

# Eco Symbol Star Standards



Item		Eco Symbol Star Standards	
		Hardware products	Software and services
Preventing global warming	Mitigation measures	Achieve a CO <sub>2</sub> emission reduction rate of 50% or more (compared to the conventional product).	Expected CO <sub>2</sub> reduction rate of 50% or more
		Equipped with technology that is a first within the industry.	Expected CO <sub>2</sub> reduction amount of 1,500 t/year or more
	Adaptation measures	A solution that provides measures to or helps to mitigate damage, loss, or other impacts related to at least two of the eight risks associated with climate change*.	
Resource recycling		Uses 80% or more of bioplastics (ratio to the total weight of bioplastics for the frame).	Reduction of environmental impact through the use of NEC's original leading (industry-first) technologies
		Introduces technology for the first time within the industry or introduces a system with unique and innovative features.	
Evaluation		External prize is awarded.	Highly rated both within and outside NEC
		Internal prize is awarded.	
Internal prize is awarded.		Overwhelmingly contributes to a reduction in the environmental impact with NEC's technology.	Release of environmental information for software and services

\*The eight risks associated with climate change

1. Damage caused by rising sea levels and storm surge in coastal areas
2. Damage caused by flooding in urban areas
3. Breakdown of infrastructure and other societal functions due to extreme weather events
4. Death and ill health caused by heat waves which particularly affect vulnerable groups in urban areas
5. Threat to food security caused by rising temperatures and drought
6. Loss of livelihood and income in rural areas due to insufficient water resources and reduced agricultural productivity
7. Loss of marine ecosystems that are vital to coastal water areas
8. Loss of services provided by terrestrial and inland water ecosystems

# Eco Symbol Standards (hardware products) ①



Eco Symbol Conformance Standards (FY 2025 Version): The Eco Symbol standard conformance ratio excluding non-applicable standards must be 55% or higher.

Major Category	Intermediate Category	Eco Symbol Standards (FY 2025 Version)	Items Applicable to All Products
Thinking on life cycle	Consideration given to the environmental impact of a product (designation and reduction)	The concept of LCA is positively and correctly promoted with similar product groups or with applicable products from procurement to disposal.	○
		A function to visualize power consumption or CO <sub>2</sub> emissions, such as a carbon meter, is added.	
Preventing global warming	Activities for the Mid-Term Environmental Plan	Energy efficiency has been improved compared to conventional products.	○
	Energy-saving design	Product power consumption is reduced compared with former products.	○
		New measures or technologies to reduce power consumption are incorporated at the design stage.	○
		Conforming to the International Energy Star Program	
Green programs	Restricting the use of environmentally harmful substances	Parts, products, and packaging materials are procured meeting the guideline requirements set by NEC.	○
	Appropriate management of environmentally harmful substances	No bromine fire-retardant plastics are used in any plastics used in products including parts. Parts and members are identified when these plastics are used.	○
		Information on materials not permitted to be contained in parts and products, conditionally banned substances, and managed substances designated by NEC among chemical substances used in parts and units comprising products is investigated and managed.	

○:An item that is applicable to all products

There are other items that are not applicable to certain products. Compatibility conditions:  
 $\text{Number of Eco Symbol conformance standards} / (\text{Number of all Eco Symbol standards} - \text{Number of non-applicable standards}) \geq 55\%$

# Eco Symbol Standards (hardware products) ②



Eco Symbol Conformance Standards (FY 2025 Version): The Eco Symbol standard conformance ratio excluding non-applicable standards must be 55% or higher.

Major Category	Intermediate Category	Eco Symbol Standards (FY 2025 Version)	Items Applicable to All Products
Resource recycling	Resource conservation	Designs that are considerate to resource conservation are made, and masses, volumes, or space usage of parts or products are less than 80% compared with former products.	○
		Eco plastics* are used in parts and products, and plastic consumption is recorded and analyzed. *: Recycled plastics, Eco-polyca (including recycled Eco-polyca), and so on	○
		Bioplastics including PLAs and non-PLAs are used in products.	
		Product contains recycled metal*, and its weight is known. *: Recycled steel, recycled aluminium, and so on	○
	Long term usability	Modules, parts, and products are reused.	○
	Manuals and packaging materials	In the design of packaging materials, the package masses, volumes, and space usage are less than 80% compared with packaging materials of conventional design.	
Information disclosure	Provisioning of environmental information on products	A method to set the low-power-consumption mode and usage to curb power consumption is disclosed to the public as a method that is easy to check and in a language that is easy for the customer to understand.	
Advantages over third party products		Has obtained Eco labels*2 other than the Type II*1. *1: An eco label of the self-declaration type conforming to standards unique to NEC Group companies *2: EPEAT, Eco Mark, Eco Leaf (Japan), Blue Angel (Germany), TCO (Sweden), and so on	

