

# Environmental Management

## Framework

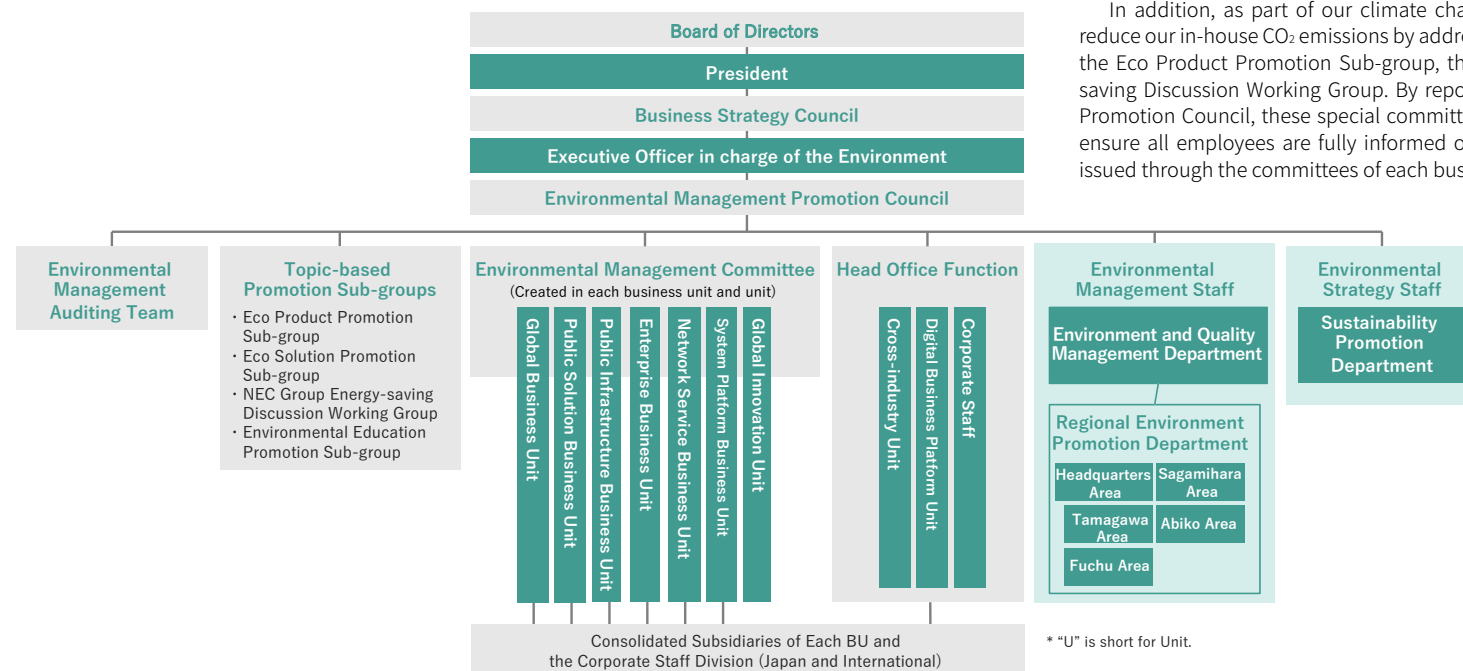
### ■ Environment-oriented Management Implementation Framework

NEC has put into place a system for advancing environmental management that contributes to the creation of a sustainable society through business activities that consider the environment. NEC has also formulated and implemented rules for environmental management to clarify the roles, responsibilities, and authorities of each organization that puts environmental management into practice.

At the Business Strategy Council (consisting of executive officers, among others), which discusses management issues at NEC, discussions are held regarding strategies and the impact of important environmental issues, including climate change, on business execution. Matters to be discussed by the Business Strategy Council are debated beforehand by the environmental management committees in each business unit and unit, as well as by special sub-groups for each topic; and depending on their importance, matters are also deliberated on by the Environmental Management Promotion Council, which comprises managers in charge of the environment in each business unit. Matters that have a significant impact on NEC's operations are discussed by the Board of Directors.

