects of our business operations (Scope 1+2+3) by fiscal 2026, the target year of our long-term management plan.



The NSK Group will focus on two initiatives to achieve this offset. Our goal is to ensure that the CO₂ emissions avoided during use of NSK products exceeds the CO₂ emissions of the NSK Group's business operations by fiscal 2026.

Two Initiatives to Achieve Offset

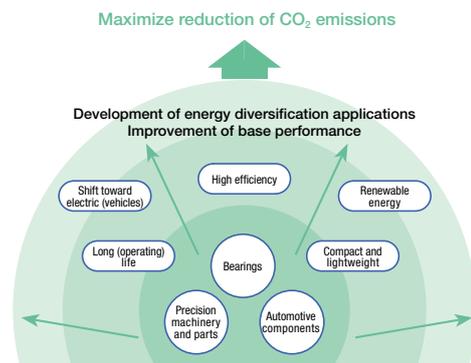
Helping customers reduce CO ₂ emissions by using NSK products:	Expand sales of eco-friendly products, replace products with eco-friendly types, and establish evaluation guidelines
Reducing CO ₂ emissions from business operations:	Pursue technology developments and manufacturing processes designed to reduce CO ₂ emissions during production

Accelerating Environmental Contributions with Products in Two Categories

NSK takes two approaches in its initiatives to reduce CO₂ emissions in the product-use stage: by improving the base performance of products and by developing applications that support energy diversification.

In fiscal 2019, NSK Group products accounted for the avoidance of 1.57 million t-CO₂ of emissions through these approaches. Our goal is to see the use of NSK products account for 2 million t-CO₂ emissions avoided in fiscal 2021. By fiscal 2026, we aim to raise this figure to a volume that completely offsets emissions from NSK Group's business operations.

We have established guidelines for calculating the CO₂ emissions avoided during customer use of our products to ensure the objective evaluation of results.



Concepts for Products Helping to Avoid CO₂ Emissions During Use

Category	Examples of contribution to CO ₂ reduction
Contributing by improving base performance (improving NSK product performance)	<ul style="list-style-type: none"> Reducing friction loss Downsizing through longer life Smaller size and less weight
Contributing by developing applications that support energy diversification (responding to new technical fields)	<ul style="list-style-type: none"> Responding to the shift from hydraulics to electrification Responding to the spread of renewable energies Developing new environmentally friendly products



Contributing by Improving Base Performance (Improving NSK Product Performance)

In this area, NSK products contribute directly to reducing energy loss in machinery. We continually strive to improve the base performance of our existing products, for instance by developing bearings that reduce even more friction.

This contribution is calculated using the formula shown at right.

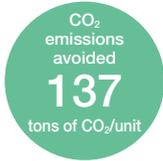
CO₂ emissions avoided (product basis)
 $= \Delta\text{PCO}_2 \times \text{Annual uptime} \times \text{Duration of use} \times \text{Product sales volume}$
 ΔPCO_2 : CO₂ emissions avoided per unit of time product is used (CO₂/hour)
 Annual uptime: Time a product is in operation per year (hours/year)
 Duration of use: How long a product is used (years)
 Product sales volume: Sales volume of the product in the fiscal year
 Note: The Japan Bearing Industry Association is currently formulating guidelines.

Low Torque Rolling Bearing for High Efficiency Centrifugal Chillers

Improving Base Performance Example

NSK was the first in the world to succeed in making rolling bearings for high-efficiency centrifugal chillers,* which had long been considered a difficult challenge. This substantially reduced friction loss compared to sliding bearings. This product contributes to the development of efficient air conditioning systems with low environmental impact.

* Based on NSK survey in March 2012



Innovative Technology

- **Significant reduction in friction loss compared to conventional bearings**
 Friction loss was significantly reduced compared to widely used sliding bearings by improving bearing design changing the cage shape, optimizing the amount of lubrication needed, etc.
- **Improved durability by optimizing internal specifications**
 Oil scavenging was improved, seizures made less likely, and product life extended by optimizing the cage shape, combining materials (brass and resin), and improving the lubrication method.

Contributing by Developing Applications That Support Energy Diversification (Responding to New Technical Fields)

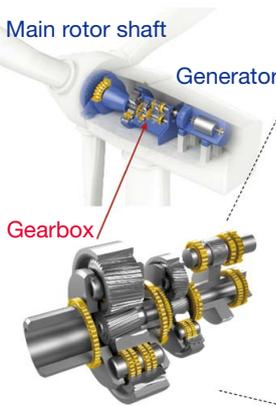
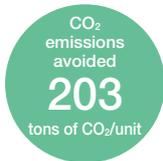
In this area, NSK products contribute indirectly by being incorporated into devices such as wind turbines and electric injection molding machines (which have motorized hydraulics). Guidelines have been established based on the disclosed contribution rate of bearings in the wind power generation field. The contribution is calculated using the formula shown at right.

CO₂ emissions avoided (equipment basis)
 $= \Delta\text{PCO}_2 \times \text{Annual uptime} \times \text{Duration of use} \times \text{Contribution rate} \times \text{Diffusion (sales volume)}$
 ΔPCO_2 : CO₂ emissions avoided per unit of time equipment is used (CO₂/hour)
 Annual uptime: Time that equipment is in operation per year (hours/year)
 Duration of use: How long equipment is used (years)
 Contribution rate: Rate of contribution of NSK products to the equipment (%)
 Product diffusion (sales volume): Diffusion (sales volume) of the product in the fiscal year

Bearings for Wind Turbines

Applications That Support Energy Diversification Example

NSK provides bearings used in the gearbox, a critical component of a wind turbine. This contributes to the spread of renewable energy.



Innovative Technology

- Bearings for wind turbines must be exceptionally reliable. Windmills are designed to operate for 20 years, and it is difficult to replace parts if problems occur.
- This is why advanced computer-based numerical simulation, extensive expertise in materials and heat treatment, and technology for testing and evaluating full-size bearings are required.
- NSK is a leader in the bearing industry in all of these areas. By constantly driving their evolution, we will continue to go beyond market expectations.

For details, see p. 3, "Creating Environmentally Friendly Products," in NSK ESG Data Book 2020.

Fighting Global Warming and Climate Change

NSK's Approach

The NSK Group seeks to minimize CO₂ emissions from its business operations to address the problems of global warming and climate change. Our specific efforts include making technical innovations in production processes, increasing production capacity, visualizing energy use, expanding the adoption of renewable energy, and strengthening energy-saving measures in logistics and offices.

We have also set an ambitious goal of completely offsetting CO₂ emissions from our business operations with the CO₂ emissions avoided during the use of NSK products by fiscal 2026. We employ two key approaches: contributing by improving base performance and contributing by developing applications that support energy diversification.

For details, see p. 30, "Creating Environmentally Friendly Products."

Targets and Performance

Long-Term Targets

Manufacturing, Technology, Offices (global)		
FY2026 CO ₂ emissions* ¹ 16% reduction from FY2017* ²	FY2030 CO ₂ emissions* ¹ 25% reduction from FY2017* ²	FY2050 CO ₂ emissions* ¹ 60% reduction from FY2017* ²

Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets		FY2019 targets	Performance in FY2019	Initiatives
Manufacturing, technology, offices	CO ₂ emissions* ¹ 7% reduction from FY2017	988,000 t-CO ₂ e* ³ 3% reduction from FY2017	● 839,000 t-CO ₂ e* ³ 17.6% reduction from FY2017	(1) Production technology innovation <ul style="list-style-type: none"> ● Adopted high-frequency induction heat treatment ● Increased production capacity by creating smart factories (2) Promotion of energy savings and fuel conversion <ul style="list-style-type: none"> ● Visualized energy use and made efforts to save energy ● Converted fuel for air-conditioning equipment ● Upgraded to high-efficiency compressors ● Repainted factory roofs with thermal insulation paint ● Switched to LED lighting ● Saved electricity by instituting "no overtime days" ● Expanded use of videoconferencing and phone conferences (3) Expanded adoption of renewable energy <ul style="list-style-type: none"> ● Introduced solar power generation Newly installed at a total of four factories in China and India ● Switched to renewable energy-derived electricity Carried out conversion of two factories in Japan and Europe (4) Mechanisms to promote measures <ul style="list-style-type: none"> ● Considered adoption of internal carbon pricing
	CO ₂ emissions by transport volume: 4% reduction from FY2017	2% reduction from FY2017	● Increased by 0.6% from FY2017	<ul style="list-style-type: none"> ● Improved loading efficiency ● Improved transport routes ● Modal shift*⁴

*1 Scope 1 and 2. The electricity emission factors for calculating Scope 2 emissions are the variable market standard. These emission factors, which change every year, are published by power companies with which we have contracts.

*2 The electricity emission factors for the base year are the market standards for 2016. They are published by power companies based on fiscal 2016 performance.

*3 CO₂e refers to the CO₂ equivalent: the emissions of a greenhouse gas multiplied by its respective global warming coefficient.

*4 Modal shift refers to the conversion of freight carried by trucks and other motor vehicles to railways and ships, which have a lower environmental impact.



Highlight

Accelerating the Adoption of Renewable Energy

The NSK Group is actively installing solar and wind power generation equipment and switching to renewable energy-derived electricity.

As a result, in fiscal 2019, renewable energy sources covered approximately 45,400 MWh, or 3.3% of the Group's total electricity use for the year. This is equivalent to a 3.6% reduction in Group-wide CO₂ emissions in fiscal 2019. We are accelerating efforts to reach our goal of 30% renewable energy by fiscal 2030.

Installing Solar and Wind Power Generation Equipment at NSK Sites

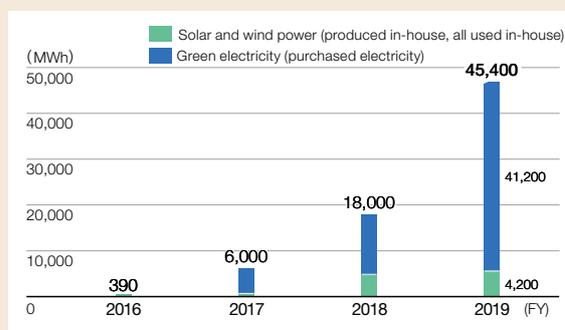
The NSK Group has currently installed solar and wind power generation equipment at 20 sites around the world. In fiscal 2019, this equipment generated a total of approximately 4,200 MWh, representing a CO₂ emission reduction of about 2,500 tons. We installed solar power generation equipment at a total of four factories in China and India. We plan to continue installing solar power generation equipment in fiscal 2020.

Increasing Use of Green Electricity

Thus far, the NSK Group has switched to green electricity (renewable energy-derived electricity) at five sites, including the Saitama Plant in Japan as well as plants in Germany, Poland, and China. In fiscal 2019, our green electricity use was approximately 41,200 MWh per year, equating to a CO₂ emission reduction of about 29,000 tons per year.

In particular, in fiscal 2019, the Kielce Plant of NSK Bearings Polska S.A., which had the largest CO₂ emissions of any NSK Group plant, fully switched over to green electricity. We anticipate this change will save about 72,000 tons of CO₂ emissions per year in fiscal 2020 and beyond.

Renewable Energy Use



NSK Steering Systems Dongguan Co., Ltd. (China)



Suzhou NSK Bearings Co., Ltd. (China)



Kielce Plant of NSK Bearings Polska S.A.

Fighting Global Warming and Climate Change

Manufacturing

Improving Production Efficiency with Smart Factories

The NSK Manufacturing Engineering Center developed a next-generation production line with a new “Smart Factory” concept, and test lines were installed at the Ohtsu Plant and the Kirihara branch of the Fujisawa Plant.

The center has increased productivity by reducing the floor space for grinding machines by 50% and reducing machining time by 33%. We are also working to reduce CO₂ emissions by decreasing standby time when products are not being processed between different product runs.

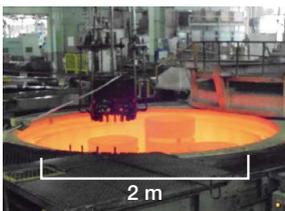
Manufacturing

Reducing CO₂ Emissions by Improving the Efficiency of Heat Treatment Processes

The NSK Group uses a great deal of energy in heat treatment processes for bearing components, accounting for 33% of energy use from all manufacturing processes.

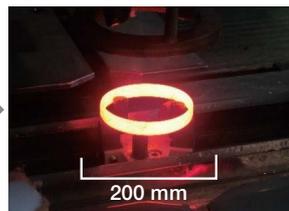
In fiscal 2019, we added more high-frequency induction heat treatment equipment at the Ishibe Plant. Unlike conventional heating furnaces where the furnace body needs to be heated, high-frequency induction heat treatment only heats the target part, significantly reducing energy consumption. We will continue to apply this technology to more products and roll it out to our other plants. We expect this will yield a significant reduction in overall CO₂ emissions for the Group.

Conventional heat treatment furnace



Heating the entire furnace

High-frequency induction heat treatment



Heating the target part only

Manufacturing

Visualizing Energy Usage

Suzhou NSK Bearings Co., Ltd. in China has installed an electricity monitoring system to comply with government production regulations designed to prevent air pollution. The system constantly monitors the electricity usage of key equipment and can determine which equipment to stop based on regulatory limits. The system also makes it possible to classify electricity usage by application, which helps with identifying and improving inefficient production lines and processes.

At our plants in Japan, we are not only employing visual monitoring of electricity usage, but also linking usage to the operational status of equipment to evaluate and improve energy efficiency.

Manufacturing

Coating Factory Roofs with Thermal Insulation Paint

When it came time to repaint the roof, the Saitama Plant used paint with excellent thermal insulation and durability, the same kind used for space rockets. In addition to reducing radiant heat caused by sunlight in summer, it also prevents heat loss in winter. We anticipate the paint will reduce energy used for heating and cooling throughout the year.



Thermal insulation paint on the roof of the Saitama Plant

Offices/Sales

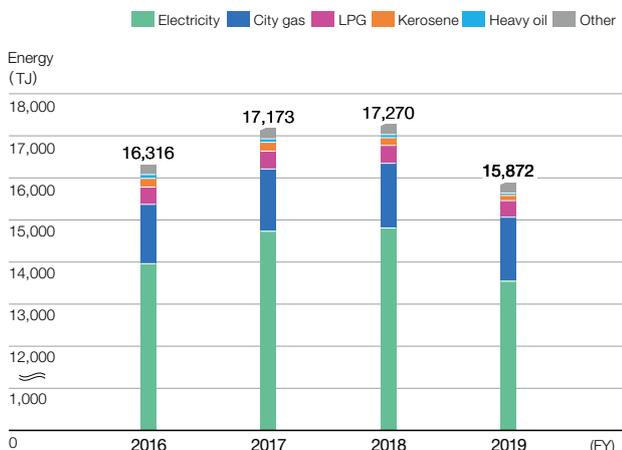
Energy Conservation and Car Sharing (Japan)

The Head Office and sales divisions have made efforts to save energy, including controlling indoor temperatures, turning off lights when not in use, and switching to LED lighting. In fiscal 2019, CO₂ emissions were down by 5% compared to fiscal 2017.

We are also reducing CO₂ emissions by promoting telecommuting, revising how sales vehicles are used, and improving fuel economy. At the Hyogo Branch in Himeji, Hyogo Prefecture, staff members previously used company-owned cars most of the time when going out. Now, however, they use public transport to the nearest station and then car sharing. This change saved 0.5 tons of CO₂ emissions. This illustrates our commitment to improving practices to achieve reductions of all sizes at all levels.

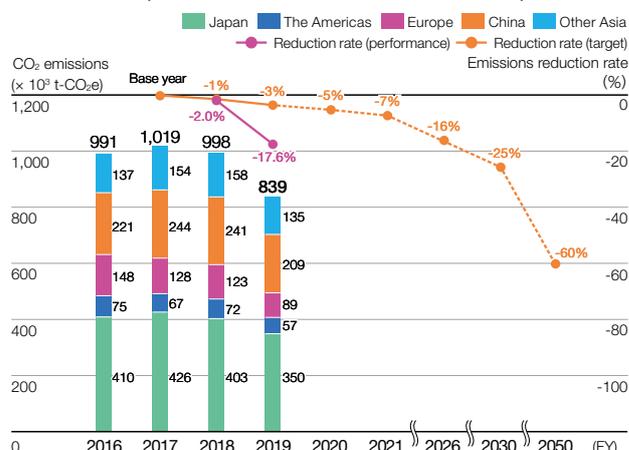


Energy Usage (Global/Production + Non-Production Sites)

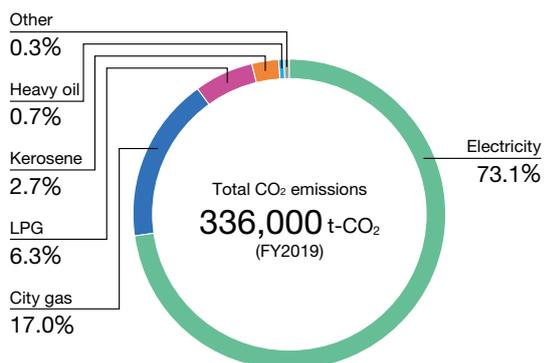


Energy usage accounted for by purchased electricity is the primary energy input from electric power companies that corresponds to the NSK Group's electricity usage.

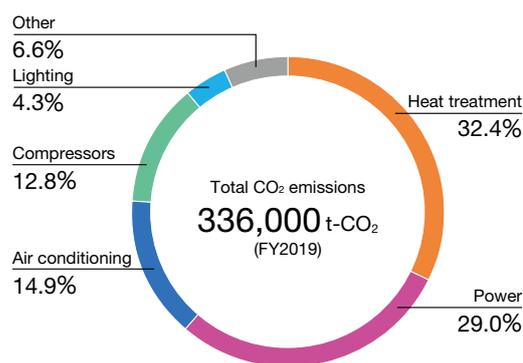
CO₂ Emissions (Global/Production + Non-Production Sites)



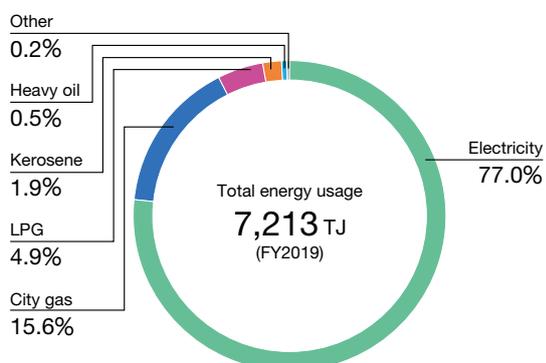
CO₂ Emissions by Type of Energy (Japan/Production)



CO₂ Emissions by Type of Equipment/Process (Japan/Production)



Energy Usage by Type of Energy (Japan/Production)



For details, see p. 4, "Fighting Global Warming and Climate Change," in NSK ESG Data Book 2020.

Resource Conservation and Recycling Measures

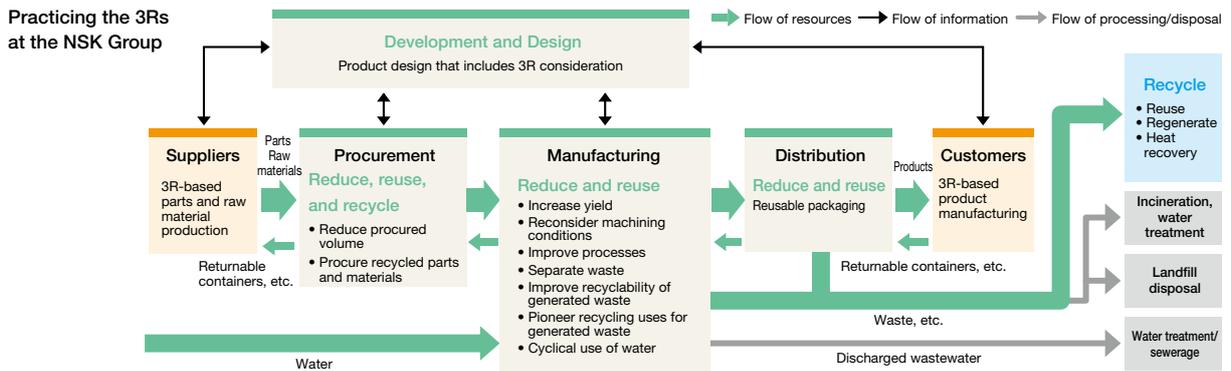
NSK's Approach

The NSK Group aims to efficiently use raw materials and other required resources through reducing, reusing, and recycling (the 3Rs). In this way, we strive to do our part in building a recycling-oriented society. Our development and design divisions work hard to create easily recyclable products that conserve raw materials by designing products that are lighter and last longer. Our manufacturing divisions improve tools and molds and treat in-house waste liquids to make effective use of resources such as steel. Our distribution divisions reduce waste emissions by reusing packaging, among other initiatives. They do their utmost to reduce, reuse, and recycle, with

the goal of eliminating waste sent to incinerators/landfills.

An examination of our water needs revealed that the NSK Group is unlikely to be subjected to restrictions on water use, in light of the locations of our business sites and the volume of water we use. Still, we strive to reduce water usage by, for instance, cyclical use of cooling water and switching to air cooling in manufacturing divisions in preparation for future risks.

In addition, to ensure the proper disposal of waste, we visit and check the sites of contracted industrial waste processors and strive to enhance management using information systems.



Targets and Performance

Long-Term Targets

Minimizing Input and Maximizing Resource Circulation to Eliminate Waste

Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

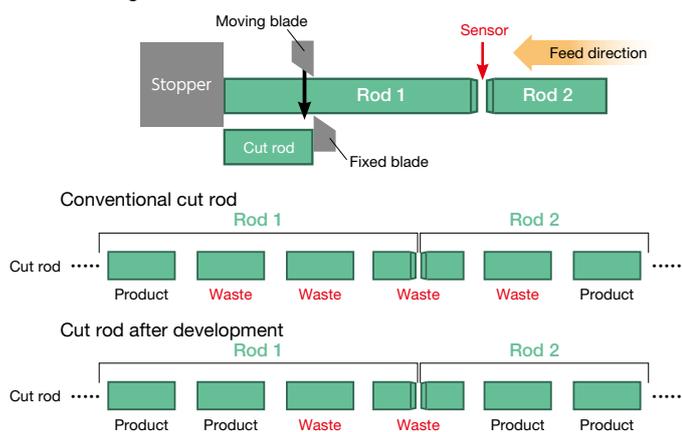
Sixth Mid-Term Management Plan targets	FY2019 targets	Performance in FY2019	Initiatives
Development/ Design	Continue to reduce steel waste	Reduce waste of materials by changing processing methods	<ul style="list-style-type: none"> Developed easily recyclable products that conserve on the use of raw materials Made products last longer Improved yield Designed products for the 3Rs
Procurement	—	—	<ul style="list-style-type: none"> Reduced procurement volume Selected raw materials and parts carefully Procured recycled materials
Manufacturing	Industrial waste per unit of sales 4% reduction from FY2017	Industrial waste per unit of sales 2% reduction from FY2017	<ul style="list-style-type: none"> Improved yield Revised processing conditions Improved production processes Reused products and water Reduced the volume of waste Improved the recyclability of generated waste and developed recycling uses for generated waste
	Recycling rate 99%	Recycling rate 98.7%	
Distribution (Japan)	Water withdrawal per unit of sales 4% reduction from FY2017	Water withdrawal per unit of sales 2% reduction from FY2017	<ul style="list-style-type: none"> Packaging waste per production unit 4% reduction from FY2017
	Packaging waste per production unit 15% reduction from FY2017	Packaging waste per production unit 4% reduction from FY2017	



Manufacturing **Better Utilizing Steel Material**

Some of our automotive parts and steel parts for bearings are hot-forged from cut pieces of steel rod. To make more efficient use of raw steel material, we increased the detection precision of the measurement sensor used when cutting rods. This greatly reduced the percentage of unusable rod end waste.

Reducing Rod End Waste



Note: Steel rods are fed continuously into a cutter and cut into fixed lengths. Lengths that are not the right size appear around the boundary between rods and cannot be used for products. In the past, four pieces including the boundary area could not be used for products, but we reduced this to two by improving the detection accuracy of the sensor. As a result, the length of rod needed to make the same amount of product was reduced by 0.7% to 1.6%.

Manufacturing **Reducing Grinding Waste Liquid**

About 40% of the NSK Group's waste is waste liquid generated during the grinding process. In November 2019, AKS Precision Ball (Hangzhou) Co., Ltd. in China acquired treatment equipment that can distill waste liquid at a low temperature. This reduced waste liquid by 720 tons per year.

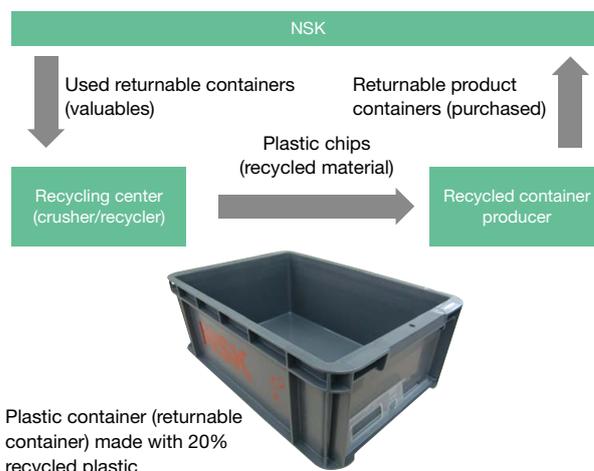


Waste liquid treatment equipment installed at AKS Precision Ball (Hangzhou)

Manufacturing and Distribution **Reducing Waste Plastic**

Plastic waste has become a social problem, with enormous impacts on marine ecosystems. Plastic accounts for only about 1% of the NSK Group's waste, but we still work hard to reduce waste plastic. One of our initiatives is closed-loop recycling of plastic containers (returnable containers) in Japan. In fiscal 2019, we recycled 148 tons of plastic.

