Product-Specific Criteria for Net Camera Products (PSC-ID: BH-01)

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Note: Requirements here are for development of EcoLeaf™ environmental labels. Use for any other purpose without consent of the EcoLeaf™ program office is strictly prohibited.

No.	Major key	Minor key	Class	Requirements
1	Preconditions	Target product	Description	Images taken with imaging elements are distributed through a network environment. Camera can be installed indoors or outdoors and remotely controlled.
2			Scope	Camera proper and web server proper in their individual boxes as the smallest retail unit, plus their packing material, driver software and IP setting software provided on CD-ROMs or other media for the camera and server to function, and user manuals, including cases and other intermediate packing materials for distribution. Not included are cables and personal computers, or routers, modems, or other network peripherals.
3		Stage	Scope	All life cycle stages.

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4	Product data sheet (PDS) Input data for the LCI: Lifecycle inventory analysis	Manufacturing stage information (product information)	Product materials or ingredient makeup	1) Class A parts (parts whose processing and assembly impacts you determine yourself) All assembled circuit boards having one or more of the functions specified below. a) Imaging elements. b) Communication ICs. c) CPU. d) Image processing ICs. • Items such as separable wiring materials are excluded. • Only mounting processes are checked. 2) Material category names recorded in the product data sheet Thirteen items: Normal steel, electromagnetic steel plate, Stainless steel, copper, aluminum, other metals, thermoplastic resins, thermosetting resins, rubber, glass, paper, assembled circuit boards, and wood 3) Resource input amounts Calculated using material mass at the stage when materials become products. However, in special cases where the mass of some materials cannot be determined, get a breakdown of the masses of the materials making up at least 90% of the product's total mass, and prorate the rest to come out to 100%. 4) When open recycling and reuse are included: Each company can calculate these categories by creating scenarios considered appropriate, and while taking careful note of the following items. The soundness of scenario bases is subject to verification. (1) Processes regarded within the scope of "indirect effects" (2) Exclusions (Deductions?) and impacts within the scope of "environmental effects"

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5			Material and energy inputs, consumption, and emissions	1) Input and consumption items Electricity, fuel oil A, diesel fuel, kerosene, gasoline, LNG, LPG (town gas), city tap water, industrial water supply, groundwater. However, see Figure 1 on energy for assembly of class A parts. 2) Emission items Not specified. Each company should enter those it deems important. 3) Transport impact The general rule is that the transport impact of material inputs (feedstock and energy) is not factored in. However, the inter-site transport impact for class A parts is included. 4) Byproducts and sub-materials Not included. • Byproducts are products which arise secondarily in the manufacturing process and are sold, as distinguished from products whose manufacture is the main purpose. • Sub-materials are materials input and discarded at the manufacturing site, and are not shipped with products.
6		Distribution stage information	Product transport conditions	1) Transport from manufacturer to seller Means and loading ratio are based on the model created by each company. 2) Domestic transport distance Calculated as 500 km. 3) Product transport impact from overseas location to Japan Factor in land and sea transport impact from manufacturing site.

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7		Usage stage information	Product usage conditions	1) Usage conditions • Usage time: 5 years • Image transmission time: 0.5 h/d • Standby time: 23.5 h/d During the 0.5 h image transmission time, the camera pan/tilt function operates 10 times. • A year is 365 days with no leap year. • Functions other than image transmission and pan/tilt are not considered.
8	Product data sheet (PDS) Input data for the LCI: Lifecycle inventory analysis	Waste/ recycling stage information	Product waste/recycling conditions	Creating a standard scenario 1) Consumer market: • Unit proper, accessories, and other items are treated as noncombustible municipal solid waste (MSW). • Paper items are combustibles. 2) Business market • Each company develops a waste management scenario assuming that products are industrial waste. 3) When open recycling and reuse are included Each company can calculate these categories by creating scenarios considered appropriate, and while taking careful note of the following items. The soundness of scenario bases is subject to verification. (1) Processes regarded within the scope of “indirect effects” (2) Exclusions （Deductions?）and impacts within the scope of “environmental effects”
9	Product Environmental Information Declaration Sheet (PEIDS)	Inventory analyses	Lifecycle inventory calculation rules	When open recycling and reuse are included, calculate direct and indirect effects separately and express the indirect portion as “recycling effectiveness.” On the PEIDS, put the indirect effect total in the “Recycling Effectiveness” space.

