

Eco Mark Product Category No.119

“Personal Computers Version 2.7”
Certification Criteria

Established: August 3, 2006

Revised: October 1, 2011

Validity Period: August 31, 2016

Japan Environment Association

Eco Mark Office

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

Eco Mark Product Category No.119

**“Personal Computers Version 2.7”
Certification Criteria**Japan Environment Association
Eco Mark Office**1. Purpose of Establishing Certification Criteria**

The personal computer (“PC”) market in Japan is large and still growing. According to the Japan Electronics and Information Technology Industries Association, domestic PC shipments in fiscal 2004 (ended March 31, 2005) totaled more than 13,039,000 units, for an annual growth rate of approximately 10%.

Some of the characteristics that typify PCs are an international distribution and a short product cycle that is hastened by factors such as rapid advances in PC-related technologies and high upgrade demand.

Society has been moving to address the environmental aspects of PCs. Over the past five years, for example, the Japanese government has led an initiative to begin collecting and recycling end-of-life PCs in accordance with the Japanese Law for the Promotion of Effective Utilization of Resources. The government has also spearheaded an initiative to further advance PC energy efficiency in accordance with the Energy Conservation Law (Law Concerning the Rational Use of Energy). Internationally, measures are being promoted to restrict the use of harmful substances under the EU RoHS Directive and to examine eco-design requirements under the EuP Directive. In Japan, it was a period of significant advances. For example, standards on marking that contains certain specified substances were established within Japanese Industrial Standards; and, moreover, in September 2005 voluntary industry guidelines on PC volatile organic compound (VOC) emissions were drafted. The certification criteria for PCs have been completely revised to make them consistent with these social imperatives. The criteria describe environmentally considerate PCs based on the latest knowledge and information, and new criteria for VOC emissions have been added and a checklist for 3R design has been optimized.

PCs are distributed internationally. Accordingly, when undertaking a revision of certification criteria, consideration must be paid to cooperation with interested organizations around the world. Japan, a member of GEN (the Global Ecolabelling Network, an international association with 27 member organizations from the U.S., Germany, the Nordic countries, South Korea and more), is strengthening and promoting cooperation with overseas eco-labeling programs implemented by third-party certification organizations, and common global certification criteria for PCs have been established in the past. In addition, Japan, China and South Korea are cooperating on eco-labeling, and cooperation among the various interested organizations is moving forward, with, for

example, the organizations launching an investigation into establishing common certification criteria.

This product category was established on September 10, 2000, as a new product category for eco mark certification after being selected along with copiers and other office equipment for eco mark eligibility with the introduction of the product life cycle concept in the 1996 revision of the Guidelines for Eco Mark Program Implementation. Five years have passed since the certification criteria were established. Accordingly, the product category criteria were revised pursuant to “6. Discontinuance of Product Categories and Revision of Certification Criteria” in Chapter II of “Guidelines for Eco Mark Program Implementation.” The goal in revising the criteria is to promote the spread of environmentally considerate PCs. Toward that end, care was taken to make the application process easier by, for example, alleviating the complicated and troublesome procedures associated with certificates and other evidentiary documentation, which were one of the factors hindering the spread of Eco Mark certified products.

2. Applicable Products

This Eco Mark product category applies to notebook PCs, desktop PCs, all-in-one PCs (a PC with integrated monitor), CRT monitors, LCD monitors, keyboards, and mouse devices.

This product category also includes thin clients*¹ and tablet PCs*².

*¹ Thin client: A terminal that is attached to an organization’s information system network. Thin clients offer enhanced security because client PCs possess only the essential functions, while application software, files and other assets are managed by a server.

Normally, thin clients do not have an internal magnetic disk or other means of storage.

*² Tablet PC: A personal computer that emphasizes features such as portability and viewing ease for business applications and that is treated as a type of notebook PC.

3. Terminology

Housing	Refers primarily to outer covers that form the external appearance of the product. A housing protects the device from environmental effects and maintains user safety. Displays, key tops, FDDs/ODD, connectors, LEDs, power switches, slide pads and other objects exposed on the surface of a housing are not considered part of the housing.
Housing appurtenance	A small object weighing less than 25g that is attached to a housing, such as a connector cover and option cover.
Copolymer	A polymer consisting of two or more types of monomers.