The business units have established environment-oriented management committees and a system that translates this into specific measures carried out by their divisions, affiliated companies, and subsidiaries of NEC throughout the world. By forming specific action plans based on the environmental strategy, devised by the

### NEC's Environmental Management Promotion Structure (as of April 2022)



\* "U" is short for Unit.

Business Strategy Council and Board of Directors, consistent environment-oriented management can be implemented throughout NEC.

### ■ Framework for Climate Change Countermeasures

With climate change, the Environmental Management Promotion Council conducts deliberations on and formulates the NEC Environmental Policy and targets. The council comprises managers responsible for promoting environmental measures in each business division. The executive officer responsible for environment-related matters confirms the council's proposals and reports them to the Business Strategy Council, an organization that is further up the organizational hierarchy and which provides approval at the corporate level. Risks related to climate change are also shared at the Environmental Management Promotion Council. The executive officer responsible for environment-related matters confirms those risks that could have a significant impact on businesses and, as necessary, reports to the Risk Control & Compliance Committee in accordance with the risk management process.

Risks and opportunities that could significantly affect businesses are also reported to the Board of Directors, as necessary. When such reports are received, the Board of Directors conducts deliberations and then provides instructions on measures, thereby realizing supervision that ensures that NEC advances appropriate climate change countermeasures.

In fiscal 2022, NEC became a signatory to Business for Ambition 1.5°C (BA1.5°C), and this 1.5°C-compliant business model was adopted by the Business Strategy Council and the Board of Directors as a long-term target for reaching net zero emissions by 2050.

In addition, as part of our climate change countermeasures, we are advancing Group-wide measures to reduce our in-house CO<sub>2</sub> emissions by addressing specific aspects of the issue through three special committees: the Eco Product Promotion Sub-group, the Eco Solution Promotion Sub-group, and the NEC Group Energy-saving Discussion Working Group. By reporting and submitting proposals to the Environmental Management Promotion Council, these special committees facilitate the Group-wide pursuit of energy-saving initiatives. To ensure all employees are fully informed of matters determined by the council, its directives and reports are issued through the committees of each business division and business site.

## Environmental Management System

### ■ Environmental Audit and ISO 14001 Inspection

NEC has established a Group-wide environmental management system based on ISO 14001.



Each Group company conducts in-house environmental audits while the Environmental Promotion Division conducts audits of environment-oriented management. The latter audits are conducted by specialized auditors, including certified ISO 14001 auditors. Audits of environment-oriented management particularly focus on the relationship between each division's operations and environmental strategy, the progress of environmentally considerate product development, environmental impact reduction, risk management, and monitoring of overall environmental activities such as ISO 14001 conformance, including examination of the effectiveness of the internal environmental audits.

The results of these audits are verified through ISO 14001 audits undertaken by an external investigative body.

### ■ ISO 14001 Certification

#### ISO 14001: 2015 Certification (as of April 2022)

Japan	International	Total
37	16	53

-  NEC Group Companies List with ISO 14001 Certification
-  ISO 14001 Certification Registrations in the NEC Group

## Environmental Risks

### ■ Risk Management and Systems

Recognizing the impact that such environmental risks as climate change and pollution by hazardous substances could have on its businesses, NEC conducts risk reduction and prevention activities through assessment, inspection, and education.

