

Most of the activities described in this report were carried out in FY2018 (April 1, 2018, to March 31, 2019), but some took place in FY2019.

#### Organizations Covered

All divisions of NOK Corporation and other NOK group companies in Japan and abroad.

- Date of Issue for Japanese Version: July 2019
- Date of Issue for English Version: August 2019

Human Rights

(Labor Practices

E The Environment

F Fair Operating Practices

Community Involvement and Development

Consumer Issues



#### **NOK Charter of Corporate Behavior**

Established on May 1, 2006 / Revised on July 1, 2019 NOK Corporation

We, NOK Corporation, are committed to being an entity that fulfills the role of driving efforts toward the realization of a sustainable society according to the Management Principles under the NOK spirit. We will pursue this through developing the Management Policies in such a way that all its stakeholders are proud of us and chase their dream with us; and, while upholding the principle of fair and free competition, through creating added value that is socially useful, generating employment, and autonomously acting responsibly. In order to achieve this realization, we will behave according to the eleven principles set forth below in the Principles of Corporate Behavior in both domestic and overseas operations, so as to respect human rights, comply with related laws, regulations, and international rules as well as the spirit behind those, and discharge our social responsibility with a strong sense of ethical values.

#### **Management Principles**

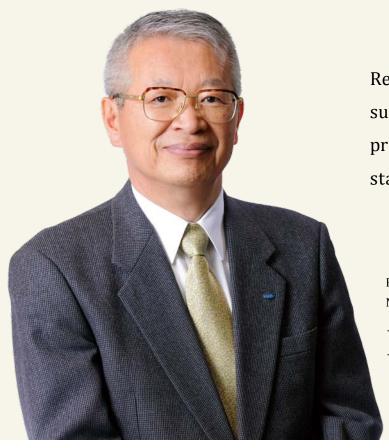
- 1. The Management has to run the Company based on feelings of love and trust in its employees.
- 2. The Management has to run the Company while uniting to ensure full ventilation without forming any cliques.
- 3. The Management has to run the Company while making absolutely incredible efforts against all odds and risks.
- 4. The Management has to run the Company while pursuing dreams with management plan.

#### **Management Policies**

- 1. We are committed to be a strong and unique parts supplier while focusing its managerial resources on core business areas.
- 2. We are committed to be a profitable and robust company while fulfilling company-wide cost reduction programs ranging from front-line sales to manufacturing floor.
- 3. We are committed to continuously improving our quality while producing and selling our products that are proven to be technologically unique and socially useful, on a global scale.

Principles of Corporate Behavior						
1. Provision of Socially Useful Products	We will develop and provide socially useful and safe products through the creation of new value, and provide pertinent information regarding products and have sincere dialogues with end users and customers while also working to achieve sustainable economic growth and solve social issues, thereby gaining their satisfaction and deeper trust.					
2. Fair and Appropriate Trade	We will ensure that we engage in fair, transparent, and free competition, that transactions are appropriate and that responsible procurement is carried out, when selling products and purchasing materials. Also, we will maintain a sound and proper relationship with political bodies and government agencies.					
3. Proper Disclosure and Management of Information	We will disclose accurate information about the Company timely and appropriately, and have constructive dialogues with the various stakeholders who surround our business in order to increase the corporativalue. Also, we will protect and properly manage personal and customer data and other types of information as well as intellectual property rights.					
4. Thorough Risk Management and Severance of all relations with Antisocial Forces and Groups	We will resolutely provide systematic risk management to prepare against activities of antisocial forces terrorists, cyberattacks, natural disasters, and other elements that threaten the lives of the public and business activities. Especially we will resolutely confront any antisocial forces or groups and sever all relations with such groups.					
5. Commitment to Environmental Conservation	We will proactively initiate environmental conservation activities while taking into account the fact that commitment to solving environmental issues is a prerequisite for a company to engage in business activities as a going concern.					
6. Promotion of Social Contribution Activities	As a good corporate citizen, we will actively participate in communities and contribute to thei development.					
7. Cooperation with the International Community	As a global corporation, we will comply with laws and regulations of the countries and regions where ou business operations are based, and respect human rights and other international norms of behavior (exprohibition of child labour and forced labour). Also, conduct business by taking into consideration the local culture and customs as well as the interests of stakeholders, and contribute toward the development of the local economy and society.					
8. Respect for Human Rights	We will carry out management that respects the human rights of all people.					
9. Provision of a Safe and Comfortable Working Environment	We will realize a work style that enhances the abilities of employees while respecting their diversity character and personality, and by drawing a line between public and private matters, and maintainin order in the workplace, we will realize a comfortable working environment that takes cleanliness, health and safety into consideration.					
10. Responsibilities of Our Officers	Our officers, while carrying out management with the recognition that it is their role to realize the spirit of this Charter, will establish effective internal control systems, and will take the lead in an exemplary manner to implement the Charter within the entire NOK Group, while encouraging our business counterparts to act in a manner consistent with this Charter. In addition, our officers will constantly listen to opinions from both within and outside the Company to ensure compliance with business ethics.					
11. Response to Problems	In the event that a matter in noncompliance with this Charter arises, which causes society to lose trus in us, our officers will take steps such as taking the lead in solving the problem, identifying the cause and taking measures to prevent the recurrence of similar problems, thus fulfilling their responsibilities Moreover, they will publicly disclose relevant information promptly and appropriately, fulfill thei accountability requirements, indicate those who are in authority and those who are responsible, an severely punish those involved, including themselves.					

## **Message from the President**



Reinforcing business structure for sustainable growth and becoming a highly profitable corporate group in which all stakeholders can take pride

President of NOK CORPORATION

Kiyoshi Doi

# Our Three-year Plan for *Reinforcing Business*Structure for Sustainable Growth

As of recently, global politics and the global economy are becoming increasingly uncertain. The world today is plagued by the rise of nationalism triggered by immigration issues as well as struggles for power, including trade wars, accompanied by a slowdown of the global economy. Wealth disparities, inequality of educational opportunities, religious conflicts and tensions related to immigration have worsened, with a series of disputes continuing to break out in many regions of the world. Meanwhile, in Japan, the economy is growing, albeit at a low rate, the unemployment rate remains low and there is a chronic shortage of labor. Recognizing and preparing against such risks and uncertainties, the NOK Group strives to produce low-cost original products—backed by technology—which are useful to society, and sell them at reasonable prices all over the world.

The NOK group launched a Three-year Plan (mid-term business plan) in FY2017. Its underlying policy is *Reinforcing Business Structure for Sustainable Growth*. In pursuit of becoming a highly profitable corporate group in which all stakeholders can take pride, NOK places top priority on steadily continuing business. As the automotive industry moves toward electrification and advanced driver assistance systems (ADAS), and as new technology trends emerge, including advances in artificial intelligence (AI), we seek to optimize our customer base by expanding sales of existing products and by boosting development and sales of new products.

Under the new plan, we will also emphasize better, more reliable quality by making comprehensive efforts to prevent the occurrence and outflow of defective products. We will rebuild our business continuity management (BCM) system based on the lessons learned from the 2011 Great East Japan Earthquake and the 2016 Kumamoto Earthquake.

Another priority for us is *implementing a management spirit* that respects *human dignity*. Respect for human dignity is one of the Management Principles of the NOK Group. We aim to build a workplace where all employees can feel that they are growing through their work, and that what they are doing is meaningful to society and directly or indirectly linked to the improved performance of their organization or company. Our policies for organizational operation, personnel systems and employee education will be constantly reviewed and improved from these perspectives.

#### **Continuing Environmental Management**

The NOK Group is committed to environmental conservation activities because we consume energy as a developer, manufacturer and seller of products used in automobiles, machinery, and electronic devices. Safety, environment and quality are key factors that we must focus on in order to remain a preferred parts supplier to customers. This has become particularly true in the past several years and is now a precondition for sustainable business activities. The NOK Group promotes environmental management, with the recognition

that taking initiatives to address environmental issues is one of our top priorities. We intend to make sustained contributions to building a recycling-oriented society by cutting back on the use of environmentally hazardous substances, reducing waste and developing environmentally friendly products at the global level. The Paris Agreement was adopted by COP21, which is officially known as the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change, and entered into force later in 2016. In this climate accord, Japan pledged to reduce its greenhouse gas emissions by 26% from the 2013 levels by 2030. In response to this move, the Japan Auto Parts Industries Association (JAPIA), of which NOK is a member, established a voluntary environmental action plan to pursue its targets to be achieved by FY2020 and FY2030. The NOK Group has developed a medium- to long-term environmental plan in view of these goals. Our Environmental Policy for the three years starting FY2017 is to Take on Challenges for the Next-Generation Environment. Its three pillars are prevention of environmental problems, which is for practical and effective BCM actions; reduction of our environmental impact for future generations, which seeks to help Japan fulfill its pledge under the Paris Agreement; and enhancement of the environmental hazardous substance management system to meet external requirements, which relates to environmental quality. We will also address the recently discussed topics of environmental impact on water and biodiversity conservation in the course of these

In FY2017, we have started deliberations to draw up a mediumto long-term environmental vision for NOK to strengthen our environmental management. We are striving to share more of the NOK group's environmental activities with stakeholders.

activities.

#### A Corporate Group in Which All Stakeholders Can Take Pride

We believe that communicating with local communities as a good corporate citizen is essential for the continuation of business activities. Among various social contributions we have made to date are implementing community support programs in districts where our sites are located and sponsoring events relating to the education of younger generations. We also seek to build an organization that encourages open communication and a workplace where employees can work with a sense of fulfillment. This is a part of our efforts to implement the management spirit that respects human dignity. The NOK group aims to be an enterprise that not only brings economic benefits to stakeholders, but also makes them proud.

#### **CSR Report**

NOK published its first Environmental Report in 2004 and has continued since then, with the title being changed to Environmental & Social Report in 2006. It was renamed again as the CSR Report in 2017 to better describe our business and social activities in addition to environmental efforts. This report is an important tool to improve the way we communicate with stakeholders and the public. We would look forward to receiving frank opinions and comments on the report.

# Group Three-year Plan (FY2017 to FY2019)

--- Slogan --

"Reinforcing Business Structure for Sustainable Growth"

#### **Chairman's Initiatives**

- (1) Building well-balanced customer mix
  - Targeting sales expansion and new business creation
- (2) Achieving sustainable unrivalled quality
- (3) Establishing practical and effective BCM
- (4) Implementing management spirit that respects human dignity
  - -Fostering vibrant people and workplace

## **Concept of CSR and Our Organization**

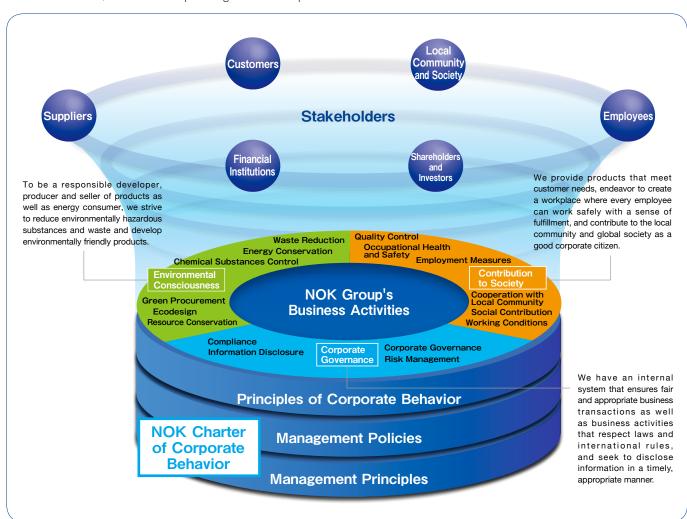
#### **Concept of CSR**

As stated in the Charter of Corporate Behavior, the NOK Group aspires to drive the realization of a sustainable society while operating its business in a way that makes our stakeholders proud to pursue their dreams with us.

All of our business activities are built on the NOK Charter of Corporate Behavior (Management Principles, Management Policies and Principles of Corporate Behavior). We believe that fulfilling the environmental, social and corporate governance aspects

of corporate social responsibility (CSR) is an integral part of continuous business activities.

We also value communication with stakeholders as an effective way to broadly examine the business climate and situation, as well as to identify business risks and opportunities. The NOK group aims to be a company that not only brings benefits to stakeholders, but also makes them proud.



#### **Our CSR Organization**

The CSR Committee was organized in October 2016 to increase the awareness of CSR throughout the company and to promote CSR activities more effectively.