	(Examples include ABS, etc.)
Reused part	A part that has previously been used and that is reused in a product.
Recycled plastic raw material	Plastic raw material composed of post-consumer material and pre-consumer material.
Pre-consumer material	Material or rejected product generated from a disposal route in a product manufacturing process, excluding those that are generated in a material manufacturing process and that are reused as raw materials within the same process (plant).
Post-consumer material	Materials or products disposed of after they have been used as goods.
Minimum retention period	The shortest period of time that a manufacturer shall keep a performance part in question after discontinuing production of a product that uses the part.
Chassis	A frame that is provided inside a housing and that is needed to support the housing and main parts of a PC. When a housing also serves as a chassis, as in a notebook PC, its external appearance function takes precedence and it is treated as a housing.
Prescribed constituent	A material component added for the intended purpose of giving certain characteristics to a product. Impurities that are technically unavoidable in the manufacturing process are not included.
Sub-assembly:	Assembly consisting of at least two components that are joined together in a force- or positive-fit manner.
Electrical/electronic sub-assembly:	Assembly that includes at least one electronic or electric part.
Batteries	Refers to both primary batteries and secondary batteries. A primary battery discharges only once, while a secondary battery can be recharged for repeated use.
Instruction manual (user manual):	Documentation that is primarily intended to describe the use and handling of the equipment. This does not include documentation that provides information on subjects other than the use and handling of the equipment in question. In this product category “instruction manual” shall be construed to include CD-ROMs, websites and other electronic media.
Homopolymer	Single polymer. Polymer consisting of one type of monomer. (Examples include PS, PC, PP, etc.)
Polymer	High molecular material that is the main constituent of plastic.
Polymer alloy	General name of multi-component polymers obtained by

(Polymer blend)	mixing or chemically binding the polymers of more than two components. A polymer blend is a physical blending of different types of polymers. (Examples include PC/ABS, etc.)
Life cycle assessment	One of the techniques used to objectively assess the environmental impacts of a product or service (referred collectively to as “product” below) throughout its entire life-cycle, from the extraction of resources through to the manufacture, use, recycling, disposal and distribution of the product.
Recycling	Materials recycling only; energy recovery (thermal recycling) is not included.

4. Certification Criteria and Certification Procedure

[Partial Mutual Recognition among Chinese Environmental Labeling and Korea Eco-Labeling]

If the applying product is already certified by Chinese Environmental Labeling (HJ/T 313-2006 Microcomputers and displays: January 2007) or Korea Eco-Labeling (EL144. Personal Computers & Monitors [EL144-1999/4/2005-68]), JEA will consider common items shown in Appendix 1 are complied with above labeling programs' certification.

4-1. Environmental Criteria and Certification Procedure

- (1) The product shall conform to Attachment 1, “PC 3R Design Checklist.”

[Certification Procedure]

The applicant shall fill out and submit Attachment 1, “PC 3R Design Checklist.”

- (2) The product shall conform to Attachment 2, “PC Substance Checklist.”

[Certification Procedure]

The applicant shall fill out and submit Attachment 2, “PC Substance Checklist.”

- (3) The product shall conform to Attachment 3, “Efforts in PC Manufacturing Plant.”

[Certification Procedure]

The responsible person or the manager of the plant that manufactures the product shall fill out and submit Attachment 3, "Efforts in PC Manufacturing Plant."

- (4) The applicant shall perform a product life-cycle assessment (LCA), strive to reduce the amount of energy consumed during manufacture, and provide information to equipment users.

[Certification Procedure]

Submit an Attached Certificate that indicates the following:

- a. Whether an LCA has been performed (or is planned) for the representative model
- b. Whether you have or plan to provide information on the LCA results for the representative model
- c. The means (website, catalog, etc.) that you use or plan to use to provide information.
- d. Whether there are past PC LCA results

An application can be submitted for a PC series. In this case, one or more models in the series may be considered representative models. To be considered representative, a model must have the highest energy consumption in the series, and LCA results for that model must be submitted along with information on the model and its specifications.

- (5) The product shall conform to Attachment 4, “Energy-Saving PC Design Checklist.” However, this item does not apply to thin clients, keyboards and mouse devices.

[Certification Procedure]

The applicant shall fill out and submit Attachment 4, “Energy-Saving PC Design Checklist.”