Closed-Loop Recycling System



Plastic container (returnable container) made with 20% recycled plastic

Manufacturing **Reusing Water Resources**

PT. AKS Precision Ball Indonesia has built a new waste water treatment facility and started reusing the treated water. Treated water is used for cleaning floors, watering plants, and filling cooling towers.



Waste water treatment facility at AKS Precision Ball Indonesia

For details, see p. 6, "Resource Conservation and Recycling Measures," in NSK ESG Data Book 2020.

Reducing Use of Environmentally Harmful Substances

NSK's Approach

The NSK Group strives to create products that use no environmentally harmful substances. We use the NSK List of Environmentally Harmful Substances to rigorously control environmentally harmful substances in each stage of development and design, procurement, manufacturing, and distribution. The List is based on industry standards such as the EU RoHS2 Directive*1, the EU REACH*2 and SVHC*3, and GADSL*4. We set

and adhere to discretionary standards that are more rigorous than regulations for safeguarding air and water quality from exhaust gas and wastewater generated by production processes. In addition, we press suppliers to practice rigorous management based on the NSK Group Green Procurement Standards and the NSK List of Environmentally Harmful Substances.

*1 RoHS2 is an update for the original "Directive on the Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment" that restricts the use of certain harmful materials in electric and electronic devices distributed in the EU. Currently, 10 substances such as phthalates are regulated.
 *2 Registration, Evaluation, Authorization, and Restriction of Chemicals: A comprehensive chemical substance regulation system that came into force in the EU in June 2007.
 *3 Substances of Very High Concern: A list of candidates for inclusion under EU REACH.
 *4 Global Automotive Declarable Substance List: A list of environmentally harmful substances compiled by consensus of automobile-related manufacturers around the world.

Targets and Performance

Long-Term Targets

- Strive to create products that use no environmentally harmful substances
- Develop and continuously improve the system for managing environmentally harmful substances
- Reduce the use of environmentally harmful substances

Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets	FY2019 targets	Performance in FY2019	Initiatives
Development and Design/ Management	—	Reflect new regulations and customer requests in the NSK List of Environmentally Harmful Substances	● Updated the NSK List of Environmentally Harmful Substances
	Full response to the 10 EU RoHS2 substances	Response to EU RoHS2	● Fully responded to the 10 EU RoHS2 substances
	—	Use parts 100% free of prohibited substances	● Usage: 100%
Procurement (Supplier Collaboration)	Obtain consent to NSK Group Green Procurement Standards from suppliers	Consent to green procurement ● In Japan: Maintain 99% ● Outside Japan: Obtain 95% or higher	● In Japan: 99% ● Outside Japan: 97%
	Full response to the 10 EU RoHS2 substances	Response to EU RoHS2	● Fully responded to the 10 EU RoHS2 substances
	Conduct supplier survey regarding inclusion of substances on the NSK List of Environmentally Harmful Substances	Conduct audits of the management systems for environmentally harmful substances at 124 companies Survey response rate ● In Japan: 100% ● Outside Japan: 95% or higher	● Audited 124 companies and followed up on their corrections ● In Japan: 100% ● Outside Japan: 99%
Manufacturing and Distribution	—	Conduct audits of 20 plants	● Conducted audits of 20 plants and implemented corrections
	Full response to the 10 EU RoHS2 substances	Response to EU RoHS2	● Continuing efforts for full elimination of prohibited substances
	Reduce handling of PRTR-designated substances per unit of sales in production processes	In Japan: Handling of PRTR-designated substances per unit of sales 1% reduction from FY2018	● Increased by 1.6% per unit of sales (total volume down by 14.9%)
Customers	—	Deliver information in response to customer requests	● Communicated information relevant to customer requests



System

Management System for Environmentally Harmful Substances

To reduce the environmental impact of the entire value chain, the NSK Group maintains a system for managing

environmentally harmful substances. We develop rules for the management of environmentally harmful substances in accordance with laws, regulations, and industry standards related to the chemical substances that must be managed.

Management of Environmentally Harmful Substances



Procurement, Design, Manufacturing, and Customers

Green Procurement and Management of Environmentally Harmful Substances

The NSK Group has registered nearly 5,800 environmentally harmful substances on the NSK List of Environmentally Harmful Substances.* Additionally, we established the NSK Group Green Procurement Standards to prevent the delivery of products with prohibited substances. We ask our suppliers to practice thorough management and to maintain and improve their management systems. We hold green procurement briefings around the world, ask our suppliers to submit forms consenting to green procurement, and conduct supplier surveys.

In fiscal 2019, we surveyed our suppliers of parts and auxiliary materials—244 companies in Japan and 234 companies outside Japan—to reconfirm that prohibited substances are not included in our products. NSK customers all around the world use our products. This is why products that contain NSK components must not only comply with laws and regulations worldwide, but also with environmentally harmful substance standards in the automotive, electrical, and electronic industries. Every year, the NSK Group surveys its suppliers based on the NSK List



NSK List of Environmentally Harmful Substances

of Environmentally Harmful Substances. We also respond swiftly to requests for information on environmentally harmful substances from our customers.

* A list classifying environmentally harmful substances as "prohibited" (substances that must not be included in or with delivered products), "reduced" (substances that will be reduced systematically), or "under observation" (substances whose inclusion must be monitored).

Design and Manufacturing

Full Response to the 10 EU RoHS2 Substances

Based on the results of supplier surveys, the NSK Group has created a list of parts confirmed to not contain the 10 substances prohibited under the EU RoHS2 Directive. We confirm that prohibited substances are not included when designing products. The list is also used at each plant when receiving procured parts. Phthalates have been added to the EU RoHS2 Directive. Phthalates have a high migration potential—that is, they move easily through contact. For this reason, we do more than disallow them in product materials; we also conduct global surveys of resins, rubber gloves, packaging, and other materials that our products come into contact with during manufacturing processes. This ongoing initiative aims to eliminate the risk of phthalates migrating to our products during manufacturing.



For details, see p. 7, "Reducing Use of Environmentally Harmful Substances," in NSK ESG Data Book 2020.

Biodiversity Conservation

NSK's Approach

The NSK Group strives to determine the impact of its business operations on biodiversity, promote positive impacts, and control negative impacts based on the NSK Biodiversity Guidelines and Action Agenda. NSK uses a great deal of special steels in its bearings and other products. Since these are made from recycled iron scrap, they consume fewer natural resources. We believe that our business operations therefore have a comparatively minor impact on biodiversity.

However, since the loss of biodiversity on a global scale is a serious issue, we do our part to reduce that loss as much as possible and to help restore biodiversity. The NSK Group's efforts in this area include both business and social contribution initiatives—for instance, assessing biodiversity risk, protecting important species on plant premises, conserving energy and resources, and creating environmentally friendly products.

NSK Biodiversity Guidelines

Basic Policy

The NSK Group recognizes the importance of biodiversity, and understands the relationship between our business activities and the ecosystem. We aim to reduce our impact on the environment by creating systems and initiatives that ensure biodiversity is conserved.

Action Agenda

1. Research and Development

We will contribute to the conservation of biodiversity by developing products that save energy and resources.

2. Procurement and Purchasing

We will contribute to the conservation of biodiversity throughout the supply chain when procuring main materials, sub-materials, and packaging/packaging materials. We will promote the purchase of the environmentally-friendly products, and consider the conservation of biodiversity in product selection criteria.

3. Manufacturing and Logistics

We will minimize the impact of our production on biodiversity by reducing consumption of energy and resources, and emission of environmentally harmful substances.

4. Plant and Office Grounds

We will consider the impact on the ecosystem when acquiring land for our places of business and during greening initiatives.

5. Social Contribution Activities

We will perform social contribution initiatives as a member of international society, and value our collaboration with public and private institutions.

6. Communications

We will actively disclose information on biodiversity-related initiatives to persons both inside and outside the company. We will heighten employee awareness of biodiversity-related issues, and constantly work to improve the quality and efficiency of initiatives.

Established October 5, 2010 NSK Ltd.

Main Initiatives in FY2019

Action agenda classification	Overview of main biodiversity initiatives
Research and development	<ul style="list-style-type: none"> ● Creating Environmentally Friendly Products (p. 30)
Procurement and purchasing	<ul style="list-style-type: none"> ● Fighting Global Warming and Climate Change (p. 34) ● Reducing Use of Environmentally Harmful Substances (p. 40) ● Green purchasing and green procurement ● Reducing Waste Plastic (p. 39) ● Resource Conservation and Recycling Measures (p. 38) ● Using recycled materials ● Milk runs and modal shift
Manufacturing and logistics	
Plant and office grounds	<ul style="list-style-type: none"> ● Protecting important species ● Conducting biodiversity risk assessments (IBAT* analysis) ● Conducting environmental impact assessments during plant construction
Social contribution activities	<ul style="list-style-type: none"> ● Preservation of <i>Satoyama</i> (woodland areas near human settlements) ● Planting activities ● Efforts to reduce ocean plastic pollution (cleanups) ● Efforts to remove specific invasive species ● Donating to organizations
Communication	<ul style="list-style-type: none"> ● Cooperation with NPOs, local governments, local residents, and organizations ● Inclusion in internal and external communications

* IBAT: Integrated Biodiversity Assessment Tool. A tool provided by BirdLife International, Conservation International, IUCN (International Union for Conservation of Nature and Natural Resources), and UNEP-WCMC (UN Environment Programme World Conservation Monitoring Centre) to help businesses assess biodiversity risks.



Biodiversity Risk Assessments (IBAT*¹ Analysis)

A survey of protected areas within a three-kilometer radius of all NSK Group production sites revealed one IUCN Category Ib*² site and two Ramsar wetland sites. (The survey encompassed World Natural Heritage Sites; IUCN Categories I, II, and III; and Ramsar Sites) We do our utmost to care for biodiversity at these sites.

*1 See note on p. 42.

*2 IUCN Ib: Wilderness Area

Protecting Important Species on Plant Grounds (Japan)

We will continue to protect important species that make their homes on our plant premises.

Fukushima: Fukushima Plant: wild grey-headed lapwings*³

Kanagawa: Kirihara Precision Machinery Plant: Golden Orchids*⁴



Wild grey-headed lapwings (Fukushima)

*3 Class IB endangered species on the Fukushima Red List.

*4 Class II endangered species on the Ministry of Environment Red List and Class II endangered species on the Kanagawa Prefecture Red List.

Efforts to Remove Specific Invasive Species (Japan)

Shiga: Since fiscal 2014, the Ohtsu Plant has been removing invasive fish species from Lake Biwa, which is a Ramsar Site. In fiscal 2019, 53 people joined the removal activities.

Saitama: Since fiscal 2016, the Saitama Plant and NSK Machinery Co., Ltd. have been working to protect the native habitat of the waterwheel plant (*Aldrovanda vesiculosa*), a protected species, in Houzouji Marsh under the guidance of Hanyu City officials. In fiscal 2019, 20 people joined the efforts to remove tadpoles of American bullfrogs, which eat the waterwheel plant.



Efforts to remove American bullfrogs (Saitama)

Satoyama Preservation and Nature Observation Workshops (Japan)

Kanagawa: Since fiscal 2015, employees and their family members from five sites in the Fujisawa area have participated in *satoyama* preservation and nature observation workshops in special green zones. In fiscal 2019, 90 people participated in the activities.

Fukushima: Some 110 people from the Fukushima Plant joined local government officials and local residents to plant 530 trees, including *Edohigan* cherry trees.

Shiga: The Ishibe Plant worked with a local forest owners' cooperative on the conservation of green spaces.

Shizuoka: NSK-Warner K.K. and Chitose Sangyo Co., Ltd. held an indoor/outdoor nature viewing event at a natural history museum, bringing together 58 people including employees and their family members.



Planting activities (Fukushima)

Tree Planting and Donation of Seedlings (Thailand, Indonesia, India)

Thailand: NSK Bearings Manufacturing (Thailand) Co., Ltd. participated in tree planting activities, drawing a total of 800 people, including government officials, to help prevent global warming.

Indonesia: PT. AKS Precision Ball Indonesia and PT. NSK-Warner Indonesia planted about 200 mangrove trees in collaboration with companies located in the same industrial park.

India: In 2019, NSK Bearings India Private Ltd. planted 50 trees together with local residents and donated 100 saplings.

India: Rane NSK Steering Systems Ltd. donated 1,000 young trees to the community.



Planting activities (Thailand)



Mangrove planting (Indonesia)

Wildlife Conservation (Thailand)

Thailand: At Siam NSK Steering Systems Co., Ltd., 137 people, including employees and their family members, helped to make saltlicks for wild elephants and released fish in a wildlife conservation area.



Making a saltlick for elephants (Thailand)

Reducing Ocean Plastic Pollution (Japan, U.S., and More)

Japan, U.S., and other countries: Cleanup activities are conducted regularly to remove plastics and other trash from around our plants.

In fiscal 2019, some 500 people, including employees of the Saitama Plant, Saitama Precision Machinery Plant, Ohtsu Plant, NSK-Warner K.K., and NSK Toyama Co., Ltd. in Japan as well as NSK Precision America, Inc., the Liberty and Franklin plants of NSK Corporation in the U.S., and other sites participated in these cleanup activities.



Cleanup activities (U.S.)

For details, see p. 8, "Biodiversity Conservation," in NSK ESG Data Book 2020.

Research and Development

NSK's Approach

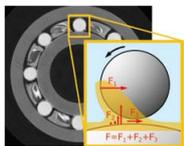
At the NSK Group, product and technology development is driven by the “Four Core Technologies +1.” These are tribology, materials, numerical simulation, and mechatronics—plus manufacturing engineering. R&D plays an essential role in realizing the NSK Corporate Philosophy, which clearly lays out the company's responsibility to contribute to a safer, smoother society and help protect the global environment. R&D gives shape to our solutions, contributing to energy savings and reduced CO₂ emissions. We aim to speedily supply the market with sophisticated products, offering new features that accurately meet the needs of customers and society. Through R&D activities, we contribute to creating a brighter, more prosperous society for all.



Four Core Technologies + 1

Tribology

Studying, Clarifying and Controlling Friction



Friction on the bearing's ball surface

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

Unrelenting Pursuit of Performance Durability and Reliability



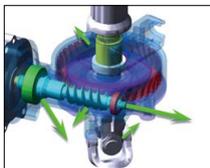
Durability testing machines

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.

Four Core Technologies

Numerical Simulation

Simulated Recreation in Cyberspace to Predict Performance



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

Technology Supports People for a Convenient, Safe and Comfortable Future



NSK vibration control actuator for train cars

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.

+1

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



System

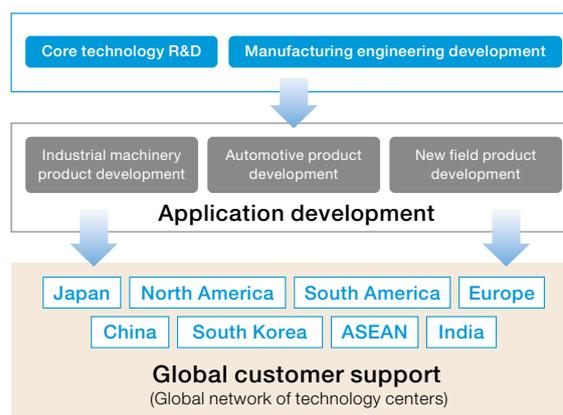
R&D Organizational Structures

To increase its technical capabilities on a global level, the NSK Group created the Technology Development Division Headquarters as an organization under the direct control of the President & CEO. The organization oversees and executes tasks such as the planning and implementation of technology strategy, the control and management of technology-related risks, and human resource development. The Core Technology R&D Center, the New Field Products Development Center, and the CMS Development Center, which are under the umbrella of the Technology Development Division Headquarters, carry out R&D and product innovation to meet social needs and customer requests while collaborating with outside research institutions, universities, and venture firms.

The NSK Group operates technology centers at 16 sites in 10 countries and regions, including Japan, the Americas, Europe, China, South Korea, ASEAN, and India. This worldwide network ensures a flexible, swift response to customers' wide-ranging needs in each locale. These

technology centers develop new technologies and next-generation products to meet local needs and work hard to enhance technical services.

Technology Development Process



Intellectual Property Management Structure

NSK has established an Intellectual Property Department under the Technology Development Division Headquarters. In cooperation with business division headquarters and technical departments in each region, the Intellectual Property Department formulates and implements an intellectual property strategy for the entire NSK Group and makes efforts in step with global expansion of the business.

Intellectual property	Main initiatives
Patents	The NSK Group's technology strategy seeks to leverage its development outcomes in the form of stronger patent rights. This helps to secure new markets for NSK products, while expanding NSK's business domains. To that end, our design and development divisions work closely with the Intellectual Property Department to file patent applications.
Trademarks	We actively pursue trademark rights in an effort to maintain and develop confidence in the NSK brand. In January 2018, the registered trademark "NSK" acquired protection in China as a "well-known brand."

Sixth Mid-Term Management Plan Targets (FY2019–2021) and FY2019 Performance

Sixth Mid-Term Management Plan targets	Performance in FY2019
Unrelenting pursuit of NSK's core technologies ("Four Core Technologies +1")	<ul style="list-style-type: none"> Developed smaller and lighter technologies Recent years have seen greater demand for smaller, lighter bearings that can help save energy and resources. To make bearings smaller and lighter requires improving the strength of the materials they are made from. We make the most of our leading materials technologies to pursue R&D into stronger, longer-lasting materials. We employ digital assessment technology to review metallographic structure as a means of increasing material strength. This assessment technology has given us effective indicators of structural strain dispersal, which has led to faster development. Developed smoother technologies We use tribology to visualize and monitor friction phenomena and use numerical simulation to reproduce these processes—all in pursuit of a smoother-running world. We have developed a tribological technology to visualize lubrication (oil film) conditions during bearing operation. During simulations, we are able to reproduce on a computer the movement of grease inside bearings. NSK's advancements are contributing to the development of low-friction bearings, and they have received high praise in the industry, winning us an award from an academic society.* Utilized expertise and technology from outside the Group We are moving forward with open innovation in collaboration with external organizations such as universities and companies.

* NSK received the "Fiscal 2019 Tribology Technology Award" from the Japanese Society of Tribologists. <https://www.nsk.com/company/news/2020/0618a.html>

Research and Development

Highlight

Pioneering the Future of Sustainable Electric Vehicles with Open Innovation Development of Third-Generation In-Wheel Motor with Dynamic Wireless Charging

Social Issues and Background

The need to reduce automotive CO₂ emissions means that electric vehicles (EVs) will soon be mainstream. The challenge is that the distance EVs can travel per charge is shorter than a conventional vehicle can go per tank of gasoline. One potential solution is gaining ground: dynamic wireless charging technology, which is able to 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 has been conducting research to apply this technology to EVs. In 2015, we developed the first-generation system for wirelessly charging in-wheel motors; in 2017, the second-generation, which successfully charged motors in-motion; and in 2019, the third-generation, which provides greatly improved performance.



Third-generation in-wheel motor with dynamic wireless charging

Open Innovation

NSK is carrying out research into dynamic wireless charging with the University of Tokyo, Bridgestone Corporation, and Denso Corporation. The project has been selected for support under the Japan Science and Technology Agency's Mirai Program, which aims to create game-changing technologies for the future—in this case, direct dynamic wireless charging of in-wheel motors. We will leverage open innovation to accelerate the progress of this technology by making the underlying intellectual property open-source.

Dramatic Improvement in the Convenience of EVs

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

Combination with Renewable Energy

Solar and wind power are becoming increasingly important, 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 installed in EVs are therefore in the spotlight. With conventional technology, only EVs that connect to charging stations would be usable. When in-motion charging becomes a reality, however, all EVs could be available, making it possible to cope with larger fluctuations in power generation.

News Release

<https://www.nsk.com/company/news/2019/1024a.html#>

NSK Stories

<https://www.nsk.com/company/news/stories/2020/0115a.html#>



Envisioning a Sustainable Future of World Energy

Daisuke Gunji
Powertrain Technology Development Department

One of the changes in automobiles making news is electrification. Electrification, however, needs to be considered from a broad perspective, including not only the parts incorporated into vehicles, but also how electricity is

made and how it is supplied to cars. This has implications for the overarching issue of how we can make the future energy supply of the world sustainable. Everyone involved in this joint research project is well aware of this issue.



Initiatives in Fiscal 2019

In fiscal 2019, the NSK Group developed products that contributed to global sustainability. These include products that help to enhance functionality, reduce environmental impact, improve reliability, and reduce maintenance of industrial machinery. Other new products contribute to energy savings, safety, and comfort of vehicles, responding to the call for automotive innovations epitomized by the keyword “CASE,” which stands for connected, autonomous, shared, and electric.

We also strove to enhance our evaluation and simulation technology. Efforts in this area included strengthening our relationships with external research institutions and, in particular, proactively adopting the latest technologies, namely digital

technologies such as computer simulation, which is advancing rapidly, and data processing technologies such as AI. As just one highlight of our pursuit of open innovation, we are now collaborating with cutting-edge researchers and venture companies.

R&D Expenses

	FY2017	FY2018	FY2019
R&D expenses	17.1 billion yen	19.0 billion yen	18.3 billion yen

Sales Share of New/Improved Products

	FY2017	FY2018	FY2019
Total sales share of new/improved products	21%	18%	18%

Developments Contributing to Social Issues

Developing Environmentally Friendly Products

In addition to R&D expenses as typically recognized in common accounting standards, NSK sees all expenses involved in the technology divisions as a form of R&D expense, in a broader sense. In fiscal 2019, we invested ¥31.4 billion in R&D expenses. Of these, development expenses related to environmental protection came to ¥10.8 billion, or 34% of the total.

 For details, see p. 30, “Creating Environmentally Friendly Products.”

R&D Contributing to Emerging Countries

In emerging markets, road conditions are often poor. Dirt roads and rainy season flooding are common. Hub unit bearings in automobile wheels are the vehicle part closest to the road surface, so they are the first to face these harsh muddy environments. NSK has developed a water-resistant grease that extends bearing life even if water gets into the bearing. This further improved the longevity and reliability of our hub unit bearings.

Expanding Engagement in Open Innovation

The NSK Group’s practice of open innovation combines original technologies and ideas from different industries and fields, including those created by universities, local governments, and venture companies in and outside Japan. We leverage open innovation to find the seeds of new businesses, building on the original technologies and products we have developed as a bearing manufacturer. Our efforts also align with the Japanese government’s promotion of a “super-smart society” (Society 5.0).

Open Innovation at Shonan Health Innovation Park

Shonan Health Innovation Park (iPark) is a science park home to many pharmaceutical and related equipment manufacturers as well as research institutes. NSK provides its manipulator technology to leading biomedical researchers and venture companies located in the park’s biochemistry area.



Product demonstration

 For details, see the NSK website. <https://www.nsk.com>

Home → Company → News → NSK Joins iPark Health Innovation Initiative (September 2, 2019 press release)

Other Examples of Open Innovation

- Signed a sponsorship agreement with CARTIVATOR Resource Management, a general incorporated association aiming to make flying cars a reality
- Capital tie-up with WHILL, Inc. in the field of next-generation personal mobility

 For details, see p. 9, “Research and Development,” in NSK ESG Data Book 2020.

Occupational Health and Safety

NSK's Approach

The NSK Group has positioned safety as one of its core values. We continuously strive to increase our employees' safety awareness so that safety will always be their basis for determining the best course of action. We implement various measures based on our Safety Philosophy to protect the safety and health of every employee, and to ensure the safe conduct of everyone in the workplace. Never content with the status quo, we are constantly working to further raise the level of safety.

NSK Group's Safety Philosophy

The personal health and safety of NSK employees is given the utmost priority in all of our business activities and is fundamental to our sustainable growth. The NSK Group is committed to ensuring safe and healthful work environments for NSK employees, and also works to protect the safety and health of the contractors and business partners at NSK business sites.

We are committed to protecting the safety and health of all employees and business partners working within the NSK Group. This philosophy expresses our conviction that safety takes precedence over any business concern and that corporate activities depend on safety. It is the foundation of each and every NSK Group employee's mindset. In all our workplaces worldwide, employees

take action on one's own initiative to ensure safety and to create comfortable environments where they can work with peace of mind.

NSK Group Safety Policy

- Prevent fatal and serious accidents
- Increase safety awareness
- Prevent accident reoccurrence

The NSK Group's safety policy sets out the three priority measures listed above. These guide our efforts to create safe, secure, and comfortable workplaces. To prevent fatal and serious accidents, we engage in "STOP6 + 2" activities and strive to build environments that ensure business partners such as outside contractors can work safely. To increase safety awareness, we are working to give everyone more time to think about safety. For example, we have implemented "Look Across Activities," which encourage each and every employee to see accidents at other sites as relevant to their own workplace and to reflect on hazardous areas, risks, and safe work practices. We also practice "Safety Contact," an activity where employees share their experiences and examples of incidents related to safety at the beginning of meetings. To prevent accident reoccurrence, we systematically conduct risk assessments (RA) to identify risks in both equipment and work procedures and implement improvements accordingly.

System

Organizational Structure for Occupational Health and Safety Management

The NSK Group appreciates the importance of a proactive approach toward safety and health to a sustainable manufacturing process. Accordingly, we established a Safety and Fire-Prevention Enhancement Committee chaired by the president. We also adopt unified priority objectives through two bodies that hold regular meetings on global safety and fire-prevention issues—both for the regional heads of operation and for regional safety and fire-prevention managers.