Chair: Manager of Corporate Administration Office

**Members:** Representatives of the Environment Control Dept., Procurement Control Dept., Corporate Planning Dept., Corporate Communication Dept., Legal Affairs Dept., General Affairs Dept., Personnel Dept., Safety & Health Dept., Corporate IT Office, Engineering Administration Dept. and Sales Administration Dept.

The CSR Committee collects reports from related internal committees and divisions and oversees company-wide CSR activities while disseminating external information, such as issuing CSR reports.





## **Management Foundation**

#### **Corporate Governance System**

Continuously strengthening the corporate governance system is one of our business management priorities, and we are committed to this goal.

NOK has adopted the format of a company with a board of corporate auditors. In our organization, directors who are well-versed in operations work together in harmony, while good governance is maintained through mutual monitoring by internal and external directors, as well as through management audits conducted by statutory auditors, including external auditors.

NOK's head office divisions have established rules for the internal control system. In accordance with the rules, these divisions give directions to NOK's operating divisions and subsidiaries, while the Internal Control Audit Committee periodically audits the internal control system to determine the progress of improvement and implementation. In FY2018, there were no legal violations or lawsuits against NOK that affected our performance critically.

#### **Corporate Governance System**



The numbers of directors and auditors are as of June 30, 2019.

#### **Compliance System**

Pursuant to the NOK Principle of Corporate Behavior, the Behavioral Guidelines Concerning Employee Compliance set forth the rules that employees must observe in their business activities.

The NOK Group has designated October of every year as a compliance promotion month in order to regularly inform employees of NOK's compliance initiatives and to help raise their awareness of compliance, such as through conducting a survey of all employees on their compliance awareness.

We also continuously promote awareness. Efforts include distributing a compliance guide to every employee, publishing a series of articles entitled *An Introduction to Compliance* in company newsletters, conducting compliance training during new employee orientation and providing workshops for new managers.

#### **Risk Management**

To effectively address diversifying risks, the NOK group promotes an organization-wide risk management system with the Risk Management Committee as its center.

#### **Crisis Management**

Our Corporate Risk Management Office takes the initiative in building our crisis management system, setting the following basic policies:

- (1) Give first priority to ensuring safety, protecting people and saving people's lives.
- (2) In the event of a disaster in the local region, make proactive contributions to the reconstruction of the region as a member of the community.
- (3) In an emergency, minimize the impact on our customers and other stakeholders by continuing business to the extent possible in order to fulfill our responsibilities.

To ensure quick information gathering in the event of a major disaster, we maintain a safety confirmation system and an emergency calling tree, and have emergency communication devices in place. We also store supplies necessary to resume business smoothly.

The Central BCM Committee was formed with the mission of establishing a more effective business continuity management (BCM) system based on our experience of past disasters. Under the initiative of the committee, we are planning and implementing group-wide measures in terms of facilities, systems and employee education, including reinforcing production facilities against earthquakes, strengthening product supply functions, reviewing the current business continuity plans and conducting projects that encourage the reform of employee awareness. Through all these endeavors, we maintain our robust business continuity system.

#### **Information Security Measures**

To protect information received from customers, preserve company assets such as proprietary technologies, and ensure appropriate use of information assets, we have established the NOK Group Information Security Policy. Also, the Information Security Committee has been formed to closely align our information security efforts with our business activities and to involve top management in this initiative.

In FY2018, we continued our ongoing review and upgrade of our overall information security regulations, as well as undertaking systematic renewal and enhancement of security devices, in order to deal with increasingly shrewd and sophisticated cyberattacks. In addition, the Information Security Committee assessed risks associated with information assets, consistently enhancing our abilities to manage risks. We will continue to implement a P-D-C-A cycle to maintain and improve our information security measures.

#### **Protection of Intellectual Property**

Our Behavioral Guidelines Concerning Employee Compliance raise awareness among employees by providing precautions regarding adherence to laws related to intellectual property rights. This is one of our efforts to promote patent application and rights acquisition for our inventions. The Guidelines also advocate respect for intellectual property rights of third parties. The NOK Group endeavors to prevent infringement of other companies' patents through patent search.

To protect NOK's brands, we combat counterfeiting, even outside Japan, through our Anti-Counterfeit Committee. In FY2018, we uncovered 11 counterfeit factories in China and got 1,066 web pages selling imitation products taken down from online sales sites.

#### **Anti-Corruption Initiatives**

The NOK Group works to fight against bribery and corruption by stipulating the following in its Principles of Corporate Behavior: "We will engage in fair, transparent, and free competition and ensure appropriate transactions and responsible procurement. We also maintain a sound and proper relationship with political bodies and government agencies."

Pursuant to the Principles, the Behavioral Guidelines Concerning Employee Compliance prohibit collusive relationships and corrupting behaviors involving business partners and public officials, including excessive entertainment and bribery. The guidelines also forbid embezzlement and misappropriation and other acts that may affect company profits. These rules are communicated to employees through providing education and distributing compliance handbooks to help them maintain a high level of awareness.

In the event of a violation of the Group's anti-corruption policy, the Risk Management Committee is primarily responsible for taking action. Information on violations of the anti-corruption rules can be shared via the whistle-blowing hotline.

The Internal Control Audit Committee conducts annual anticorruption audits and reports the results to the Board of Directors. In FY2018, there were no violations across the Group.

#### **Business Plan**

We intend to be a competitive, world-leading enterprise group under the management principle of respect for human dignity.

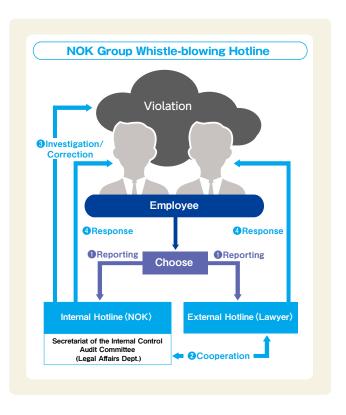
In the Three-year Plan that started in FY2017, the NOK group seeks to achieve sustainable growth and development by optimizing its customer base through sales expansion and new business creation, further improving and stabilizing quality, establishing a BCM system, and developing human resources to drive these activities.

#### **Reporting and Whistle Blowing System**

The NOK group provides a reporting and whistle blowing system for the early detection and correction of compliance regulation violations.

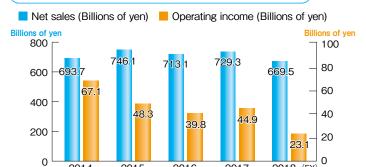
An employee who has noticed a violation can contact the reporting hotline. If the violation continues even after the reporting or the employee finds it difficult to report the case, he or she can contact the whistle blowing hotline.

The whistle-blowing hotline consists of the Internal Control Audit Committee and independent lawyers. Reports can be made anonymously, provided they are objective and specific. Moreover, the whistle-blower is protected against disadvantageous treatment under the compliance regulations.



# **NOK Group Business Overview**

#### Net Sales and Operating Income (FY2014 to FY2018)

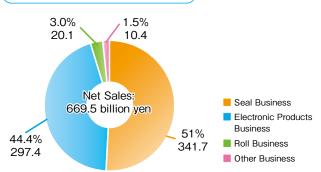


2016

2017

2018 (FY)

#### Sales by Segment (FY2018)



#### **Seal Business**

2014

2015

Net sales: 341.7 billion yen Operating income: 36.2 billion yen

Major products: Oil seals, O-rings, dust covers, industrial rubber and resin products, rubber sound and vibration isolators

Major operating companies: NOK CORPORATION, UNIMATEC CO., LTD.

Founded in 1941, NOK is Japan's first oil seal manufacturer. This functional part seals oil and is used in automobiles and many other machines in a wide range of industries. NOK also develops, produces and sells items that leverage our synthetic rubber processing technology, including O-rings and packings.



#### **Electronic Products Business**

Net sales: 297.4 billion yen

Operating income: △14.2 billion yen

Major products: Flexible printed circuits (single-sided, double-

sided, multilayer and component assembly FPCs) Major operating company: NIPPON MEKTRON, LTD.

The company develops, manufactures and sells flexible printed circuits (FPCs). FPCs are built-in electronic devices that require compact, lightweight and super-flexible electronic circuit boards. They are commonly found in smartphones, mobile phones, hard disk drives and digital cameras. As automobiles are employing an increasing number of electric and electronic components, automotive FPCs are finding wider applications including switches, sensors and lights.



#### **Roll Business**

Net sales: 20.1 billion yen Operating income: △0.1 billion yen

Major products: Development and charge rollers, cleaning blades, fixing belts, pressure rollers, products for financial terminals, products for textile machinery,

Major operating company: SYNZTEC CO., LTD.

Production of highly functional rollers for office equipment such as copiers and printers.

#### **Other Business**

Net sales: 10.4 billion yen

Operating income: 1.2 billion yen

Major products: Special lubricants (grease, oil and coating products for automobiles, industrial machinery, electric appliances, food machines, etc.)

Major operating company: NOK KLUEBER CO., LTD.

We develop, manufacture and sell a range of lubricants that offer excellent performance under harsh operating conditions, such as super-high or super-low temperatures, at high speed or under heavy loads. Comprehensive services are available to help customers improve the productivity of their facilities and machinery and to reduce maintenance costs.



# **NOK Group's Products Support Daily Lives**

#### **Automobile and Traffic Safety Products**

The NOK group's products for automobiles and motorcycles include seal products (such as oil seals, O-rings and gaskets), flexible printed circuits (FPCs), rubber vibration isolators, dust covers and lubricants. We also offer lane control/guidance products and shock absorbers.

#### **Electronic Devices**

NOK's FPCs, precision rubber and resin components are built into various electronic devices, such as smartphones, mobile phones, computer hard disk drives, and digital cameras.

#### **General Industrial Machinery**

NOK's oil seals, 0-rings, gaskets, packings, and belts are used in construction machinery (such as power shovels, bulldozers and cranes), agricultural machinery (such as tractors and grain combines) and plant machinery for various industries (such as steel, paper and food).

# Aircraft and Rockets

Our seal products are installed in engines and turbo pumps for aircraft and rockets.

#### **Robots**

Our flexible printed circuits (FPCs) are used in industrial and consumer robots.

#### **Power Generation Plants**

Our oil seals, O-rings and lubricants are built into equipment and auxiliaries for thermal power plants and renewable energy power plants (such as wind, hydroelectric, photovoltaic and solar thermal plants).

# Residential Equipment

NOK's O-rings are found in water supply systems, water purifiers and shower toilet seats, while CELLSEAL and membrane humidifiers are used in residential fuel cells.

# Office Equipment and ATMs

The NOK group's products are installed in copiers, printers and other office equipment, including development rollers, charge rollers, fixing belts and cleaning blades. Our bill beater rubber is used in ATMs and other financial terminals.





## **NOK Group's Technologies and Products**

The NOK Group's operations are grouped under the categories of the Seal Business, the Electronic Products Business, the Roll Business and Other Business, and its technologies and products developed in the respective business domains are widely used in automotive and other applications. The NOK Group builds on its wide-ranging capabilities to develop new technologies in an effort to contribute to a sustainable society through its parts used in customers' products.

#### Initiatives to Support Everyday Life and Contribute to a Sustainable Society

The NOK Group offers a diverse lineup of products, including different types of seal products, flexible printed circuits (FPCs), resin parts, products for office equipment and lubricants. Although our products can be found everywhere in daily life, they are seldom directly visible to consumers. Amid a new era that is ushering in dramatic

changes and developments such as electric cars, the hydrogen-powered economy and the super-smart society, the NOK Group's technologies and products continue to support people's lives in ways they may not even be aware

#### Automobiles and traffic safety products

NOK's oil seals, O-rings and other seal products as well as rubber vibration isolators are used in both automobiles and motorcycles. We also offer lane control/guidance products such as pylons.





#### Smartphones and digital cameras

Our FPCs, precision rubber and resin components are used in electronic devices, such as smartphones, personal computers and digital cameras.





#### Construction and agricultural machinery

Our gaskets, packings and lubricants are used in construction machinery, such as bulldozers and cranes, and agricultural machinery, such as tractors.





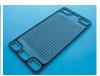




#### Household and healthcare products

NOK offers hollow fiber membranes for water purifiers, rubber electrodes for power assist applications and cell seals for household fuel cell systems.





#### Aircraft, marine vessels and rockets

The NOK Group's seal products are used in aircraft and rocket engines as well as in stern tubes of marine vessels.





