

**NEC GREEN PROCUREMENT
GUIDELINES
(FOR SUPPLIERS)
Ver. 5**

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NEC Corporation

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1 Introduction

As exemplified by the "Sustainable Development Goals (SDGs)" of the United Nations and the "Paris Agreement" of the Framework Convention on Climate Change, efforts are rapidly being made around the world toward the creation of a sustainable society. Given these circumstances, the role of corporations has become more important. At NEC, environmental efforts are ranked as one of our top priorities in business management, and our contribution to the realization of a sustainable society through our business activities has been promoted as "environmental management." Efforts throughout the supply chain are essential to the realization of the "environmental management" to which NEC aspires. To date, we have been promoting green procurement with the cooperation of suppliers. In addition to such efforts, we have recently revised the GREEN PROCUREMENT GUIDELINES to promote climate change measures further in cooperation with our suppliers.

These guidelines present [essential requirements], the minimum requirements that we ask suppliers to observe for green procurement, and <<requests>>, which we ask suppliers to consider incorporating into their environmental activities. If a supplier fails to satisfy the [essential requirements], we may have to discontinue our business relationship with that supplier. For the <<requests>>, we check the status of the efforts being made by suppliers and prioritize procurement from those suppliers that are shown to be more proactive in their green procurement efforts. It should be noted that the green procurement standard is subject to revision due to subsequent changes in laws, regulations, and social trends.

2 Scope of Application

These guidelines cover all procurement products of NEC.

3 Terms and Definitions

(1) Procurement products:

Any products including finished products (such as OEM products), units, parts, materials, chemicals, gas, facilities, software, services, and packaging materials that NEC procure.

(2) EMAS:

EU Eco-Management and Audit Scheme.

(3) Eco Action 21:

An environmental activity evaluation program promoted by the Ministry of the

Environment of Japan to small- and medium-sized companies and others. This program integrates an environmental management system, environmental performance evaluation, and environmental reporting.

(4) KES:

Kyoto Environmental System Standard. An environmental management system for small- and medium-sized companies certified by the KES Certification Secretariat of the Kyoto Local Agenda 21 Forum.

(5) Eco Stage:

An environmental management system that closely conforms to ISO14001 for which the EcoStage Institute is responsible for certification.

(6) Environmental impact substances:

Substances affecting the environment and human health that are to be controlled by laws, regulations, or voluntary control programs as defined by NEC.

(7) Product environmental assessment:

A preliminary assessment where a product developer identifies the environmental impact at the design stage considering global warming, resource recycling, and reduction in environmental impact substances so as to provide products using fewer resources or less energy in society.

4 Essential Requirements for Suppliers

NEC believes the essential criterion in selecting suppliers is to consider not only the procurement products with less environmental impact but also the proactive efforts toward environmental conservation taken by suppliers engaged in the manufacturing and marketing of the procurement products. We will verify the environmental efforts of the suppliers and purchase procurement products from those that:

(1) Create an environmental management system (EMS)

Create an EMS within the factory, where products are developed and manufactured, and the office, from which they are marketed,

(2) Do not use "substances banned by NEC" (see Table 1) in the manufacturing process, and

(3) Respond to the survey of chemical substances contained in the procurement product.

5 Essential Requirements for Procurement Products

To prevent environmental contamination and harm to human health, appropriate design processes and measures must be implemented not to release environmental impact substances when NEC products are manufactured, used, recovered, and disposed of. The environmental impact of the procurement products to be incorporated in NEC products and to be shipped with NEC products must be reduced. By ensuring that the procurement products do not contain any environmental impact substances, we further promote greener design and waste product recovery at NEC. To achieve this purpose, we will only procure finished products, units, parts, materials, and packaging materials that do not contain any of the "banned substances" and "conditionally banned substances" stipulated by NEC. For details on these substances, please refer to the "Standards Pertaining to Procurement Restrictions for the Inclusion of Chemical Substances in Products" (Document No.: KANKANTU-04-006).

Please note that this "essential requirement" does not apply to software, services, chemicals, gas, facilities, and others that are not incorporated in NEC products.