Occupational Health and Safety Management System

The NSK Group has developed an occupational health and safety management system that complies with requirements established by international certification bodies and other

related regulations. We strive to foster a "safety first" culture and to fully engage employees at all sites in safety efforts. We quickly and globally share information on any occupational health and safety incidents that do occur, as well as the corresponding countermeasures, in order to prevent a recurrence of similar incidents.

In fiscal 2019, we continued efforts to acquire certification in the international standard covering occupational health and safety management systems. Three sites in Japan and eight sites outside Japan have acquired certification for ISO 45001.* We plan to progressively acquire more certifications in and outside Japan in fiscal 2020.

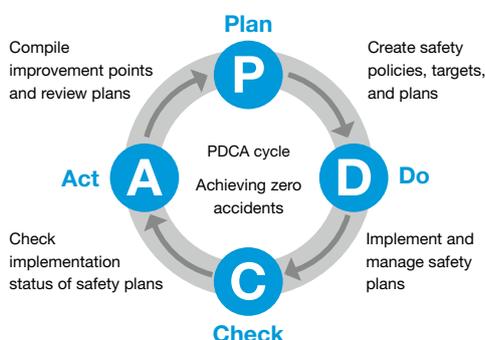
* The international standard covering occupational health and safety management systems issued by the International Organization for Standardization (ISO) in March 2018.



Global Safety and Fire-Prevention Management System



Safety Management System



Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets		FY2019 targets	Performance in FY2019
Prevent fatal and serious accidents	Each production site manages its own PDCA cycle for identifying dangerous spots and their improvement	Raise the level of STOP6 + 2 activities and realize self-driven initiatives in identifying and reducing risks at each site	<ul style="list-style-type: none"> Manuals and evaluation sheets used at each site; achieved self-driven initiatives through visualization of activities to reduce dangerous spots
	Enhance safety management of outside contractors	Improve the level of rule guidebook use for construction by outside contractors	<ul style="list-style-type: none"> Introduced the latest version of our rule guidebook for construction by outside contractors and created a web-based system for managing construction
Increase safety awareness	Train and implement behavior that increases safety awareness, including KYT* and the safety practice of pointing and calling	Increase the amount of time employees spend thinking about safety and continue to raise the level of activities aimed at increasing each employee's awareness toward safety	<ul style="list-style-type: none"> Practiced Safety Contact in each division; shared opportunities to think about safety from new perspectives at every meeting
	Further enhance safety management through continuous ISO 45001 certification	Acquire ISO 45001 certification at three sites in Japan and eight global sites	<ul style="list-style-type: none"> Obtained ISO 45001 certification and began implementing it at three sites in Japan and eight global sites
	Newly establish the Safety and Fire Prevention Training Center and foster an advanced safety culture	Take all preparatory steps to open the Safety and Fire Prevention Training Center in 2020	<ul style="list-style-type: none"> Decided on procedures for operating the Safety and Fire-Prevention Training Center; finished preparations to start training
Prevent accident reoccurrence	Expand the "Look Across Activities" to operators on the shop floor (seeing accidents at other sites as relevant to one's own workplace and learning lessons from those accidents)	Advance the "Look Across Activities" up to the operator level	<ul style="list-style-type: none"> Started implementing the use of "Look Across" sheets in Japan and started an evaluation system for improvement suggestions outside Japan; advanced "Look Across Activities" to the individual operator level
	Identify risks through risk assessment of equipment and work procedures and implement countermeasures for those risks	Implement, identify and evaluate risks of existing equipment through risk assessments and countermeasures	<ul style="list-style-type: none"> Conducted risk assessments of existing equipment according to the risk assessment plan and promoted countermeasures implementation

* KYT: *Kiken Yochi* (hazard prediction) Training

Global Lost Time Injury Frequency Rate

With the above initiatives, the lost time injury frequency rate is decreasing year by year.

	FY2017	FY2018	FY2019
Lost time injury frequency rate*1	0.60*2	0.37	0.35

*1 Lost time injury frequency rate = Number of work accidents resulting in one or more days of work absence / total actual working hours × 1,000,000

*2 Revised to improve accuracy.

Occupational Health and Safety

Highlight

Strengthening the Safety Management System: Using the Safety and Fire-Prevention Intranet Site

Collaborating and Sharing Information Globally in Real Time

The Intranet Site for Safety and Fire-Prevention

Since December 2016, the Safety and Fire-Prevention Enhancement Office has been posting safety and fire-prevention updates on the Company's intranet home page to keep NSK Group employees informed. We also provide timely information to each NSK Group site globally, including announcements of safety and fire-prevention activities and slogans being rolled out across the Group, as well as awards for outstanding safety posters.

Intranet Information

The Safety and Fire-Prevention Intranet Site provides information in four categories—disaster and accident information and reporting, manuals and rules, subcommittee activities, and audit results—as well as the latest information updates. In addition, we disclose our global policies, priority measures and targets, and also share the number of days free of accidents at each NSK plant worldwide. This has led to a higher awareness of accidents, and has encouraged each plant to keep its string of accident-free days going.

Items Posted on the Intranet

- Philosophy, policies
- Rules
- Manuals
- Educational videos
- Disaster and accident information
- Subcommittee information
- Audit results
- Information on activities to prevent fatal and serious accidents
- Videos on work safety tips (Japanese/English)
- Safety improvement activities
- Information related to chemical RA
- Safety newsletter

Latest information shared globally in real time

Access the intranet to get information

Plant case study

Safety education video

Gather information with one click. Provided conference rooms for remote use.

Original banner

Occupational Safety Measures

The NSK Group employs two approaches to raise individual safety awareness: ongoing activities to increase safety awareness, and initiatives to give people more time to think about safety. *Kiken Yochi* (hazard prediction) Training (KYT), communication of near-miss incidents, and the safety practice of pointing and calling are implemented at workplaces on an ongoing basis as continuous activities to increase safety awareness. KYT is intended to prevent workers from getting stuck in unconscious routines. Past accidents and near-miss incidents at each workplace are

compiled into a booklet, and everyone recites them in unison at morning briefings and other occasions. Our initiatives to give people more time to think about safety include “Look Across Activities,” “Safety Contact,” and group activities related to safety. In these group activities, safety-related themes are set twice a year for sites in Japan, and improvement activities are carried out with the participation of all employees. Awards are given for outstanding activities.



Increasing Safety Awareness

Pointing and Calling

NSK Group sites in Japan follow the three steps below in the safety practice of pointing and calling. We also share best practices for this activity company-wide in an effort to spread them to all sites.

Three Steps of Pointing and Calling

Step1	Identify the work procedures that require pointing and calling
Step2	Clarify the key points that require pointing and calling
Step3	Point and call out loud when performing the work procedures

Practicing “Safety Contact” in Each Department

The NSK Group practices “Safety Contact” at the beginning of meetings, morning briefings, and other occasions. This is an activity in which employees share their thoughts and ideas about safety. It gives employees more time to think about safety, with the expectation that this will enhance sensitivity to safety issues. The program has received positive feedback such as: “It’s easy

to relate to stories I hear from people close to me,” and “It allows me to see different ways of thinking about safety in a new light.” The NSK Group will continue using “Safety Contact” as a safety enhancement tool.

“Look Across Activities”

At the NSK Group, we ask employees to see accidents at other sites as relevant to their own workplaces and examine those incidents to identify similar risks in their surroundings. Countermeasures are then implemented for those identified risks to prevent the recurrence of the accidents. We call these efforts “Look Across Activities.” Carrying out “Look Across Activities,” either on a workplace or individual level, makes it possible to identify new risks and make the working environment safer. These activities also increase communication about safety in the workplace and help to foster an interdependent safety culture in which employees are motivated to challenge one another on the safety of their actions.

Preventing Fatal and Serious Accidents

STOP6 + 2 Activities

The NSK Group conducts “STOP6 + 2” activities as a means of preventing fatal and serious accidents. STOP6 is an initiative for occupational safety designed to prevent fatal and serious accidents. STOP6 classifies accidents in the manufacturing industry into six major types and defines key prevention activities. In addition to the accident types identified by STOP6, the NSK Group addresses “oxygen deficiency and poisoning” and “accidents caused due to an employee working alone” as two additional accident types in its “STOP6 + 2” activities.

Major Accident Types in STOP6 + 2 Activities

1	Getting caught-in or entangled
2	Contact with heavy objects
3	Contact with vehicles
4	Falling down or falling from a height
5	Electric shock
6	Work with hot objects, accidents caused by explosions
+ 2	1 Oxygen deficiency and poisoning
	2 Accidents caused due to an employee working alone

Preventing Accident Reoccurrence

Using Video to Share Cases of Accidents

The NSK Group in Japan posts cases of accidents on its intranet to share information. In the past, details of accidents were posted in writing. However, we received feedback that all of the technical terminology made it difficult for employees outside of manufacturing departments to understand the accidents and

what caused them. Now, we post videos depicting recreations of accidents, which we believe has made it easier for everyone to “look across” and see how such accidents are relevant to their own workplaces. At some sites, all employees watch these videos together at morning briefings in order to start the day with a heightened awareness of safety.

For details, see p. 9, “Occupational Health and Safety,” in NSK ESG Data Book 2020.

Quality Assurance

NSK's Approach

With quality as one of its four core values, the NSK Group 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 our Quality Assurance Vision 2026 (100% good products and services that put the customer first), we engage in activities based on the Three Pillars of NSK Quality Assurance.

Three Pillars of NSK Quality Assurance



1. NSK Product Development System (NPDS)	To quickly transform new orders into reliable, stable production, we promote initiatives that incorporate quality into individual processes.
2. NSK Quality No. 1 (NQ1) Program	We work hard to realize stable production and ensure zero defects.
3. Human Resources Development	We promote human resource development to build a stronger foundation for quality systems.

Quality Assurance Vision 2026

Our Quality Assurance Vision 2026 sets clear goals and expectations to achieve by 2026. It has Three Pillars, as mentioned above. Across the NSK Group, we are working to build a seamless, consistent system for quality improvement, leveraging inter-departmental collaboration to achieve our

goal of being No. 1 in Total Quality. This includes quality at every operational stage, from design and manufacturing, to supplier management and field responsiveness.

Our goal is 100% good products and services that put the customer first, by 2026.

FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027		
Fifth Mid-Term Management Plan			Sixth Mid-Term Management Plan			Seventh Mid-Term Management Plan			Eighth Mid-Term Management Plan				
Market and customer-centric quality that delivers safety and security													
Enhance the quality foundation <ul style="list-style-type: none"> Reinforce the global quality assurance organization Ensure quality plans and policies are fully adopted Promote global quality human resource development Monitor product quality in the field and improve incident responsiveness 			Minimize quality risks <ul style="list-style-type: none"> Minimize 4 Ms quality risks Enhance onsite quality assurance (design/manufacturing/suppliers) 			Improve quality value <ul style="list-style-type: none"> Create appealing quality Improve business quality 			Quality Assurance Vision 2026 <p>100% good products and services that put the customer first</p>			Objectives <ul style="list-style-type: none"> Contribute to society by delivering total quality Maintain an approach to quality that customers will evaluate highly Ensure all employees think and act based on the quality-first principle according to high-quality ethics 	

System

Quality Assurance Organizations

The NSK Group has established the NSK Quality Committee, chaired by the president, to supervise Group-wide quality management. The president and heads of each business division headquarters meet in the committee three times a year to review the state of quality control and discuss

quality issues, necessary initiatives, and related matters. NSK's Quality Assurance Division Headquarters serves as the global lead for quality management, assisted by quality committees in each business division headquarters. Together, they work to strengthen quality improvement efforts by promoting cooperation among the manufacturing,

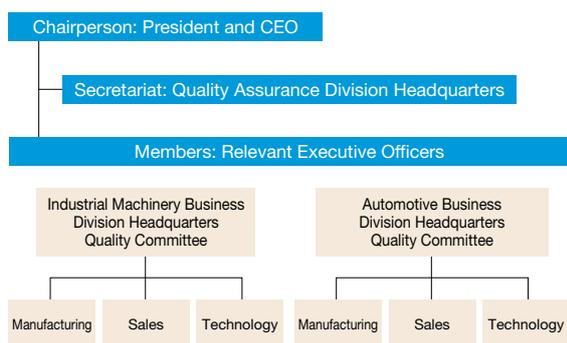


sales, and technical departments. The headquarters also reports the Group-wide status of quality management to senior management at monthly Executive Officers' Meeting.

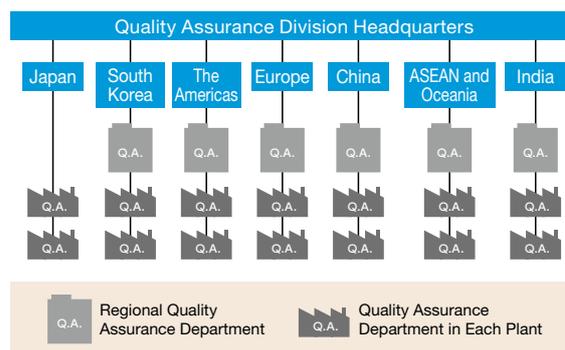
We have established regional quality assurance departments in South Korea, the Americas, Europe, China, ASEAN/Oceania, and India. This global quality assurance

system has been built to meet customer needs in each country and region, as the highest priority. Annual global meetings and biannual regional meetings on quality are held to share and discuss quality-related information and to strengthen monitoring, oversight, and the support structure in each region.

NSK Quality Committee



Global Quality Assurance Organization



Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets		FY2019 targets	Performance in FY2019
Market and customer-centric quality that delivers safety and security Minimize quality risks ● Minimize 4 Ms quality risks ● Enhance onsite quality assurance (design/manufacturing/suppliers)	● Verify performance with a complete grasp of the level and conditions required by the market ● Improve field quality	Strengthen NPDS activities	● Enhanced design reviews ● Created a platform for global design <i>kakotora</i> (quality problems experienced in the past) ● Developed a platform for systemizing field quality concerns
	● Improve procurement quality ● “Dantotsu” improvement activities (ongoing activities for zero defects)	Reduce loss costs from defects Prevent quality problems at customers caused by suppliers	● Established the Global Quality Audit Office ● Improved quality to keep defects at zero ● Established the Supplier Quality Audit Group ● Promoted activities to improve supplier quality (standardized evaluations/audits)
	● Identify front-line (<i>gemba</i>) 4 Ms quality risks, review good product conditions ● Enhance reoccurrence prevention	Prevent irregular procedures attributable to a lack of process capability Address <i>kakotora</i> (quality problems experienced in the past)	● Review of customer quality problems/action to prevent recurrences ● Optimized Quality Investments
	● Foster quality-first human resources development	Thoroughly disseminate the standards for each process	● Established “Quality-Dojo” globally ● Improved communications (weekly reporting system, regional meetings)
		Enhance awareness of quality	
		Reflect customer needs in specifications	
		Improve communication between design and manufacturing departments	
		Unify the activities of regional quality assurance departments	

Quality Assurance

Highlight

Quality-Dojo Maintains and Supports NSK's High-Quality Manufacturing Expertise

The NSK Group provides a range of education and training programs to maintain and develop the human resources needed to ensure high quality manufacturing. We leverage collaboration across divisions to ensure that we offer high-quality products and services that satisfy our customers. In fiscal 2019, we created an area called *Quality-Dojo* in each plant. Sharing the same structure worldwide, *Quality-Dojo* helps to develop well-rounded human resources who have total familiarity with every aspect of manufacturing.

Quality-Dojo is being set up inside all of the Group's major plants: 17 plants in Japan and 40 plants outside Japan (2 in South Korea, 11 in China, 9 in the U.S., 6 in Europe, 7 in the ASEAN region and 5 in India). It is tasked with training all employees on six key items determined by the Quality Assurance Division Headquarters.

In fiscal 2019, we focused on setting up *Quality-Dojo* and creating the educational curriculum.

Quality-Dojo

NSK's *Quality-Dojo* is a place where employees can refine their knowledge and skills related to quality. It aims to help each trainee to develop sound judgment when it comes to ensuring quality. It also encourages employees to refocus on putting both the customer and quality first.

Teachers and assistant instructors will be appointed to all *Quality-Dojo* to manage them comprehensively, ensuring the enhancement and renewal of educational content to the training of instructors and the formulation of educational curricula.

Quality-Dojo training is for both management and employees. It is designed to improve quality awareness by ensuring that everyone acquires broad knowledge about products, quality problems experienced in the past (called *kakotora*), and inspection methods. It also enables them to make connections between their own work and quality assurance. In fiscal 2020, we plan to establish separate *Quality-Dojo* for the product design stage at major NSK sites.

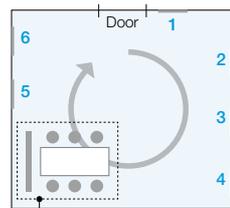


Quality-Dojo at Ohtsu Plant (Japan)



Quality-Dojo at Fukushima Plant (Japan)

Quality-Dojo Objectives (Six Key Items)



Sample room layout shared with Dojo worldwide

Quality-Dojo classroom (table, chairs, and monitor)

Provide places for all employees to realize the importance of being No. 1 in Total Quality by learning about and discussing quality.

1. Importance of quality, Vision 2026
 - CEO's approach to quality
 - Group-wide and plant quality policies
2. Product knowledge
 - How NSK products are used
 - Problems that could occur if we provide a defective product
3. *Kakotora* (quality problems experienced in the past)
 - Major defects in the past
 - Recent quality problems
4. Procedure manuals
 - Importance of adhering to procedure manuals
 - Distinctive procedure manuals
5. Dimension and accuracy measurements, visual inspections
 - Measuring equipment (actual)
 - Measurement key points and limit samples for visual inspection
6. Nonconformity, abnormalities and defective product control
 - Non-conforming/abnormal products (actual)
 - Rules for operation interruptions

"Nice Plays" by Operators Prevent Defective Products from Slipping Through

During an assembly process at a plant, an operator noticed that the finish on the outer surface of an outer race was unusual. As a precaution he returned the questionable part to the shape measurement step in the previous process. It was then discovered that the part dimensions did not meet the specifications. This is what we mean by a "nice play"—a smart move by an employee that contributes to quality assurance. The kind of finish defect the operator noticed is difficult to detect even during a final inspection, and the defective products could have even ended up in the hands of a customer. The heightened quality awareness of the operator, however, prevented this.



Recognizing cases of outstanding quality assurance efforts by employees with "Nice Play" awards at each plant

Quality Improvement Initiatives

To ensure quality that puts customers first, and enduring quality in the field, the NSK Group strives to secure and improve quality throughout the product process, from design, to procurement from suppliers, to manufacturing.

NSK is promoting total quality through the four initiatives shown on the right.



Initiatives to Enhance Field Quality

As a firm that services the manufacturing sector, the NSK Group aims to achieve a level of quality that meets the expectations of society at large. This is why we not only strive to satisfy our direct customers, but also look beyond to assess the needs of the end users who use products with NSK components. Our system enables us to both propose and deliver quality products and services that thoroughly fulfill both customer and social needs.

Customer Management Database

In order to accurately meet customer requests, the NSK Group provides technical support related to design and expert knowledge on product usage. We have also established a database of information such as response history for customer inquiries. The information gathered from various countries and regions is used to improve our products and services.

After being honored with a Quality Control Award from Hino Motors, Ltd. in 2019, NSK received the Quality Control Excellence Award in March 2020 for achieving zero delivery defects for the second consecutive year.



NSK receives the Quality Control Excellence Award from Hino Motors, Ltd.

Initiatives to Enhance Design Quality

The NSK Group incorporates feedback from customers into its designs to enhance quality in the design stage. We make every effort to design products with a superior level of quality by drawing on our expertise and experience in the market, cultivated over many years. We always strive to meet our own unique quality targets, going above and beyond the core quality that our customers have come to expect.

Building Quality into Each Process

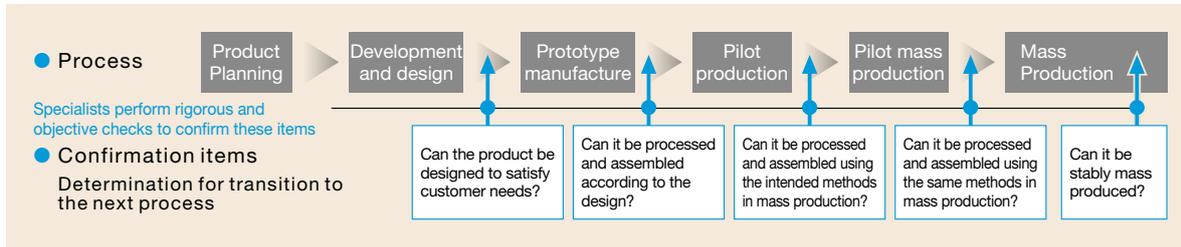
NSK Product Development System (NPDS)

The NSK Group has globally deployed an innovative quality management system, the NPDS, to respond promptly and reliably to new projects and to mass produce products that

satisfy customers. At each stage of the process, from product planning to development/design, prototype manufacturing and mass production, we ensure that any concerns are resolved and strive to improve quality. Even after mass production begins, we conduct thorough management to maintain high quality.

Quality Assurance

Outline of NPDS



Education to Improve the Quality of Design Reviews in Developed Products

To improve product design quality in new projects, the NSK Group has its own internal system of experts that perform design reviews (DR) and has implemented worldwide measures to improve DR quality. These DR experts identify issues related to product quality from the design phase and into the mass production phase to prevent problems down the road. Along with the enhancement of DR content for NSK-developed products, we ask these experts to make the most of their knowledge and experience: (1) to promote robust design* proposals that fully meet customer requirements; (2) to build manufacturing processes that emphasize the 4 Ms and maintain stable production; and (3) to hand down technology skills

while creating learning opportunities for young NSK engineers.

In fiscal 2019, we focused on advance preparation in particular to raise the level of our DRs. This advance preparation enabled more efficient and meaningful design review discussions, since participants received the necessary materials and data in advance and were familiar with all the details before the review.

In fiscal 2020, we will increase the number of opportunities for discussions between DR experts and our designers and developers, while working to improve their technical skills and improve the needed technical data that is available for each DR step. We will continue to optimize assessments and feedback at each DR step and further enhance DR expert activities.

* Robust design: Design that ensures the required characteristics for various product usage conditions.

Initiatives to Enhance Manufacturing Quality

The NSK Group works diligently to deliver a consistently high level of product quality that meets customer needs.

We also develop manufacturing processes that focus on the 4 Ms (man, machine, materials and methods) to further improve product quality.

4 Ms Priority Issues

Man (human resources)

We are working to raise the quality awareness of all employees by establishing *Quality-Dojo* at all plants, worldwide. This training area provides a place for employees to learn how to use and handle NSK products and how to inspect them correctly.

Machine (equipment)

We are promoting systematic investment in quality assurance equipment to prevent any quality problems from recurring.

Material

We will continue to develop lightweight and highly reliable materials, leveraging robust design to maintain high quality.

Method

We aim to develop products that can be reliably produced without any defects.

Global Rollout of Measures from Best Practice Plants

Every month, the NSK Group monitors the status of quality management at all production sites worldwide. Production sites that produce exceptional results in terms of quality are categorized as “Best Practice Plants.”

The characteristics of those plants and their management initiatives are analyzed and rolled out to other production sites.

We ensure that case studies and best practices are shared among sites by holding quality information exchange meetings with representatives from different plants. The participants bring back new information to their respective workplaces and consider applying it to their own operations. This helps to disseminate good quality assurance practices throughout the Group. Going forward, the NSK Group will continue to ensure good communication among plants so that employees can learn about activities undertaken at other sites and their benefits. These efforts will promote Group-wide quality awareness and a shared sense of accomplishment.

FY2019 Quality Information Exchange Meetings for Plants

Plants	Initiatives	Details
Needle Bearing Operation Division (Takasaki Plant/Haruna Plant)	Identifying issues and working to improve problems on the production line	Fostering good communication using quality notes from the production line
Ohtsu Plant	Improving the process of approval for new production startups and transitioning to mass production	Performing inspections to find quality check omissions



Initiatives to Enhance Supplier Quality

High-quality lubricants, materials, and parts are required to manufacture high-quality products. At the NSK Group, we engage in a wide range of initiatives to enhance quality, based on our strong ties with suppliers. In fiscal 2019, we established the Supplier Quality Audit Group at the Quality Assurance Division

Headquarters. It has been promoting quality data visualization at suppliers, implementing improvement plans, and carrying out quality improvement efforts in collaboration with NSK plants that receive products from suppliers.

Initiatives begun in fiscal 2019

Category	Details
Briefing sessions by the Global Quality Audit Office on internal activity policies	<ul style="list-style-type: none"> At the annual purchasing policy briefing, shared with suppliers the details of a supplier quality control system currently being created
Ascertaining and visualizing the current quality situations at suppliers	<ul style="list-style-type: none"> Using trend graphs and radar charts to clarify the situation for quality problems originating at suppliers that are detected during receiving inspections and on production lines
Development of a management system for supplier quality problems	<ul style="list-style-type: none"> Managing quality problems originating at suppliers using a system that handles everything from information gathering to data visualization Information standardization, usability enhancement, and flow acceleration
Monthly report on supplier quality issues	<ul style="list-style-type: none"> Using a system to prepare and send monthly visualized data reports on supplier quality situations to business division headquarters and plants
Ascertaining the current situations at suppliers performing final processing	<ul style="list-style-type: none"> Reliably ascertaining the quality situations at suppliers who perform final product processing Raising management to the same level as for purchased items

Strengthening Audit Functions

We established the Global Quality Audit Office within the Quality Assurance Division Headquarters and began full-scale operations in fiscal 2019. The purpose of this office is to perform objective audits and check compliance and potential risks relating to quality control.