#### Offices and factories

Our various types of roll products are used in office equipment, such as copiers and printers, while special polyurethane belts and mechanical seals are used at





#### TSSD products that use recyclable recycled plastic

With auto parts being its mainstay business, NOK contributes to traffic safety and smooth traffic flows through its products. Our lineup of traffic signs & safety devices (TSSDs) includes lane control/guidance products and impact buffers for smoother road traffic flows and accident prevention. These have been developed with our rubber synthetic and processing techniques that we have accumulated over a long period of time. The material used is NOK's "Iron Rubber" (special polyurethane rubber), having high reliability and a track record of being used as the material for a wide range of mechanical parts. Even under harsh outdoor environments where it is difficult to use conventional rubber and plastic products, Iron Rubber products offer superior durability such that the high quality and functionality are maintained for an extended period of time. In particular, center median blocks are made from environment-friendly recycled plastic. They are recyclable and a certified recycled product of Ibaraki Prefecture. These TSSD products made by NOK are demonstrating their benefits and supporting road traffic safety and smooth vehicle flows on roads across Japan.







# Environmental Management

#### **Basic Policies on Environmental Conservation**

On the basis that the company is a member of the society, we give all our employees full recognition to the fact that our business activities, products, and services have diverse relations to the environmental impact in the global scale. We set and implement the Basic Policy on Environmental Conservation from a longitudinal perspective in order to contribute to the realization of sustainable development of a society toward future generations.

- Based on our unique technology, we promote the improvement of technology and development of products with environmental considerations to reduce the negative environmental impacts.
- We promote energy saving to prevent the global warming, and promote reuse and reproduction of resources and reduction of wastes corresponding to the recycling society.
- Setting the goals by NOK central environmental protection committee, we will continue environmental improvement cooperating with business partners including suppliers, strengthen the control of chemical substances, prevent global environmental pollution and strengthen the effort to initiative of water environmental impact.
- We comply with related laws and regulations, local government ordinances, and regional agreement, etc., and promote activities for environmental conservation.
- We comply with self-imposed restrictions by the industry and customers, and positively engage in the requirements from our stakeholders toward environmental issues.
- We disclose information on environmental conservation and social contribution activities, and positively communicate with local and broader society.
- As a good corporate citizen, we strive to continually improve the environmental management system, as well as promoting all employees to recognize the importance of biodiversity and conservation of global environment and cultivate the awareness toward the global environment.

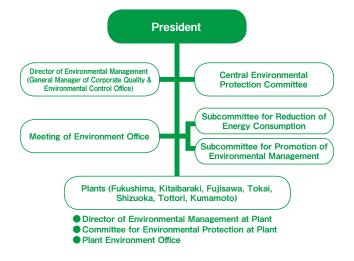
Third revision on April 1, 2018

President of NOK Corporation Chairman of Central Environmental Protection Committee Kiyoshi Doi

#### **Environmental Management System**

To promote our environmental management activities smoothly and steadily, company-wide efforts are made under the following system. The Central Environmental Protection Committee, chaired by the President, sets the overall direction of our environmental management and implements it. Actual environmental

conservation activities are led by subcommittees, which formulate and promote group-wide energy conservation initiatives and longterm environmental vision.



#### Nok will promote activities aimed at supporting the next generation by upholding the slogan "laying a foundation for environmental management"

Since the adoption of the Paris Agreement in 2015, momentum toward the realization of a decarbonized society has been gathering around the world. The NOK Group has promoted its efforts based on the Group's three-year plan from FY2017, which upholds an environmental policy titled "Take on Challenges for the Next-Generation Environment." This is in line with Japan's commitment to reduce greenhouse gas emissions by 2030, and the Japan Auto Parts Industries Association (JAPIA)'s voluntary Action Plan on the Environment.

NOK has defined its priority action items as:

- (1) Prevention of environmental problems;
- (2) Reduction of our environmental impact for future generations; and (3) Enhancement of the environmentally hazardous substance management system to meet requirements of

external parties. To achieve these objectives, NOK Group companies closely cooperated in implementing various initiatives. However, society's demands for a prompt response to challenging environmental issues have intensified beyond our initial expectations. At this point, the NOK Group is not fully prepared to meet such requirements.

In FY2019, the final year of the threeyear plan, we will redefine our visions for both society and the Company to clarify challenges, and strive to achieve the goals. Furthermore, to take a fresh step toward the next phase of our efforts in the period of the next three-year plan starting in FY2020, we will formulate specific targets and measures and make untiring efforts to contribute to building a sustainable society and enhancing corporate value.



Operating Officer, General Manager of Corporate Quality & Environmental Control Office (Director of Environmental Management) Tomio Nakayama

FY2019 Environmental Policy

#### Laying a Foundation for **Environmental Management**

Pheriority Action Items

#### Maintain and improve an EMS

- ·Ensure that compliance with ISO140001:2015 is a standard operation at NOK
- ·Review the method of environmental impact assessment
- · Raise awareness of environmental conservation and deepen understanding of the respective roles of individuals

#### Prevention of environmental problems (for BCM)

- ·Prevent problems through reliable change-point monitoring and prevent recurrence by investigating root
- ·Implement effective self-inspection on compliance and environmental quality; correct and improve deficiencies

#### Reduction of our environmental impact for the next generation (for the Paris Agreement, etc.)

- · Reduce carbon dioxide emissions: achieve a reduction of 1% in emission intensity from FY2018 by promoting energy conservation activities
- ·Maintain a recycling rate of waste at 98% or higher

#### Rigorously control environmentally hazardous substances in compliance with external requirements

- ${\boldsymbol \cdot}$  Efforts to discontinue the use of specific phthalates in products
- ·Increase the accuracy of investigation for environmentally hazardous substances contained in products, and promptly respond to inquiries

#### **Environmental Management System**

NOK has established a mechanism compliant with ISO14001 and is implementing an environmental management system. Having obtained integrated ISO14001 certification, all of NOK's production sites are operating a single unified environmental management system.

To ensure compliance with environmental laws and regulations, as is strictly required by ISO14001, NOK's divisions and group companies have identified laws and regulations that they must observe, along with key control items, and periodically check and evaluate the compliance status. We will continue our effort for early detection of possible risks related to environmental accidents and compliance and for prevention of nonconformities.

- Registration Agency: Japan Automobile Research Institute, Registration Body
- Certificate Number: JAER 0335

#### **NOK Environment Mark**

To raise employee awareness of environmental conservation, we asked them to submit proposals for the company's environment mark. The mark chosen as the best design has been used as the symbol of NOK's environmental conservation activities.

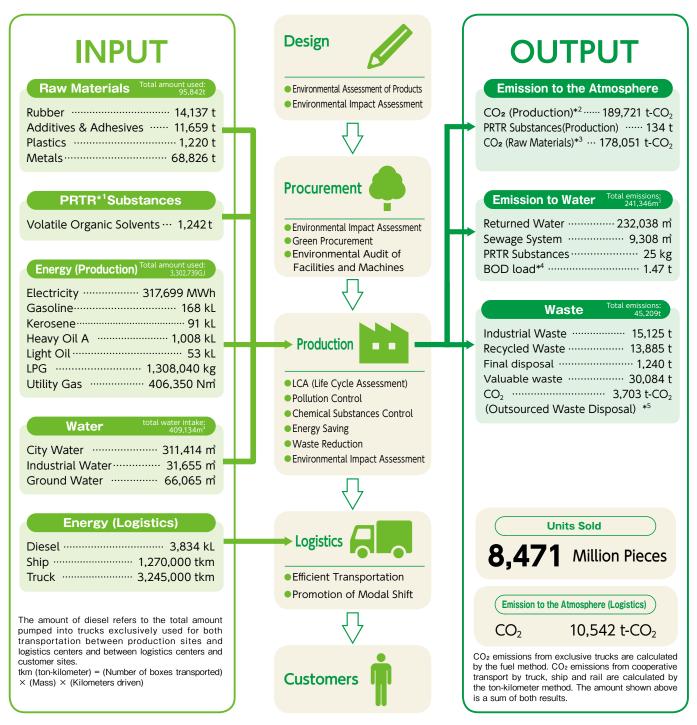
The mark combines three letters that read NOK, where N represents Nature, K indicates Keep, and the O in the center is designed in the shape of a globe. This design effectively conveys the message Protecting Nature on Earth.





# Input & Output of Our Business Activities

#### NOK Corporation and Production Subsidiaries in Japan during FY2018



#### **★**Scope of coverage

The above input and output refer to the amounts from business activities at NOK's seven divisions (Fukushima, Nihonmatsu, Kitaibaraki, Fujisawa, Shizuoka, Tokai, Tottori and Kumamoto) and 17 production subsidiaries in Japan (Tohoku Seal Industry, Miyagi NOK, Miharu Industry, NOK Metal, TSK, Nihonmatsu Seal Industry, Isohara Polyurethane Industry, ISSHIN Industries, MYK, Kikugawa Seal Industry, TVC, SAGA SEAL Industry, Kumamoto Seal Industry, Kusu NOK, Nichinan NOK, Kawazu Kogyo, TOSU Seal Industry). Exceptions are PRTR substances, water used and emission to water, for which the amounts refer only to NOK's seven divisions.

#### \*1 PRTR

Pollutant Release and Transfer Register, a publicly accessible database of hazardous chemicals released to the environment and transferred off-site for treatment in the form of waste. It brings together information about which chemicals are being released, how much and from which sources. (Source: Website of the Ministry of the Environment)

#### \*2 CO<sub>2</sub>

 $\text{CO}_2$  emissions are calculated in accordance with the greenhouse gas emissions accounting and reporting manual under the Act on Promotion of Global Warming Countermeasures.

#### \*3 CO<sub>2</sub> (Raw Materials)

CO<sub>2</sub> emissions are calculated from the mass data of purchased raw materials while referring to the JAPIA LCI Guideline.

#### \*4 BOD load

Biochemical oxygen demand (BOD) is one of the indicators of water pollution and represents the amount of oxygen used by microorganisms to decompose pollutant organic material in water. The figure for BOD load was obtained by multiplying the BOD measurement by the amount of effluent to rivers.

#### \*5 CO<sub>2</sub> (Outsourced Waste Disposal)

CO<sub>2</sub> emissions are calculated based on the emission factor database for organizations calculating GHG emissions through supply chains.

# Results and Targets

#### FY2018 Results and FY2019 Targets for Environmental Protection

Environmental Policy	FY2018	FY2019		
Environmental Policy	Action Item	Target	Result	Target
Prevent environmental problems	Comply with environment-related laws and regulations (Monitor and eradicate environmental problems by thorough compliance)	Promotion of compliance self-audit in Japan and abroad	Compliance self- audits conducted in Japan and abroad	Promotion of compliance self-audit in Japan and abroad
Maintain and improve EMS	Eliminate operational problems (Review the environmental aspects of changes and irregular activities)	Sufficient quantity and quality of human assets	Sufficient quantity and quality of human assets secured	Sufficient quantity and quality of human assets
	Absolute CO <sub>2</sub> emissions (t-CO <sub>2</sub> )* from NOK's divisions	52,986	50,243	47,357
Reduce environmental	Intensity (t-CO <sub>2</sub> /million yen) at production divisions	1.630	1.536	1.521
	Intensity per square meter (t-CO <sub>2</sub> /m²) at development divisions	0.180	0.171	0.169
	VOC emissions to the environment (t) from NOK's divisions	805	790	Below 790
hazardous substances	CFC facilities (number of machines)	109	87	80
	Absolute $\text{CO}_2$ emissions (t-CO <sub>2</sub> )* from NOK group companies in Japan and abroad	788,364	821,341	813,128
	VOC emissions to the environment (t) from NOK group companies in Japan and abroad	3,266	3,871	Below 3,871
Create and expand use of efficient environmental hazardous substances	Promptly respond to requests for investigation of environmental hazardous substances contained in products	Creation of a database to manage products containing environmental hazardous substances	Made preparatory work for creation of a database to manage products containing environmentally hazardous substances	Creation of a database to manage products containing environmental hazardous substances
survey system	Plan for information sharing systems	Upgrading of environmental quality voluntary audits	Voluntary audit items upgraded and audits conducted	Continuing of voluntary audits on environmental quality

## Formulation of Long-term Environmental Vision for 2030

#### **NOK Twin Green Plan 2030**

As climate change and energy issues have become increasingly serious problems, the Paris Agreement entered into force to combat global warming and the Sustainable Development Goals (SDGs) were adopted

by the United Nations. In line with such global initiatives, NOK has formulated the NOK Twin Green Plan 2030 to promote our environmental conservation activities for a sustainable society.