We classify risk countermeasures under three risk categories: plant-related risks, product-related risks, and sales and maintenance-related risks. In the first category, countermeasures for plant-related risks cover risks related to leaks of hazardous substances, soil contamination, and groundwater contamination caused by natural disasters or equipment failure. To help prevent such environmental accidents, we conduct prior environmental risk assessments as well as education and training. In the second category, countermeasures for product-related risks are focused on risks such as the inclusion in products of substances regulated by the Restriction of Hazardous Substances (RoHS) Directive in the European Union and violations of labeling regulations. To address such risks, we

conduct product assessments to ensure strict compliance with guidelines and use in-house systems to implement centralized management of information. As for the third category, countermeasures for sales and maintenance-related risks are aimed at mitigating such risks as violations of the Waste Management and Public Cleansing Act due to inadequate consignment of waste treatment. Our countermeasures include efforts to ensure compliance by issuing guidelines on waste and regularly conducting education for sales department personnel. In conjunction with these efforts, we have established the Environmental Escalation Manual for Emergencies to strengthen our governance of environmental risks.

Our risk management system includes the Risk Control & Compliance Committee. If a risk is identified that may have a significant effect on businesses, the Risk Control & Compliance Committee deliberates on countermeasures. The committee fulfills a supervisory function for specific risk measures by checking the results of activities, problems, and future plans and by issuing directives on where measures should focus. Further, reports are submitted to the Executive Committee and the Board of Directors, as necessary.

### ■ Legal Violations, Accidents, and Complaints

Since fiscal 1999, NEC has used its website to disclose any fines or penalties levied on the Company related to the environment. In both fiscal 2021 and fiscal 2022, NEC was not subject to any fines or penalties related to the environment inside or outside the Company, unchanged from the previous fiscal year. There were no accidents that affected the areas beyond the perimeters of our sites; there were nine environmental accidents that were contained within our sites; and three complaints were received.

### ■ Prevention Activities: Group-wide Dissemination of Information on Near-misses

Since the latent causes of environmental accidents are present in minor accidents, we thoroughly investigate their causes and implement technological countermeasures even for minor incidents at the near-miss level. NEC's findings are then passed on to affiliated companies in Japan and abroad, and corrective measures are checked. In this way, we advance accident prevention.

### ■ Soil

Among the substances covered by the Soil Contamination Countermeasures Act, NEC completely discontinued the use of the VOCs trichloroethylene and tetrachloroethylene in 1998 and 1,1,1-trichloroethane in 1993. Further, as far as possible NEC has continued to conduct independent soil surveys.

In fiscal 2022, we conducted independent surveys of the soil and groundwater at our Tamagawa Office in Kawasaki, Kanagawa Prefecture, and at our Sagami Office in Sagami, Kanagawa Prefecture.

The surveys found specified hazardous substances at levels exceeding the legal limit, and we reported the results to the administrative agency with jurisdiction. We finished remedial work (excavation and removal of soil, cleaning of original site) under the guidance of the administrative agency.

Going forward, we will continue to comply with the Soil Contamination Countermeasures Act, related ordinances, and the directives of the administrative agency with jurisdiction and will continue taking appropriate measures.

## Environmental Training

Aiming to realize the Purpose of the NEC Way, we heighten employees' environmental awareness through environmental education that targets specific business divisions and employee ranks.

Item	Details and fiscal 2022 results	Target
Environmental training for all employees	NEC conducts environment-related web-based training (in five languages) for employees at offices around the world. Targets for course completion in the NEC Eco Action Plan were achieved, at 98% in Japan (95% target) and 90% overseas (85% target).	All employees
Training of environmental auditors	NEC conducted auditor training remotely by group on law revisions, audit policy, and other matters.	NEC environmental auditors
Environment Month (June)	Fiscal 2022 topic: "Environment Month" for personally thinking about and taking action on climate change and biodiversity We asked employees to make a MY Action Declaration to protect biodiversity after listening to presentations and panel discussions by outside experts. A total of 13,000 employees participated in Environment Month.	All employees

## Development of Environmentally Friendly Products

NEC reduces the environmental footprint of products over their entire life cycles, from procurement through to customer use and disposal of products. In these activities, we have added to our long-standing emphasis on quality, cost, and delivery an emphasis on compliance and ecology—including resource circulation, global warming prevention, and environmental awareness.