It also implements preventive measures for any potential problems.

The audit office also constantly gathers product recall and defect information on other companies. It examines this information and promotes necessary information development and preventive activities.

Supply Chain Management

NSK's Approach

The NSK Group's operations are made possible by the support of its many suppliers. We consider suppliers to be essential business partners, and we seek mutual development while building relationships of trust. We have established a basic procurement policy to ensure fair procurement practices that also takes into account potential impacts on society and the environment. We carry out CSR procurement and green procurement globally, working across the entire supply chain to help build a sustainable world.

Mission of NSK's Procurement Division

NSK's procurement division strives to improve earnings and cost competitiveness by ensuring stable procurement and optimizing quality, cost, and delivery time through fair, transparent transactions with suppliers. In our relationships with suppliers, we practice sustainable, responsible

procurement by ensuring compliance and focusing on CSR procurement. We also share our Green Procurement Standards and Supplier CSR Guidelines with suppliers in order to foster CSR activities throughout the supply chain.

Sixth Mid-Term Management Plan: Procurement Division Headquarters

Mid-Term Plan Targets

Ensure stable supply and optimize supplier portfolio

Mission

Collaboration and thorough adherence to the principle of competition

Stable procurement

Sustainable, responsible procurement

Core Values

Safety, quality, compliance, and environment

Basic Policy and Guidelines for Procurement

NSK Group Basic Policy for Procurement

1. Economic Rationality

Applicable companies shall conduct transactions whose quality and service are economically rational.

2. Fairness and Impartiality

Applicable companies shall conduct transactions in a fair and impartial manner regardless of region, company size, or whether the counterparty is a new or existing business partner.

3. Observance of All Laws

I Applicable companies shall strictly follow the procurement laws and regulations of each country, and possess awareness of their important societal role.

II Applicable companies shall conduct training and education programs to ensure strict observance of procurement laws and regulations.

4. Respect for Moral Standards

I Applicable companies shall adhere to strict moral standards.
•Transactions with counterparties and/or potential

counterparties shall not be entered into if there are personal interests involved.

•Transactions with counterparties and/or potential counterparties shall not be entered into for the purpose of personal gains.

•Companies shall not compel counterparties and/or potential counterparties to make donations, etc.

II Applicable companies, when entering into transactions with subcontracting firms, shall strive to build a strong, cooperative partnership and maintain a stable supply.

5. Environmental Preservation, Resource Conservation (Green Procurement)

Applicable companies shall promote environment protection by procuring environmentally-conscious products from counterparties that make positive efforts toward environmental preservation.

6. Employee Training and Education

Applicable companies shall provide procurement training and education to employees.

NSK Supplier CSR Guidelines

The NSK Group asks its suppliers 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, and to make efforts to preserve the environment through activities such as managing environmentally harmful substances.

NSK Supplier CSR Guidelines Key Items

- Compliance
- Human rights/labor
- Environment
- Contribution to local communities
- Risk mitigation
- Information disclosure



For details, see the NSK website. <https://www.nsk.com/>

Home → Sustainability → Supply Chain Management
→ NSK Supplier CSR Guidelines



NSK Group Green Procurement Standards

The NSK Group has established standards for green procurement throughout the supply chain, starting at the beginning with parts and materials, and works together with suppliers on this issue. The standards address efforts to fight climate change, promote resource conservation and recycling, manage environmentally harmful substances, and other important matters.

For details, see the NSK website. <https://www.nsk.com/>

Home → Sustainability → Supply Chain Management
→ NSK Group Green Procurement Standards

NSK Group Green Procurement Standards Key Items

- Policies addressing environmental preservation
- Compliance with environmental laws
- Requirements for the development of an environmental management system (EMS)
- Requirements for the development of an environmentally harmful substance control system
- Requirements for environmental protection activities
- Audit and investigation of environmentally harmful substances

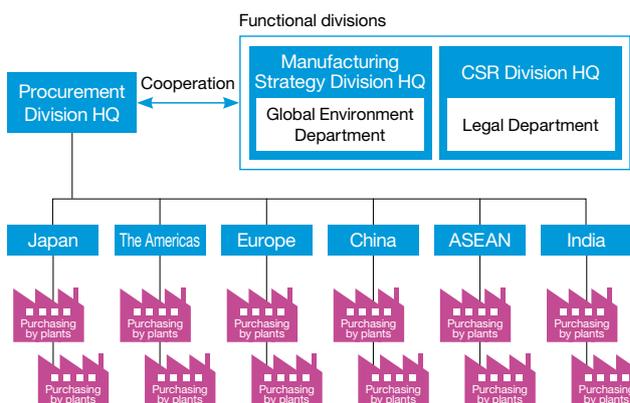
System

Supply Chain Management System

The Procurement Division Headquarters is tasked with ensuring that the NSK Group fulfills its social responsibility throughout the entire supply chain. Directed by a senior vice president, it plays a central role in building systems to promote supply chain management, working in collaboration with relevant functional divisions, such as the CSR Division Headquarters and Global Environment Department, as well as production, procurement and administrative divisions within the NSK Group.

Procurement policies and progress on CSR procurement and other related measures are reviewed at the biannual Global Procurement Conference, which brings together those responsible for procurement from each region of the world.

Global Supply Chain Management Promotion System



Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets		FY2019 targets	Performance in FY2019
Ensure stable supply and optimize supplier portfolio	Stable procurement	BCP audit (40 companies)	<ul style="list-style-type: none"> • BCP: Audited 40 suppliers in fiscal 2019 (total of 73 suppliers since fiscal 2018)
	Sustainable and responsible procurement	Take follow-up action on the CSR audit conducted by a third party in fiscal 2018	<ul style="list-style-type: none"> • CSR: Based on fiscal 2018 audit results, follow-up action was undertaken for five suppliers.

Supply Chain Management

Regional Distribution of the NSK Group's Supply Chain

The NSK Group has transactions with approximately 1,200 suppliers worldwide (after adjusting for overlap between regions) for direct materials.

NSK Group Suppliers, by Region (based on number of suppliers)



Note: After adjusting for overlap between regions

Stable Procurement Based on Relationships of Trust

Sharing NSK's Value Creation with Suppliers

The NSK Group holds procurement policy briefings every year to explain its procurement and other policies to major suppliers. Suppliers are asked to reinforce their efforts to implement CSR activities to ensure the same level of performance throughout the entire supply chain.



Procurement policy briefing

Promoting Fair Trade

In 2017, the NSK Group created an internal manual to address various fair trade trends in government and industry, such as laws and regulations like Japan's Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors, and industry agreements like the Voluntary Action Plan of the Japan Automobile Manufacturers Association, Inc. and Japan Auto Parts Industries

Association. The manual is designed for employees involved in procurement, and it covers key issues and warns against specific types of conduct that are likely to be viewed with suspicion. We disseminated the manual and continue to work hard to promote fair trade.

Compliance Hotline (Whistleblowing System)

The NSK Group has established the compliance hotline (whistleblowing system) to enable anyone to anonymously convey their criticisms, opinions, and concerns. This helps to ensure any issues will be identified at an early stage so corrective measures can be taken. In Japan, for example, the hotline has two points of contact: one is the Head of the CSR Division Headquarters and the other is an outside attorney. We are careful to ensure that not only internal whistleblowers but also suppliers can use the hotline safely and securely and face no repercussions as a result. We have distributed leaflets to make the compliance hotline more widely known. There were two incidents reported via the hotline by suppliers worldwide in fiscal 2019. Both issues were appropriately addressed after they were reported to the hotline.

Identifying and Managing Risks in the Supply Chain

Supplier Risk Management

The NSK Group obtains understanding and agreement from all suppliers to follow the NSK Supplier CSR Guidelines and NSK Group Green Procurement Standards. We have also incorporated clauses on environmental, social, and governance (ESG) performance into basic transaction agreements to further strengthen risk management. We determine the risk that each supplier presents to our business activities by taking into account the procurement cost and volume, the importance of the procured parts, availability of replacements, and risk of the presence of environmentally harmful substances.

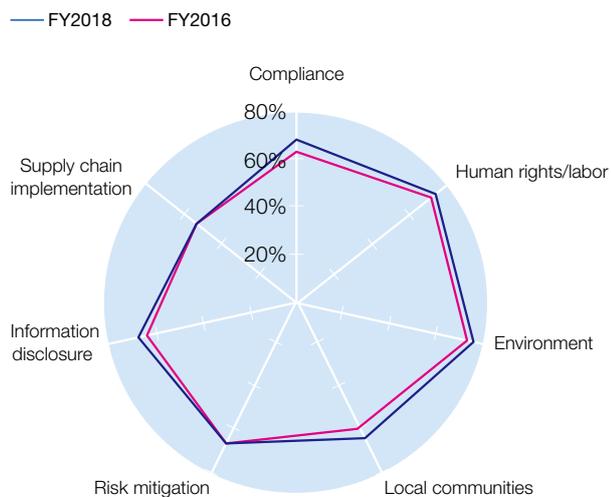
Suppliers estimated to present a high level of risk are placed under critical control, and we assess supplier risk by checking their financial condition, requiring them to conduct CSR self-assessments, and other methods. The necessary measures to reduce risk are then implemented in close collaboration between those suppliers and the relevant departments at NSK, such as design and production. We also conduct a careful study of risk before beginning to do business with any new supplier. We confirm their management structure, check for legal violations including violations of environmental and labor laws, and verify practices related to quality control and environmental management, among other things.



Supplier CSR Self-Assessment

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 the suppliers.

In conducting the previous round of assessments (in fiscal 2018), we strengthened initiatives to reduce risk and added new items to the assessment form on the status of compliance with labor and environmental laws and the occurrence of environmental pollution accidents and workplace accidents. Furthermore, we started working on an initiative to implement audits conducted by a third-party organization in accordance with Responsible Business Alliance standards. We carried out a survey of the current situation, based on international standards in five areas—labor, ethics, safety and health, the environment, and management systems. We will revise the content of the assessments again in fiscal 2020 (scheduled to be implemented in the second half of the fiscal year) based on the survey results.



- 2018 supplier CSR self-assessment results: Replies from 426 companies
- Aggregation of self-assessments on the level of engagement in initiatives in each CSR field
- The solid lines are the average level of engagement in initiatives in each field for the companies that submitted self-assessments.

Enhancement of Supply Chain BCP Effectiveness (Japan)

The NSK Group has built a system for quickly identifying the scale of damage and problems at suppliers in the event of a disaster. The system also facilitates a precisely targeted response with the cooperation of suppliers. Drills are conducted regularly to ensure sites properly utilize the Supplier Safety Confirmation System, which is used for emergency contact. We have also asked major suppliers to create their own Business Continuity Plans (BCP) and verified their progress in order to strengthen risk management throughout the supply chain.

In fiscal 2019, we sent trained inspectors to review the BCPs at 40 suppliers, where they examined the status of BCP initiatives and identified priority concerns. The NSK Group is determined to build a more disaster-resistant supply chain by continuing to forge cooperative relationships with suppliers.

Human Resources

NSK's Approach

At the NSK Group, we see our workforce as a vital resource for the continued success of our business. We know that employees who remain fully engaged in their work produce the best results, which ultimately leads to the sustainable growth of individual employees and the entire NSK Group. This is why we are committed to creating a safe and motivating workplace where the cultures and practices of countries and regions worldwide are respected and diversity is embraced in the workforce.

Policy

The NSK Group Management Principles clearly state that our aim is "to provide challenges and opportunities to our employees, utilizing their skills and encouraging 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.

Creating a Dynamic Work Environment



Leveraging a Diverse Workforce

- The NSK Group is working to build a corporate culture where diverse human resources and their individual values are recognized and accepted. This effort is based on the conviction that employees from different backgrounds, working together, are able to generate more new ideas in the workplace, which will in turn strengthen the Group's competitiveness.
- NSK has established programs to help employees fulfill any childcare or nursing care responsibilities they may have. These programs exceed legal requirements and take into account the ongoing need for employees to balance their work and family obligations throughout the stages of their lives. We also seek to ensure good communication between superiors and their team members in the workplace. We offer seminars, for instance, to support caregivers and working parents who are returning to work after childcare.

Building More Engaging Workplaces

- It is our conviction at the NSK Group that having safe workplaces and employees who enjoy and are actively engaged in both their work and personal lives will have a beneficial impact on our business. Based on this, we seek to provide safe, supportive workplaces.
- We are working to reform work styles in order to encourage greater awareness of work-life balance among employees, while encouraging them to take paid leave and working to offer more diverse ways of working.
- At the NSK Group, we see an investment in health as an investment in corporate value, and as such, we are committed to the health and wellness of our employees and their families. We have established health management initiatives under the NSK Basic Policy on Health and Wellness (Employee Wellness Declaration).

Providing Opportunities for Growth

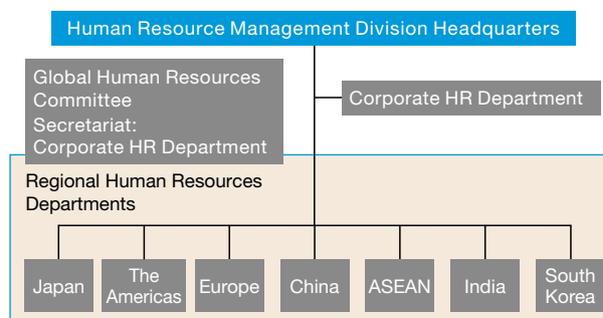
- The NSK Group has established a range of human resource programs including education and training. Providing opportunities for professional growth, the programs enable employees to further enhance their motivation and skills by maximizing their individual potential.
- We position job rotation at the core of human resource development, promoting employee awareness of the benefits of independent learning and growth. Employees learn new skills and operations while taking advantage of opportunities to advance their careers.
- We develop the core human resources needed to fuel sustainable growth by offering education and training programs which not only enhance the knowledge and skills of employees, but also promote their growth as human beings.

System

Global Human Resources

The Human Resource Management Division Headquarters collaborates closely with regional HR departments worldwide on a variety of efforts, all guided by the commitment described at left. At the regular Global Human Resources Committee meetings, HR managers from each region meet to report on their regional and national initiatives, share the local challenges they face, and discuss measures to further improve talent management.

Structure of the Human Resource Management Division Headquarters



Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets		FY2019 targets	Performance in FY2019
Leverage a diverse workforce	Promote more diversity and inclusion	Raise awareness of diversity and inclusion	<ul style="list-style-type: none"> Held lectures on three key themes: women empowerment, management and LGBTQ+
		Continue supporting women in career-track positions	<ul style="list-style-type: none"> Started third round of training for women in career-track positions
		Paternal leave acquisition rate of 20%	<ul style="list-style-type: none"> Achieved paternal leave acquisition rate of 26.8%
		Create a work environment that empowers foreign nationals working in Japan	<ul style="list-style-type: none"> Introduced bilingual signage
		Raise awareness of LGBTQ+ issues	<ul style="list-style-type: none"> Distributed ALLY stickers Conducted training and lectures
		Raise external awareness of our initiatives to promote diversity and inclusion	<ul style="list-style-type: none"> Selected as <i>Nadeshiko</i> Brand Retained <i>Kurumin</i> accreditation (certification recognizing companies with parent-friendly HR policies and programs)
Build more engaging workplaces	Promote work style reform	Expand remote work	<ul style="list-style-type: none"> Participated in Telework Days 2019 (Japanese government campaign to encourage remote work) Gradually expanded remote work by setting NSK's own remote work periods
		Work style reform in sales divisions	<ul style="list-style-type: none"> Tried out satellite offices to reduce travel times when visiting customers
	Promote health and wellness	Raise external awareness of our initiatives to improve the health of employees	<ul style="list-style-type: none"> Retained certification as an Outstanding Health and Productivity Management Organization (White 500)
		Conduct activities to improve health awareness among employees	<ul style="list-style-type: none"> Held a health fair
Provide opportunities for growth	Support the career advancement of each and every employee	Develop the next generation of global leaders	<ul style="list-style-type: none"> Implemented mentorship program for employees newly appointed to core posts Implemented a leadership program for select employees through collaboration with a major business school outside Japan
		Train young employees at an early stage	<ul style="list-style-type: none"> Implemented young employee rotation
		Expand selective training	<ul style="list-style-type: none"> Set up a new assistant manager course of the Japan Management College

Human Resources

Highlight

Increasing employee engagement in the workplace and corporate culture by helping each person to make the most of their abilities and individuality

Selected as a *Nadeshiko Brand**

In fiscal 2019, 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 working styles.



* The *Nadeshiko Brand* program is designed to promote investment in listed companies making exceptional efforts to promote inclusion and career advancement for women. The program targets investors interested in companies that are well-positioned to grow in value over the medium to long term. Since fiscal 2012, METI and the Tokyo Stock Exchange have jointly selected *Nadeshiko Brand* companies in order to promote the equal opportunity efforts of all listed companies.

Developing LGBTQ+ Allies

Diversity includes both visible and invisible minority groups. The NSK Group has begun to work on LGBTQ+ inclusion and SOGI training, in order to promote respect for forms of diversity that may not be immediately apparent. In fiscal 2019, employees received e-learning modules, training, and lectures on basic LGBTQ+ issues designed to help ensure proper understanding.

As an additional effort to promote LGBTQ+ visibility along with general understanding and empathy, LGBTQ+



Training on LGBTQ+ issues

Allies within the company wear specially designed "Ally" stickers in the workplace.

Women's Empowerment

Empowering women in the workplace is an important management objective, and the NSK Group has been working hard on this issue in each world region. In the Americas, for example, training on unconscious biases* and multicultural training form a part of the region's broad-based activities to raise awareness of diversity and inclusion. The region has also established the NSK Americas Women's Development Program to develop more female leaders throughout the organization. Around a dozen women are selected to join this program every year, where participants are equipped with the skills and mindset necessary for leadership. In Japan and Europe, we offer educational opportunities for female employees to support career advancement and develop future managerial candidates.



Participants in NSK Americas Women's Development Program

* Unconscious biases are views and opinions that individuals form outside their own conscious awareness based on their experiences. At the NSK Group, we aim to welcome diverse value systems by helping our employees to become aware of their unconscious biases.

Outstanding Health and Productivity Management Organization

NSK's outstanding efforts in health management have been widely recognized. In 2020, the company was certified as an Outstanding Health and Productivity Management Organization in Japan for the third consecutive year. More than that, NSK was named to the "White 500" list of the top-performing 500 companies with this certification.





Leveraging a Diverse Workforce

Promoting More Diversity and Inclusion

It is our conviction that employing people from diverse backgrounds—in gender, age, nationality, culture, lifestyle and values—will foster a work environment full of new perspectives and ways of thinking. This, in turn, will strengthen NSK's competitiveness and capacity to avoid risks. This is why we are working to build a corporate culture that embraces diversity and is inclusive of all people and the values they hold.

Diversity and Inclusion Roadmap and Priorities for Our Mid-Term Management Plan

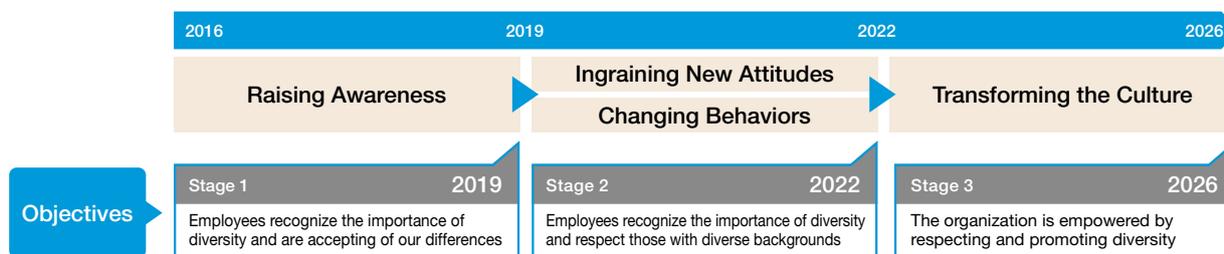
The NSK Group is promoting diversity and inclusion in a three-phase initiative lasting from 2016 to 2026. The stage from fiscal 2019 to 2021 is dedicated to establishing awareness and changing behaviors.

During this stage, we will continue to take steps to empower women, which is an important management objective. At the

same time, we will expand our initiatives in other areas, working also to empower non-Japanese employees and all those who identify as LGBTQ+. We are determined to advance all aspects of diversity and inclusion. Accordingly, we have included the empowerment of non-Japanese employees in Japan as an important objective under the current Mid-Term Management Plan. We will improve the environment and foster a workplace culture that allows non-Japanese employees to take an active role in advancing their own careers.

We also recognize that encouraging diverse employees to play an active role requires that we make progress in creating more flexible work arrangements. This is why we will move forward with work-style reform, hand in hand with diversity and inclusion, recognizing that they are critical to one another. In this way, we will work to ingrain new attitudes and change behaviors simultaneously.

Diversity Roadmap



FY2019–2021 Mid-Term Management Plan (Priority Areas)

Priority 1	Promote a better understanding of diversity and inclusion	Priority 2	Promote career advancement for women
Priority 3	Promote the advancement of non-Japanese employees	Priority 4	Support work-life balance (parenting, caregiving, medical or infertility treatment)
Priority 5	Work style reform		

Human Resources

Promoting the Advancement of Women in the Workplace

The NSK Group believes that empowering more women to actively demonstrate their abilities in the workplace will encourage diversity and inclusion, enhancing the overall competitiveness of the Company. To achieve this, we have begun making efforts to hire more women and to expand their work options.

Our efforts do not stop there, however: as a first step in cultivating diversity in talent and values at the management level, not only in terms of personnel numbers and occupation areas, NSK conducts training for women in career-track positions in Japan who are managerial candidates to prepare them with the skills and mindset they will need to excel as leaders. Fiscal 2019 marked the third year of these efforts.

Once every three months, women from sales divisions of regional branch offices also get together in working groups to study and propose improvements. In fiscal 2019, a new program was launched to help women enhance their communication abilities and develop new skills.

We are also launching initiatives to empower women in the workforce in Europe and the Americas. A diversity conference was held in Europe, with women in executive positions from headquarters in Japan also participating. In the Americas, we initiated a program to support women's career development.



Diversity Event, as part of the Management Conference (Europe)

Leveraging Global Talent

The NSK Group continually hires and trains outstanding human resources to support the operations of the NSK Group worldwide. The Group also works hard to assign the right person for each job. Key posts for global business operations have been identified as "global posts." In consultation with senior management and human resources departments in each global region, we determine the leadership competencies required of people in these positions. With these competencies as core requirements, we devise successor plans and systematically promote, evaluate, and compensate our global talent. This program includes

transfers between different world regions. We also provide a variety of human resource development programs such as education for future and current leaders. We are also working to develop organizational infrastructure to ensure that we make the most of our global talent across national and regional boundaries. We have, for instance, established and rolled out Group-wide guidelines designed to facilitate international transfers.

Helping to Support an Aging Society (Japan)

NSK recognizes that the knowledge and skills of experienced senior employees are beneficial in growing its business. Our basic policy is to provide work opportunities to employees willing to continue at NSK after retirement. We have had a rehiring program in place since April 2001. NSK is committed to ensuring that its human resources system meets the needs of all employees. We will work to build environments in which the knowledge and expertise of veteran employees can be fully utilized to support the sustainable growth of our business activities.

Number of Rehired Senior Employees*

	FY2015	FY2016	FY2017	FY2018	FY2019
Senior employee rehiring system	505	620	570	592	555
Other (fixed-term contract, etc.)	25	35	54	68	70
Total	530	655	624	660	625

* Includes employees of NSK Ltd. and main group companies in Japan.

Providing Work Opportunities to People with Disabilities (Japan)

At NSK, we believe it is our responsibility to provide suitable employment opportunities to individuals with disabilities. With three sites in Japan, special subsidiary NSK Friendly Service Co., Ltd. provides opportunities for people with intellectual disabilities to work and thrive in our organization. Going forward, some of these employees will also be assigned to the Head Office to further expand employment opportunities. In fiscal 2019, NSK Ltd., major NSK Group companies in Japan and NSK Friendly Service together had a total of 166 people with disabilities, representing 2.24% of all employees.



Employees of NSK Friendly Service at work



Supporting Hidden Diversity: LGBTQ+ (SOGI)

The NSK Group has created original LGBTQ+ Ally stickers, which are distributed to employees who wish to show support for LGBTQ+ inclusion measures. The aim is to enhance the visibility of LGBTQ+ employees and increase support for them in the workforce. We are also working to foster a culture where employees with diverse gender identities can play active roles in the workplace. One such infrastructure measure involves providing gender-neutral restrooms at each business site.



NSK's original LGBTQ+ Ally stickers



Facilitating Work-Life Balance

Supporting Work-Life Balance in Every Life Stage (Japan)

The NSK Group is building workplaces that meet the wide-ranging needs of a diverse workforce and allow each and every employee to enjoy job satisfaction. NSK wants every employee to enjoy a healthy work-life balance. Our system for ensuring employees can balance their work and child/nursing care responsibilities exceeds legal requirements. As part of this approach, we not only provide comprehensive support for working parents and caregivers, but also strive to create a work environment where they can realize their full potential.