#### **Green Factory**

NOK will reduce CO<sub>2</sub> emissions from factories by 20% from FY2007 through environment-friendly manufacturing initiatives.

#### **Initiatives**

- Develop production equipment that consumes 20% less energy than conventional equipment
- · Actively promote the use of renewable energy
- Reduce waste and aim to achieve a recycling rate of 100%
- Reduce water consumption and ensure cleaner wastewater
- Control and reduce hazardous chemical substances throughout processes

Relevant SDGs







#### **Green Product**

NOK promotes the development of products that contribute to next-generation environment-friendly technologies.

#### Initiatives

- Develop products that contribute to popularization of next-generation energy-saving technologies, such as fuel cells
- Contribute to reducing environmental impact through the development of low-friction technologies that help achieve greater fuel efficiency
- Develop functional membranes that help recycle water (supply of clean water and water circulation)
- Rigorously manage chemical substances contained in products to improve their environmental quality

Relevant SDGs







# Global Warming Countermeasures

#### **Activities of Subcommittee for Reduction of Energy Consumption**

Based on the NOK Twin Green Plan 2030, NOK engages in continuous and strategic energy conservation activities with the goal of reducing  $\mathrm{CO}_2$  emissions from plants by 20% from FY2007 through environment-friendly manufacturing initiatives.

In FY2018, NOK actively implemented various measures for plant buildings, including replacing conventional lights with LED lights, adopting the Top Runner Program for motors and introducing solar energy. We also promoted the establishment of a system for more robust energy conservation management by adopting IoT technology to visualize power consumption.

In terms of facility development initiatives, we examined ways to simultaneously achieve energy

conservation and comfort at plants. We pursued a comfortable work environment while reducing air-conditioning and heat loads through curbing heat release from production facilities, controlling exhaust air and reusing exhaust heat. We also developed a tool for constantly monitoring energy consumption and started proposing items for improvement of an energy management system through visualization.

We will continue activities to improve our energy efficiency through expanding energy conservation measures and developing energy-efficient facilities and tools.

Chair of the Subcommittee for Reduction of Energy Consumption.



Manager of Production Engineering Dept., Production Engineering Technology Office Chair of the Sub Committee for Reduction of Energy Consumption Yushi Nakahata

#### CO<sub>2</sub> emissions and emission intensity in FY2018

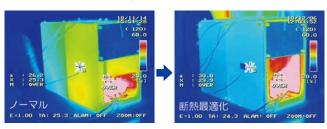
In addition to energy conservation measures in production, NOK undertook initiatives aimed at reducing fuel consumption in the distribution process. However, in FY2018, CO<sub>2</sub> emissions and emission intensity remained unchanged from the previous year.

The Subcommittee for Reduction of Energy Consumption, through proposing challenges to be tackled and expanding the scope of activities as well as developing energy efficient facilities, will promote more rigorous continuous activities for improvements, with a view to contributing to energy conserving corporate activities.

#### **Development of Energy-Saving Equipment**

NOK's energy conservation efforts are mainly designed to improve conventional methods through optimizing process parameters and improving productivity and to develop new methods and new production facilities.

Introduced here is a case focused on a vulcanizer, one of NOK's key production facilities. We studied ways to reduce the load of air conditioners on factory floors and the heat load from equipment while maintaining a comfortable work environment. We examined measures for improvement, including optimally installing heat insulators and securing an adequate exhaust airflow passage to address heat released from the machine and exhaust heat, which degraded the working environment. Firstly, we measured heat discharge from a small-size model to which the improvement measures were applied, and confirmed a 64% reduction in heat discharged to the work area, as compared with the machine without the improvement.



[Measurement of heat released from the small-size model.

Achieved a 64% reduction of heat discharge]

We then went on to verify the finding we obtained on the small-size model on the actual model. The vulcanizer was placed in a booth and an adequate exhaust airflow passage secured to confirm changes in work environment loads and facility energy loads.



This experiment provided a good prospect for heat radiation control measures and optimization of exhaust heat, which are likely to help achieve reductions of air-conditioning and machine heat loads without compromising the comfortable working environment. We will apply these measures to actual production sites and continue development activities to reduce energy consumption.

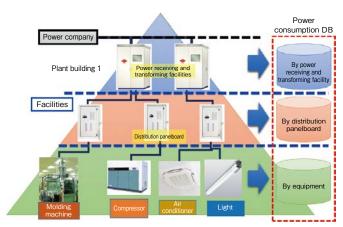


[Verification using a real vulcanizer]

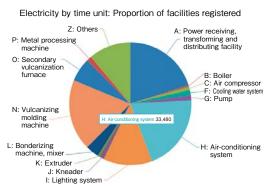
#### **Visualization of Power Consumption**

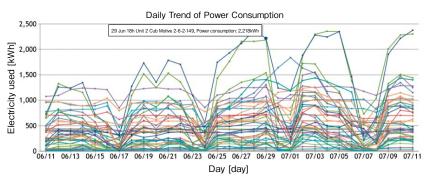
The Subcommittee for Reduction of Energy Consumption promoted the development and provision of energy monitoring tools in order to enhance energy management activities. Based on the concept of "visualization," the tool enables power consumption data collected to be displayed on a terminal on a real-time basis to analyze what the energy is used for, trends and changes in energy consumption.

Energy management requires monitoring and analysis of consumption trends by use at each site. This tool meets the requirements while data is stored in the power consumption database for sharing. By sharing data before and after the improvement and the analysis findings, further energy conservation effects can be expected at the NOK Group as a whole.



[Capturing and analyzing energy data for each hierarchy]





[Analysis of uses of electricity and daily fluctuation]

#### **Use of Renewable Energy**

NOK proactively introduces renewable energy sources as part of BCM measures to prepare for electricity failure and other emergency situations, in addition to using renewable energy in normal times. In FY2018, approximately 84 MWh of renewable energy was used at NOK divisions for the year. We will encourage the group companies to proactively introduce renewable sources.

Location	Туре	Electricity reduced
Fukushima Plant (Exterior light)	Solar panel	12.2 MWh/year
Kitaibaraki Plant (Isohara Polyurethane Industry) (Rooftop)	Solar panel	61MWh/year
Shizuoka Plant (Guard gate)	Solar panel	5MWh/year
Tottori Plant (Guard gate)	Solar panel	5.6MWh/year
Kumamoto Plant (Exterior light)	Solar panel and wind power generator	0.6MWh/year

[Use of Renewable Energy]









# Toward the Realization of a Sustainable Society

#### **Activities to Reduce VOC Emissions**

#### Long-term target

Based on benchmarks set in the JAPIA voluntary environmental action plan, NOK aims to reduce VOC emissions by 30% in FY2030 from FY2000 (the base year for NOK divisions) as its long-term target. As to hazardous air pollutants (dichloromethane, trichloromethane and tetrachloroethylene), we have set a long-term target of reducing the emissions by 95% from FY2000.

#### Background and activities

As a result of activities to reduce VOC emissions, we achieved in 2010 a net reduction of 50% from emissions of 2,503 tons in FY2000, which substantially exceeded the long-term target of 30%. From FY2011, we made it a minimum target to keep the VOC emissions at the current level and strived to achieve a further reduction.

In FY2017, we completely eliminated the use of dichloromethane at the last overseas site. With this, the three air toxics were totally eliminated at 11 sites in Japan (including production subsidiaries) and six sites outside Japan as of the end of FY2017.

#### Results for FY2018

In FY2018, NOK strived to reduce emissions of toluene. which had been our long-standing concern, to zero, and did in fact achieve net zero emissions by installing exhaust treatment equipment. In addition, we continued to seek out the next reduction target of VOCs, an initiative we started in FY2017. We also explored how to improve the yield of organic solvents in adhesives and paints used in certain processes and found a technique that seemed likely to achieve a roughly 25% reduction. This technique has already been employed at some sites. These efforts resulted in a year-on-year reduction of 23% at NOK's production sites. Meanwhile, VOC emissions from production subsidiaries in Japan have remained almost unchanged, with an increase of 2.6% in FY2017 and a decrease of 2.9% in FY2018. Although we have achieved a long-term reduction on the group level, we have failed to reduce the emissions substantially in the past three years, achieving only a slight reduction from FY2016.

#### Future plans

Having eliminated the emissions of dichloromethane and toluene, which were our outstanding concern, we completed "radical" VOC reduction activities. Going forward, our focus will be on studying ways to curb VOC emissions from adhesives and paints in each process. If the use of organic solvents increases due to a production increase, we will begin a technical study and technology development to prevent the increase of VOC emissions.

#### **Activities to Reduce Waste**

#### Long-term target

Based on benchmarks set in the JAPIA voluntary environmental action plan, NOK has promoted activities to reduce waste emissions and set its long-term reduction target of maintaining a recycling rate of 85% or higher. In particular, the NOK Group aims to achieve the goal of an industrial waste recycling rate of 99% or higher at the group level

#### Background and activities

In FY2014, the committee in charge of zero emissions activities at the NOK Group was renamed the Subcommittee for Waste Management, which has since led the Group's efforts to control the generation of waste. As a result, the recycling rate for industrial waste approached its ceiling, sitting at 99.8% or higher at NOK's divisions and production subsidiaries in Japan from FY2013.

#### Results for FY2018

Although we did at one point achieve the recycling rate of 99.8% or higher for industrial waste, the rate dropped to 94.8% due to the start of operation during the second half of FY2017 of a foundry (a production subsidiary in Japan), whose waste was disposed of in landfills. However, as a result of technical investigations that started October 2018, we managed to recycle 44.8% of the emissions from the entire foundry and to improve the recycling rate at the end of FY2018. Previously, cast products were manufactured by outsourcing and substantial costs and CO<sub>2</sub> emissions were associated with their management and transport, which were regarded as problems. The integrated production within the Group helped reduce the cost and the CO<sub>2</sub> emissions.

#### Future plans

To regain the high recycling rates we at one time achieved prior to FY2016, NOK is working to reduce waste emissions through efforts to find new recycling methods.

#### **Compliance with PRTR Law**

In FY2018, we reported six regulated substances under the PRTR law, which mandates that companies submit information on environmental release and transfer of specified toxic chemicals.

#### Results for FY2018

	Cabinet	abinet Emissions (kg)				Transfer (kg)		
	Order No.	Atmosphere	Public Water	Landfill	Soil	Drainage	Off-site	
Zinc Compounds (Water-Soluble)	1	0	25	0	0	0	0	
Xylene	80	87	0	0	0	0	12	
N,N-Dimethylformamide	232	98	0	0	0	0	15,448	
Toluene	300	133,470	0	0	0	0	33,295	
Methylnaphthalene	438	85,239	0	0	0	0	0	
Methylenebis (4,1-Phenylene) Diisocyanate	448	1	0	0	0	0	700	
Total		218,895	25	0	0	0	49,455	

Scope of coverage: NOK's seven divisions See  $\bigstar$  on page 13 for the details of NOK's seven divisions.

# **Environmental Performance Data**

#### **INPUT**

Item	Unit	FY2016	FY2017	FY2018
Total energy	GJ	2,718,404	2,917,984	3,302,739
Electricity	GJ	2,614,662	2,814,003	3,167,459
Fuels	GJ	103,742	103,981	135,280
Total water intake	m <sup>3</sup>	835,100	369,906	409,134
City water	m <sup>3</sup>	268,719	280,634	311,414
Industrial water	m <sup>3</sup>	454,156	29,224	31,655
Groundwater	m <sup>3</sup>	112,224	60,048	66,065
Volatile organic solvent used	t	1,360	1,479	1,242
Raw materials used	t	73,508	59,560	95,842
Rubber	t	12,098	10,468	14,137
Additives & adhesives	t	10,330	8,360	11,659
Plastics	t	895	717	1,220
Metals	t	50,185	40,015	68,826
Environmental conservation cost	Million yen	709	847	1,194
Investment	Million yen	73	149	451
Expenses	Million yen	636	698	743

#### OUTPUT

Item	Unit	FY2016	FY2017	FY2018
Total CO <sub>2</sub> emissions	t-CO <sub>2</sub>	282,319	353,371	371,475
Scope 1	t-CO <sub>2</sub>	6,400	6,384	8,315
Scope 2	t-CO <sub>2</sub>	149,746	161,163	181,406
Scope 3*1	t-CO <sub>2</sub>	126,173	185,823	192,296
Total wastewater discharge	m <sup>3</sup>	261,328	277,378	241,346
Public waters	m <sup>3</sup>	252,962	269,208	232,038
Sewage system	m <sup>3</sup>	8,366	8,170	9,308
BOD load	t	1.33	1.42	1.47
VOC emissions	t	1,266	1,334	1,088
Industrial waste emissions	t	11,333	12,733	15,125
Amount of waste recycled	t	11,317	12,278	13,885
Amount of waste in landfills	t	16	455	1,240
Valuable materials	t	10,608	11,224	30,084
Recycling rate*2	%	99.9	98.1	97.3

<sup>\*1 1</sup> Covers Categories 1, 5 and 9 of the GHG Protocol's 15 categories of Scope 3.