6 Definition of Green Procurement Products

6.1 Procurement products incorporated in NEC products/procurement products shipped with NEC products

Green procurement products are the ones that satisfy both the requirements set forth in "4. Essential Requirements for Suppliers" and the requirements set forth in "5. Essential Requirements for Procurement Products" of these Guidelines.

6.2 Other procurement products

Green procurement products are software, services, chemicals, gas, facilities, and others that satisfy the requirements set forth in item (1) in "4. Essential Requirements for Suppliers" of these Guidelines. The environmental preliminary assessment of chemicals, gas, and facilities (preliminary assessment of chemical substances and facilities) will be conducted before procurement.

7 Standards for Green Procurement

NEC requests suppliers to make efforts toward environmental conservation, to manufacture and market procurement products, and to reduce the environmental impact of

procurement products themselves. These requests are defined in [essential requirements] and <<requests>>, respectively. In the selection of suppliers, NEC values the response to these requirements and requests.

7.1 Environmental conservation activities at suppliers

(1) Creation of an EMS [essential requirement]

The factories and offices in charge of final production and packaging products are required to create an EMS. NEC expects suppliers to have certification of an international standard, such as ISO14001 and EMAS, or other third party certification such as Eco Action 21, KES, and Eco Stage. To create an EMS in-house, suppliers are requested to create one that covers the following items ① to ⑥. For designing and manufacturing companies, a system for managing the chemical substances incorporated into products must be included in the scope of the EMS.

- ① Develop environmental policies.
- ② Set up an environmental management organization and appoint an environmental representative.
- ③ Identify and comply with environmental laws and regulations.
- ④ Develop and carry out environmental objectives, targets, and plans.
- ⑤ Conduct environmental education and training for employees.
- ⑥ Periodically confirm the legal compliance and environmental activities.

(2) Appropriate management of environmental impact substances used in manufacturing process

Suppliers are requested to manage environmental impact substances used in the manufacturing process according to the following categories ① and ②:

① Non-use of banned substances [essential requirement]

Do not use the "banned substances" (see Table 1) in the manufacturing process of the procurement products. NEC, in principle, shall not purchase any product from suppliers that use such substances in the manufacturing process of the procurement products. Refrigerants and substances used in fire extinction are excluded in the scope of these substances.

② Efforts to fully eliminate the use of substances to be avoided <<request>>

If suppliers use any of the "substances to be avoided" (see Table 1) in the

manufacturing process of the procurement products, suppliers are requested to set a discretionary target to reduce their use and to make efforts for complete elimination.

Table 1 Environmental impact substances in the Manufacturing Process

Classification	No	Substance group name	CAS	Main applicable laws and regulations		NEC request
Banned substances	1	CFCs (chlorofluorocarbons)	-	Complete elimination from Jan. 1996	Montreal Protocol Law Concerning the Protection of the Ozone Layer	Ban their use.
	2	1.1.1-trichloroethane	71-55-6	Complete elimination from Jan. 1996		
	3	Carbon tetrachloride	56-23-5	Complete elimination from Jan. 1996		
	4	Halon	-	Complete elimination from Jan. 1994		
	5	HBFCs (hydrobromofluorocarbons)	-	Complete elimination from Jan. 1996		
	6	Methyl bromide	74-83-9	Complete elimination from Jan. 2005		
Substances to be avoided	1	HCFCs (hydrochlorofluorocarbons)	-	Complete elimination from Jan. 2020 ^{*1}	Montreal Protocol	Strive toward complete elimination.

*1) Regulation schedule for developed countries in the Montreal Protocol coming into force in December 1998

(3) Responding to survey of chemical substances incorporated into procurement products [essential requirement]

Suppliers are requested to manage the chemical substance information such as information collection and data creation to be able to respond to any survey of the chemical substances incorporated into the procurement products conducted by NEC.

(4) Implementing the product environmental assessment <<request>>

Suppliers are requested to perform a product environmental assessment so as to

reduce the environmental impact of the product at the design stage. This does not apply to intangible assets such as software and services.

(5) Climate change measures <<request>>

To create a sustainable management foundation, NEC Group implements climate change measures in both "mitigation" and "adaptation" aspects throughout the supply chain. Suppliers, who assume important roles in the supply chain, are requested to implement climate change measures from both "mitigation" and "adaptation" aspects (See ①&② below).