Support Programs for Work-Life Balance*

	NSK	Japanese Law
Parental leave	Through end of April following child's third birthday (first five days are paid)	Up to 2 years old (unpaid)
Reduced hours for working parents	Through end of March of child's 6th grade year	Up to 3 years old
Caregiver leave	Up to 1 year	Up to 93 days
Reduced hours for working caregivers	Up to 3 years (eligible for extension)	Up to 3 years
Exemption from half-day limit	The limit of 12 half-days per year does not apply to employees when caring for sick family members, providing childcare, or undergoing medical or infertility treatments	
Re-employment registration system	Employees who resign to follow a transferring spouse can register for re-employment at NSK upon their return	

* Includes employees of NSK Ltd. and main group companies in Japan

For details, see the NSK website. <https://www.nsk.com/>
 Home → Sustainability → Creating a Dynamic Work Environment → Facilitating Work-Life Balance

Support for Working Parents (Japan)

NSK encourages eligible men in the workforce to take childcare leave. This is part of our efforts to promote a culture of work-life balance and also helps to update work styles. Starting in 2019, managers at NSK Ltd. and major NSK Group companies in Japan have been encouraged to ensure that men they supervise

take childcare leave when a child is born. By asking managers to develop childcare leave plans with eligible employees, we are promoting leave-taking by men. In fiscal 2019, 26.8% of eligible men took childcare leave.

Special seminars were also held for women at home on childcare leave and for those who recently returned to work from leave. The aim of these seminars was to ensure a smooth return to work, and to help participants maintain work-life balance once back in the workplace, while raising their awareness of career development opportunities.

Many employees are eager to excel in the workplace despite the time constraints of parenthood. This is why we also provide flextime for working parents and offer onsite childcare services on working national holidays when regular daycare facilities close down.

In recognition of our efforts to support working parents of small children, the Minister of Health, Labour, and Welfare awarded NSK the *Kurumin* certification.*



* *Kurumin*: Based on the Act on Advancement of Measures to Support Raising Next-Generation Children, NSK formulated an action plan as a general business operator and received certification from the Minister of Health, Labour and Welfare as a corporation that supports child raising.

Support for Family Caregivers (Japan)

In order to support our family caregivers, we have run caregiving seminars since 2017, providing a place for employees to seek advice on balancing work with family commitments. In fiscal 2019, basic courses for employees aged 40 and older were held a total of 25 times across NSK sites, and they were attended by around 550 employees. In addition, we offered seven sessions for managers, which drew about 150 participants. Two specialized courses were also offered, going a step further than the basics.

To improve our ability to respond to concerns from employees, we began to publish a monthly caregiving e-mail magazine and hold seminars for HR representatives.

Human Resources

Building More Engaging Workplaces

Promoting Safe, Secure, and Comfortable Workplaces

It is our conviction at the NSK Group that having safe workplaces and employees who enjoy and are actively engaged in both their work and personal lives will have a beneficial impact on our business. An improvement in employee productivity will lead to an improvement in their ability to produce quality work, which will ultimately cultivate a more fulfilling life both at work and at home. For this reason, we strive to better manage employee working hours, to encourage employees to take their annual paid leave, and to provide a variety of work-style options to fit their diverse lifestyles. In order to boost job satisfaction, we are also promoting work-style reform to change employee attitudes.

Managing Employee Working Hours and Promoting Paid Leave (Japan)

At NSK, we believe that helping employees stay focused and efficient on the job will allow them to enjoy greater productivity and produce higher quality work, without wasting time. For this reason, in addition to making flextime available to employees, we are striving to better manage working hours using objective records and to encourage employees to take their annual paid leave. As a result of cooperative efforts by labor and management to ensure that employees use all of their annual paid leave, employees and

managers took an average of 16.2 days of paid leave in fiscal 2019.

In 2019, employees began working from home or from satellite offices on a trial basis in preparation for the upcoming Tokyo Olympics. Then, as an emergency step to help prevent the spread of COVID-19, many employees at the head office, sales departments, and technology departments began working from home in 2020. Going forward, going beyond merely adapting to the “new normal,” we will officially introduce a remote work system designed to further enhance opportunities for our diverse employees.

Promoting Health and Wellness (Japan)

At NSK, we see an investment in health as an investment in corporate value, and as such, we are committed to a full range of initiatives to promote the health and wellness of our employees and their families. We have therefore established the NSK Basic Policy on Health and Wellness (Employee Wellness Declaration) and have implemented various specific activities in line with the Three Main Focal Points of NSK Health and Wellness.

NSK Basic Policy on Health and Wellness (Employee Wellness Declaration)

At the core of NSK’s Vision to set the future in motion is a desire to create a brighter tomorrow where we can all lead safe, healthy, and fulfilling lives. It is NSK’s firm belief that the health of our employees and their families is foundational to achieving this future.

The health—both of body and mind—of each one of our employees and their families is an invaluable asset to the Group. As such, NSK has established a management structure that prioritizes health and is committed to a full range of activities to promote employee wellness, all with the aim of improving their physical and mental health.

NSK sees an investment in employee wellness as an investment in the future profitability of the NSK Group, and will continue to proactively pursue initiatives in this area.

Three Main Focal Points of NSK Health and Wellness

1. Focus on prevention. Support employees to prevent aggravation of medical conditions.
2. Implement and promote mental wellness strategies to prevent the onset of mental health issues.
3. Prevent damage to health by reducing secondhand smoke risks (through smoking cessation efforts, etc.).

Progress on Three Main Health Focal Points

	FY2017	FY2018	FY2019
Percentage of employees participating in the Specific Health Guidance program	25.7%	25.3%	25.1%
Percentage of employees receiving stress checks	93.8%	95.9%	94.9%
Percentage of employees who smoke	39.1%	37.6%	36.6%

* NSK Ltd. and major NSK Group companies in Japan

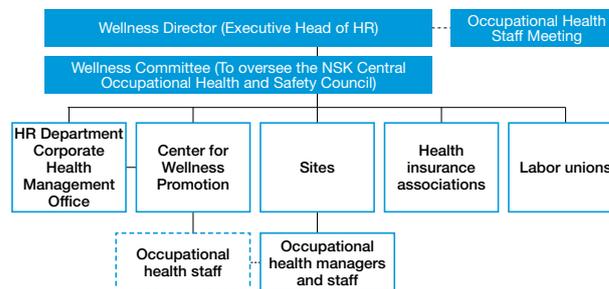
Corporate Health Management Structure (Japan)

NSK is committed to helping employees maintain and improve their health and wellness. Our collaborative approach involves the HR Department, the Center for Wellness Promotion, labor unions, health insurance associations, onsite labor divisions, and occupational health staff—all under the supervision of the executive head of HR. In April 2019, we established the Corporate Health Management Office within the HR Department to enhance our capacity to achieve our health and wellness objectives. We also built an organization that is more conducive



to coordination. The resident occupational physicians in each locality report to the Corporate Health Management Office, and nurses and health specialists also hold concurrent posts in the office. Going forward, we will further advance health management by appointing a manager of occupational safety and health at each site. In addition, by holding regular meetings of occupational health staff and the Wellness Committee—a function established to oversee the activities of the NSK Central Occupational Health and Safety Council—we will continue improving our ability to support the wellness of employees.

Corporate Health Management Structure



Specific Initiatives for the Three Main Health Focal Points (Japan)

NSK has been implementing various activities as part of the Three Main Health Focal Points. In the area of employee mental health, we are working with experts in and outside the company to prevent problems from occurring and to help those on mental health leave to return to work as soon as possible. To ensure the physical health

of employees, we not only provide individual one-on-one health guidance, but are also focusing on preventing seasonal illnesses such as heat stroke and influenza. To eliminate the harmful effects of smoking and second-hand smoke, we are working to reduce employee smoking rates by prohibiting indoor smoking and encouraging the use of free smoking cessation programs offered by health insurance associations.

	Category	Target	Initiatives
Increasing health awareness	Distribution of NSK health booklets	All employees	Created a handbook to help employees take steps to improve their health
	Health promotion events and lectures	All employees	Held events and lectures to raise employee health awareness
Mental health measures	Stress checkups and mental health education	All employees	Promoted self-care by providing employees with their own personal stress scores
		Managers	Created an organizational health improvement plan based on the results of diagnoses for each organization
	Consultation desk/support for people with mental illness	All employees and their families	Established health consultation desks for each site, and an external consultation call center
Physical health measures	Disease prevention/lifestyle improvement	All employees and their families	Employee assistance programs (EAPs) using outside experts*
		All employees	Interviews to provide specific health guidance to employees with issues found during health checkups
	Measures to prevent seasonal illness	All employees	Provided screening by health insurance associations for stomach, colorectal, breast, and cervical cancers
			Workplace employee vaccinations for influenza
Prevention of secondhand smoke exposure	Prevention of secondhand smoke exposure	All employees	Education to prevent heat stroke, and heat mitigation measures
			Only allowed smoking spaces outdoors in principle
			Looked into providing free smoking cessation programs offered by health insurance associations (launched in fiscal 2020)

* Employee assistance program: A program that supports employee mental health

Employee Engagement Surveys

The NSK Group has been conducting regular employee surveys in Japan and at some global sites in order to enhance awareness of its corporate philosophy and the importance of compliance. We recognize that it is essential for every employee to understand and follow the corporate philosophy, and that we must create the kind of transparent workplaces required to ensure compliance. As employee engagement is critical to these efforts, we recently expanded the scope of the survey to include all employees worldwide, and also added questions to measure engagement. Based on the survey results, we are developing next

steps for each region. These steps include more clearly linking the corporate philosophy with daily operations, and promoting better communication between superiors and team members.



Employee awards and health promotion activities at a subsidiary in Thailand

Human Resources

Providing Opportunities for Growth

Human Resource Programs for Talent Management

The NSK Group has established a range of human resource programs designed to maximize the motivation, skills, and individual potential of employees and to help shape encouraging workplaces for every employee. We provide many opportunities for individual growth, with a focus on employee evaluation

and feedback using target management and performance agreements. Some of the main channels for growth are job rotation, our Workplace and Career Aspirations Survey, and our system for changing employee classification.

Job Rotation

We believe that the growth of individual employees drives the growth of the organization. Accordingly, the NSK Group positions job rotation at the core of human resource development. The rotation system allows employees to be transferred within Japan, and even to overseas and affiliated companies. The aim of job rotation is to accelerate employee development by providing new career experiences and encouraging them to learn and grow independently by taking on new work challenges.

Young Employee Rotation

At the NSK Group, 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 in order to broaden their outlook through a variety of experiences and give them a better perspective. They are interviewed every two or three years to check their career goals. Transfers are performed to promote career development, and they are given opportunities to learn in environments that promote professional growth.

Evaluation and Feedback Using Target Management and Performance Agreements

The NSK Group uses a performance agreement system to align individual goals with departmental and corporate targets, allowing employees to maximize their potential as they grow along with their department and company. Under this system, employees meet regularly with their supervisors to set goals for the fiscal year, and follow up on results at the end of the year. In order to ensure that evaluations are fair and that managers and their employees are communicating well with each other, we also conduct a survey to determine how satisfied employees are with evaluation feedback from their supervisors. When setting personal goals with individual employees, the degree of challenge is based on the individual's own abilities and qualifications in order to encourage self-motivation and challenge-taking. Managers view feedback as another opportunity to support the growth of their team members. By giving individuals the opportunity to reflect on their performance through dialogue, managers employ this technique to help employees grow.

Workplace and Career Aspirations Survey

Once a year, the NSK Group gives employees the opportunity to submit feedback directly to human resources departments through the Workplace and Career Aspirations Survey. The survey includes questions on their current workplace environment, their personal aspirations for their future with the company, and other personal concerns they might like to address. Employees may also request a follow-up interview with HR departments. Based on the results of these surveys and interviews, we employ strategic personnel transfers to enable our employees to fully develop their unique skills and abilities through growth opportunities.

System for Changing Employee Classification

We have set up a system that allows employees to change their classification, such as allowing them the opportunity to change from a non-managerial career track to a career-track position. The system also encourages employees to develop greater career awareness and take the initiative in developing their abilities. It is an opportunity for employees to promote their own careers.



Providing Educational Opportunities for Individuals to Realize Their Potential

NSK aims to develop core human resources who can support sustainable growth. Through a variety of educational offerings and training programs that further refine our people's abilities, knowledge, and character, we provide numerous opportunities and forums for further development.

As a new initiative, we have been planning career seminars for each generation, bearing in mind today's changing social realities, in a world where it is quite possible to live to be 100.

In fiscal 2019, we began the program with a trial seminar for employees in their 50s. We will continue to enhance these seminars, going forward. They provide an opportunity for employees to recognize how times have changed and how they can continue to learn and grow on their own. We hold the following specific training programs to help employees continue to develop their own careers.

Career Development System

		Pre-Employment	New Employees	2nd Year and Beyond	Assistant Managers	Managers	Senior Managers	
Company-Wide Common Training	Rank-based training	<ul style="list-style-type: none"> ● Training before joining company <ul style="list-style-type: none"> - English - Business etiquette 	<ul style="list-style-type: none"> ● New employee development <ul style="list-style-type: none"> - New employee development (approx. 1 month) - Plant training (approx. 3 months) - Follow-up training (conducted three times during first two years) 	<ul style="list-style-type: none"> ● New employee mentor training 	<ul style="list-style-type: none"> ● New assistant manager training 	<ul style="list-style-type: none"> ● New manager training ● Manager training (for managers) 	<ul style="list-style-type: none"> ● Manager training (for senior managers) 	
	Career development support		<ul style="list-style-type: none"> ● Follow-up seminar for mid-career recruits 	<ul style="list-style-type: none"> ● Career seminar for young employees 		<ul style="list-style-type: none"> ● Career seminar for different age groups 		
	Self-improvement		<ul style="list-style-type: none"> ● Business skills training (correspondence course, e-learning) ● Language training (group lesson, correspondence course, e-learning) 					
	Selective training					<ul style="list-style-type: none"> ● NSK Management College <ul style="list-style-type: none"> Assistant Manager Course 	<ul style="list-style-type: none"> Manager Course General Manager Course Global Course (NSK Global Management College) 	
Specialized Training	Production department training			<ul style="list-style-type: none"> ● NSK Manufacturing Education and Training Center <ul style="list-style-type: none"> Engineers <ul style="list-style-type: none"> Beginner Course Intermediate Course Skilled Operators <ul style="list-style-type: none"> Mid-Career Course Electrical Maintenance Course 				
	Technical department training		<ul style="list-style-type: none"> ● NSK Institute of Technology (NIT) <ul style="list-style-type: none"> General education, optional/specialized classes (1-3 years) Technical English education 				<ul style="list-style-type: none"> MOT (Management of Technology) course 	
	Sales division training			<ul style="list-style-type: none"> ● Sales ability enhancement training 				

Human Resources

NSK Management College

To develop talent for managerial roles around the world, the NSK Group has been running the Japan Management College (JMC) since 2000. In 2011, the eligibility criteria was expanded to include NSK Group employees worldwide, launching a parallel program named the Global Management College (GMC). At the JMC, managerial applicants selected in Japan systematically learn about business management over a period of about one year. They then make proposals to NSK's executives for enhancing the Group's future operations. About 400 employees have been through the JMC so far, and a steady stream of executives have been produced by the program. Every year, two GMC participants from each global region, including Japan, are selected to make educational visits to NSK Group sites worldwide. GMC participants receive lectures on business strategy and make visits to business sites in and outside the company, helping them to acquire the knowledge and skills required for senior leadership. In recent years, the GMC has been sending some participants to prestigious business schools outside Japan and inviting experts to come and give lectures. More than 100 people have completed the GMC to date, and they are now active as leaders across the NSK Group.

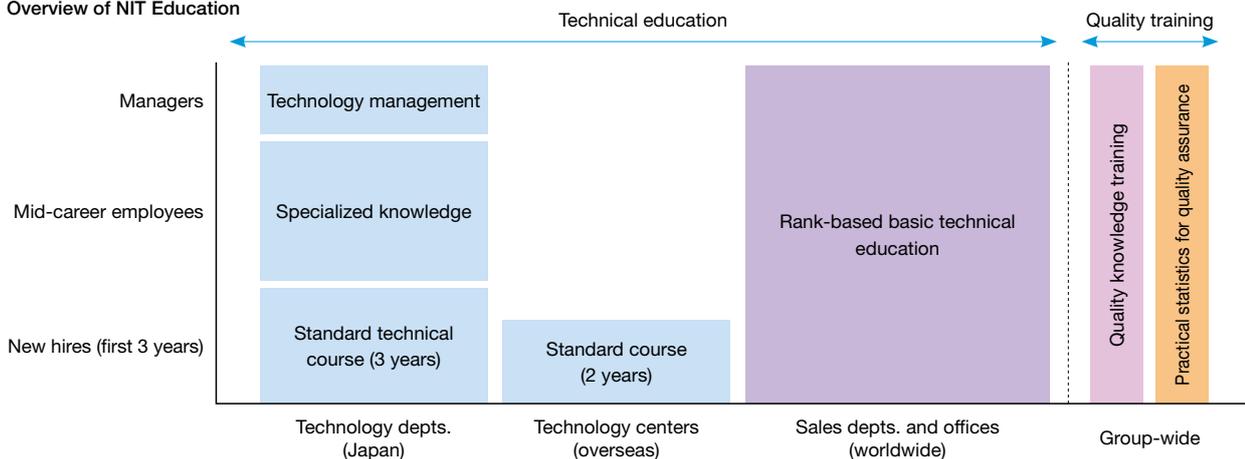
In fiscal 2019, we began selecting outstanding young employees and offering them a special program to prepare them for potential admission to the college later in their careers. The aim is to further raise the level of the JMC program. While learning the basics of business management, these young participants learn about the current business environment, which is undergoing major changes as a result of globalization and digital technology. They spend four months studying and thinking about the optimal direction for NSK in the future.

Development of Professional Human Resources (NIT, NSK Manufacturing Education and Training Centers, and Quality-Support Professionals)

Established in November 2007, the NSK Institute of Technology (NIT) is a global educational institution that provides opportunities for employees to obtain knowledge on a broad range of market and customer technologies, while gaining specialized expertise by diving deeper into fields of focus at NSK. The credit-based curriculum is divided by academic discipline, with classes provided at technology departments in Japan and technology centers around the world. The aim is to provide a comprehensive technical education that goes beyond technical theory to include product usage and handling, safety, quality control, ethics for engineers, manufacturing methods, and cost control. In addition to these standard courses, there are objective-based courses such as English training, technology management training for managers, training for mid-career employees, sales engineer training, and quality education that combine textbook knowledge with practical skills. Open seminars are also held periodically, where external lecturers introduce new perspectives into the organization. In these programs, NSK goes a step beyond mere technical training in an effort to raise up highly talented engineers who will have a direct impact on strengthening the competitiveness of our businesses. In fiscal 2019, 527 students were enrolled in standard programs offered at 10 sites in eight countries.

Seeking to develop frontline manufacturing specialists to inherit unique skills and expertise and pass them on to the next generation, NSK established the NSK Manufacturing Education and Training Center at Ishibe Plant in Shiga Prefecture and at Fujisawa Plant in Kanagawa Prefecture. The technical education provided at these facilities, conducted in three courses on grinding/assembly, maintenance, and electrical maintenance, offers training suited to the abilities and experience of each individual employee. Going forward, the centers will continue conducting the education needed to ensure skill transfer among our frontline employees.

Overview of NIT Education





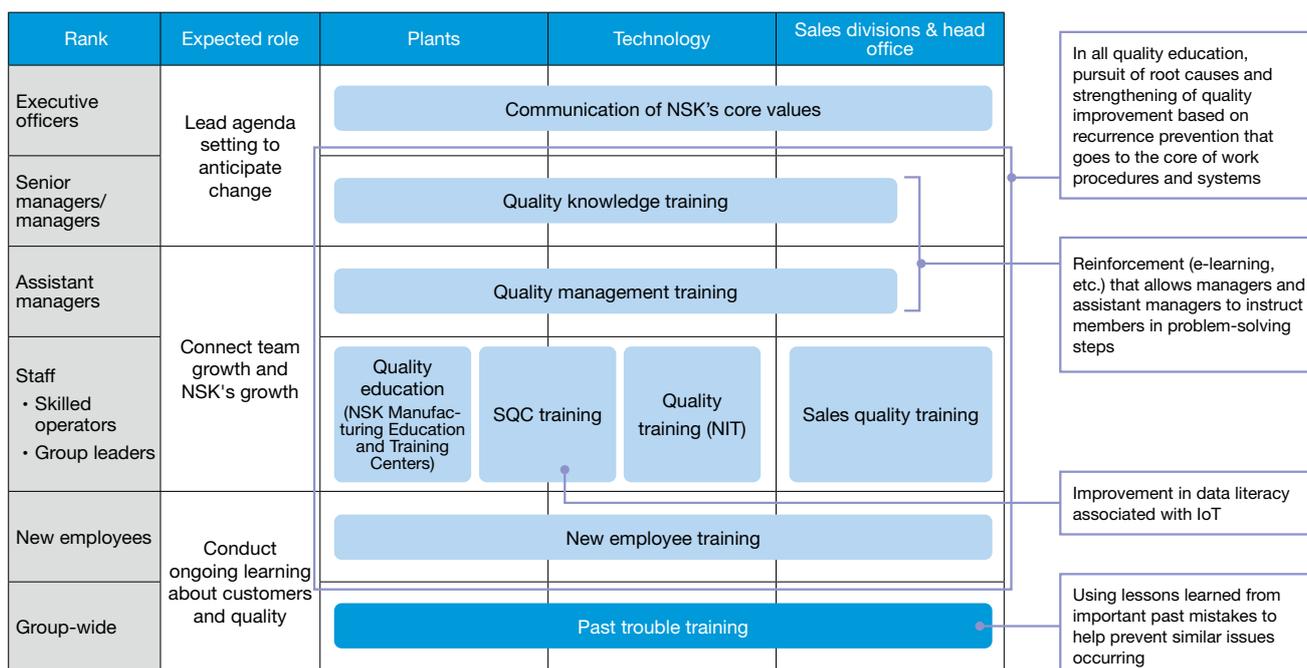
NSK Manufacturing Education and Training Center: Courses and Content

	Course	Participants	Period	Course content
Skilled operators	Skilled operators (grinding/assembly)	Skilled operators	3 months	<ul style="list-style-type: none"> ● Skills knowledge focused on the fundamentals of shop floor management
	Skilled operators (maintenance)	Skilled operators	3 months	<ul style="list-style-type: none"> ● Special skills for repair/maintenance as well as shop floor management
	Electrical maintenance	Candidates for advanced maintenance staff	6 weeks + 2 months (at plant)	<ul style="list-style-type: none"> ● Fundamentals of electrical maintenance (basic theory, programming, troubleshooting) ● 2 months of hands-on training at plant
Engineers	Beginner-level engineers	Engineers with 2-3 years (or equivalent) experience	6 weeks	<ul style="list-style-type: none"> ● Fundamentals of being a plant engineer (basic engineering, basic management knowledge)
	Intermediate-level engineers	Engineers with 5-7 years (or equivalent) experience	1 week (held twice)	<ul style="list-style-type: none"> ● Knowledge for shop floor management skills for intermediate-level engineers ● <i>Monozukuri</i> knowledge from the Toyota Production System

Developing Quality-Support Professionals

The NIT programs are broadly divided into technical and quality assurance education. NSK provides quality education based on collaboration between the Quality Assurance Division Headquarters and NIT. It is tailored to each employee's rank and department. In fiscal 2016, we began restructuring our quality education systems by introducing quality ethics education and practical education in statistical quality control (SQC). We also adopted quality engineering (*Taguchi* method) and practical education.

Sixth Mid-Term Management Plan: Function-Based and Rank-Based Education System (in cooperation with NIT)



For details, see p. 10, "Human Resources," in NSK ESG Data Book 2020.

Human Rights

NSK's Approach

Expectations for the resolution of human rights issues are growing within the international community. The public demands that corporations ensure respect for human rights not only in their own organizations but across the entire value chain. The NSK Group's corporate ethics policy mandates that NSK Ltd. and its affiliates always engage in sincere, fair conduct in order to earn the respect and trust required to succeed in business. We support and respect international norms such as the Universal Declaration of Human Rights and the Guiding Principles on Business and Human Rights. The NSK Code of Corporate Ethics sets out universal concepts that our officers and employees should observe. It includes the NSK Code of Conduct Concerning Compliance, which articulates commitments related to human rights and labor. The NSK Supplier CSR Guidelines incorporate sections from the NSK Code of Corporate Ethics in order to ensure that the NSK Group and its suppliers stay in step as they address these important issues. The NSK Group aims to disseminate human rights initiatives throughout the supply chain by conducting supplier CSR assessments based on the Guidelines.

We uphold a policy of avoiding use of conflict minerals* and are careful in our procurement activities to avoid benefiting armed groups that violate human rights. We ask our suppliers to do the same. We also take steps to avoid using parts or materials that are suspected to be related to armed conflict.

The NSK Group is committed to respecting human rights and will continue to respond to the international community's expectations for the resolution of human rights issues, while monitoring the ongoing evolution of those expectations.

* Conflict mineral clauses in the 2010 U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act

NSK Corporate Ethics Policies

1. Personnel will strive to ensure that NSK Ltd. and its affiliates continue to prosper as a company that acts in a sincere and fair manner, and which is respected and trusted in international and regional society.
2. Personnel will comply with all laws related to the Company's business activities. Moreover, personnel will act in a highly ethical manner in order to ensure that NSK fulfills its responsibility as a corporate citizen.