<sup>\*2</sup> A certain amount of valuable materials in waste is factored into the calculation of the rate, according to internal standards.

# **Environmentally Conscious in All Business Activities**

#### **Environmental Impact Assessment for Design**

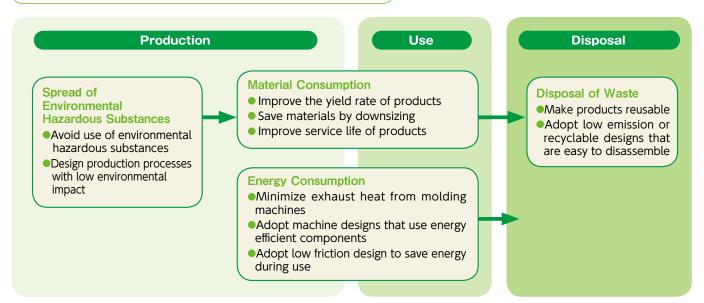
We assess the environmental impact of designs of new products, new materials and new production machines in accordance with NOK's Standard of Environmental Impact Assessment for Design.

During the design phase, we plan for the disuse of environmental hazardous substances, low energy consumption, high product yields, downsizing, long service life, low friction and low wear performance, as well as reuse, low waste and recycling of end-of-life products.

(Application of the Standard of Environmental Impact Assessment for Design in FY2018)

Division	Applicable Cases	Performance Improved
Fukushima & Nihonmatsu	827	107
Kitaibaraki	1,097	26
Fujisawa	149	77
Shizuoka	684	15
Tokai	10	2
Tottori	235	53
Kumamoto	122	95
Total	3,124	375

#### Standard of Environmental Impact Assessment for Design



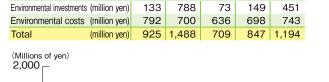
#### **Environmental Protection Cost**

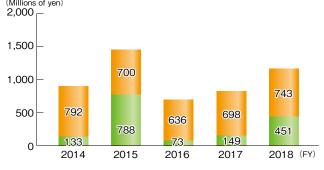
NOK calculates its environmental investments and expenses in its business activities annually to fulfill its environmental social responsibility and promote environment conservation activities efficiently and effectively.

Our environmental investments in FY2018 include the introduction of high-efficiency air-conditioning systems and the replacement of conventional lighting with LEDs as energy-saving measures, along with the improvement of wastewater treatment facilities.

We are introducing solar panels, which also serve a function under BCM.

# Trend of Environmental Investments and Costs ●NOK's seven divisions | tem | 2014 | 2015 | 2016 | 2017 | 2018 | (FY)





Note: See ★ on page 13 for the details of NOK's seven divisions.

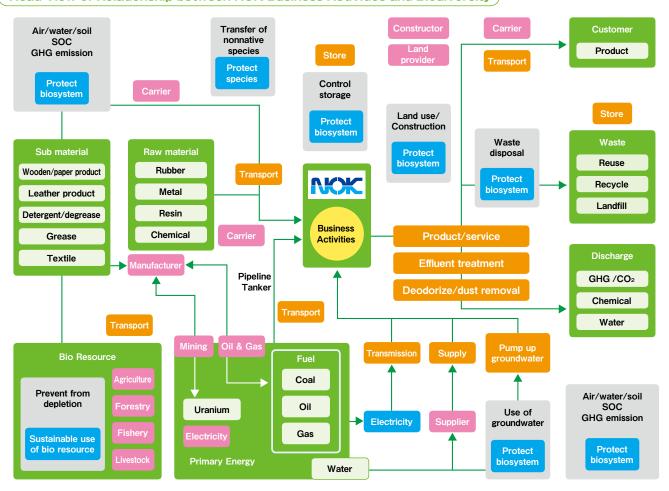
#### **Biodiversity**

We assessed our impact and dependence on biodiversity and ecosystem services. Based on the results, we have confirmed the direction that NOK should take to conserve biodiversity and established a common internal regulation in FY2011, the Standard

for NOK Biodiversity Conservation.

This standard defines the biodiversity-related actions we should take in our business activities and promotes biodiversity conservation.

#### Head View of Relationship between NOK Business Activities and Biodiversity



#### **NOK Business and Biodiversity**

Activities	Related Ecosystem Services and Impact
■ Efforts to reduce CO₂ emissions and emission intensity	Impact on climate change
2 Promotion of water use reduction and water reuse	Impact on fresh water use and water purification ability
3 Reduction of nonconforming products, improvement of yields, reduction of industrial waste and improvement of the recycling rate	Use of wood, paper, textile, fuel, oils and fats, raw materials, genetic resources, biochemical substances, natural medicines, etc., and collection of biological resources
4 Prevention of entry of specified chemical substances into exhaust, and restriction of volatile chemical substances, dust, etc.	Atmospheric quality and climate
5 Prevention of entry of hazardous substances, oil, etc., into drainage	Impact due to discharge of contaminants into waters
6 Management of nighttime outdoor lighting to limit leaked light and lighting hours	Impact of nighttime lighting and noise
Compliance with applicable laws and regulations, including the Noise Regulation Act, Vibration Regulation Act, Soil Contamination Countermeasures Act, Air Pollution Control Act, and Water Pollution Control Act	Protection from natural disasters associated with water retention and soil erosion, recreation and spiritual wellness, and changes in habitats due to land use
Proper disposal of industrial waste	Protection from natural disasters associated with water retention and soil erosion, recreation and spiritual wellness, and changes in habitats due to land use
Implementation of internal environmental education, participation in social environmental activities, etc.	General

# Reports from NOK Group Sites

#### **NOK Divisions**

#### Fukushima and Nihonmatsu Plants

The Fukushima Plant introduced a green parking area when the factory building was expanded in order to secure green space.

Two new buildings were constructed at the Nihonmatsu Plant. Each building is furnished with energy-efficient ancillary facilities (air conditioners) to minimize  $\mathrm{CO}_2$  emissions. To meet various regulatory requirements incidental to the construction of the buildings, the plant files notifications in a timely manner.

#### Kitaibaraki Plant

The Kitaibaraki Plant is engaged in EQT\* activities that integrate efforts for quality and cost reduction.

In FY2018, the plant was commended for its energy conservation activities and awarded the prize of excellence by the Kanto Region Electricity Usage Rationalization Committee. Moreover, resin blocks (center median blocks) made from recycled plastic were awarded a recycled product certification by Ibaraki Prefecture

In FY2019, the plant will ensure that management of change-points, including the start of operation at a new material and adhesive building, are conducted in order to preserve the environment.

\* Environment, Quality and Total cost reduction

#### Fujisawa Plant/Shonan R&D Center

The Shonan R&D Center pursues environment-friendly development practice in basic technology research and product and material development. We are also developing production technologies to achieve further energy and resource conservation, in addition to improving the efficiency of production equipment. Moreover, the Center also focuses on technical support for NOK plants to help them promote their environment-friendly manufacturing. Our support contributes to extending product lifetimes, reducing torque and improving yield. The Fujisawa Plant and Shonan R&D Center actively take part in environmental activities in local communities, including cleanup activities in Fujisawa City as well as sponsoring Enoshima Aquarium as an "Enosui eco Supporter."

#### Shizuoka Plant

With the completion of the transfer of the Honjo Factory of Kikugawa Seal Industry Co., Ltd. in May 2018, Shizuoka Plant resumed full-fledged operation. The Plant will continue to maintain a high level of awareness regarding compliance also this year

regarding compliance also this year.

Recently, we have focused on energy conservation activities and are conducting concrete and effective measures, including holding seminars taught by representatives of external organizations, introducing energy-saving equipment and taking countermeasures against atmospheric leakages from production facilities.

#### Tokai Plant

As the leader of NOK's long-standing contribution to environmental conservation through seal technology, the Tokai Plant has engaged in the development and production of innovative products that have facilitated the popularization of fuel cell vehicles and the effective use of water resources. With a high level of environmental awareness and motivation for new products to be launched in the market, we have consolidated the system to fulfill our corporate social responsibilities.

#### Tottori Plant

The Tottori Plant launched the full-fledged operation of a foundry to internally produce cast parts from this year. To reduce waste (slag) generated at the foundry, we were engaged in activities to improve the recycling rate.

Moreover, we reviewed the energy intensity of the foundry and conducted fine-tuned energy management. The Tottori Plant will continue these efforts to reduce waste emissions and energy consumption.

#### Kumamoto Plant

The Kumamoto Plant periodically performs environmental measurements of drainage from the plant and groundwater on the premises to protect the Aso region's water resources, which have been conserved by local residents. Such activities to contribute to local environmental protection are conducted continuously.

In FY2018, the Plant's energy conservation effort for reducing the heat load of outdoor units of air conditioners was recognized by Kumamoto Prefecture and won the Kuma Eco Prize for Global Warming Countermeasures by Business.

#### **Group Companies**

#### NIPPON MEKTRON, LTD. (MEK)

The MEKTEC Group has promoted the reduction of  $CO_2$  emissions through energy conservation activities and achieved a year-on-year reduction of approximately 2% in FY2018. As to the use of renewable energy, the Group successively introduces solar power generation facilities, mainly at sites outside Japan. Following the existing facilities at MMCS (China), a photovoltaic facility started operation at MMCT (Thailand) in May 2018 (total output of 1.4 MWh/year). MEKTEC Taiwan also started operation of a system in November 2018 (1.0 MWh/year), thereby contributing to the reduction of  $CO_2$  emissions.

#### SYNZTEC CO., LTD.(SZT)

The SZT group engages in production at its group companies in Japan and abroad. Independent efforts by SZT are focused mainly on support for internal sections in technology and quality control by initiating activities to reduce nonconforming products and save more energy.

In FY2018, a production function was transferred from another plant to the Yokosuka Plant, and various concerns associated with the transfer emerged. To begin with, the Plant set a target to reduce waste emissions. The SZT Group will make concerted efforts to further promote environmental conservation activities.

#### UNIMATEC CO., LTD. (UMT)

As a chemical factory striving to establish a failsafe system for the absolute prevention of accidents, UMT has been engaged in the risk assessment and management of pipelines on the premises of the plant since FY2018, with the goal of preventing the leakage of environmental pollutants. Having completed the transition to a management system compliant with ISO14001:2015, the management system is integrated with operational processes and has incorporated the abovementioned risk-based concept. Efforts for wastewater treatment facilities at UMT include reducing the amount of effluent and the volume of sludge. These measures are intended to simultaneously reduce the environmental impact of effluent/emissions and effluent-related costs. UMT has thus established a system that contributes not only to the environment but also to society.

#### Wuxi NOK-Freudenberg Oil Seal Co., Ltd. (WNF)

WNF continues its environmental activities in accordance with ISO14001. To reduce power consumption, we have introduced an automatic switching function that turns cooling tower air blowers on and off and adopted a narrower size of compressed air pipelines for facilities for the efficient use of electricity. To raise environmental awareness among employees, WNF provides new employees with basic environmental training every year. Persons in charge of environmental management gather from all departments every month for mutual exchange and environmental meetings, thereby developing their interest in environmental conservation.

#### NOK Vibration Control China Co., Ltd. (NVCC)

NVCC is promoting company-wide energy saving activities. In FY2018 it substantially reduced power consumption through cutting down the amount of electricity used in the power-intensive melting process of casting, and through efficiently using compressors. Also in FY2018, self-audits and independent audits were conducted in compliance with environmental laws and regulations, with a view to reinforcing the environmental conservation system.

