

# Environmental Report



Information about business activities, the flow of the life cycle, support of the ISO 14001, environmental accounting and management and reduction of substances of concern have been migrated to the environmental data on our homepage as of this fiscal year. <https://www.nhkspg.co.jp/eng/csr/env/index.html>

## Environmental Voluntary Action Plan

We have established the Global Environmental Activities Plan and Global Environmental Activities Guidelines for involvement in a broad range of global environmental issues. We published them in May 1993 as our Environmental Voluntary Action Plan. The NHK Spring Group draws up Environmental Activity Policies each year on that basis.

### Global Environmental Activities Guidelines

Our Group's Corporate Philosophy is to declare that our business activities will strive for harmonious coexistence with the global environment.

#### Global Environmental Activities Guidelines

- 1. Actively involve environmental conservation at all stages of the life of products, from design through production to disposal.**
  - 1) Look for ways to use resources efficiently, and make every effort to save resources and recycle.
  - 2) Set our energy saving target at over 1% improvement in unit energy consumption to sales per year to promote energy saving.
  - 3) Aim for zero emissions in production activities to encourage cutting waste and saving resources.
- 2. Encourage the development of technology to solve global environmental problems and contribute to saving the environment.**
- 3. As NHK Spring, be involved in the environment and take an active part in saving the social and local environment.**

### Global Environmental Activities Plan

We identify important areas we should be involved in on the basis of our Global Environmental Activities Guidelines. We then set specific objectives and targets and plan what we must do to achieve them.

#### Main concerns

- Reducing CO<sub>2</sub>
- Reducing waste
- Lifting recycling
- Compliance with various environmental laws and regulations
- Reducing and managing pollutants
- Contributing to local communities & environmental protection
- Promoting use and development of energy-saving products
- Alliance between the government, customers, and partners

#### Global Environmental Activities Plan

- 1. Framework to encourage activities**
  - 1) Operating the Global Environmental Measures Committee and encouraging protection of the environment across the entire Group
  - 2) Set up CO<sub>2</sub> Reduction and Waste Reduction Committees to respond to social needs
- 2. Involvement in specific issues**
  - 1) Saving energy and reducing CO<sub>2</sub>
  - 2) Involvement in the recycling-oriented society
  - 3) Encouraging green procurement at a global level
  - 4) Product design and technical development taking account of impact on the environment
  - 5) Reducing toxic chemicals
  - 6) Preventing environmental accidents
  - 7) Streamlining logistics
  - 8) Reliably running and upgrading Environmental Management Systems (EMS)
  - 9) Review water usage management
- 3. Publicity and social activities**

We recognize our corporate social responsibilities (CSR), and develop environmental conservation activities throughout the company, which will widely gain the empathy of local communities and the general public.
- 4. Activities overseas**

We are actively involved in the actual preservation of the environment and observe local environmental rules. We also protect the environment through technology transfer, etc. having regard to local social and economic conditions.

### Environmental Activity Policies

We are striving to address environmental issues worldwide from a global Group perspective based on the Environmental Activity Policies drafted every year. We research new measures toward ongoing energy savings and introduce and expand those measures horizontally to build on the previous year to achieve our independent target to reduce unit consumption of CO<sub>2</sub> emissions by 1% or more in fiscal 2018.

In waste management, we continue zero emissions activities in Japan and promote restrictions in emissions by transitioning waste to useful resources. We also continue to improve the recycling rate at our overseas bases.

We will systematically conduct management of environmental load substances, support customers, maintain and update environmental equipment, and respond to facilities subject to environmental laws and regulations.

#### Environmental Activity Policies 2018

- 1. Encourage global environmental management**
  - 1) Continuing CO<sub>2</sub> reduction activities and investigation and implementation of new measures
  - 2) Maintaining zero emissions\* and continuing to reduce waste
  - 3) Promoting control of substances of concern (SOC)
- 2. Maintain 'zero' global environmental incidents**
  - 1) Maintaining and stepping up environmental management and thorough risk management
  - 2) Maintaining environmental legal compliance and responding to revisions to ISO standards
  - 3) Maintaining environmental facilities in operation and protecting them

\*Group-wide definition for "zero emissions": Recycling rate of 99.0% or better, also regards thermal recycling as recycling