Matters Related to Human Rights and Labor Stipulated in the Code of Conduct Concerning Compliance (NSK Compliance Guidebook 2018)

Category	Compliance requirements	Scope
Prohibition of discrimination	(1) Prohibition of discrimination (2) Prohibition of harassment	NSK Ltd. and its consolidated and non-consolidated subsidiaries as well as affiliates
Respect of fundamental rights at work	(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	

For details, see "NSK Compliance Guidebook" on p. 87.

System

The NSK Group's efforts related to human rights and labor range widely from proper management of working hours and prevention of unjust discrimination and harassment in the workplace to the creation of safe, comfortable workplaces. We recognize that it is important to address these issues not only internally, but also across our supply chain. Accordingly, we ask our suppliers to carry out similar activities. Within the NSK Group, the CSR Division HQ as well as departments related to human resources, safety, procurement and more are advancing pertinent initiatives.

Human rights/labor	Division responsible
<ul style="list-style-type: none"> ● Understanding social trends; ensuring that understanding is shared throughout the Group ● Dissemination of NSK Code of Corporate Ethics; education and awareness raising activities 	CSR Division HQ
<ul style="list-style-type: none"> ● Proper employment practices ● Prevention of discrimination and harassment 	Human Resource Management Division HQ
<ul style="list-style-type: none"> ● Ensuring workplace safety 	Manufacturing Strategy Division HQ
<ul style="list-style-type: none"> ● Dissemination of activities to suppliers 	Procurement Division HQ



NSK Group's Main Initiatives on Human Rights and Labor

The NSK Group recognizes that eliminating unjust discrimination and respecting the fundamental human rights of employees are two of the most important matters for any employer. As such, we work to maintain stable employment relationships, create safe, comfortable working environments, and facilitate understanding and mutual respect of diverse values. In addition, we distribute the NSK Supplier CSR Guidelines to suppliers and ask that they conduct the same kind of initiatives that the NSK Group does in adherence to the stipulations of the NSK Code of Corporate Ethics. We also conduct supplier CSR assessments that include items on human rights.

Employment Policy to Preserve the Stability of NSK and Society at Large

As a corporate group committed to high-quality manufacturing, the NSK Group pursues sustainable growth. For this reason, we take a long-term perspective on employment and highly value the ongoing recruitment and development of outstanding human resources to lead our businesses in all the countries and regions where we operate. As a matter of course, we use proper employment practices with respect for international norms and local laws and regulations.

Labor-Management Relations Based on Dialogue

The NSK Group regards sound labor-management relations as critical to sustainable growth. One way in which we respect fundamental rights at work, as pledged in the NSK Code of Corporate Ethics, is by guaranteeing employees the right to communicate openly and directly with management without fear of retaliation, intimidation or harassment.

As of March 31, 2020, a total of 83% of the Group's employees in Japan, including managers, belonged to a labor union. Regular meetings between employee representatives of the labor union and members of the management team are held. Participants discuss ways of improving employment conditions by securing more reasonable working hours, better treatment, and improvements in occupational safety and health.

In addition to the compliance hotlines in the CSR Division HQ and outside entities, a harassment consultation service is made available at each site. We respond promptly to consultations and whistleblowing reports from employees and take corrective action when problems are recognized.

Consideration for the Human Rights of the LGBTQ+ Community and Other Groups

NSK explicitly prohibits discrimination based on sexual orientation and gender identification (SOGI) 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 encourages understanding of LGBTQ+ (SOGI) issues and explains considerations to prevent outing and SOGI-related harassment.

In fiscal 2019, over 5,000 employees took part in e-learning on LGBTQ+ (SOGI) issues.

Status of Compliance with Regulations

Addressing Conflict Mineral Issues

In response to the enactment of the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010, the NSK Group adopted a policy of avoiding the use of conflict minerals and is working on this issue. In 2013, the NSK Supplier CSR Guidelines were revised to unequivocally prohibit the use of conflict minerals, and we have endeavored to raise awareness of the revised guidelines among our suppliers. Since then, we have conducted a conflict mineral survey every year with cooperation from the suppliers of parts and materials used in NSK products. Surveys through 2019 have not identified any case of conflict minerals.

Compliance with the UK Modern Slavery Act

In recent years, there has been increasing concern about human rights risk in the supply chain, such as child labor and forced labor. In response to the UK Modern Slavery Act, which was enacted in 2015, the NSK Group partially revised the NSK Supplier CSR Guidelines in 2016 to better prevent human rights violations throughout the supply chain. We also posted statements on the website of NSK Europe Ltd., which oversees the European region.

 URL <https://www.nskeurope.com/en/modern-slavery-statement.html>

Social Participation to Promote Social Progress

NSK's Approach

The NSK Group strives to understand the needs of each country and region, and it trains personnel, develops technology, and promotes community-based activities accordingly. Seeking to contribute to sustainable development and continue being a company that is needed, trusted, and considered a valued member of each community, we conduct social contribution initiatives in the three priority areas of “promoting science and technology,” “development of the next generation,” and “mutual harmony and benefit with communities.”

Establishment of Social Contribution Action Period

Taking the opportunity of our 100th anniversary to further enhance social contribution initiatives, we have designated the months of, before, and after NSK's founding (October through December) as the Social Contribution Action Period, starting in fiscal 2016. During this period, we will work to strengthen our social contribution initiatives Group-wide, making the most of the unique features of each region.

Policy on Social Contribution Initiatives

We are determined to remain a company that is needed, trusted, and considered a valued member of each community.

1. Promoting science and technology that supports the prosperity of society
2. Fostering the development of the next generation
3. Engaging in activities designed to build mutual harmony and benefit with communities

Priority Areas and Stakeholders

Priority	NSK's main stakeholders	Initiatives
Promoting science and technology	Local communities/next generation	● Providing aid to research institutions
Development of the next generation	Next generation	● Providing scholarships, offering students work experience opportunities ● Holding classes about bearings
Mutual harmony and benefit with communities	Local communities	● Cooperating in community events ● Cooperating in welfare programs

Promoting Science and Technology

Providing Aid and Support to Research and Other Institutions

Supporting the NSK Foundation for the Advancement of Mechatronics (NSK-FAM) (Japan)

NSK-FAM was established with a donation from NSK in 1988 and was approved as a public interest incorporated foundation in 2010. NSK-FAM's purpose is to contribute to the development of Japan and the improvement of living standards by advancing mechatronics technology. It does this by providing grants for

R&D, education, technology exchanges, meetings, and other activities that will spur rapid progress in the development of mechatronics technology.



NSK-FAM website (only in Japanese) (<http://www.nskfam.or.jp/>)

Sponsoring the Maebashi RoboCon 2019 (Japan)

NSK Steering & Actuator Technology Center

NSK Steering & Actuator Technology Center supported Maebashi RoboCon 2019, a robotics contest held in August 2019 mainly for elementary and junior high school students. The contest is organized by the Maebashi Technology Forum Executive Committee with joint sponsorship from Maebashi City and Maebashi City Board of Education. The Center also received the Award for Outstanding Industrial Promotion and Social Contribution by a Company from Maebashi City for its service in supporting the robotics contest for 20 years.





Development of the Next Generation

Development of the Next Generation and Education Support

Children's Future Support Fund: Installation of Donation Vending Machines (Japan)

NSK's Ohtsu Plant, Takasaki Plant, Haruna Plant, Fujisawa Plant, etc.

As of October 2020, NSK has installed 12 vending machines that give donations to the Children's Future Support Fund promoted by Japan's Cabinet Office and others. Ten yen is donated for each drink purchased. The empty plastic bottles, cans, and paper cups are collected and properly recycled by a beverage manufacturer with a strong awareness of recycling.



Ohtsu Plant



Takasaki Plant

Haruna Plant

Fujisawa Plant

Supported Renovation of Local Kindergarten (China)

NSK (China) Investment Co., Ltd.

As part of its community contribution, NSK (China) Investment provided a grant for renovating an aging kindergarten. This is the third time it has provided a grant for kindergarten renovation.



Held a Plant Tour for Parents and Children (Japan)

NSK Micro Precision Co., Ltd.

The company held a plant tour for the children and family members of NSK Group employees in August 2019. The program is designed to spark children's interest in science. In addition to the plant tour, a class with experiments is a part of the program. This was the 11th such event.



Mutual Harmony and Benefit with Communities

Contributing to Local Communities

Supporting Access to Clean Water (Indonesia)

PT. NSK Indonesia

PT. NSK Indonesia supported the installation of a well and water storage tank to ensure local residents have access to clean water.



Donation of Masks to Fujisawa City (Japan)

NSK Fujisawa Plant

In March 2020, when the effects of COVID-19 spread rapidly, the plant donated 1,000 masks, which were in short supply, to Fujisawa City. The plant will continue to value the practice of mutual support.



Donation of a Welfare Vehicle (Japan)

NSK Saitama Plant and Saitama Precision Machinery Plant

The plants donated a welfare vehicle to the Hanyu-City Council of Social Welfare through the NSK Welfare Fund.



Donation of Books to Kindergartens (China)

NSK (China) Investment Co., Ltd.

NSK (China) Investment donated books about the environment to four local kindergartens as part of its efforts to address environmental issues.



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

We aim:

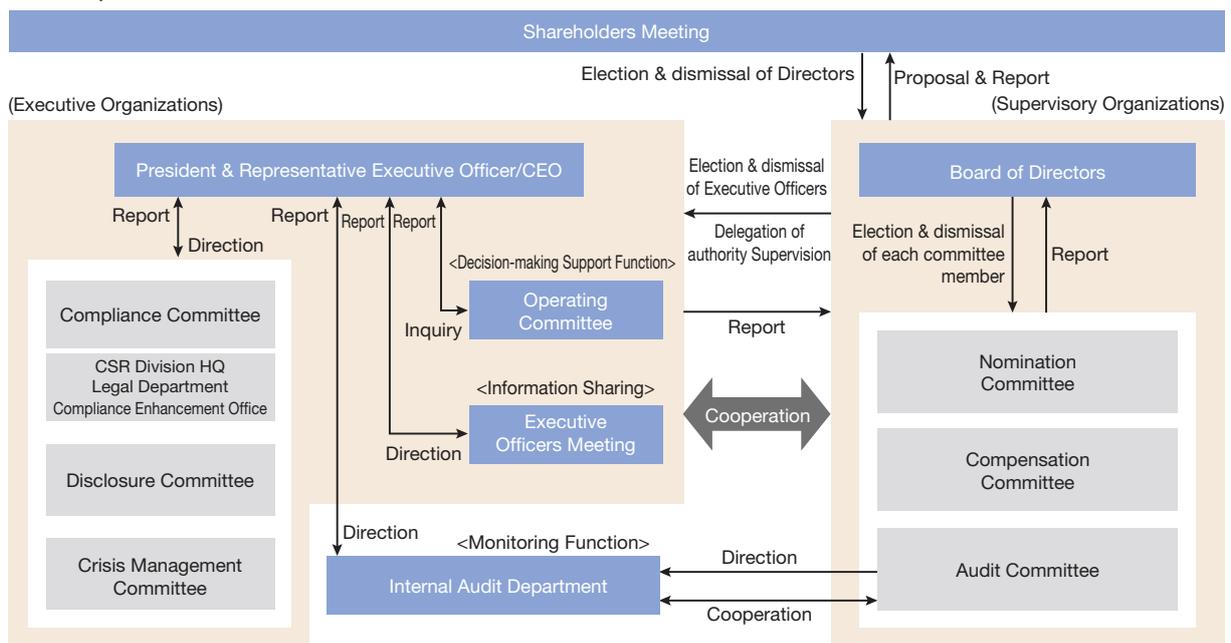
- 1 To increase the efficiency and agility of management by proactively delegating decision-making authority regarding the execution of operations from the Board of Directors to the Company's executive organizations.
- 2 To ensure that supervisory organizations have oversight of the executive organizations 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.

System

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

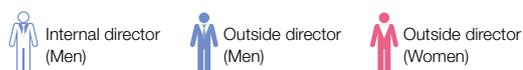
to executive organizations, while supervising the status of implementation in an appropriate manner. The CEO has the ultimate authority and responsibility for all decision-making and operational executive functions delegated by the Board. Under the direction of the CEO, executive officers are responsible 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 June 2020)



Organizations	Board of Directors	Nomination Committee	Audit Committee	Compensation Committee
Structure	 9 members (4 internal directors, 5 outside directors) ● Majority outside directors	 3 members (2 outside directors, 1 internal director) ● Majority outside directors ● Chair : Outside director	 4 members (3 outside directors, 1 internal director) ● Majority outside directors ● Chair : Outside director	 3 members (2 outside directors, 1 internal director) ● Majority outside directors ● Chair : Outside director
Objectives and authority	<ul style="list-style-type: none"> ● Passes resolutions related to basic management policies, etc. (including delegation of duties to executive officers) ● Supervises execution of duties by executive officers 	<ul style="list-style-type: none"> ● Determines the content of proposals submitted to the Shareholders Meeting regarding the appointment or dismissal of directors 	<ul style="list-style-type: none"> ● Audits the duties of directors and executive officers ● Creates audit reports ● Determines the content of proposals related to appointment or dismissal of the accounting auditor, and other matters 	<ul style="list-style-type: none"> ● 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 FY2019	10	8	15	5

Changes to NSK's Corporate Governance Systems

	1999~	2004~	2006~	2015~
Form of corporate organization	1999 <ul style="list-style-type: none"> ● Adopted an executive officer system 	2004 <ul style="list-style-type: none"> ● Transitioned to a Company with Committees System 	2006 <ul style="list-style-type: none"> ● Transitioned to a Company with Committees 	2015 <ul style="list-style-type: none"> ● Transitioned to a Company with Three Committees (Nomination, Audit and Compensation)
Committee	1999 <ul style="list-style-type: none"> ● (Voluntary) Established a Compensation Committee 2003 <ul style="list-style-type: none"> ● (Voluntary) Established an Audit Committee 	2004 <ul style="list-style-type: none"> ● (Voluntary) Established a Nomination Committee ● Established Nomination, Compensation and Audit committees based on the Companies Act of Japan 		2018 <ul style="list-style-type: none"> ● Chairs of three committees all outside directors
Outside director	1999 <ul style="list-style-type: none"> ● 1 outside director 2003 <ul style="list-style-type: none"> ● 2 outside directors 	2004 <ul style="list-style-type: none"> ● 3 outside directors 2005 <ul style="list-style-type: none"> ● 4 outside directors 	2010 <ul style="list-style-type: none"> ● Established criteria for the independence of NSK's outside directors ● Each of the Company's outside directors registered with the Tokyo Stock Exchange as an independent director 	2018 <ul style="list-style-type: none"> ● 5 outside directors
Others	2002 <ul style="list-style-type: none"> ● Established the Crisis Management Committee 	2004 <ul style="list-style-type: none"> ● Established the Internal Audit Office (current Internal Audit Department) to undertake auditing functions and monitor the operations of the Company 2005 <ul style="list-style-type: none"> ● Established the Information Disclosure Team (current Disclosure Committee) 	2006 <ul style="list-style-type: none"> ● Established the Internal Control Project Team (later merged into the current Internal Audit Department) 2012 <ul style="list-style-type: none"> ● Established the Compliance Committee 	June 2020 <ul style="list-style-type: none"> ● Outside directors a majority on the Board of Directors

Corporate Governance

Initiatives to Further Enhance 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, and its business and financial status.

We also hold executive sessions several times a year related to the direction of our business strategies and CSR/ESG management-related topics.

Active Board Deliberations

To achieve active Board deliberations, NSK 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.

Evaluation of Effectiveness of the Board of Directors

In order 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.

Main Content of Questionnaire

The main content of the questionnaire conducted in fiscal 2019 is outlined below.

- Role of the Board of Directors (including deliberating on management strategies, monitoring operation of internal control systems)
- Composition and balance of the Board of Directors
- Operation of the Board of Directors
- Operation of advisory committees (Nomination/ Compensation/Audit Committees)

Assessment Results by External Experts

Continuing from the previous year, an assessment in fiscal 2019 by external experts found that the assessment concluded that the Board of Directors maintained a high level of effectiveness.

- The decision-making authority delegated by the Board of Directors and the Board's supervision of executive directors' duties is appropriate.
- Outside directors gave useful opinions based on their extensive knowledge of and experience in corporate management, finance, accounting and technology at Board of Directors' meetings.
- Discussions are advancing in terms of technology and global management.

Going forward, we will continue working to improve the effectiveness of our Board of Directors, consisting of a majority of outside directors, by further strengthening our corporate governance system and focusing on discussions regarding the direction of long-term management.

NSK Receives "2019 Corporate Governance of the Year" Award

NSK was selected as a "Winner Company" in the 2019 Corporate Governance of the Year Awards* administered by the Japan Association of Corporate Directors.

The Corporate Governance of the Year award was established in 2015. The award is bestowed on companies operating in Japan based on their initiatives to revamp governance structures toward realizing healthy and sustainable business growth over the mid- to long-term. Evaluation also includes measuring company compliance with the Corporate Governance Code set out by the Tokyo Stock Exchange and the Practical Guidelines for Corporate Governance Systems defined by the Ministry of Economy, Trade and Industry.

As a result of its evaluation, the Award Committee selected NSK as a "Winner Company" for management that

takes corporate governance into account and for conducting initiatives to revamp governance structures toward realizing healthy and sustainable business growth over the mid- to long- term.

Moving forward, NSK will continue to evolve and adapt its governance structures to further enhance the sustainability of the Company and its operations over the long term.



At the award ceremony on February 25, 2020. Yoshihiko Miyauchi (left; Chairman of the Japan Association of Corporate Directors) and Saimon Nogami (right; Senior Executive Vice President of NSK).

* "Corporate Governance of the Year" is a registered trademark of the Japan Association of Corporate Directors.



Outside Directors

Selection Standards

NSK expects outside directors to contribute to enhancing and reinforcing the Company's corporate governance, achieving sustainable growth and increasing mid- to long-term corporate value. When electing outside directors, we verify requirement as follows:

- Persons who have neither a special interest with the Company nor a conflict of interest with regular shareholders
- Persons who meet NSK's criteria for independence
- Persons who have considerable experience and deep insight as a corporate executive or as experts
- Persons who can devote sufficient time to perform duties as an outside director of NSK

The Nomination Committee determines outside director candidates who meet the above criteria.

The criteria for the independence of NSK's outside directors can be found on our website. These criteria satisfy those of the Tokyo Stock Exchange, Inc.

For details, see the NSK website. <https://www.nsk.com/>

Home → Company → Corporate Governance

Supporting System

NSK provides opportunities for outside directors to attend meetings of the operating organizations and visit business facilities in Japan and overseas, which enables them to learn directly about the state of business execution in order to deepen their understanding of NSK's business and matters specific to NSK.

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.

Fiscal 2019 Results

- **Visited domestic business facilities (production bases and technology bases)**
Visits to 7 locations, with 9 outside directors participating in all
- **Meetings of executive organizations**
All outside directors participated
- **External exhibitions**
4 outside directors attended

Outside Director Attendance and the Three Committee System

● : Chair ○ : Members

Name	Date appointed as director	Attendance at Board of Directors and Committee Meetings in FY2019				Composition of each committee from June 2020		
		Board	Nomination	Audit	Compensation	Nomination	Audit	Compensation
Teruhiko Ikeda	June 2015	○ 100% (10/10)	—	○ 100% (15/15)	● 100% (5/5)	—	—	—
Hajime Bada	June 2018	○ 90% (9/10)	● 100% (8/8)	—	—	●	—	—
Akemi Mochizuki	July 2018	○ 100% (10/10)	—	● 100% (15/15)	—	—	●	—
Toshio Iwamoto	June 2019	○ 100% (7/7)	—	—	○ 100% (4/4)	—	—	○
Yoshitaka Fujita	June 2019	○ 100% (7/7)	○ 100% (7/7)	—	—	○	○	—
Mitsuhiro Nagahama	June 2020	—	—	—	—	—	○	●

* Each of the outside directors has been registered with the Tokyo Stock Exchange as an independent director.

* On June 25, 2019, Toshio Iwamoto was appointed to the Board of Directors and Compensation Committee, and Yoshitaka Fujita was appointed to the Board of Directors and Nomination Committee. Accordingly, the number of meetings of the Board of Directors and the three committees and the number of meetings subject to attendance in fiscal 2019 differ.

* Teruhiko Ikeda retired as a director on June 30, 2020.

For details, see pp. 11-12, "Corporate Governance," in NSK ESG Data Book 2020.

Corporate Governance

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.

The Board formulates this basic policy, and periodically confirms the development of systems as well as the status of operations and oversees effectiveness. 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 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 to audits conducted by the Audit Committee.

Directors/Officers' Compensation

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

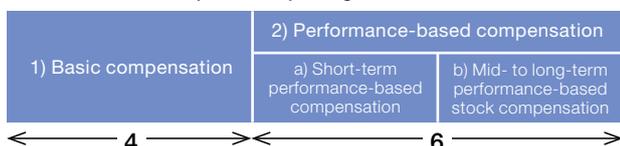
As a Company with Three Committees (Nomination, Audit, and Compensation), NSK makes decisions on executive compensation structure, compensation levels, and individual compensation, etc., at a Compensation Committee chaired by an independent director, and based on advice from external consultants as well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



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 representation rights.

2) Performance-based compensation

The performance-based compensation consists of a short-term performance-based compensation and a 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 CO₂ 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 they 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 in the fiscal year ending March 2020 a performance-based stock compensation program using a 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.

2) Stock compensation

To further incentivize contributions to the sustainable improvement of corporate value and to ensure they 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 executive officers 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, 2019, and March 31, 2020, was as follows.

Classification	Compensation, etc., total (¥ Millions)	Basic compensation		Short-term performance-based compensation		Stock compensation	
		No. of directors/officers	Amount (¥ Millions)	No. of directors/officers	Amount (¥ Millions)	No. of directors/officers	Amount (¥ Millions)
Directors (internal)	72	7	65	—	—	1	7
Directors (outside)	77	7	61	—	—	7	15
Executive Officers	1,447	33	1,058	31	110	36	279

* Compensation (excluding stock compensation) for directors (internal) includes compensation for directors who also serve as executive officers.

* The amount of performance-based salary is the planned amount to be paid on July 1, 2020, based on the results for the year ended March 31, 2020. The amount of performance-based salary paid on July 1, 2019, based on the results for the year ended March 31, 2019, was ¥410 million.

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

* 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, 2019, and March 31, 2020, was as follows.

Name	Consolidated compensation, etc., total (¥ Millions)	Title	Company	Amount for each item of consolidated compensation, etc. (¥ Millions)		
				Basic compensation	Short-term performance-based compensation	Stock compensation
Adrian Browne	103	Executive officer	NSK	87	14	1
Jean-Charles Sanchez	129	Executive officer	NSK	119	7	2

Response to Japan's Corporate Governance Code

NSK complies with all principles of the Corporate Governance Code and outlines its policies in the Corporate Governance Report that it submits to the Tokyo Stock Exchange, Inc.

For details, see the NSK website.

Corporate Governance Report (in English)
<https://www.nsk.com/company/governance/index.html>

For details, see pp. 11-12, "Corporate Governance," in NSK ESG Data Book 2020.

Compliance

NSK's Approach

The NSK Group 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.

Policy

The NSK Group aims to continue developing as a company that is trusted by the international community 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.

To that end, the Group has put in place policies and a management system related to compliance, constantly enhances its education and training for officers and employees, conducts internal audits and has established a compliance hotline. We also strive to fulfill our corporate social responsibility through initiatives such as preventing information leaks and addressing issues related to conflict minerals.

NSK Code of Corporate Ethics

The NSK Code of Corporate Ethics sets out the universal approach for the Company and its officers and employees as they engage in a range of corporate activities, in accordance with the NSK Group vision and philosophy. All officers and employees of the NSK Group must follow this code. Whenever it is violated, the person concerned is subject to disciplinary action based on the employment regulations.

NSK Code of Corporate Ethics (Established: February 2002, Revised: June 2017 by a Resolution of the Board of Directors)

1. Personnel will strive to ensure that NSK Ltd. and its affiliates continue to prosper as a company that acts in a sincere and fair manner, and which is respected and trusted in international and regional society.
2. Personnel will comply with all laws related to the Company's business activities. Moreover, personnel will act in a highly ethical manner in order to ensure that NSK fulfills its responsibility as a corporate citizen.

Code of Conduct Concerning Compliance

1. Compliance with Competition Laws
2. Compliance with Import- and Export-Related Laws
3. Prohibition of Commercial Bribery (handling of entertainment, gifts, etc.)
4. Transactions with Public Institutions and Handling of Political Donations
5. Accurate Recording and Processing
6. Prohibition of Insider Trading
7. Handling of Intellectual Property Rights
8. Prohibition of Illegal and Criminal Conduct
9. Protection of Corporate Assets
10. Handling of Confidential and Personal Information
11. Relations with Customers
12. Relations with Suppliers
13. Prohibition of Acts Discrediting Competitors
14. Prohibition of Discrimination, Cultivation of a Sound Workplace
15. Respect of Fundamental Rights at Work
16. Global Environmental Protection

Guidebook and Main Regulations Concerning Compliance

NSK Compliance Guidebook 2018

https://www.nsk.com/company/compliance/data/nsk_compliance_guidebook_en.pdf

There are 16 items in the NSK Code of Conduct Concerning Compliance, under the NSK Code of Corporate Ethics. The guidebook explains the purpose of each item and how to comply with each one.

Rules for Compliance with Competition Law

These rules require compliance with Japan's Antimonopoly Act and similar competition laws worldwide. They prohibit officers and employees from exchanging information or making arrangements with competitors regarding product prices, customers, or restriction of sales price setting by retail stores.