#### Thai NOK Co., Ltd. (TNC)

TNC has been implementing various initiatives for environmental conservation. In FY2018, its plant in Phanthong cut annual  $\mathrm{CO}_2$  emissions by 3,297 tons through its energy-saving activities, including the replacement of chillers with a more efficient, energy-saving model and a reduction in the use of compressed air. Moreover, TNC actively participates in recycling and tree-planting activities in the local community to help employees develop a high level of awareness of environmental conservation. We will continue improving our environmental management system to enhance our environmental performance.

#### P.T. NOK Indonesia (NIN)

In FY2018, NIN promoted the replacement of decrepit hydraulic units for vulcanizing presses with an energy-efficient model (reducing power consumption by 50%) as a measure to save energy. We also installed additional wastewater treatment facilities and boosted treatment capacity in an effort to cope with our production expansion plan.

In FY2019, NIN plans to change the layout of equipment that generates dust and wastewater as part of efforts to improve the workplace environment. We will also automate the monitoring of wastewater treatment facilities, establish a special team tasked solely with operation and maintenance of the wastewater treatment facilities, and strive to ensure compliance with environmental laws and regulations on a continuous basis.



#### The NOK group's procurement from suppliers complies with its Procurement Policy

#### **Procurement Policy**

- 1 We comply with laws, regulations and social norms.
- 2 Based on the idea of free competition, we select suppliers in a stringent manner by providing fair and equal opportunities.
- 3 We share mutual interests and benefits with suppliers based on the idea of mutual prosperity.
- We engage in open communication and build a relationship of trust with suppliers.
- 5 We conduct improvement activities proactively in collaboration with suppliers.

The NOK Group believes that if we are to fulfill our corporate social responsibility, it is essential that our awareness is shared across the procurement supply chain

We are asking our suppliers to understand the Procurement Policy shown on the left and respect the NOK Charter of Corporate Behavior and CSR Procurement Guidelines in business transactions with us.

#### **CSR Procurement Guidelines**

To fulfill our corporate social responsibility, we carry out procurement activities in accordance with the following policies:

1. Compliance with laws and regulations	We comply with laws and regulations, including the competition laws, trade laws, environmental laws and social norms of relevant countries.
2. Respect for human rights	We do not deal with business entities that would use forced or child labor, that would engage in unlawful employment of foreign nationals or any other illegal employment and that would not satisfy industrial safety and health requirements.
3. Safety	We prioritize the safety of customers and consumers and purchase products that satisfy safety requirements.
4. Green procurement	We carry out procurement activities based on the NOK Group Green Procurement Guideline with consideration for preserving the global environment .
5. Confidentiality	We deal with suppliers that can appropriately manage and control the confidentiality of information on customers, individuals and technologies, etc. obtained through business transactions.
6. Elimination of anti-social forces	We do not deal with any organized crime groups, any of their members and related individuals nor any other antisocial forces as well as any business entities associated with them.
7. Activities regarding conflict minerals	We strive to avoid purchasing minerals and products that use minerals from countries where inhumane armed forces are active and mining minerals for their financial resources.
8. Contribution to local communities	We contribute to the development of local communities by promoting business transactions with local suppliers.
9. Sharing awareness with suppliers	We strive to ensure that the NOK Charter of Corporate Behavior and the CSR Procurement Guidelines are respected throughout the supply chain.

NOK's production activities are centered on industrial components made from polymeric materials, such as synthetic rubber and resin. We are committed to environmental conservation activities such as managing environmental hazardous substances used in production processes, saving energy and resources, and reducing waste. To extend these

controls beyond production processes to procurement activities, we have established the NOK Group Green Procurement Guideline. Controlling environmental hazardous substances and building a system to guarantee the non-inclusion of these substances throughout the supply chain are our priorities.



# The NOK Group continues its efforts to provide customers with high-quality products and services.

#### **Quality Management System**

To continuously supply products that meet customer requirements, we have steadily worked on quality improvement by implementing our quality management system, which complies with ISO9001 and other international standards.

Quality officers conduct on-site diagnoses for quality assurance. Group companies in and outside Japan closely exchange information on the quality management system in an effort to ensure that NOK's products have a uniform level of quality on a global basis. In this way we strive to enhance customer satisfaction.

# **Quality Education and Continuous Quality Improvement Activities through Actual Practice**

NOK's educational programs are common throughout the company, with key programs being the Quality Dojo and SuT Seminar.

Firstly, the Quality Dojo started in 2009 with an aim to develop employees capable of communicating, practicing and promoting the culture of "Quality First" in their day-to-day work. Each division has quality trainers (Quality Dojo Masters) who run the Quality Dojo training center and provide disciples with training and education. Disciples who graduate from the Dojo are certified as Quality Leaders\*1 and they are responsible for providing guidance and training to their subordinates while engaging in their own quality improvement activities as part of their duties. Thus far, the program has produced over 800 Quality Leaders in and outside Japan.

The second key program is the SuT Seminar. SuT,\*2 which is pronounced "satto" in Japanese, is a series of seminar courses aimed at encouraging the use of tools to speedily solve problems. Many employees have taken the courses and applied the methods they learned to QC circle activities and process improvement efforts.

Moreover, we hold a meeting called N-Act\*3 where achievements of the two initiatives are presented. Results of activities by Quality Leaders who completed the Quality Dojo program are reported for the Act-Q category, while those by SuT course participants are presented for the Act-S category. The N-Act has been a great opportunity to share model activities across the Group, further expanding our quality improvement activities.

- \*1 Quality Leader is a title given to an employee who has completed the Quality Dojo program.
- \*2 SuT is an acronym for Speed-up Tools of problem solution, and means a tool that expedites the solution of problems.
- \*3 N-Act is an acronym for NOK Action Changes Tomorrow.



#### **NOK Group QC Circle Meeting**

The NOK Group encourages employees to form quality control (QC) circles: autonomous small groups that engage in quality improvement activities.

Upholding the motto of "pursuing down-to-earth improvements by going back to the starting point of QC circles," presentation meetings are held at NOK divisions in Japan and group companies in and outside Japan every year. In FY2018, 1,093 QC circles participated in such meetings globally. Eight circles, each selected at a regional presentation meeting, gathered and reported their activities at the NOK Group QC Circle Meeting, where the best QC circle in the NOK Group was decided.

At the NOK Group, QC circle activities are widely conducted at many of our sites, group companies and affiliates both in and outside Japan.



#### **Nonconformity Reduction Activities**

NOK strives to reduce nonconforming products to improve quality and cut back on waste. We have also been committed to developing human resources through these activities.

In FY2011, the Zero Nonconformity Project was launched. In Japan, the project was extended to production subsidiaries in FY2013 in an effort to make project activities "selfpropelling," or freestanding. Basically, this project requires the repeated observation of gemba (actual place) and gembutsu (actual thing) and verification based on a certain mechanism. It has helped employees to develop their abilities to solve problems on-site. Results of the verification based on mechanisms are represented in an FTA\* to be managed as a proprietary technique for use in the future. Activities under this project, which work on many technical themes, are being implemented every year at sites in and outside Japan. The nonconformity reduction activities are now conducted at group companies in and outside Japan on a routine basis and at the initiative of each company. We will further expand this project and make it a standard activity across the Group.

#### **In-house Quality Award System**

Our quality award system was introduced in FY2008 to boost quality improvement activities. All employees of the NOK group in Japan are eligible. Following a nomination and selection process that takes place every six months, organizations that have accomplished excellent results through effective quality improvement activities are honored. Articles on the outstanding improvements they have achieved appear in company newsletters.

Nomination guidelines were revised in FY2012 so that the award system can promote quality improvement activities more effectively. The revised system encourages nominations of projects that are feasible and implementation by teams to increase quality awareness among employees.

The top prize for the first half of FY2018 was awarded to TVC Corporation for its achievement of quality improvement through rigorous worker education and by boosting communication. For the second half, the top prize was presented to the NOK Tohoku Logistics Center in recognition of the Center's brilliant quality improvement activities in its warehouse and shipping operations, which led to the Center receiving no customer complaints for a period of 10 years. The quality award system helps us to create a workplace culture that encourages quality enhancements and improvement.

#### **Promotion of Products at Exhibitions**

NOK exhibits at many trade shows in Japan and elsewhere every year. Through exhibitions, we seek to make our technologies and products known to a broader range of prospective and existing customers, and to improve our understanding of market needs.

We also organize in-office exhibitions in which our products are displayed in a spare space at customers' sites. This provides us an opportunity to better understand the customer needs and encourage communication with them.

# Exhibition at Automotive Engineering Exposition 2018 Yokohama

The NOK group joined many exhibitions in FY2017 as in previous years.

At the Automotive Engineering Exposition 2018 Yokohama held in May 2018, NOK exhibited products and technologies that contributed to quietness, anti-corrosion measures and low-electricity consumption as required for electric vehicles. NOK displayed technologies related to three themes of vibration and noise isolation, PCU & secondary battery, and motors, highlighting the fact that a wide range of NOK's products can also be applied to EVs.





#### **Establishment of Customer Support Center**

The Customer Support Center responds to various inquiries concerning the contents of catalogs and assists customers to select the right products for their needs. Questions and requests received by the Customer Support Center and via the website are reported to relevant departments as feedback. This input provides information used in resolving challenges that customer face and in proposing new projects.

<sup>\*</sup> Fault Tree Analysis, a method of failure and accident analysis.

# Social / Local Area Activities

# Support for "AICHI: No Longer the Worst" Road Safety Project

With the highest rate of car ownership in Japan, Aichi Prefecture has also had the highest rate of traffic fatalities in the country for 15 consecutive years\*. To reduce traffic fatalities by raising road safety awareness, Chunichi Shimbun Co., Ltd. launched the "AICHI: No Longer the Worst" Road Safety Project in 2016 in collaboration with radio and television stations based in Nagoya City, and with the cooperation of the Aichi prefectural police department. As a manufacturer of auto parts, NOK has joined the project since FY2017 in support of the project's objective to eliminate traffic accidents from this world.

Now that people aged 65 years or older account for the majority of traffic fatalities in Aichi Prefecture, the challenge is to reduce accidents involving the elderly. In FY2018, measures to support road safety for the elderly and activities focused on pedestrian protection were undertaken.

\* As of 2018

#### Sponsorship for NHK Gakusei Robocon 2018

NHK Gakusei Robocon (Student Robot Contest) 2018, Japan's preliminary for the ABU Asia-Pacific Robot Contest 2018, took place on June 10, 2018 at Ota City General Gymnasium in Tokyo. NOK has been sponsoring NHK Robocon since 2015 as a way of supporting the next generation of engineers. The theme for the 2018 contest was "Nem Con" (shuttlecock throwing), inspired by the traditional northern Vietnamese event of the same name. Each round of the competition featured two robots from each team. Aiming for a ring, the first robot threw a shuttlecock handed to it by the second robot. If the shuttlecock passed through the ring, the team earned points. "These serious matches involving robots that students had built themselves by overcoming difficulties and exercising their creativity were thrilling to watch in today's contest," commented one employee who observed the event. "I watched the games with my first-grade daughter, who loves the Robocon so much that she wants to make robots herself when she grows up," said another, adding, "My daughter and I got excited when a robot made a great play." A third said: "I was really into the heated battles, which can rightly claim another name of 'Koshien' for science students."

The bold and free-thinking ideas of student engineers on display at this event, along with their hard work, never fail to generate excitement among the audience. NOK will continue to sponsor this event in and after 2019 to encourage their development.







#### **Sponsorship for Tech Plan Grand Prix**

The NOK Group cosponsored the first Tech Plan Grand Prix in Shizuoka held on July 7, 2018, the second Tech Plan Grand Prix in Ibaraki held on November 24 and the first Tech Plan Grand Prix in Fukushima held on February 9, 2019. The Tech Plan Grand Prix is a program organized and operated by Leave a Nest Co., Ltd. Its aim is to discover scientific technology and business seeds with the potential to form the basis for new industries in each participating country around the world and each prefecture in Japan. In support of this objective, the NOK Group provided cooperation for the program.

The NOK Group continues to support the discovery and development of R&D ventures based in the regions where the Group operates its sites. In addition, through networking and collaboration with external organizations, we will strenuously undertake initiatives for open innovation and new business creation.



#### **Sponsorship for Kids Engineer 2018**

NOK was a cosponsor of Kids Engineer 2018, which was held on July 27, 2018 at PACIFICO Yokohama. Organized by the Society of Automotive Engineers of Japan, Kids Engineer provides a hands-on learning opportunity for schoolchildren and is aimed at encouraging their interest in various fields of science, technology and monozukuri (manufacturing skills), particularly around automobiles.