- (6) The product’s A-weighted emission sound pressure level (dB) per item 3.2.5 in ISO 9296 shall not exceed 40 dB in idle mode. In operating mode (when accessing a hard disk or optical disk), it shall not exceed 45 dB. However, this item does not apply to keyboards and mouse devices.

[Certification Procedure]

The applicant shall submit test records for a representative model. An application can be submitted for a PC series. In this case, the highest A-weighted emission sound pressure level value in the series shall be considered the test record of the representative model.

- (7) The product shall conform to Attachment 5, “Checklist for Providing PC Information.”

[Certification Procedure]

The applicant shall fill out and submit Attachment 5, “Checklist for Providing PC Information.”

- (8) The product shall conform to Attachment 6, “PC Packaging Materials Checklist.” (This does not apply to items that are issued beyond the applicant’s control, such as CD-ROM cases and instruction manuals for basic software.)

[Certification Procedure]

The applicant shall fill out and submit Attachment 6, “PC Packaging Materials Checklist.”

4-2. Quality Criteria and Certification Procedure

- (9) Products shall conform to safety standards that are in accordance with IEC 60950 (published by the International Electrotechnical Commission).

[Certification Procedure]

The applicant shall submit a certificate providing evidence that the product conforms to safety standards that are in accordance with IEC 60950.

5. Considerations

In manufacturing products, it is desirable to consider the following, although they are not requirements for certification. The conformance to the individual criteria item shall be indicated in Attached Certificates.

- (1) Instruction manuals (user manuals) provided to users shall conform to the following “a.” to “c.”
- a. The binding method shall not impede waste paper recycling. A hot-melt adhesive used to bind a manual shall be one of a modified non-dispersive EVA hot-melt adhesive, a polyurethane hot-melt adhesive and a water-soluble hot-melt adhesive. However the use of other hot-melt adhesives is permitted for manuals printed outside Japan.
 - b. Chlorine gas shall not be used in the bleaching process of waste paper pulp.
 - c. The percentage of waste paper in the pulp mixture shall be over 70%.
However, this item is not applied to the manuals printed outside Japan.

6. Product Classification, Labeling, etc.

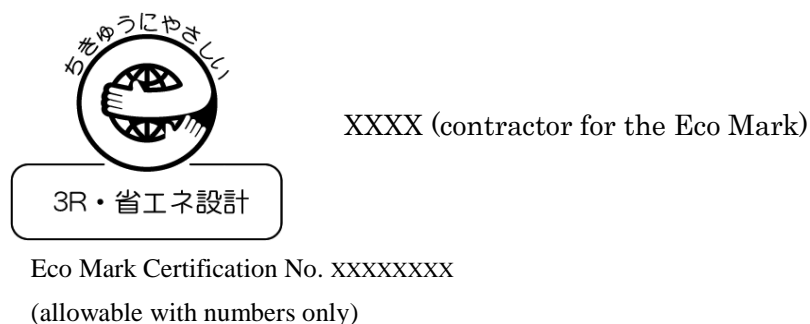
- (1) The product classification (application unit) shall be either a model or a series. Products shall not be classified by color or size.
A single application can be used to apply for multiple models in the same series, but each model or device in the series shall satisfy the respective criteria.
In the product classification, a separate application can be submitted for accessory equipment included in desktop PC and all-in-one PC configurations. For products that are sold primarily as a part of a system, a CRT monitor, LCD monitor, keyboard and mouse devices may be included along with the computer itself in the same application. In this case each piece of equipment shall satisfy the respective criteria.
- (2) The environmental information shown below shall be indicated below the mark. However, the indication of Eco Mark and certification information (Type B indication) can be allowed by following “Guide to Eco Mark usage” (enforced on March 1, 2011). The location and details of the Eco Mark to be indicated shall be

submitted when applying for Eco Mark product certification and use.

The environmental information shall be indicated as “3R & energy-saving design” on the first line and enclosed in a rectangular box.

For the products certified under Eco Mark No.119 “Personal Computers”, it is approved to indicate the same environmental information below Eco Mark and certification number as those used under previous product category in the indication below Eco Mark based on this product category as in the past.

A sample Eco Mark is shown below.