# Systems to encourage environmental conservation

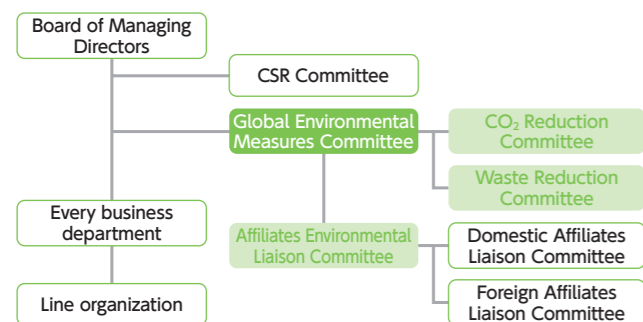
Our Global Environmental Measures Committee is at the center of our efforts to promote and implement our Environmental Voluntary Action Plan. Our continuous environmental activities follow the PDCA cycle.

## Organization

The Global Environmental Measures Committee unilaterally debates environmental activities overall throughout the NHK Spring Group and formulates and executes global environmental action plans. The CO<sub>2</sub> Reduction and Waste Reduction Committees have been set up as two subcommittees under the Global Environmental Measures Committee.

NHK Spring Group has also set up the Affiliates Environmental Liaison Committee to establish a system to actively promote global environmental conservation activities.

### System for encouraging environmental protection



### Zero emission activities

This project achieved zero emissions at the Yokohama Office in 2003 before the activity spread to reach zero emissions at all of our plants in 2004. We are also stepping up these activities to include a 100% recycling rate at NHK Spring in 2010.

We have also achieved zero emissions at all Group companies in

Japan and have been conducting efforts to improve our recycling rate since 2009 and are continuing to at overseas Group companies.

2010 recycling rate Achieved **100%**

## VOICE

**Takashi Yonezawa**  
Manager, Safety & Environmental Activities  
Department, Engineering Division



### Promoting a Wide Range of Environmental Support by Updating the ISO 14001 (2015 Version)

We have furthered the acquisition of the ISO 14001 certification at each plant since its inception in 1996. Today, we have acquired the third-party certification at all of our plants and Group companies involved with manufacturing in Japan as well as at our main overseas Group companies. In September 2015, we finished a large-scale update to the ISO 14001, and we have finished renewing our certification to the 2015 version at each plant as of September 2018. The update to this new version requires active support for additional requirements new to the ISO 14001, such as a support for CSR, various risk management, and greater environmental performance.

In the future, we will advance the use of the ISO 14001 by incorporating perspectives to promote the effective use of water resources and measures toward biodiversity (forest conservation, etc.) in addition to reducing CO<sub>2</sub> and waste emissions.

# Environmental audits and energy conservation diagnostics

We are conducting environmental audits and energy conservation diagnostics to improve environmental performance while ensuring clear management in accordance with the environmental manual.

## ISO 14001 and environmental auditing

By conducting environmental audits, the NHK Spring Group checks whether Group company environmental management systems are functioning correctly according to ISO 14001.

Environmental audits also help us comply with the laws on the environment, improve our environmental performance, isolate areas that need improvement, and lift our management capacity.

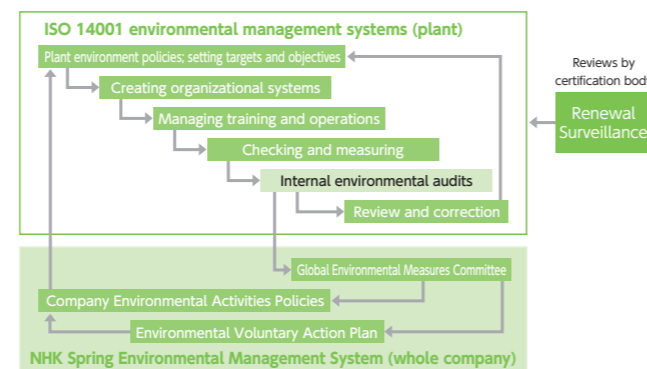
### Environmental audits

People who have graduated from a specialized education program are appointed as the members who conduct internal environmental audits. In addition to conducting internal environmental audits based on ISO14001 at each plant in fiscal 2017, NHK Spring head office conducted independent environmental management audits (verification via a check sheet) to ensure that our systems were functioning properly. We were improving our performance.

The results of these audits were reported to the plant chiefs and presidents of Group companies and measures were taken to

quickly improve and rectify any issues. These auditing results are also reported to the Global Environmental Measures Committee and reflected in the Environmental Activity Policies and Environmental Voluntary Action Plan.