○:An item that is applicable to all products

There are other items that are not applicable to certain products. Compatibility conditions:  
 $\text{Number of Eco Symbol conformance standards} / (\text{Number of all Eco Symbol standards} - \text{Number of non-applicable standards}) \geq 55\%$

# Eco Product standards (hardware products) ①

<b>Thinking on life cycle</b>	An effort is made to reduce environmental impact throughout the entire life cycle of a product.	
	Designation and reduction of environmental impacts of products	LCA from procurement to disposal is targeted for similar product groups or applicable products in accordance with in-house guidelines.
<b>Preventing global warming</b>	Energy-saving designs are made and CO <sub>2</sub> emissions are measured to reduce CO <sub>2</sub> emissions during the use of products.	
	Energy-saving design	Reduction of power consumption of a product is equal to or below an absolute value or in performance ratio compared with a former product.
		Conformance with regulations on energy-saving design at shipment destinations
<b>Green programs</b>	Kinds and consumptions of materials contained in products that affect the environment are thoroughly measured and analyzed so as to control their use.	
	Reducing the use of environmentally harmful substances	Procurement of parts, products, and packaging materials conforms to requirements set in the in-house rules.
		PVC (polyvinyl chloride) is not used in the external casing. If a product is not covered by this standard based on customer specifications, etc., the product has been certified as not covered by this standard in accordance with procedures of in-house rules.
		Brominated flame-retardant plastics are not used in the plastic used for the external casing, except in cases where they must be used for product safety reasons. Even in cases where they must be used for product safety reasons, their mass is known.
	RoHS compliance	Conforms to the European RoHS Directive regardless of shipping country
The substance restrictions of the importing country and region are known and quantities exceeding those amounts are not used		
<b>Resource recycling</b>	Materials that can be recycled easily are used to the extent possible, and utilization of recycled materials is actively promoted to curtail emission of waste so as to contribute to a recycling-oriented society.	
	Resource conservation	The mass, volume, or space usage of the parts or products is equivalent to or less than that of conventional products.
		Parts and units are selected considering their reusability.
		Design that heeds material recycling without impairing function
	Simplified disassembly	Design easy for detachment and disassembly of products
		Design that makes disposal easy Ex) The disassembly and detachment steps for recycling have been reduced. Written procedures or drawings showing the disassembly method can be supplied anytime when requested by the customer or other parties.
	Long term usability	The design considers longer service lives for products.
		Material names are marked on plastic parts weighing 25 g or more in accordance with the in-house guidelines.
		Cases and parts are standardized at the design stage for same product groups or successor models.
	Manuals and packaging materials	Instruction manuals are digitized (websites and CD-ROMs). If not digitized, manuals are printed on recycled paper or paper that has acquired an environmental label, to reduce environmental impact.
		Package cartons use recycled or recyclable materials.
		Packaging materials are identified and marked in accordance with a method specified in the in-house rules. Markings also conform to related laws and regulations of countries and regions.
	Batteries	Packaging materials specified in a companywide standard or their equivalents are selected to trim kinds and types of packaging materials and to make packaging efficient.
		Batteries do not contain more than 0.0005% (5 ppm) of mercury by weight. And portable batteries do not contain more than 0.002wt% (20ppm) of cadmium, and do not contain more than 0.01wt% (100ppm) of lead.
Conforming to the in-house rules that incorporate the requirements of laws of countries and regions		
	Structure that allows easy identification and removal by a recycler	

# Eco Product standards (hardware products)②

<b>Information disclosure</b>	An effort is made to disclose environmental information correctly in a style that is easily understood by the customers.	
	Disclosure of product environmental information	Information such as environmental law regulation, guideline requirements or status of compliance, matters requiring environmental consideration, and appeal points is transmitted through the Internet, manuals, catalogs, specifications, and other media.
		A check system is in place to validate information printed on product catalogs, manuals, and other printed matter to ensure that the information is suitable for printing.
		Information on batteries such as battery type, location, and procedure for safe removal is printed on manuals and other places.
	Information on product recycling is prepared for users and disposal facilities and conforms to requirements of countries and regions.	
<b>Management mechanism</b>	Main production facilities establish an environmental management system.	
	Environment management systems	Environment management systems (ISO 14001, EMAS, etc.) are available at the main product business entities (including development and design) and the main production facilities.
	Manufacturing process	When new chemical substances are introduced or when parts are used that require changes in production processes at the main production facilities of products, assessments are conducted.