To achieve climate change measures throughout the supply chain, suppliers are also requested to encourage upstream suppliers to implement climate change measures and to offer those suppliers guidance and advice, if necessary.

① "Mitigation": Reduction in greenhouse gas emissions

Set reduction targets of greenhouse gas emission and promote specific measures in a planned manner from the perspective of energy and power conservation, operational efficiency, and so on.

② "Adaptation": Preparations for the effects of climate change

With ongoing climate change, the damage caused by abnormal weather, including flooding, inundation, strong winds, and a shortage of water resources, is expected to increase. Suppliers are requested to evaluate the effects on your business and supply chain and to implement measures in a planned manner from the perspective of ensuring business continuity. For the details of the risks associated with climate change, refer to the IPCC website.

<http://www.ipcc.ch/>

(6) Efforts and contributions to global environmental conservation <<request>>

Suppliers are requested to strive to satisfy the following items ① to ⑧, besides climate change.

① Reduction in greenhouse gas emissions

Make efforts to reduce the amount of greenhouse gases, such as carbon dioxide emitted by the manufacturing processes of products and business activities, and to reduce or completely eliminate fluorocarbons, the use of which is regulated.

② Reduction in amount of water consumed

Make efforts to reduce the amount of water used in the manufacturing processes of products and business activities.

③ Reduction in waste generation

Make efforts to reduce the amount of waste generated in the manufacturing processes of products and business activities and to reuse wasted resources.

④ Management of chemical substances

Make appropriate efforts to store the chemical substances used in the manufacturing processes of products, to manage, and to reduce the amounts used.

⑤ Reduction in resource consumption

Make efforts to reduce the amount of resources used in products and to reduce the amount of resources consumed in the manufacturing processes, such as electricity and gas.

⑥ Reduction in the environmental impact of package and packaging materials

Make efforts to minimize the amounts of product packaging and packaging materials used and to introduce a design that can be reused repeatedly.

⑦ Environmental impact assessment (prevention of air pollution, water pollution, ground contamination, noise, vibration, etc.)

Make efforts to take the necessary measures and to periodically measure and monitor these progress so that the manufacturing processes of products and the business activities do not have negative effects on the neighborhood.

⑧ Efforts for biodiversity conservation

Make efforts to promote employees' understanding of biodiversity and to conserve the rare animals and plants in and around the site in collaboration with employees, neighboring residents, and local governments.

(7) Green procurement <<request>>

Suppliers are requested to establish their own standards for green procurement, in line with the standards for green procurement in these Guidelines, and to make every effort to implement green procurement for your procurement products as well.

(8) Public disclosure of environmental information <<request>>

Suppliers are requested to actively disclose information about any environmental activities, including the environmental consciousness of your products and the progress of the efforts for environmental conservation.

7.2 Environmental Consciousness of Procurement Products

- (1) Appropriate management of the environmental impact substances contained in products [essential requirement]

To comply with global environmental laws and regulations and also NEC's voluntary regulations, NEC specifies the following substances, and suppliers are requested to comply with the requirements for each of these types of substance.

- "Banned substances": substances that must not be contained in the product;
- "Conditionally banned substances": substances that must not be contained in the product under certain restrictions; and
- "Controlled substances": substances for which intentional inclusion is not restricted but for which information as to whether they are contained, as well as the concentration, should be managed and reported.

- ① Non-inclusion of "banned substances" and "conditionally banned substances" in the procurement products

DO not contain these substances, in accordance with the "Standards Pertaining to Procurement Restrictions for the Inclusion of Chemical Substances in Products" (Document No.: KANKANTU-04-006)." Please note that the threshold of "conditionally banned substances" does not apply to some products, and suppliers are requested to check the drawings or specifications or to check with the NEC department from whom suppliers receive order(s).

- ② Disclosure of information as to whether "controlled substances" are contained in the procurement products

Identify the "controlled substances" in accordance with the "Standards Pertaining to Procurement Restrictions for the Inclusion of Chemical Substances in Products" (Document No.: KANKANTU-04-006)." If any "controlled substances" are contained in a product, provide all relevant information to NEC.

- (2) Resource and energy conservation <<request>>

Suppliers are requested to design products in such a way as to minimize resource and energy consumption by considering items ① to ③.