### Environmental management and environmental auditing



### External audits

External audits are conducted by an external registered auditing authority to verify whether the environmental management system complies with and operates in accordance to the requirements of the ISO 14001. A surveillance audit is generally done every year and a renewal audit once every three years.

All 11 plants received external audits in fiscal 2017; eight plants had surveillance audits for the ISO 14001: 2015, and three plants had a renewal audit. The results of these audits found that each of the plants and the environmental management systems are run correctly, that pollution is being prevented, and that we were making continuing efforts to improve.

**Fiscal 2017 external audits**  
 **8** plants (surveillance audits), **3** plants (renewal audits)

### Energy saving diagnostics

NHK Spring Group began energy conservation diagnostics in fiscal 2017. The diagnostician listened to representatives at each plant and checked the site to find new energy-saving measures for the purpose of effectively using resources and further reducing CO<sub>2</sub> emissions. In fiscal 2017, energy saving diagnostics were done at a total of ten plants—six NHK Spring plants and four Group companies in Japan—and proposals for energy-saving measures were expanded horizontally. In the future, we will continue to improve the environmental performance throughout the Group by regularly conducting these diagnostics at each plant.



Energy Saving Diagnostics

## VOICE



**Hajime Yamanoue**  
Manager,  
General Affairs Section,  
Precision Spring &  
Components Division  
Atsugi Plant

### Striving to Further Improve Environmental Management

The Atsugi Plant of the Precision Spring & Components Division is located inside of the Nairiku Industrial Park in Aikawa Town in the Aiko District of Kanagawa Prefecture. This plant produces components such as thin spring products, precision stamped products and wire springs. In waste management, we thoroughly separate garbage and increase what we can take and reuse as a valuable resource to further reduce our waste emissions. In energy-saving activities, we operate engine compressors that use plant-derived fuel to limit CO<sub>2</sub> emissions while keeping energy consumption at the height of summer to less than the contracted power. We also underwent an audit at the plant to assess conformity with the ISO 14001: 2015 in August 2018 before a renewal audit in October in an effort to improve our environmental management. As part of our activities to contribute to local communities, we participated in the Clean Campaign in Aikawa Town on May 27 and October 20.

# Environmental education

We conduct a variety of environmental education and consciousness-raising activities to ensure that all our employees carry out their regular jobs with knowledge of the environment and a high level of awareness of the issues.

## Environmental education

Raising the environmental consciousness of individual employees is important to carrying environmental work forward. Our Group has an excellent in-house training system to extend awareness of environmental issues, including a range of environmental education programs, training for internal environmental auditors, and encouragement to acquire external qualifications.

At NHK Spring, we offer different levels of education for all employees, as well as specialist training for staff with particular environmental responsibilities. General environmental education at different levels is included in our staff training program and is repeated with promotion. Specialist education is provided when staff begin new positions, and regular skill upgrading is also provided.

Furthermore, abstracts of relevant domestic environmental laws have been periodically distributed to Group companies since fiscal 2014 to share information.

### Contents of environmental education

Education at different levels		
Recipients	Content of training	
Training for new employees	Global environmental issues, environmental management systems, and requirements for environmental laws and regulations and efforts made by NHK Spring	
Training for new assistant managers		
Training for new senior staff		
Training for new executives		
Specialist education		
Recipients	Content of training	
Internal environmental auditors (Responding to ISO revision)	Training and education	Internal environmental auditor training and refresher courses
	Skills upgrading training	Environmental auditor workshops for lead auditors
Overseas secondees (expatriates)	Environmental management system, overseas environmental laws, NHK Group environmental requirements	

### Number of staff with environmental qualifications (as of June 2018) (Units: Persons)

Qualification	Classification	Numbers holding qualifications
Pollution prevention management	Air	Type 1: 7, Other: 29
	Water quality	Type 1: 8, Other: 25
	Noise	40
	Vibration	34
	Dioxins	1
Environmental management system auditors	Assistant auditor	1
Working environment measurement experts	Type 1	Dust: 5, Special chemicals: 3, Metals: 1, Organic solvents: 3
		Type 2: 5
		Certified environmental measurers
Specialty controlled industrial waste managers		49
Qualified persons for energy management		34
Energy managers for Type 2 Designated Energy Management Factories		11

### Environment-related qualified persons



**259** people

(including multiple qualifiers)