This was the third time for NOK to cosponsor this event. NOK offered a program to allow children to experience "the world of auto parts—small components that play big roles" through videos and quizzes. We used creativity and ingenuity in designing the program to help participants readily understand the "big" roles played by "small" parts in cars through exhibits that they could see, touch and enjoy.





#### **Sponsorship for National Tree-Planting Festival**

The national tree-planting festival has been held to deepen the public understanding of forests and greenery, which are fundamental to the protection of national public land. The event for 2018 took place on June 10 in Fukushima Prefecture on the theme of "growing forests of hope and life." In support of the objective of the event, NOK cooperated with the organizers to contribute to the local community as a company with a production base in the prefecture.

#### **Sponsorship for 16th Student Formula Japan**

From September 4 to 8, 2018, the 16th Student Formula Japan took place at Ogasayama Sports Park ECOPA, Shizuoka Prefecture. Student Formula is a competition organized by the Society of Automotive Engineers of Japan. Teams of students race with small-sized formula racing cars that they have planned, designed and built themselves. The event is aimed at developing young professionals who can facilitate the growth and promotion of the automobile industry and related technologies by supporting students through cooperation among industry, academia, government and the local community. As well as the actual performance of the car, the comprehensive monozukuri capability, including the concept, design and cost of the car, is evaluated.

NOK has been a sponsor since FY2008 and has provided NOK Group products to some of the participating universities. NOK will continue to sponsor this event and is proud to support young engineers who are enthusiastic about building cars.



#### Sponsorship for World Food Day 2018 Campaign

Even as 800 million people around the world suffer from hunger, about 1.3 billion tons of food is wasted each year. This is equivalent to around one third of the total amount of food produced worldwide. To coincide with World Food Day on October 16, the United Nations World Food Programme (WFP) conducted the Zero Hunger Challenge to eliminate food waste and eradicate hunger during the entire month of October 2018. The campaign is intended to arouse the interest of the general public in developed countries toward hunger in developing countries as we make efforts to reduce food waste, a challenge familiar to those of us living in developed countries. The campaign also provided food assistance to starving people. NOK sponsored this campaign to show support for its aims.



# Sponsorship for Hamamatsucho Green Sound Festa Hama Matsuri

The Hamamatsucho Green Sound Festa Hama Matsuri was held by Nippon Cultural Broadcasting Inc. on November 3, 2018 in Hamamatsu-cho. NOK has cosponsored the event since FY2016 for the purpose of contributing to the local community.

This year's event attracted a total of 128,500 visitors to the Hamamatsu-cho area, where event venues such as Zojoji Temple, Tokyo Tower, Nippon Cultural Broadcasting, HAMASITE Gurume and Shiba Commercial High School are situated

At the "NOK presents KIDS EXPO—Kids Expo 2018" held at Shiba Commercial High School, NOK set up a PR booth and offered a puzzle game to teach children about automotive parts. Moreover, on the special stage, a performance called "NOK Presents Kid's Expo Science Show" was presented. Under the theme of "the Wonder of Friction," NOK demonstrated experiments that used huge balloons and daruma otoshi blocks as well as other experiments featuring liquid nitrogen and rubber.





#### **Sponsorship for Minato City Half Marathon 2018**

The Minato City Half Marathon 2018, the first marathon race held in Minato City, took place on December 2, 2018 with NOK as a cosponsor. The race course started in front of Shiba Park, extended through Shimbashi Station and Shinagawa Station and finished at Tokyo Tower. Under the winter sunshine, 4,698 athletes competed, among them 11 runners from the NOK Group, who all completed the race within two hours. Another roughly 70 employees lined up along the course to rousingly cheer the runners on.

NOK will cosponsor the event again in FY2019 with the aims of making contributions to the local community and raising the public profile of the company through sporting events.







#### **Corporate Member of Enosui eco Supporter**

In January 2019, NOK offered to cosponsor the "Enosui eco" program for ecology under EcoAction 21,\* promoted by Enoshima Aquarium (Enosui). As a supporter, NOK will assist in conservation efforts, including investigation and research into the biological and ecological diversity of Sagami Bay, cleanup activities, and waste reduction efforts. In addition, NOK will proactively take part in beach cleanup activities and foster a relationship with the local community.

\* The environmental management system formulated by the Ministry of the Environment



# **Sponsorship for the 4th Japan BtoB Newspaper Advertising Award for Students**

The Japan BtoB Newspaper Advertising Award for Students organized by the BtoB Advertising Association Japan and the Nikkan Kogyo Shimbun, Ltd. was inaugurated with the goal of deepening students' interest in and understanding of BtoB companies. NOK has cosponsored the competition since FY2017 in support of its purpose. For the 2018 competition, students produced newspaper ads in line with requirements given by eight corporate cosponsors, including NOK

The issue NOK wanted to address with a newspaper ad was the low level of NOK's name recognition. NOK's concern was that although it is making everyday life easier for people, its products are seldom seen by consumers because they are used inside finished products made by other companies. NOK requested an ad that would let people know what kind of businesses the company is engaged in. Twelve entries were submitted in response, and a panel of judges convened on March 27, 2019 award the Gold Prize to an advertisement that addressed NOK's requirement.

# Accepting Interns from Universities and Technical Colleges

NOK actively provided opportunities for students to undertake work experience at a variety of workplaces within the company, with the objective of human resource development through industry-academia cooperation.

	Humanities students	Science students	Total
Participants in 2-week internship program	0	31	31
Participants in 1-day internship program	60	176	236
Participants in long-term		1	1
(4-month) internship program		Į.	' '

#### Initiatives at VNN, a NOK Group company

VNN is a wholly owned subsidiary of NOK Corporation located in Amata Industrial Park in Dong Nai Province, southern Vietnam. The area VNN is located in was the site of fiercely contested battles during the Vietnam War. Taking this history of the region into account, VNN focuses on community and social contribution as a company rooted in the community.

As part of such contribution initiatives, VNN purchased photo frames from a facility that sells small products created by people with disabilities and health problems caused by Agent Orange. Fitted with a commemorative photo, the photo frames are given to visitors to VNN as a gift.







## Communication with Shareholders, Investors and External Organizations

# **Exhibition at Tokyo Stock Exchange IR Festa 2019**

The Tokyo Stock Exchange IR Festa 2019 was held from February 22 to 23, 2019 at the Tokyo International Forum. Organized by the Tokyo Stock Exchange, this event aims to offer an opportunity for individual investors to communicate with listed companies. NOK participates in this event every year with the objective of promoting fair disclosure. NOK held company briefing sessions at its booth again this year and explained our business activities, performance and growth strategy. We distributed questionnaires to visitors after every briefing session and received responses from 767 of them. The event allowed us to obtain valuable feedback from individual investors.

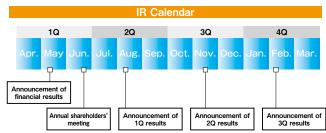
During the Festa, students of college investment clubs affiliated with the Union of Student Investment Clubs organized an event in which they visited each company's booth and evaluated the exhibits and presentations. Out of a field of roughly 80 exhibitors, NOK was named the No. 1 company. NOK is committed to providing easy-to-understand, fair and accurate information on a continuous basic



#### **Financial Results Briefings**

The NOK group holds two financial results briefings every year, one in May for annual results and another in November for interim results. Securities analysts, institutional investors, research institutions, journalists and financial institutions are invited to these sessions, where we explain financial results and forecasts, and also respond to questions.

Presentation materials used for financial results briefings are available at NOK's website.



#### **Relations with External Organizations**

The NOK group is a member of economic organizations and industry associations and participates in their activities. We cooperate with these external organizations by acting as a general affairs committee member of the Japan Auto Parts Industries Association (JAPIA) and the chair of the Japan Electronics Packaging and Circuits Association (JPCA).

At JAPIA, we seek to contribute to the development of the automobile and automobile parts industries. NOK is a member of subcommittees on the environment and on conflict minerals, and exchanges views with other JAPIA members

# Relations with Employees

#### **Policy**

Item 1 of NOK's Management Principles stipulates as follows: "The Management has to run the Company based on feelings of love and trust in its employees." We value the life of each employee and respect their humanity. At the same time we maximize the potential of each employee, thereby maintaining and reinforcing the company's competitive edge. In everything from our Management Policies and our work procedures to our recruitment and development of human resources and our benefits package, we firmly uphold the stance of respecting human rights across all aspects of our operations. The company's various measures are implemented on the premise of secure and stable employment.

#### **Adhering to Basic Rules for Employees**

#### Respect for basic human rights

NOK's Principles of Corporate Behavior set forth *Respect for Human Rights* and *Provision of a Safe and Comfortable Working Environment*. Our Behavioral Guidelines Concerning Employee Compliance embrace the idea of respect for diversity, personality differences and individuality and prohibit discrimination based on race, color, creed, religion, nationality, age, gender, national origin and physical and mental disabilities. The Guidelines further stipulate that no form of discrimination is to be tolerated, and forbid harassment. To address harassment, an employee hotline is available at each division.

#### Compliance with labor-related laws

Group companies are instructed to ensure compliance with labor-related laws of their respective countries, namely, the local equivalents to the Labor Standards Act, the Labor Union Act and the Minimum Wage Act of Japan. Moreover, NOK periodically confirms that the group companies are abiding by basic rules concerning the prohibition of child labor and forced labor.

#### **Promoting Active Roles of Diverse Human Resources**

#### Advancement of female employees

NOK provides training and guidance to enable female employees to be promoted to management-track positions and on to executive positions according to the willingness and abilities of existing female employees in non-management-track positions. We have also increased the number of female candidates to be recruited for management-track positions.

The medium-term plan for this initiative is to increase the percentage of new female recruits placed in management-track positions to 10% by 2020. The plan has also set the target of transferring 20 female employees to management-track positions also by 2020.

#### **Supporting Active Roles for People with Disabilities**

NOK is promoting the employment of people with disabilities. As of FY2017, we achieved the mandatory employment rate. Going forward, we will increase our employment of people with disabilities in line with the FY2018 revision of the regulatory employment rate.

#### **Reemployment after Retirement**

A system to rehire employees who have reached mandatory retirement age was introduced in 2006. We seek to improve the system so that healthy retired people who still wish to work can make full use of their rich work experience and advanced skills gained through their career at NOK. For example, retired employees can pass their work-related knowledge and techniques on to younger generations while improving their livelihood through reemployment under the system. In FY2016, flexible working patterns were permitted and working conditions were revised to facilitate reemployed personnel taking on more active roles and to enhance their job satisfaction.

#### **Facilitating Work Style Reform**

NOK has consistently implemented various measures to help employees to achieve both professional and personal goals, including the reduction of working hours. Going forward, we will consider and undertake various other measures from the viewpoint of work style reform.

#### Shortening total actual working hours

We have endeavored to shorten the total number of actual working hours to help employees pursue comfortable and affluent lifestyles, and will consider and implement new measures to:

- Substantially lower the upper limit of overtime work hours
- Improve the rate of paid leave taken by encouraging employees to take leave in a planned manner, including by taking consecutive days off.
- Operate a flextime system

#### Supporting diverse work styles

NOK provides childcare leave, nursing care leave and other employee benefit systems to help employees work in ways that suit their lifestyles. To ensure the systems are properly functioning and facilitate their use by employees, we are providing information and advice on them.

#### Exploring new working arrangements

NOK will consider new work style arrangements, taking into account the efficiency gains available through teleworking and the realization of an optimum work-life balance for employees.

#### **Self-evaluation and Reporting System**

Each year, employees are provided with an opportunity to report on their workplace situation and the job they aspire to have in the future. Depending on the contents of the report, such as the desired career path, an interview with a supervisor is arranged as needed. Results of the self-reporting are used to develop and utilize human resources effectively in order to ensure that the right personnel are appointed to the right positions, thereby improving the workplace environment.



#### **Workplace Communication**

NOK aspires to create an open workplace. Executives and managers take the lead in creating and maintaining a workplace where good communication is ensured between superiors and subordinates, among coworkers and between departments. For example, there is a program in which each workplace plans and implements a social gathering, which the company pays for.

#### **Human Resources Development Program**

NOK's human resources development program consists of level-specific education and development/specialized education. Level-specific education is mandatory for employees after specified years of service and for those in specified positions. Development/specialized education is designed to train employees in skills that are considered necessary for their duties by their supervisors.