- ① Consume less energy in both the operation and standby modes.
- ② Reduce size and weight.

- ③ Use minimum volume of rare resources.
- (3) Long lifetime <<request>>
Suppliers are requested to design products so that they have long life and are easy to repair and replace.
- (4) Use of recycled parts and materials <<request>>
Suppliers are requested to use recycled parts and materials as much as possible.
- (5) Use of materials that are easy to recycle <<request>>
Suppliers are requested to use materials that are easy to recycle and design for ease of disassembly.
- (6) Labeling plastic type <<request>>
Molded parts weighing 25 g or more must be marked with a label indicating the type of plastic/composite material from which they are fabricated, in accordance with the following ISO Standards. Whenever possible, such labeling should be provided even on parts weighing less than 25 g.
 - ① ISO1043-1 (JIS K 6899-1)
"Plastics - Symbols and abbreviated terms - Part 1: Basic polymers and their special characteristics"
 - ② ISO1043-2 (JIS K 6899-2)
"Plastics - Symbols and abbreviated terms - Part 2: Fillers and reinforcing materials"
 - ③ ISO1043-3 (JIS K 6899-3)
"Plastics - Symbols and abbreviated terms - Part 3: Plasticizers"
 - ④ ISO1043-4 (JIS K 6899-4)
"Plastics - Symbols and abbreviated terms - Part 4: Flame retardants"
 - ⑤ ISO11469 (JIS K 6999)
"Plastics - Generic identification and marking of plastics products"

8 Survey Green Procurement Efforts

- (1) Once every year, NEC selects suppliers and checks the suppliers' progress on "7. Standards for Green Procurement" in these Guidelines using the "environmental activity survey form," which includes greenhouse gas emission reduction targets

and actual emissions, climate change measures (refer to 7.1), and the environmental consciousness of procurement products (refer to 7.2).

(2) Regarding [essential requirements] ① to ④ below and <<requests>> ⑤ and ⑥, NEC may conduct on-site checks and interviews based on the results with the "environmental activity survey forms."

- ① Creation of an environmental management system
- ② Non-use of banned substances in the manufacturing process
- ③ Responding to any survey of chemical substances incorporated into procurement products
- ④ Non-inclusion of banned substances or conditionally banned substances in procurement products
- ⑤ Climate change measures
- ⑥ Efforts and contributions to global environmental conservation

(3) Suppliers are requested to immediately disclose the latest information to the department in charge, NEC, if any changes are made in the information contained in the "environmental activity survey form."

9 Supplementary Provisions

Provisions concerning green procurement may be added as individual specifications to agreements, memorandums, purchase specifications, etc., as and when required. In such cases, the aforementioned individual specifications shall take precedence over the NEC GREEN PROCUREMENT GUIDELINES.

On the basis of the information provided by suppliers in accordance with the NEC GREEN PROCUREMENT GUIDELINES, NEC shall select and procure suppliers and products that are more compliant with our green procurement goals. Any and all information received from suppliers will be managed in confidentiality in accordance with the regulations of NEC.

Revision History

● Revisions to Ver. 2 (June 2004)

“(1) Creation of an environmental management system” in section 6. “Supplier Assessment Items” changed as follows:

- ① Eco Action 21 (Ministry of Environment) and Eco Stage were added as third party certifications.
- ② Text in (1)–④ and (1)–⑥ was modified.

● Revisions to Ver. 3 (December 2004)

- Notes on the explanation did not apply to the software and service companies
- Importance of management of product substances was stipulated.
- Substance banned in the manufacturing process was added (Methyl bromide was moved from the substances to be avoided).
- Product substance standards were revised (e.g., target substances and categorization).
- "Standards for Procurement Restriction on Chemical Substances in Products" and the JGPSSI guideline were quoted for product substance standards (duplication deleted).
- Implementation of RoHS conformance check was stipulated.

● Revision to Ver. 4 (June 2010)

- Conformance to the EU REACH Regulation was totally revised.

● Revision to Ver. 5 (January 2018)

- Climate change measures (reduction in greenhouse gas emissions and preparations for the effects of climate change) were added.
- "Assessment items" were changed to "requests."
- The activity survey with the environmental activity survey form was added.

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