Personal Information Management Regulations

These basic regulations cover the acquisition, management and protection of personal information by officers and employees.

Anti-Bribery Standards

These standards prohibit officers and employees from being involved in bribery and the giving or receiving of entertainment and gifts that deviate from socially accepted norms. In principle, the provision of entertainment or gifts to any officer or employee of a public institution is prohibited.

Internal Regulations for Preventing Insider Trading

These rules prohibit officers and employees from buying or selling company stock while in possession of insider knowledge of related undisclosed information. Personnel in this situation are also not allowed to encourage others including family members to buy or sell company stock. In addition, we have set up a pre-approval system for the sale of NSK stock by personnel, and we prohibit the purchase of NSK shares by personnel on the stock market.

NSK Group Tax Policy

<https://www.nsk.com/investors/management/taxpolicy.html>

Paying taxes is one of the most basic and important social responsibilities of a company. To fulfill this responsibility properly, NSK has adopted this policy with regard to tax matters.

System

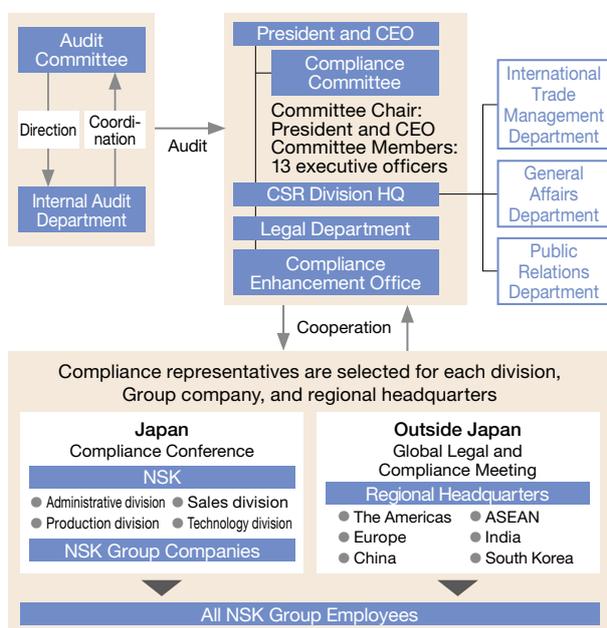
Compliance Promotion System

NSK has established a Compliance Committee chaired by the president. The committee formulates policies aimed at strengthening compliance and formulates and promotes initiatives to strengthen compliance in order to achieve those policies. At the same time, it monitors and supervises the implementation of those initiatives and reports regularly to the Board of Directors.

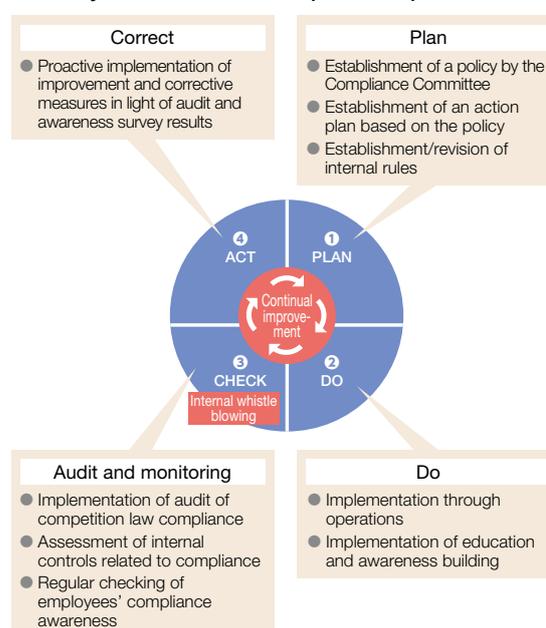
We have also established a Compliance Enhancement Office in the Legal Department at CSR Division Headquarters

and tasked it with overseeing the practical work related to compliance across the entire NSK Group based on the decisions of the Compliance Committee. The NSK Group has appointed persons responsible for compliance at each department, site, and NSK Group company in Japan as well as each headquarters outside Japan to serve as key contact points who regularly report on compliance and conduct risk management.

NSK Group Compliance System (As of August 2020)



PDCA Cycle for Continual Compliance Improvement



Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets	FY2019 targets	Performance in FY2019
Further strengthen the global compliance system	Monitor compliance plans and their progress outside Japan	<ul style="list-style-type: none"> Monitored compliance plans outside Japan and their progress through global and monthly meetings Conducted employee engagement surveys
Improve sophistication of compliance risk management	Assess bribery risk (worldwide)	<ul style="list-style-type: none"> Conducted bribery risk assessment to ascertain risks (worldwide)
Heighten employee compliance awareness	Establish and implement a compliance training system for factory operators (Japan)	<ul style="list-style-type: none"> Established a system where department managers serve as training instructors in Fujisawa and Fukushima plants, and provided training to all factory operators
Increase confidence in the compliance hotline	Distribute messages from the top management about the compliance hotline (Japan)	<ul style="list-style-type: none"> Messages about the compliance hotline sent out by the President and Head of the CSR Division HQ
	Share information on usage status and response measures (worldwide)	<ul style="list-style-type: none"> Information on system usage and response measures shared in the Compliance Newsletter and via other channels such as digital signage

Compliance

Highlight

Reflecting on Lessons Learned from the Cartel Incident and Our Corporate Philosophy “NSK Corporate Philosophy Day”

Eight years have passed since the Japan Fair Trade Commission raided NSK offices in 2011. 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 2019, employees at sites in and outside Japan watched videos titled “Message from the President,” “Understanding Our Corporate Philosophy” and “A Look Back at the Cartel Incident.”



NSK Corporate Philosophy Day

In Japan, employee questions were answered about the Corporate Philosophy and examples of how the Corporate

Philosophy is put into practice were shown. Outside Japan, after a message from local management, each site held its own events, which included lectures by outside experts and discussions on compliance.

Starting on NSK Corporate Philosophy Day, NSK holds an annual compliance month, inviting employees to submit compliance slogans. In fiscal 2019, posters featuring the two outstanding slogans were designed and distributed to all NSK sites.



Compliance slogan posters (Japanese)

Right: Communication comes not only from the top, so let's hear everyone's voice

Left: Remember the Corporate Philosophy and work together to prevent any cartel behavior

NSK's Efforts to Enhance Compliance

The entire NSK Group is making efforts to ensure thorough compliance and is striving to enhance business activities based on corporate social responsibility. Key initiatives to enhance compliance undertaken to date are as follows.

Item	NSK Group initiatives
Strengthening the compliance system	Established the Compliance Committee (meetings held 3 or 4 times a year)
	Established the Compliance Enhancement Office (a dedicated organization)
	Holds Global Legal and Compliance meetings (twice a year) with legal and compliance representatives outside Japan
	Holds a Compliance Conference (twice a year) with compliance representatives in Japan
Establishing relevant regulations & systems	Managed by system for considering whether or not 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
	Revised the Hotline Operational Rules to reflect the Consumer Affairs Agency's guidelines concerning the operation of internal reporting 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	



Establishing relevant regulations & systems	Clarified the prohibition on any association with organized crime in the NSK Code of Corporate Ethics
	Established the NSK Group Tax Policy
Strengthening education and awareness raising activities	Regularly distributed the president's message calling for thorough compliance
	Implemented compliance e-learning for officers and employees
	Conducted compliance training at sales divisions, plants, engineering sections and Group companies
	Started a regular Compliance Newsletter
	Designated July 26 as "NSK Corporate Philosophy Day"
	Conducted a compliance slogan contest during compliance month (July 26–August 31)
	Internally shared compliance violation information
Strengthening monitoring	Conducted internal audits of sales divisions relating to Antimonopoly Act compliance
	Inspected specific categorical risks in compliance for the NSK Group
	Conducted an employee engagement survey for the NSK Group (compliance awareness survey)

Strengthening the Compliance System

Global Legal and Compliance Meetings

In order to strengthen the global compliance system, global legal and compliance meetings are held twice a year. At these meetings, members responsible for compliance from the Americas, Europe, China, ASEAN, India, and South Korea gather with their colleagues and report on and discuss activities in their respective regions and countries. They also share information on legal requirements in each country, seeking ways to improve future efforts. Global legal and compliance meetings were held in China and Japan, in June and November 2019, respectively. Participants discussed their activity plans for the fiscal year and progress already made. They also talked about methods for conducting training to raise compliance awareness, and operation of the compliance hotline.

Compliance Audits

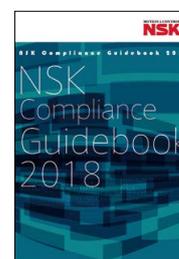
Since fiscal 2013, the Compliance Enhancement Office in NSK's Legal Department has been conducting annual audits to determine the extent of compliance with competition law and how well the compliance system is operating. In fiscal 2019, audits were conducted on 24 business sites in Japan, 19 outside Japan, and no major non-conformities were found.

In fiscal 2019, risk assessments were also conducted with a focus on anti-bribery, as a special compliance theme. Self-inspections were carried out at 77 departments in Japan and 118 outside Japan. No high-risk transactions or departments were found.

Establishing Regulations and Systems

Distribution of Compliance Guidebook

NSK distributed the NSK Compliance Guidebook 2018, which explains the 16 items of the NSK Code of Conduct Concerning Compliance in the NSK Code of Corporate Ethics, to officers and employees of the NSK Group to raise awareness about compliance. The Guidebook was prepared in four languages: Japanese, English, Chinese, and Korean. Employees who receive the Guidebook pledge to abide by its content.



NSK Compliance Guidebook 2018

Preventing Violations of the Competition Law

The NSK Group strives to realize fair and free business transactions by ensuring employees are aware of and comply with competition law. It also prohibits agreements with competitors regarding such matters as price, quantity, customers, and sales outlets as well as the exchange of information.

In fiscal 2019, we conducted training worldwide, focusing on sales departments. The training covered competition law and other compliance-related themes. In the future, we will continue this training on competition law, incorporating discussion among participants. In addition to training in and outside Japan, rigorous steps are taken to prevent violations of the law, including requiring in-advance applications and ex post facto reports when participating in meetings where there could be contact with competitors.

Compliance



Competition law training

Compliance Hotline (Whistleblowing System)

The NSK Group has made explicit in its internal rules that employees who learn of acts that violate or might violate the NSK Code of Corporate Ethics or compliance are to contact the compliance hotline made available in their regions and countries. The Group makes sure that employees are well informed about these hotlines. In some countries and regions, the hotline is available to suppliers as well.

In Japan, we established hotline operational rules to ensure that the functioning of our system is in full compliance with Japan's Whistleblower Protection Act. In fiscal 2017, we changed the hotline system to enable users to contact the Audit Committee concerning officer compliance matters. This point of contact is independent of executive personnel, and has further increased the effectiveness of the compliance hotline. The system allows hotline users to remain anonymous, and rules are established to ensure they are protected from disadvantageous repercussions. Reported incidents are investigated by the CSR Division Headquarters in Japan and by the local legal department outside Japan with the help of relevant departments as needed. If a compliance violation becomes apparent, corrective actions and recurrence prevention measures are quickly taken where needed.

We are working to ensure that employees are well informed about the compliance hotline. This is done by putting up posters about the compliance hotline and distributing business card-sized cards containing the hotline contact information.

In fiscal 2019, the hotline was contacted 175 times worldwide. The incidents were quickly investigated and resolved, including implementation of corrective actions where needed.

Compliance Hotline: Consultations and Reports

	FY2017	FY2018	FY2019
Number of consultations and reports	88	127	175

Preventing Insider Trading

The Internal Regulation for Preventing Insider Trading applies to all officers and employees of the NSK Group. It prohibits NSK Group officers and employees from purchasing NSK shares on the stock market. When selling NSK shares, they must apply for permission in advance using a special system. We are working to ensure thorough awareness of insider training across the Group. This is achieved through e-learning modules and other training, posters, and internal communication materials such as the Compliance Newsletter.

Anti-Bribery Measures

Given stronger anti-bribery regulations in many countries, the NSK Group clearly states in the NSK Code of Corporate Ethics that bribery is prohibited, and has established Anti-Bribery Standards. Bribery prevention rules have been established in each country and region based on the Anti-Bribery Standards, taking into consideration the anti-bribery regulations in each jurisdiction.

In fiscal 2019, we offered anti-bribery training and e-learning in the Americas, Europe, China, and ASEAN countries, etc.

No Association with Organized Crime

The NSK Group is fulfilling its corporate social responsibilities with a basic policy for completely blocking any association with organized crime, including transactional relationships. Furthermore, this policy is spelled out clearly in the NSK Code of Corporate Ethics and awareness of it is continually promoted to ensure a systematic response across the Group. We have also strengthened cooperation with the police and other external organizations. In Japan, the Group adds special clauses to its contracts with business partners to enable cancellation if the business partner is later found to be connected with organized crime.

Security Export Control

The NSK Group has strengthened its system for controls for preventing products and technology from being exported for the aims of the development, manufacture, and use of weapons, based on Japan's Foreign Exchange and Foreign Trade Act. A basic policy and system of controls related to security export have been set forth in the Standards on Security Export Control, and efforts are being made to maintain and improve the reliability of the NSK Group's export-related operations and to reduce the



risk of legal violations.

In fiscal 2019, we revised our process for determining whether the goods we export or the technology we share internally outside Japan is subject to Japan's Foreign Exchange and Foreign Trade Act. While properly managing security exports, we are also improving efficiency by utilizing digital systems that eliminate the need for manual stamping of documents.

Tax Compliance

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. In March 2018, we established the NSK Group Tax Policy. We are striving to ensure appropriate tax treatment, including refraining from forming organizations that are inconsistent with business purposes and actual conditions for the purpose of tax avoidance.

Strengthening Education and Awareness Raising Activities

Compliance Education and Awareness Raising Activities

The NSK Group provides group training and e-learning modules to further raise the awareness of officers and employees concerning compliance issues. The training content is tailored to the particular risks faced by each department in every Group company. It covers a wide range of topics, including compliance with competition law, anti-bribery measures, and prevention of insider trading.

Compliance Training for Factory Operators

In fiscal 2019, we conducted compliance training for all operators working at the Fujisawa and Fukushima plants to further raise compliance awareness. With department managers serving as the instructors, the training covered NSK's basic approach to compliance. Group discussions were also carried out using video teaching materials on the topic of product quality. The employees renewed their appreciation of the importance of quality assurance and internal rules. We will continue to provide training for operators at our plants.



Training for factory operators

Strengthening Monitoring

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 2019, we addressed issues that were identified in the fiscal 2018 survey in Japan, namely enhancing awareness of compliance in manufacturing divisions and further improving the reliability of the compliance hotline. In addition, we conducted surveys in some regions outside Japan. A total of 15,518 officers and employees answered the survey.



For details, see p. 12 "Compliance," in NSK ESG Data Book 2020.

Risk Management

NSK's Approach

At the NSK Group, the executive management team oversees the implementation of a risk management system guided by the Group's basic internal control policy. Risks faced by the NSK Group are identified, categorized and prioritized by the risk management

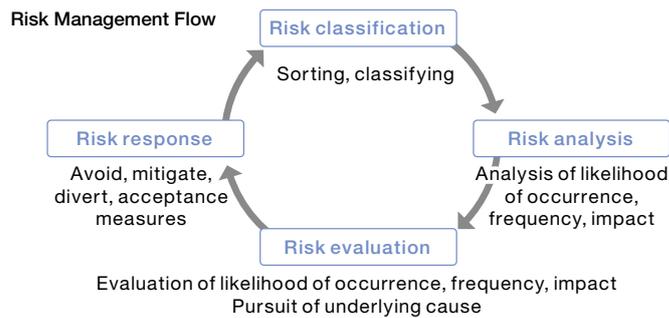
department, before being assigned to responsible departments. This system is designed to avoid and minimize risks for the entire Group and to coordinate response measures when risks actually materialize.

System

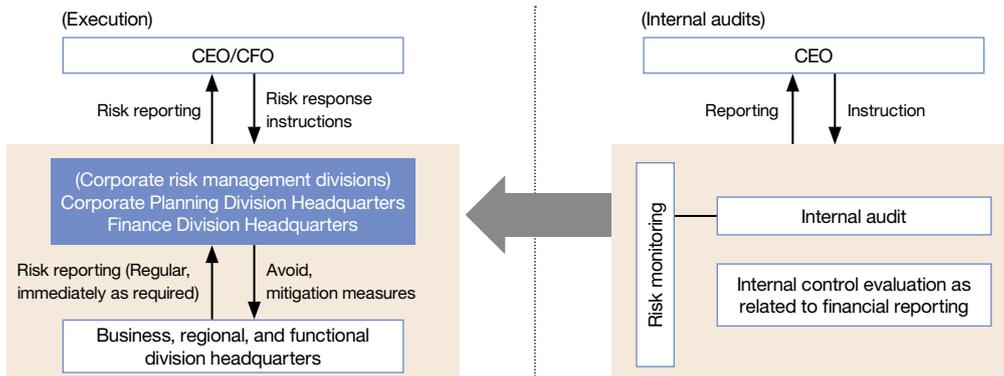
Risk Management Systems

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 of 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, regional and functional headquarters with regard to risks identified by 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 take action in the unfortunate

event a risk should actually be manifested, and then works to mitigate 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. These are shown on the following page, Representative Risks of High Importance. Among the risks we present, the three types outlined in 1, 2, and 6 could lead to business opportunities for NSK, and we include details concerning these as well.

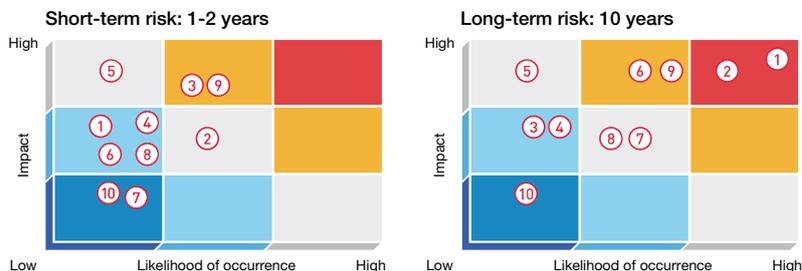


Risk Management System



Representative Risks Deemed of High Importance

Risk Heat Map



Risk types	Details of representative risks	Risk mitigation measures
1 Risk associated with changes to technology innovation, and the market or competitive landscape	<ul style="list-style-type: none"> 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 <p>Opportunity Generation and expansion of new businesses brought about by the introduction of new products and new technology</p>	<ul style="list-style-type: none"> 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
2 Risk related to local situations and dependency on specific region	<ul style="list-style-type: none"> 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 Risk associated with halt in operations on account of deteriorating public order, outbreak of riots or terrorism Risk associated with business continuity in the event the supply chain breaks down Risk of overemphasis on Asia, particularly China <p>Opportunity Business expansion in important regions other than China, such as Europe, ASEAN and others</p>	<ul style="list-style-type: none"> Expand and enhance a balanced presence in other regions Get an early grasp of information on dangers by strengthening ability to gather information from each region Leverage our global network that has the principle of local production, local procurement
3 Risks associated with safety, prevention of fire and disaster, and pandemics	<ul style="list-style-type: none"> Risk of major industrial accident occurring Risk of halt in operations due to mistaken BCP measures to address fires or natural disasters Risk of being unable to secure a comfortable and safe working environment in neighboring regions, or for employees Risk associated with the global outbreak of new infectious diseases 	<ul style="list-style-type: none"> Strengthen and nurture safety awareness, thoroughly educate and enlighten employees Share case studies from other locations introducing what went right, and what went wrong Conduct simulations of anticipated scenarios, prepare disaster countermeasures, formulate a business continuity plan Implement thorough measures to prevent infection when an outbreak of an infectious disease occurs, including development of responsive procedures
4 Risk associated with quality	<ul style="list-style-type: none"> Risk of compensation claims due to significant quality defects Risk associated with insufficient response due to improper quality assurance system or quality control management Risk of spoofed, falsified quality data 	<ul style="list-style-type: none"> Secure high quality by strengthening process management aimed at enhancing design and product quality Realize zero defects through continued quality improvement activities Create a system to prevent data falsification and conduct thorough training
5 Risk with regard to compliance	<ul style="list-style-type: none"> Risk of violating laws and regulations due to employee carelessness or misunderstanding, etc. Risk of losing the trust of society due to bearing responsibility for criminal, civil and administrative acts associated with the above 	<ul style="list-style-type: none"> 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 the status of implementation
6 Risk concerning the environment	<ul style="list-style-type: none"> Risk of not progressing toward attaining reduction in CO₂ emissions (60% reduction in emissions in 2050) and other specific goals related to 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 <p>Opportunity Expand sales of environmentally friendly products</p>	<ul style="list-style-type: none"> Formulate and implement environmental action plans through a special committee dedicated to environmental protection Understand information, and formulate and implement specific response measures, in order to conform to environment-related laws and systems Acquire external certifications in the development, design, production and distribution divisions that pay careful attention to environment-related issues, and manage thoroughly according to reviews by third-party institutions
7 Risk associated with human resources and labor	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Strengthen and thoroughly implement human resource management policies such as leveraging a diverse workforce, building more engaging workplaces, providing opportunities for growth Undertake measures to bolster engagement and systems, including support for females, elderly and people with disabilities to play an active role, conduct employee awareness surveys and Employee Relations (ER)
8 Risk with regard to procurement	<ul style="list-style-type: none"> 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 that CSR procurement initiatives will not make progress 	<ul style="list-style-type: none"> Build a firm understanding of the Company's basic policy through procurement policy briefings, NSK Supplier CSR Guidelines, procurement 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, environmental, and CSR audits, and support supplier improvement
9 Risk associated with information and communication technology (ICT)	<ul style="list-style-type: none"> Risk of decline in competitiveness due to lagging sophistication of IT systems Risk of decline in business efficiency due to loss of stability in IT system that underpins business operations 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 	<ul style="list-style-type: none"> Maintain and raise technology level by pursuing new IT system technology and field trial deployment Ensure stability through backup and redundancy of IT system infrastructure and standardized system support Build and strengthen a management structure relevant to cyber security risks and educate and enhance knowledge internally with regard to information security, acquire external certifications
10 Risk related to finance	<ul style="list-style-type: none"> 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 procedures 	<ul style="list-style-type: none"> 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 Perform Group management and increase effectiveness based on the internal control system

As a measure to minimize COVID-19 pandemic risks, the NSK Group puts the safety and security of its customers, business partners and employees first. The Group has implemented thorough infection prevention measures based on the guidelines of the World Health Organization (WHO) and the health authorities in each country concerned. NSK has prohibited travel to countries or regions with a high risk of infection as a general rule, and is promoting work style reform in preparation for a post-COVID world by taking measures such as having employees work from home and encouraging the use of online conferencing systems and internal chat tools to facilitate remote communication. For more information on the Group's pandemic measures, see page 94.

Risk Management: Disaster Risk Management

NSK's Approach

With a basic policy of placing top priority on securing human safety, NSK's objective is to protect lives, as people are the foundation of its business, and to resume business activities as soon as possible after an emergency arises. To this end, the NSK Group has established a permanent Crisis Management Committee to oversee Group-wide initiatives to address disaster risk, including natural disasters such as large-scale earthquakes, wind and flood damage, infectious disease outbreaks, and other major incidents. The Committee plans and implements measures to prevent crises and minimize damage in the event that these risks materialize, and is also responsible for establishing and improving Business Continuity Plans (BCP).

In the event of a crisis, crisis response task forces are set up at the head office as well as at the site of the crisis, and relevant departments cooperate to handle the situation quickly and accurately according to the circumstances.

Policy

Recovery time objectives are set so as to enable a resumption of product supply to customers even after a crisis occurs. To ensure recovery within the target period, the NSK Group promptly implements measures to thoroughly minimize damage in the event of a disaster. By reducing the recovery period and securing the minimum inventory required, we will be able to continue supplying products. In anticipation of unforeseen damage and difficulties for recovery within the target period, we are in a state of preparedness so that business activities can be resumed using alternative functions.

System

Crisis Management Systems for Disaster Risk

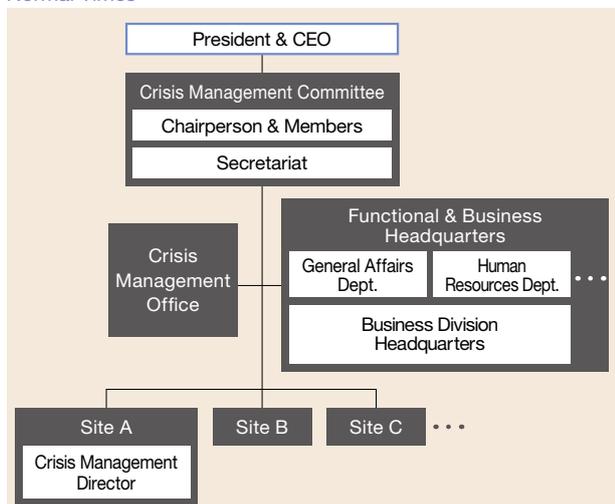
By establishing and improving crisis management systems to prepare for relevant risks such as natural disasters, pandemics from infectious diseases, and major accidents, the Crisis Management Committee helps to minimize the damage in the event of an actual emergency, while playing a

role in addressing such situations swiftly and effectively.