# Eco Software and Eco Service Standards

NEC performs environmental assessments of its software and services. Environmentally sound software and services conforming to all applicable items in the environmentally sound assessments set for each software and service category in seven product environmental assessment classifications are designated as an "Eco Software" or "Eco Service."

## Eco Software and Eco Service Standards - Seven Product Environmental Assessment Classifications -

Product Environmental Assessment Classifications	Number of Items in Environmentally Sound Assessment
1. Energy saving during manufacturing	1
2. Resource conservation during manufacturing	1
3. Resource recycling during use by the customers	6
4. Low power consumption during use by the customers	5
5. Resource conservation during use by the customers	1
6. Enhanced usability during use by the customers	2
7. Environmental impact during use by the customers	7

# Product Assessments

In 1994, NEC set company-wide product assessment guidelines and institutionalized a system to check against the environmental design requirements during assessment.

Its divisions have set and are operating implementation rules tailored to their own business and conditions based on the company-wide product assessment guidelines.

Assessment items for product assessment include energy-saving design, LCA, standards for environment-impacting materials contained in products, standards related to the 3Rs (reduce, reuse, and recycle), and other related items. The whole mechanism ensures comprehensive environmentally friendly design.

In addition, final assessment results are provided for the design and development phases so the results can be reflected in the goals and assessment criteria of future products.

All newly developed products of the NEC Group undergo 100% product assessment including computers and communication equipment.

## Product Assessment Procedure

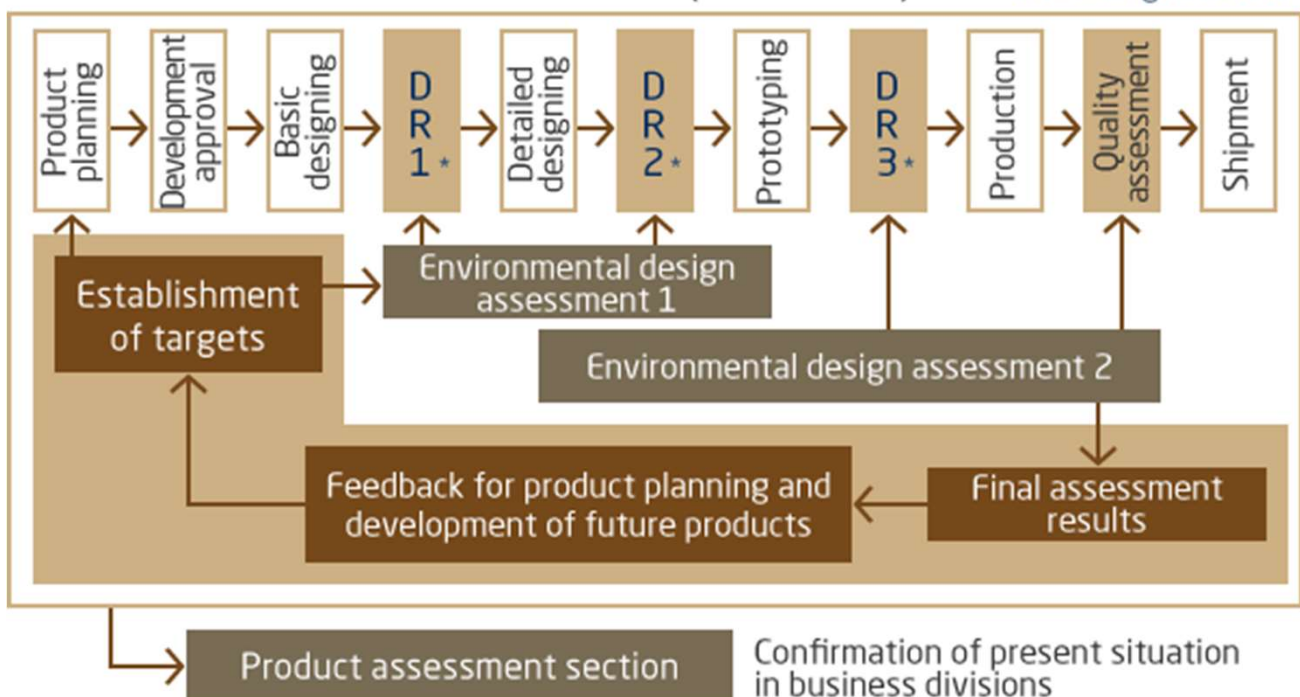
1994: Founded company-wide guidelines (1st edition)

1998: Introduced product eco-efficiency (2nd edition)

2001: Applied Eco Product standards (3rd edition)

2016: Rules for Product Assessment (9th edition)

\*DR: Design review



100% enforcement for newly developed products