### ■ Framework for Developing Eco Products

Environmentally friendly products, software, and services that meet NEC's environmental standards are certified and registered at three levels.


Eco Products are products that have been confirmed as meeting all of the Eco Product standards—which are basic requirements—in product assessments conducted by each business division during new product development.

Eco Symbol products are Eco Products that meet the Eco Symbol standards, which require products to be even more environmentally advanced and environmentally friendly.

The Eco Symbol Star is assigned to Eco Symbol products that are regarded as leading environmental products which conform to stringent standards, such as 50% reduction in CO<sub>2</sub> emissions compared with that of conventional products.

In fiscal 2022, two items, comprising two software products and services, were certified as Eco Symbol Star products.

Products conforming to the aforementioned standards are affixed with the Eco Symbol Star mark on product catalogs and on websites.

-  Eco Symbol Star Products (Hardware)
-  Eco Symbol Star Products (Software and Services)

### Eco Symbol System



## Environmental Compliance of Products

### ■ Compliance with Regulations on Chemical Substances Contained in Products

NEC strives to comply with both Japanese and international regulations regarding chemical substances. To ensure that we comply with global regulations such as the European Union's Restriction of Hazardous Substances (RoHS) Directive and Registration, Evaluation, Authorisation and Restriction on Chemicals (REACH) regulations, and the Toxic Substances Control Act (TSCA) in the United States, we promote the exchange of information on chemical content throughout the supply chain as well as the enhancement of NEC's internal information management system.

Our approach toward the exchange of information on chemical content is not to introduce individual rules but to employ the common use of chemSHERPA, a scheme for the sharing and exchange of information on the chemicals contained in new products in supply chains compliant with international standard IEC 62474. Such an approach improves the work efficiency of those giving and receiving information while allowing both to respond more quickly.

NEC has built a compliance structure using chemSHERPA-CI<sup>\*1</sup> and chemSHERPA-AI<sup>\*2</sup> which are operated by JAMP<sup>\*3</sup>.

<sup>\*1</sup> Sheet for entering information on the chemical substances contained in a material or prescription to ensure compliance with laws and regulations

<sup>\*2</sup> Sheet for entering information on the chemical substances contained in the formed articles to ensure compliance with laws and regulations

<sup>\*3</sup> JAMP: Joint Article Management Promotion-consortium

### ■ Risk Management for Chemical Substances Contained in Products

#### Complying with the EU RoHS Directive

The EU RoHS Directive bans, in principle, the inclusion of 10 substances, including lead, mercury, and cadmium, in electrical and electronic products. NEC requests its suppliers to comply with the EU RoHS Directive in products that they supply, and conducts surveys to determine whether purchased parts and materials contain any of the banned substances. These efforts ensure that NEC branded products comply with the EU RoHS Directive, in principle.

#### Progress of replacement initiatives

The NEC Group is moving forward to replace chemical substances in compliance with the restrictions put forth by the EU RoHS Directive. Hexavalent chromium plating in the treatment of steel sheets and plates is being substituted by trivalent chromium plating, organic film, nickel plating, and stainless steel.

Pigments and paints have been changed to materials that do not contain lead, cadmium, or hexavalent chromium.

Lead solder has been replaced with lead-free solder.

Procurement of parts and materials containing polybrominated diphenyl ether (PBDE) and polybrominated biphenyl (PBB) has been banned since 1997, and other flame retardants are used instead.

NEC had already prohibited the inclusion of four phthalic acid compounds in purchased products one year before the enforcement of a law banning them, and has made progress in replacing them.

#### Management of exceptions

The EU RoHS Directive includes exceptions where the inclusion of prohibited substances is permitted under certain conditions. These can be used within a legally allowed period, but they must be replaced at an appropriate time.