- (3) The Eco Mark shall be used and displayed in accordance with Article 7 of “Eco Mark Usage Rules.” These rules, which are based on the Guidelines for Eco Mark Program Implementation, stipulated separately.
- (4) In principle, the product for which the application is being submitted shall not contain antibacterial agents. Moreover, the products shall not be labeled “biodegradable plastic.” Under special circumstances, however, the use of such agents and labels may be permissible. In such cases, they shall satisfy the provisions on antibacterial agents and on labeling of biodegradable plastics in the Guidelines for Eco Mark Program Implementation. Specifically, the applicant shall indicate on the application form (“Application for Certification and Use of the Eco Mark”) whether flame retardants and antibacterial agents are used. For any that are used, the applicant shall include the prescribed documentation as an attachment.

August 3, 2006	Version 2.0 established
October 19, 2006	Revised Version 2.1
April 13, 2007	Revised Version 2.2
Feb. 14, 2008	Revised Version 2.3
August 21, 2008	Revised Version 2.4
April 28, 2009	Extension of Expiration date
March 1, 2011	Revised Version 2.5
April 1, 2011	Revised Version 2.6
October 1, 2011	Revised Version 2.7

August 31, 2016 Validity Period

The certification criteria for this product category shall be revised as appropriate.

Appendix 1. Corresponding table to common items among Chinese Environmental Labeling and Korea Eco-Labeling

Eco Mark No.119 Personal Computer Ver.2	China Environmental Labeling HJ/T 313-2006 Microcomputers and displays	Korea Eco-Labeling EL144. Personal Computers EL145. Notebook Computers EL147. Monitor for Personal Computers
4-1.(1)		
Attachment 1 No.1	-	-
Attachment 1 No.2	5.2.2 (4)	-
Attachment 1 No.3	-	-
Attachment 1 No.4	5.2.2 (3)	-
Attachment 1 No.5	-	-
Attachment 1 No.6	-	-
Attachment 1 No.7	-	-
Attachment 1 No.8	-	-
Attachment 1 No.9	-	-
Attachment 1 No.10	5.2.2 (1)	3.1.5.1
Attachment 1 No.11	5.2.1 (2)	3.1.5.2 b)
Attachment 1 No.12	-	-
Attachment 1 No.13	-	-
Attachment 1 No.14	-	-
Attachment 1 No.15	-	-
Attachment 1 No.16	-	-
Attachment 1 No.17	5.2.1 (3)	3.1.5.2 c)
Attachment 1 No.18	-	-
Attachment 1 No.19	-	-
Attachment 1 No.20	-	-
Attachment 1 No.21	-	-
4-1.(2)		
Attachment 2 No.1	-	3.1.3.3
Attachment 2 No.2	-	-
Attachment 2 No.3	-	-
Attachment 2 No.4	-	-
Attachment 2 No.5	-	-
Attachment 2 No.6	-	-
Attachment 2 No.7	-	3.1.3.1, 3.1.3.2, 3.1.3.3
Attachment 2 No.8	-	-
4-1.(3)		
Attachment 3 No.1	5.4.6 (1)	-
Attachment 3 No.2	-	-

Eco Mark No.119 Personal Computer Ver.2	China Environmental Labeling HJ/T 313-2006 Microcomputers and displays	Korea Eco-Labeling EL144. Personal Computers EL145. Notebook Computers EL147. Monitor for Personal Computers
Attachment 3 No.3	5.4.6 (2)	-
4-1.(4)	-	-
4-1.(5)		
Attachment 4 1. No.1	-	-
Attachment 4 1. No.2	5.1.3	-
Attachment 4 1. No.3	-	-
Attachment 4 2. No.1	-	-
4-1.(6)	-	-
4-1.(7)		
Attachment 5 No.1	-	-
Attachment 5 No.2	-	-
Attachment 5 No.3	-	-
Attachment 5 No.4	-	-
Attachment 5 No.5	-	-
	-	-
	-	-
	-	-
4-1.(8)		
Attachment 6 No.1	-	-
Attachment 6 No.2	-	-
Attachment 6 No.3	5.4.5	3.1.4.2 c)
Attachment 6 No.4	-	-
4-2.(9)	-	-

※If the cell of Chinese Environmental Labeling or Korea Eco-Labeling is filled in above chart, there will be no need to submit documents for Eco Mark's application in case the applying product is certified by each labeling program.