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10		Impact analysis	Additional impact category	“Ozone layer depletion” and “eutrophication” items deleted.
11	Breakdown data sheet (PDS-related)	Data processing	Allocation rule	Not unified; each company decides as it sees fit.
12		Data collection	Coverage	When data are unobtainable because products are new or for other reasons, It is permissible to substitute data (including intensities) that include the conditions used in designing or planning.
13			Cut-off rules	When cut-off rules apply for assembly impact and the like, specify so and give the reason.
14	Breakdown data sheet (PEIDS-related)	Database	Common intensity selection	Target item — EcoLeaf common intensities 1) Assembly of parts whose purchase is decided by each company — “Parts assembly” 2) LCDs, imaging elements, and other boards — “Assembled circuit boards” (excluding boards designated class A parts) 3) Motors are parts manufacturing — “Mid-size motors” 4) AC adaptors — Electromagnetic steel plate 50%, copper 20%, covering material: applicable resin 30%. However, item 5) applies to power cords. 5) Power cords — conductors: copper 40%, covering material: applicable resin 60%. 6) Coil cord — Conductor: copper 20%, covering material: applicable resin 80% 7) Signal line cord — Conductor: copper 10%, covering material: applicable resin 90% Note: These do not restrict the use of individual intensities.
15			Intensity database addition	No additions.
16			Addition of characterization factor	No additions.

No.	Major key	Minor key	Class	Requirements
17	Product environmental information	Product specification	—	1) Lens specifications • Focal length (**mm), F stop (F**), zoom or not, and optical zoom magnification 2) Imaging element specifications • Sensor type (CCD/CMOS), sensor size (*/* inches) Number of pixels (in units of 10,000) 3) Transmission interface • 10 Base-T/100 Base-TX, IEEE 802, 11 b/g/a, etc. 4) Camera mechanism • Pan/tilt or not, pan/tilt speed (**/sec) 5) Image compression type, frame rate • JPEG (** fps), MPEG4 (** fps) 6) Type of environment where camera is installed • Indoor/outdoor specifications (JIS protection rating) 7) Product mass
18		Data disclosure	—	1) Required items Global warming impact, acidification impact, energy consumption 2) Optional items Seven items in the guidelines 3) Note at bottom of section E A 5-year period of use is assumed. 4) Section E, method of representation Use bar graphs to show the global warming impact (CO_2 equivalent) for each stage and the total for all stages. 5) When open recycling and reuse are included, the “recycling effectiveness” of each stage is expressed by a dotted line independent of the actual impact.

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19		Other environment-related information		The following information may be provided when it is related to the product's environmental characteristics and when it can be confirmed by a third party. 1) Type I and Type III environmental labels 2) Acquisition of ISO 14001 certification 3) Certificates, approvals, or awards from national or industry organizations 4) Information on hazardous substances Whether or not these 6 substances are used: lead, mercury, cadmium, hexavalent chrome, polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs). Note clearly when there are limitations on items subject to information disclosure. 5) Information on use of eco-friendly materials Note the part and specify its materials.

Figure 1 Network Camera

How to determine the impacts of materials and manufacturing stages (related to item 4)

Perform measurements for the parts shaded with diagonal lines, and calculate the rest with intensities.

[left column]
Individual part manufacturing
Imaging element
Communication ICs
CPU
Image processing ICs
[middle]
Assembled circuit board manufacturing (mounting)
Assembled circuit board mounting process
[right]
Final assembly
Final assembly process