NEC manages risks using an internal system called CHEMSIS, which centrally manages information on chemical substances contained in purchased products collected with chemSHERPA-AI, and then automatically determines whether contained substances exceed threshold values and the time limit on exemptions. At the same time, we ask suppliers to comply with the end of exemption periods six months in advance.

### Confirmation by analysis

For purchased products that are deemed to be high risk, we obtain analysis data from the supplier, and when necessary, conduct our own individual analysis to confirm that prohibited substances are not contained in the products. The NEC Group has introduced fluorescent X-ray analysis systems in its production plants to create a system for confirming that certain prohibited substances, such as lead, cadmium, mercury, and hexavalent chromium, are not contained in the products.

### Complying with EU REACH regulations

The EU REACH regulations identify restricted substances that may not be included in products and Substances of Very High Concern (SVHC), which may be included but require provision of information to product recipients if they exceed a certain threshold value.

NEC uses chemSHERPA-AI to request provision of the above chemical substance information from its suppliers and manages the response information obtained centrally on its internal green procurement support system, CHEMSIS, to control the presence of restricted substances and SVHC in excess of threshold values. NEC then shares this information with sellers in the EU.

### Complying with other global regulations

In addition to the EU RoHS Directive and EU REACH regulations, NEC's business divisions all work together with local subsidiaries and relevant industry organizations in Japan and abroad to comply with regulations on chemical substances contained in products applicable to each respective country, including China and the United States.

## Environmental Initiatives in Supply Chains

NEC aims to reduce the environmental footprint of its products throughout their life cycles. NEC asks its suppliers to behave responsibly as corporations by the NEC Group Procurement Policy and Guidelines for Responsible Business Conduct in Supply Chains. We are working in close collaboration with our suppliers to promote green procurement.

### ■ Green Procurement Policies

NEC is making a Companywide effort to promote "green procurement," which involves giving priority to the procurement of items that are environmentally friendly. More specifically, we favor environmentally conscious suppliers, low-impact manufacturing processes, and low-impact parts and materials. Our objectives are to expand the green product market to build a recycling-oriented society, to promote the development of recycling-oriented products for such a society, and to raise awareness among designers and developers.

Aiming to make all of our products environmentally friendly, since fiscal 2007 we have been promoting procurement from suppliers certified as "green."

### ■ NEC Green Procurement Guidelines

To promote green procurement, we have established the NEC Green Procurement Guidelines. These guidelines set out essential requirements and requests.

About the "essential requirements" for suppliers, purchased goods that are incorporated in or shipped together with NEC's products must satisfy requirements (1) to (4), while other purchased products such as software, services, pharmaceuticals, gases, and supplies must satisfy requirements (1).

#### Essential Requirements

- (1) Creation of environmental management systems  
Create environmental management systems within factories that develop and manufacture products and at offices that market products
- (2) Do not use banned substances in the manufacturing process
- (3) Respond to the survey of chemical substances contained in the procurement product
- (4) Products must not contain banned substances or conditionally banned substances

- 📄 NEC Green Procurement Guidelines for Suppliers (Japanese) (5th edition)  
Environmental Specifications Pertaining to Procurement Restrictions for the Inclusion of Chemical Substances in Products (Ver. 10) (Japanese)

### ■ Enhancing Engagement with Suppliers

In fiscal 2022, throughout its supply chains, NEC identified and assessed risks by conducting a survey of about 1,000 suppliers to sustainable procurement.

In the survey, 30 questions were asked about the environment, including the establishment and operation of environmental management systems, proper management of chemical substances, and efforts to control and reduce environmental impacts, such as CO<sub>2</sub> emissions, water consumption, and waste generation.

In March 2022, NEC held a briefing for suppliers about its initiatives to combat climate change, and asked suppliers for their cooperation in battling climate change. While collaborating with suppliers, we are advancing activities to reduce environmental risks to assess environmental issues and correct any risks found in the entire supply chain.

### Briefing for suppliers