This program facilitates the personal development of each employee, as it supports those employees who actively work on their own capacity building, based on a discussion with their immediate superior. Trainee records are managed and monitored in the in-house training management system. In FY2018, 829 employees received training through this program. The total training time for the level-specific education across the entire company was 13,741 hours (FY2018).

#### **Special-purpose training**

Training programs meeting various needs are available, such as those aimed at providing support for female employees and for employees rehired after retirement age, as well as those for improving workplace productivity.

#### **Development of global human resources**

This program seeks to develop employees who can actively apply English at work rather than people who can simply speak English well. Employees who pass preliminary interviews are assigned duties individually, and receive onthe-job and off-the-job training for a year.

Rate of employment of new female graduates for management-track positions

Rate of employment of persons with disabilities (as of the end of FY)

	FY2014	FY2015	FY2016	FY2017	FY2018
Rate of employment (%)	1.78	1.96	1.98	2.06	2.06

Number of persons reemployed after retirement

	FY2014	FY2015	FY2016	FY2017	FY2018
Number of persons reemployed	48	65	47	54	67

Number of paid-leave days taken

	FY2014	FY2015	FY2016	FY2017	FY2018
Number of days	12.9	13.6	13.5	13.5	13.6

Number of employees who took childcare/nursing care leave

	FY2014	FY2015	FY2016	FY2017	FY2018
Childcare leave	57	51	47	54	53
Nursing care leave	1	1	0	1	0

Rate of turnover

	FY2014	FY2015	FY2016	FY2017	FY2018
Rate of turnover (%)	1.0	1.2	1.2	1.1	1.3



#### **NOK Group Safety Principles**

"Safety is the foundation for implementing management spirit that respects human dignity, my desire and my mission"

Respect for human dignity is one of the NOK Group's management principles, and we believe that safety is a crucial precondition for respecting human dignity. Safety represents both a mission for management and a desire of all employees. At the NOK Group, safety has been well recognized as a top priority in all operations. To explicitly communicate a message on safety from top management to employees as well as raise and ensure safety awareness and eliminate industrial accidents, we formulated the NOK Group Safety Principles in FY2017 and are promoting our safety activities accordingly.

#### **Occaupational Health and Safety Management System**

We have established a safety and health management organization headed by the president of NOK to promote safety and health activities. The Safety & Health Dept. of the Corporate Administration Office, which supervises safety and health affairs at a corporate level, promotes groupwide activities in collaboration with safety secretariats at divisions, the head office and group companies. In addition, our Safety and Health Mottos were developed back in 1976 with the aim of maintaining and raising the safety awareness of employees and helping them to acquire safety knowledge. The Mottos have been used by all employees as a textbook to share awareness of safety in operations. In 1988, we further formulated the Safety and Health Standards to set standards for employee education and training as well as for facility safety. These standards are applied to on-site operations of relevant departments.

#### [Organization to Promote the Safety and Health Activities]



[Safety and Health Mottos] [Safety and

[Safety and Health Standards]

#### **Activities during FY2018**

#### Activities for safety and health

Our safety and health policy for FY2018 was improvement of safety and health control practice. We thoroughly identified and remedied unsafe conditions, conducted worksite patrols and observed work processes to provide guidance for corrective actions. When contractors conduct work on NOK premises, we ensure the sharing of near miss incident information, risk prediction training and adherence to safety working procedures.

As to safety education, line managers receive safety, hygiene and health training at the time of their appointment and again at the beginning of their third year to ensure a common awareness of safety and health issues. In addition, facility safety standards are utilized to provide the facility development and production departments with education and to secure safety during the processes of design, introduction and remodeling of facilities.

Major safety activities	FY2018
No. of participants in safety, hygiene and health training for line managers	143
No. of participants in basic training on facility safety standards	330
No. of units undergoing facility safety improvements	622
Investment in facilities and equipment for safety measures (major capital investment projects at NOK)	370 million yen (automated warehousing, cranes, etc.)

#### Mental and Physical Health

To meet the mental health needs of employees, we have a counseling system in place that incorporates individual interviews by clinical psychologists, in addition to efforts by employees by themselves, line care and care provided by inhouse specialists. We have also established a free 24/7/365 telephone hotline staffed by an external professional institution to deal with mental health problems at an early stage and provide support for a smooth return to work.

To support physical health, we have promoted activities to encourage employees to engage in exercise through seminars on lifestyle diseases (at the head office), seminars to prevent back pain and stiff shoulders (at the divisions) and walk events (at the head office and divisions). These initiatives have been recognized and NOK was certified as a sports promotion company by the Tokyo metropolitan government in FY2018.

Major mental and physical health promotion activities	FY2018
Telephone health consultation (by reason for call)	Ref 7  Concerned about physical symptoms: 293 About treatment: 238 About stress and mental health: 66
Rate of receiving comprehensive checkup	99.9%
Rate of receiving secondary comprehensive checkup	89.4%



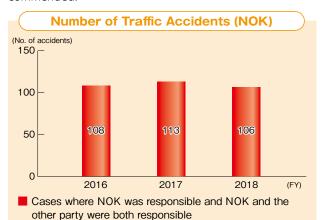


#### Activities to improve the workplace environment

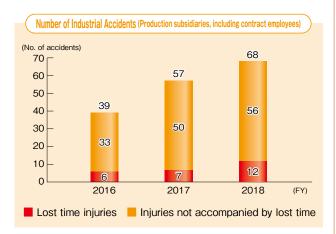
We first launched activities to improve the workplace environment in FY1993. We took measures and made improvements in terms of managing working environments (noise, heat and cold), operations (posture and handling of heavy objects) and support systems (provision of facilities for relaxation). In particular, we focused on reinforcing and promoting measures to reduce workloads and control heat. We regularly review our measures in an effort to address changes in the respective environments.

#### Activities for traffic safety

As part of its efforts around respecting human dignity, the NOK Group is also committed to traffic safety initiatives. We have rigorously exercised control, education and guidance for safe driving in the hope that we can reduce, even if only slightly, the number of people adversely affected by traffic accidents and prevent employees from violating traffic rules and becoming involved in an accident. NOK divisions are undertaking traffic safety lookouts and holding traffic safety seminars taught by JAF and local police departments. We also commend drivers with no history of traffic violations by number of years of safe driving. In FY2018, a total of 840 employees, including 76 drivers who had not been involved in an accident or violation for at least 30 years, were commended.



#### Number of Industrial Accidents (NOK, including contract employees) (No. of accidents) 50 40 30 23 22 20 20 20 18 10 20 2016 2017 2018 (FY) Lost time injuries Injuries not accompanied by lost time



	FY2016	FY2017	FY2018
Average among manufacturers	1.15	1.02	1.20
NOK	0.22	0.00	0.34
Production subsidiaries	0.29	0.41	0.47

**Lost Time Injury Frequency Rate** 

#### **Questionnaire on NOK CSR Report 2018**

# What do you think about the CSR Report 2018? Basy to understand Average Hard to understand What do you think about the contents of the CSR Report 2018? Excellent Average Poor

#### Opinions and feedback (Excerpts)

- I cannot see any differences with other companies. It would be better
  if NOK's characteristics and unique initiatives were described. (40s;
  securities industry)
- The contents are substantial. It would be great if a description of efforts for diversity were incorporated. (40s; securities industry)
- The Report well conveyed the contribution of the NOK Group to creating a sustainable society with its technology as a manufacturer. (30s; financial institution)
- I was able to understand well NOK's approach to CSR based on the NOK Charter of Corporate Behavior and the top message. (30s; construction industry)
- I suggest that illustrations be included so that students would find it easier to understand. (30s; broadcaster)
- The Report helped me to deepen my understanding of initiatives taken by each department. (30s; printing industry)
- I suggest that particular efforts for quality as a manufacturer be described more in detail. (30s; printing industry)
- Specific environmental activities are described, which is good. (20s; manufacturing industry)
- It would be good if specific information for ESG investment were disclosed. (60s; manufacturing industry)

#### Third-Party Opinion on CSR Report 2019

#### Mr. Masatoshi Ikari

Advisor, PDCA Co., Ltd Representative, Sustainability Consulting Part-time Teacher, Seikei University



#### **Importance of Non-financial Information**

Initiatives toward a more sustainable world have been gaining momentum, as exemplified by the Sustainable Development Goals (SDGs) adopted at the United Nations Summit in September 2015 and by the Paris Agreement in December of the same year. Also, in Japan, interest in ESG investment has grown since the Government Pension Investment Fund (GPIF) signed up to the Principles for Responsible Investment (PRI) in September 2015. Investors, who used to evaluate only sales, profits and other elements of the "financial" value of a company, are now assessing also the "non-financial" value, which indicates how the company addresses environmental and social issues, as a benchmark to ascertain whether or not the company can achieve long-term, stable growth.

Against this backdrop, NOK published the first Environmental Report in 2004, renaming it the Environmental & Social Report in 2006 and then the CSR Report in 2017, through which the company has continuously disclosed information on its non-financial value. First of all, I would like to commend this point.

#### **Respect for Human Dignity in Management**

Respecting human dignity is upheld in the Management Principles and the Message from the President. In the 2019 Report, this policy is objectively confirmed by the data provided in the Relations with Employees section, including the rate of employment of new female graduates for management-track positions, the number of persons reemployed after retirement, the number of paid-leave days taken and the rate of comprehensive checkups received, in addition to the number of employees who took leave, which has been reported in previous reports. Moreover, the Report discloses a new item of data, the number of traffic accidents, which is rarely made available by other companies. I give the company high marks for having disclosed all this data. These indicators can be regarded as key performance indicators (KPIs) for human resources management, and it is expected that further improvements will be made based on the P-D-C-A cycle in a similar manner as for environmental management.

# Relationship between the NOK Group's Products and Activities and the SDGs other than Those Related to Environmental Issues

In the Long-term Environmental Vision for 2030 that was formulated and published last year, the NOK Group has identified the environmental Sustainable Development Goals relevant to its environmental objectives. Meanwhile, I would like to call attention to the fact that traffic safety products of the NOK Group facilitate the achievement of Target 3.6 relating to road traffic safety of Goal 3 (Good Health and Well-being) of the SDGs. The NOK Group's oil seals, O-rings and gaskets used in construction machinery and other general industrial machinery contribute to Goal 9 (Industry, Innovation and Infrastructure). With regard to the Group's activities in terms of social contributions, NOK sponsors such events as the NHK Gakusei Robocon, Kids Engineer and Student Formula Japan, which are all related to Goal 4 (Quality Education). Moreover, many initiatives stated in Relations with Employees are relevant to Goal 5 (Gender Equality) and Goal 8 (Decent Work and Economic Growth). In this way, I encourage the NOK Group to closely examine its products and activities also from the perspective of the nonenvironmental SDGs and clarify the connection between these Goals and the Group's products and activities.

### In Formulating a New Three-year (Medium-term Management) Plan from FY2020

I believe that FY2019 falls into the period during which a new three-year (medium-term management) plan from FY2020 is formulated. In recent years, a considerable number of companies have incorporated the SDGs into their medium-term management plans and integrated their financial value and non-financial value as a way to effectively promote their corporate value to investors and other stakeholders. Therefore, I would encourage the NOK Group to appropriately incorporate the SDGs concerning social challenges, in addition to those on environmental issues, into the new three-year medium-term management plan from FY2020, in reference to the connections above.

#### Response to Third-Party Opinion

#### Noriyuki Takahashi

Senior Operating Officer and Manager of Corporate Administration Office Chair of the CSR Committee



We deeply appreciate the valuable opinions we have received. The 2019 report is our third CSR Report, and we believe that we have made progress with each issue thanks to the third-party feedback.

We boast that our company's Management Philosophy, business contents and operational practice are compatible with the SDGs. Yet, as you pointed out, we have not necessarily conducted business with a clear awareness of the relevance to the SDGs and have not proactively advertised our contribution to the Goals. The new three-year plan will be launched in FY2020. Going forward, we will endeavor to give our stakeholders a better understanding of NOK's efforts for the SDGs.



**Head Office:** Mita MT Building, 3-13-12 Mita, Minato-ku, Tokyo 108-0073, Japan

Established: December 2, 1939
Capital: 23,335 million yen

Business Details: Manufacture, purchase, import and sale of seals, industrial functional parts, hydraulic

and pneumatic equipment, plant machinery, synthetic chemical products, electronic products and various other products; and the provision of associated services such as

installation of machinery and devices

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