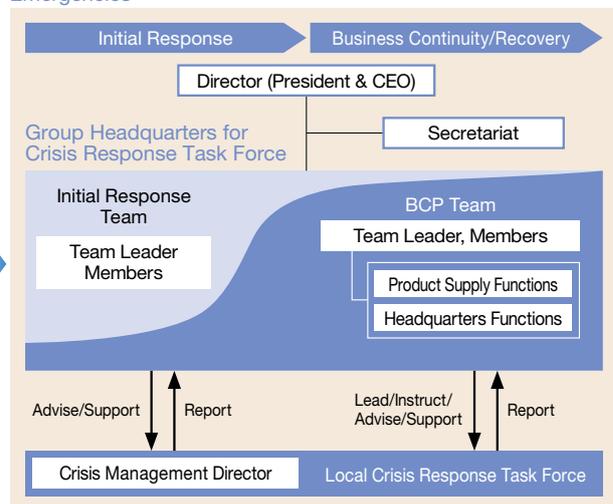
Organizations have also been established in each region outside Japan to supervise crisis management in their respective locations. When a relevant emergency occurs, the Crisis Management Committee in Japan works with the organizations concerned to deal with the crisis.

Crisis Management Structure for Disaster Risks

Normal Times



Emergencies





Sixth Mid-Term Management Plan Targets (FY2019–2021) and the FY2019 Targets and Performance

Sixth Mid-Term Management Plan targets		FY2019 targets	Performance in FY2019
Development of group crisis management systems	Strengthen cooperation with regional headquarters outside Japan	Establish rules for reporting to the Crisis Management Committee	<ul style="list-style-type: none"> ● Implemented crisis reporting based on the rules
	Optimize crisis management system	Review the management system based on crisis response results	<ul style="list-style-type: none"> ● Reviewed the management system based on actual response to major disasters (earthquakes, wind and flood damage, and pandemics from infectious diseases, etc.)
BCP creation and effectiveness enhancement	Japan: Improve BCP effectiveness for earthquake, wind and flood damage	Enhance product supply capability	<ul style="list-style-type: none"> ● Familiarized with emergency response procedures through training
	Outside Japan: Promote establishment of BCP against serious risk	Create BCP at model factories	<ul style="list-style-type: none"> ● Examined BCP and verified its effectiveness at model factories

Responding to Disaster Risk

Strengthening Risk Response Capabilities with Business Continuity Planning

In order to maintain a steady supply of products to customers even during an emergency, the NSK Group is working to improve the effectiveness of its BCP, in preparation for disasters such as large-scale earthquakes. We have concrete measures in place for disaster preparedness. This includes a complete organizational structure and the necessary emergency response procedures and tools for preparedness at the head office and all the business sites of Group companies in Japan. We also conduct regular drills to confirm the viability of the plan and to address issues that emerge during the drills by making improvements. Also, to ensure recovery within the target period, the Group continually promotes measures to minimize the time needed to resume normal operations. These include preparing thorough measures to minimize damage in the event of disaster, securing communication and reporting systems that can be used in an emergency, taking measures to protect against large-scale power

outages, and securing backup IT infrastructure.

We also have a policy calling for BCPs to be established at model factories outside Japan, and are deploying them to other locations. As a model factory, PT. NSK Bearings Manufacturing Indonesia has started to look into establishing a BCP for its operations. This factory was chosen as a model factory because it supplies products to customers all over the world. Its status is also the result of certain geopolitical risks, and the fact that it makes products that are made nowhere else.

Based on specific risk impact assumptions, the factory has already set recovery targets, clarified emergency response procedures, and identified necessary recovery measures. It plans to verify the effectiveness of its BCP in the near future.

Risk Management: Disaster Risk Management

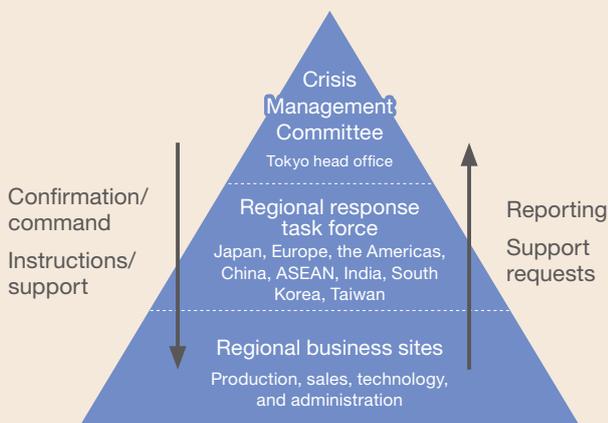
Highlight

Response to COVID-19 and Other Pandemics from Infectious Diseases

Formation and Startup of the COVID-19 Response Team

The NSK Group has responded to the COVID-19 pandemic according to its basic policy of putting human lives and safety first. The chairperson of the Crisis Management Committee (the Executive Vice President responsible for administrative divisions) has set up a COVID-19 response team. Similar teams have been set up based around the regional headquarters management system outside Japan.

To deal with the initial outbreak of COVID-19 in China, NSK's regional headquarters in that country set up an emergency response team. In close contact with the head office in Tokyo, it provided instructions to each NSK site in China on procedures to prevent infection and steps to be taken in the event of a COVID-19 case. Necessary measures were taken to put the safety of employees first. Once the virus began spreading worldwide, emergency response task forces were also set up in the other regions under the organizational heads concerned. The task forces continue to monitor suspected cases and stay in close contact with all NSK sites to provide the appropriate instructions. Meanwhile, in Japan, the COVID-19 response team has been holding daily meetings to follow up on pandemic measures taken. By continually monitoring the situation at sites in Japan and overseas, it has swiftly implemented all necessary measures.



Global Collaboration

At the beginning of the pandemic, the NSK Group worked to prevent the spread of the virus globally by having regions share their personal protective equipment, including masks and thermometers, with other regions as needed. Currently, each region reports on its COVID-19 cases and the status of infection prevention measures in a timely manner, and the head office provides guidance and support. By using the current pandemic as a learning opportunity, we aim to strengthen internal cooperation even further and thoroughly prepare for any future crisis that may arise.

Infection Prevention Measures and Infection Case Response (Japan)

Under the system implemented by the COVID-19 response team, the NSK Group has implemented the following routine preventive measures for employees, along with measures for suspected or actual cases.

Routine infection prevention measures

(1) Infection prevention

- Encouraging frequent hand washing and disinfecting, as well as gargling, and cough etiquette (including mask wearing)

(2) Health awareness

- Having employees check their health and temperature before coming to work and asking them to stay home if they have a fever
- Not insisting that people come to work

(3) Avoiding the Three Cs

- Thorough measures to ensure employees avoid the Three Cs (crowded places, close-contact settings, and confined spaces) at each business site, including the staggering of times for the use of dining rooms and break areas

(4) Meetings

- Fully utilizing phone and video conferencing

(5) Tokyo head office

- Seating arranged at distances of 1.5 meters or more
- No face-to-face seating and utilization of plastic shields
- Seating capacity of each conference room lowered to ensure distancing of 1.5 meters or more
- Marking seating positions in conference rooms
- Disinfecting conference rooms after each use

(6) Visitor management

- Checking health, temperature, and overseas travel history

Suspected cases and response

- Whenever an employee or their family member consults the local government's COVID-19 counseling center for those returning from abroad and potential contacts, the information is shared with NSK's emergency response task forces at the head office and business sites. The condition of the person concerned is then checked daily and the necessary measures are taken.
- Whenever someone tests positive for the virus, the guidance of the health authority is followed.

Work Styles and Other Measures to Prevent Infection (Japan)

The NSK Group understands that the COVID-19 pandemic is a major risk to employee health, peace of mind and safety. Given the current situation where there is no effective treatment for the illness caused by the virus, the Group's first priority is to do what it can to prevent infection among employees. Whenever someone tests positive, the human resources department takes various steps to prevent the spread of infection within the company. The following are the main pandemic measures that have been taken with respect to employees' work styles.

(1) Working from home (all offices in Japan)

- **Employees in the Tokyo head office, and the technology and sales departments**
Working from home while adjusting the number required to come into the office according to the level of community infection and based on requests from the authorities.
- **Employees other than those above**
Those able to work from home are doing so, according to the level of community infection and based on requests from the authorities.

(2) Flextime (all offices in Japan)

- All office employees in Japan can utilize flextime including with no core hours, as long as it is available in their workplace. In workplaces where flextime is not available, we have implemented staggered start and finish times. This allows employees to avoid commuting on crowded trains and buses during regular rush hours.

(3) Flextime while working from home (workplaces where flextime is available)

- As of September 2020, employees can utilize flextime even when working from home, within regular flextime hours. This is designed to promote better communication within the organization than ever before.

Pandemic measures at NSK sites outside Japan

Contact reduction measures

- **India**
To avoid touching doorknobs, employees at NSK Bearings India Pvt. Ltd. and Rane NSK Steering Systems Ltd. have adapted doors so that they can be opened with a foot.



Health management measures

- **India**
NSK Bearings India Pvt. Ltd. uses devices to measure the blood oxygen level of employees. This checks each person's respiratory function.



- **The Americas**
NSK Bearings Manufacturing Mexico S.A. de C.V. also takes the temperature of employees every day before entering the building.



- **Europe**
At NSK factories, warehouses, and main offices in Europe, devices have been installed at building entrances to automatically check employee temperatures, and whether they are wearing a mask.



Risk Management: Information Security Management

NSK's Approach

Recent advances in information and communications technology have dramatically enhanced the convenience of information handling. However, this has also dramatically increased the risks associated with digital information. In addition to the risk of mishandling information, there is a greater risk of information security incidents, such as sensitive information being stolen or leaked through sophisticated cyber-attacks, or due to the growing number of people working from home. To mitigate these risks and remain in compliance with increasingly tighter regulations related to information security, the NSK Group views information security as an important management task and is taking steps to strengthen it. In fiscal 2019, we began taking steps to acquire ISO 27001 certification, which is an international standard for managing information security.

Basic Policy and Management Standards and Rules

In June 2003, the NSK Group issued the NSK Basic Policy on Information Security as well as the Rules of NSK Information Management. We subsequently established rules concerning information security and strengthened our Group-wide efforts.

In June 2019, the NSK Group Basic Policy on Information Security was updated to clarify the need for continuous improvement of security activities and to revise the relevant rules that serve as specific action guidelines.

Main information security policies and standards of the NSK Group

NSK Group Basic Policy on Information Security

This policy sets out the objectives for the NSK Group's information security (information security initiatives, handling of information assets, compliance with regulations and contracts, as well as education and continuous improvement)

NSK Group Information Security Management Standards

As the top information security directives in the NSK Group, these standards outline the principles for bringing the levels of information security management across the Group up to the same high standard.

NSK Group Information Security Procedural Standards

These rules stipulate measures to protect information assets, such as proper methods for handling information assets that need to be adopted across the NSK Group.

System

Information Security Management System (ISMS)

In April 2018, the NSK Group moved its Information Security Enhancement Office under the ICT Division HQ in order to implement more comprehensive information security enhancement measures globally. With a Vice President as the Head of ICT Division HQ, the NSK Group has a system for comprehensive management of its information systems and information security. This allows it to promote measures that both improve convenience and mitigate risk. The Board of Directors also discusses issues related to information security measures and oversees risk mitigation for the entire Group.

The Information Security Enhancement Office regularly holds global meetings, and plans and implements information security measures for the Group, working in cooperation with information security management committees in Japan, the Americas, Europe, China, ASEAN and Oceania, India and South Korea.

Information Security Management System





Sixth Mid-Term Management Plan Targets (FY2019–2021) and FY2019 Performance

Sixth Mid-Term Management Plan targets	Performance in FY2019
Enhance information security infrastructure	<ul style="list-style-type: none"> Completed the Information Security Management System (ISMS)
Obtain ISO 27001 certification	<ul style="list-style-type: none"> Subsidiary in South Korea acquired ISO 27001 certification and the IT department in Japan prepared for the same certification
Strengthen incident response capability (including C-SIRT system)	<ul style="list-style-type: none"> Created incident response system
Enhance ID and access management	<ul style="list-style-type: none"> Completed preparations for ID management system updating

Information Security Initiatives

The NSK Group's main information security initiatives are as follows.

- Enhancing information security management
- Penetration testing by an external specialist to evaluate the security of NSK's critical internal computer systems and its public website
- Creating an incident response system
- Raising the information security awareness of NSK's officers, employees, and business partners

Prevention of Information Leaks

The NSK Group takes meticulous care in the handling of confidential information and works hard to prevent the leakage of information. We are deploying tools that enhance security across the Group and are taking steps to reduce the risk of information leaks from not only PCs but also paper documents. We have also categorized information according to its level of confidentiality and established rules for proper handling. In fiscal 2019, we added four companies to the Group-wide security network and implemented security improvements.

Penetration testing of critical systems is also carried out by external specialists to evaluate resistance to server attacks, and we continue to identify and address security problems.

We have established a system and operation manual to ensure swift and appropriate response in the event of a security incident, and conduct regular training. We are also evaluating and improving the response system.

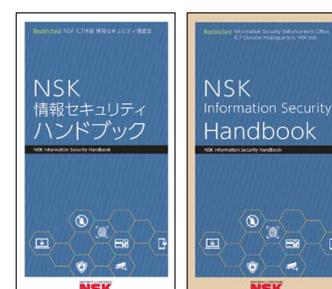
Development of Information Security Education

The NSK Group provides education on information security via e-learning programs for all officers, employees, and temporary employees who use PCs. We are also conducting regular email-based training globally to help prevent targeted attacks.

In fiscal 2019, approximately 8,000 employees at Group companies took part in e-learning on information security. In addition, about 8,000 employees filled out a security questionnaire that asked about classification labeling, as well as compliance with information handling rules.

A rank-based education program for system personnel was created, and about 100 employees have received the training. The NSK Information Security Handbook (Japanese and English versions) has been prepared and distributed to all Group companies worldwide so that security rules can be easily checked. In fiscal 2020, a Chinese version of the handbook is also being prepared to help improve the information security knowledge and awareness of employees whose native language is Chinese.

In addition, we have created materials to further raise the security awareness of companies that provide contracted services to NSK. We have begun to provide training to employees of these companies before they begin services at NSK.



NSK Information Security Handbook: Japanese version (left) and English version (right)

Independent Verification Report



No.1811003934

Independent Verification Report

To: NSK Ltd.

1. Objective and Scope

Japan Quality Assurance Organization (hereafter "JQA") was engaged by NSK Ltd. (hereafter "the Company") to provide an independent verification on "FY2019* NSK Group GHG emission calculation report", "FY2019 NSK Group Water withdrawal calculation report", "FY2019 NSK Group Waste, valuable resources, and Hazardous waste calculation report" and "FY2019 NSK Group VOC emission calculation report" (hereafter "the Reports"). The content of our verification was to express our conclusion, based on our verification procedures, on whether the statement of information regarding GHG emissions, Energy Use, Water withdrawal, Industrial waste and valuable resources, Hazardous waste out of facilities in Japan, and VOC emissions in the Reports was correctly measured and calculated, in accordance with the "NSK Group GHG emission calculation standard (Scope 1 and 2) (Ver. 02-06)", "NSK Group GHG emission calculation standard (Scope 3) (Ver. 01-06)", "NSK Group Water withdrawal calculation standard (Ver. 01-03)" and "NSK Group Total waste of industrial waste and valuables, Recycling rate and Hazardous waste, calculation standard (Ver. 02-02)" and "NSK Group VOC emission calculation standard (Ver.01-03)" (hereafter "the Rules"). The purpose of the verification is to evaluate the Reports objectively and to enhance the credibility of the Reports.

* The fiscal year 2019 of the Company ended on March 31, 2020.

2. Procedures Performed

JQA conducted verification in accordance with "ISO 14064-3" for GHG emissions and Energy use, and with "ISAE3000" for Water withdrawal, Industrial waste and valuables, Hazardous waste, and VOC emissions, respectively. The scope of this verification assignment covers Scope 1, 2 and Scope 3 as GHG emissions, Energy Use, Water withdrawal*¹, Industrial waste and valuables*², Hazardous waste out of facilities in Japan*³, and VOC emissions*⁴. The verification was conducted to a limited level of assurance and quantitative materiality was set at 5 percent each of the total emissions and total amount in the Reports. The organizational boundaries of this verification cover all NSK Group sites in Japan and overseas, including production sites, technology centers and non-production sites of NSK Ltd., NSK equity affiliates*⁵ and NSK brand producing companies.

*¹ Water withdrawal is clean water, industrial water, groundwater, reused water and rainwater, used by business activities.

*² Industrial waste and valuables are solid or liquid waste generated by business activities.

*³ Hazardous waste is "specially controlled industrial waste" stipulated by the "Waste Management and Public Cleaning Act" out of amount of Industrial waste and valuables out of Japan facilities.

*⁴ VOC emissions are substances specified by the Rules, out of VOC emitted from business activities.

*⁵ NSK equity affiliates which 50 percent or more of the voting stock is owned by NSK.

Our verification procedures included:

- For on-site verification except for Scope 3, visiting four domestic sites: NSK Ltd., Ishibe Plant, NSK Ltd., Fujisawa Plant Kirihara branch, Amatsuji Steel Ball Mfg. Co., Ltd., Shiga Works and NSK Ltd. Headquarters Nissei Bldg., selected by the Company.
- On-site assessment to check the report scope and boundaries; monitoring points of activity data; monitoring and calculation system; and activity data. The number and location of sampling sites for on-site assessment were selected by the Company.
- Visiting the Company's Head Office for validation of the Rules and verification of Scope 3. Checking calculation scenario and allocation method for Scope 3; monitoring and calculation system; and emission data.

3. Conclusion

Based on the procedures described above, nothing has come to our attention that caused us to believe that the statement of the information regarding the Company's FY2019 GHG emissions, Energy Use, Water withdrawal, Industrial waste and valuables, Hazardous waste out of facilities in Japan, and VOC emissions in the Report is not materially correct, or has not been prepared in accordance with the Rules.

4. Consideration

The Company was responsible for preparing the Reports, and JQA's responsibility was to conduct verification of GHG emissions, Energy Use, Water withdrawal, Industrial waste and valuables, Hazardous waste out of facilities in Japan, and VOC emissions in the Reports only. There is no conflict of interest between the Company and JQA.

Sumio Asada, Board Director

For and on behalf of Japan Quality Assurance Organization

1-25, Kandasudacho, Chiyoda-ku, Tokyo, Japan

August 24, 2020



Independent Assurance Statement



Independent Assurance Statement

September 16, 2020

Mr. Toshihiro Uchiyama
President & CEO
NSK Ltd.

1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by NSK Ltd. (“the Company”) to provide limited assurance on the Company's Lost-Worktime Injury Rates for FY 2019 which were 0.20 in Japan, 0.45 outside Japan, and 0.35 globally (“the performance data”). The purpose of this process is to express our conclusion on whether the performance data were calculated in accordance with the Company's standards. The Company's management is responsible for calculating the performance data. Our responsibility is to independently carry out a limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed

Our assurance engagement has been planned and performed in accordance with International Standard on Assurance Engagement 3000 (ISAE3000).

The key procedures we carried out included:

- Interviewing the Company's responsible personnel to understand the Company's standards
- Reviewing the Company's standards
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the performance data were calculated in accordance with the Company's standards.

3. Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the performance data have not been calculated, in all material respects, in accordance with the Company's standards.

We have no conflict of interest relationships with the Company.

Takashi Fukushima
Representative Director
Sustainability Accounting Co., Ltd.

Recognition by Outside Agencies

Over and above their financial performance, companies that merit high evaluations for their environmental and social contributions are increasingly 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 November 2020.

Member of
**Dow Jones
Sustainability Indices**
Powered by the S&P Global CSA

● Selected for inclusion in the Dow Jones Sustainability Indices' (DJSI) Asia Pacific Index

NSK has been selected for inclusion in the Asia Pacific Index that covers the Asia-Pacific region of the Dow Jones Sustainability Indices (DJSI), which is highly regarded as a global stock price index for socially responsible investment (SRI). The DJSI is rated based on economic, environmental, and social contribution.

<https://www.spglobal.com/esg/csa/indices/djsi-index-family>



FTSE4Good

● Selected as a component of the FTSE4Good Index

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.

<https://www.ftserussell.com/products/indices/ftse4good>



FTSE Blossom
Japan

● Selected as a component of the FTSE Blossom Japan Index

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)

<https://www.ftserussell.com/products/indices/blossom-japan>



● Selected as "Prime" by ISS-oekom research

NSK has been rated "Prime" by ISS-oekom, an ESG evaluation organization. ISS-oekom evaluates corporate social responsibility initiatives based on evaluation items selected in the "environment" and "society" categories.

<https://www.issgovernance.com/esg/ratings/corporate-rating/>



● Selected as a member of Sompo Sustainability Index

NSK has been selected as a member of the Sompo Sustainability Index established by Sompo Asset Management Co., Ltd.

<https://www.sompo-am.com/>



Third-Party Comment



As in fiscal 2019, NSK again this year asked Professor Emeritus Yoshinao Kozuma of Sophia University to provide a third-party comment on this report.

Yoshinao Kozuma
Professor Emeritus,
Sophia University, Japan

After earning credits in the latter half of the doctoral program at Sophia University Graduate School of Economics, Professor Kozuma worked as a research assistant at the Nagoya Institute of Technology, a visiting researcher at the Limpert Institute in the Netherlands, an associate professor at the University of Shizuoka, and as an associate professor, then professor, in the Faculty of Economics at Sophia University, before taking up his current position. He has held successive positions as the chair or member of various CSR or environment-related advisory panels, study groups, and research conferences for the Ministry of the Environment; the Ministry of Economy, Trade and Industry; the Ministry of Land, Infrastructure and Transport; the Ministry of Agriculture, Forestry and Fisheries; the Cabinet Office; and the Japanese Institute of Certified Public Accountants. A specialist in environmental accounting, he chaired the Japanese Ministry of the Environment's Review Panel for Production of a Handbook on the Environmental Reporting Guidelines (2018) [provisional translation]. His recent work includes *Carbon Labeling to Visualize CO₂* (Chuokeizai-sha, Inc., in Japanese).

1. Executive Compensation and ESG Incentives

Under its Sixth Mid-Term Management Plan, NSK has begun full-scale efforts to help build a sustainable society. In order to improve its ESG performance, it has introduced executive compensation incentives based on ESG evaluation criteria. The short-term performance-based compensation portion of the executive remuneration system now includes criteria for target achievement on ESG-related issues such as CO₂ emissions reduction and safety and quality improvement. During the long-term process of building a more sustainable world, the new system will contribute to the improvement of NSK's governance functions, which are indispensable for carrying out a consistent ESG strategy as an organization. In recent years, NSK has been working on corporate governance reforms. These efforts to strengthen its governance system led to NSK's selection as a "Winner Company" in Japan's Corporate Governance of the Year 2019 awards. It is clear that NSK's initiatives are highly regarded in the industry.

2. Key SDGs

While many companies have made efforts to link their business activities to the SDGs, NSK has taken this a step further by selecting seven SDGs that are especially relevant to its business as key goals. To help achieve these goals, in August 2019 NSK set up a cross-organizational project group called "Team SDGs" to incorporate the SDG perspective into the company's management objectives. NSK achieved a range of laudable initiative results in fiscal 2019. In terms of environmental efforts, the NSK Group now performs CO₂ emission reduction management employing both total volume and per-unit indicators, while calculating CO₂ emissions offset in terms of emissions avoided during the use of its environmentally friendly products. The Company has also expanded green electricity use and enhanced Scope 3 emission reduction. In terms of safety, the NSK Group performed target management for workplace accidents based on the Mid-Term Management Plan, obtained ISO 45001 certification, and decreased

its lost time injury frequency rate. In the area of social initiatives, NSK promoted fairer workplaces by pursuing diversity and inclusion measures.

3. Disclosure Improvement

In Japan, corporate reporting has not yet been mandated, so ESG information disclosure also has not progressed. Integrated reports and sustainability reports, which are prepared on a voluntary basis, are important sources of corporate information for investors. Improving their quality and reliability has become an important issue for corporate evaluation by investors. The NSK Sustainability Report includes a description of its efforts to further enhance reporting reliability by obtaining third-party assurance and environmental information verification from multiple independent experts. This year, in addition to the message from the President, a message from the Vice President and Head of CSR Division HQ was added. NSK has also made ambitious improvements to the quality of its ESG information disclosure, such as the addition of an environmental executive summary that outlines key environmental information. It is clear that NSK is making every effort to meet global standards for ESG report publication.

4. Future Issues

The movement toward systematic human rights and environmental due diligence is accelerating, especially in Europe, and global companies like NSK must quickly implement such due diligence systems. As a next step, NSK needs to establish a due diligence process and include human rights risks in its risk management. This should be integrated with supply chain management including CSR procurement and conflict mineral avoidance measures. Such measures ought to be implemented as soon as possible under the governance of the Board of Directors.

Response to Prof. Kozuma's Comments

Thank you very much for the positive evaluation of our recent activities, such as applying ESG evaluation to executive compensation and our efforts to help achieve the SDGs and promote diversity. We will continue to enhance our ESG management as one of our Vision goals to be achieved by 2026. We truly appreciate your comments and will use them to further improve our efforts.

While preparing the *Sustainability Report 2020*, we sought to present the environmental initiatives you mentioned in your comments last year, especially the reduction of indirect greenhouse gas emissions. Our aim was to

present them in a way that was more concrete and easier to understand, and to illustrate how NSK is helping to reduce the emissions generated by products in the consumer usage stage. In response to your recommendation for the adoption of human rights and environmental due diligence processes, we will consider the matter carefully and take the necessary steps, while seeking to increase internal awareness of ESG due diligence as a management objective.

Tamami Murata

Vice President, Head of CSR Division HQ





Contact

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