

# Green Product Evaluation Standard

Fujitsu began conducting product environmental assessments using 43 criteria in fiscal 1993 with the aim of designing new products to prevent pollution and lower the environmental burden. “Green Products” are those with superior environmental performance characteristics. To earn this designation, products must score at least 90 points on a product environmental assessment and conform to all the relevant Green Product Evaluation Standards the company has adopted as a global environmental measure. These standards are revised periodically to take into account changes in the regulatory environment, moves to encourage a cyclical society and the establishment of eco-labeling systems.

## Common Standards Applicable to All Products

Major category	Characteristic	Common standards	
Product environmental assessment	Overall assessment		Overall score of at least 90 points, with no score of zero on any assessment criterion
Resource conservation	Product durability	(1)	Ensuring expandable product structures that support functional or performance improvements (Not applicable to electronic parts, portable products, unit products, customer-specified products)
	Product warranties	(2)	Extension of unconditional manufacturer's warranties on products sold in Japan by six months and of those for PC products by one year (Not applicable to electronic parts, products for markets outside Japan, customer-specified products)
	Reduction in product weight, volume, number of parts	(3)	Achievement of at least one of the following criteria for product weight, volume and number of parts, plus substantial improvements in remaining criteria relative to past products: 1) 10% + reduction in product weight compared to past products, or 30% + reduction per unit of performance 2) 10% + reduction in volume compared to past products, or 30% + reduction per unit of performance 3) 10% + reduction in number of parts compared to past products, or 30% + reduction per unit of performance
	Ratio of easily recyclable and recyclable plastics used	(4)	Achievement of a usage ratio of recyclable or easily recyclable plastics of at least 90% for products with a minimum of 25 grams of plastic by weight (Not applicable to electronic parts, PCBs inside products)
	Potential resource recyclability	(5)	Use of potentially resource-recyclable parts for a minimum of 75% of product weight; minimum use of 50% for portable products with LCD unit or monitor (Not applicable to electronic parts)
Recyclable design	Plastic parts	(6)	Labeling of all plastic parts (excluding packaging materials) weighing more than 25 grams and/or of parts with flat surface areas exceeding 200 mm <sup>2</sup> ; maximized labeling of materials irrespective of weight or surface area (Not applicable to electronic parts)
		(7)	Minimized painting or coating of any plastic parts weighing more than 25 grams (Not applicable to electronic parts)
		(8)	Elimination of PVC use in plastic parts (Not applicable to cable coatings, insulation materials for electronic parts)
	Primary/secondary batteries	(9)	Products whose batteries are changed by the user: adoption of structures permitting battery exchange or removal
		(10)	Products whose batteries are not changed by the user: adoption of structures permitting battery exchange or removal without complete PCB exchange
	Disassembly and separation capabilities	(11)	Permitting separation and disassembly into component materials or units (separated as devices, PCBs, cables, plastic parts, and metal parts) by hand or with general-purpose tools (Not applicable to electronic parts, equipment with automatic movement features, artificial satellites, undersea relay devices, Defense Agency products, wireless equipment covered by radio spectrum-related legislation)
		(12)	Creation of manuals for equipment disassembly (Not applicable to electronic parts, secret components)
Limitation of chemicals contents	Use of PBB, PBBO or chlorinated hydrocarbons	(13)	Freedom of plastic parts from PBB (polybrominated biphenyl), PBBO (polybrominated biphenyl oxide), or chlorinated hydrocarbons
		(14)	Freedom of printed circuit boards from PBB (polybrominated biphenyl), PBBO (polybrominated biphenyl oxide) or chlorinated hydrocarbons
	Lead	(15)	Freedom of in-house manufactured products from lead solder
Prevention of global warming	LCA	(16)	Assessment of product carbon dioxide emissions
Energy saving	Energy-saving function	(17)	Products to be equipped with an energy-saving function (Not applicable to electronic parts, customer-specified products, equipment for which an energy-saving function is not permitted)
	Power consumption	(18)	Reduction in average power consumption per unit of product performance from previous products
Environmental information disclosure	—	(19)	Inclusion in product documentation of information on waste product collection and recycling system (Not applicable to electronic parts, customer-specified products)
Manual	—	(20)	All documents for external use to be produced using a minimum of 70% recycled paper; elimination of plastic coatings from cover sheets
Packaging	Resource conservation	(21)	Use of a minimum of 70% recycled paper in cardboard
		(22)	Minimized use of packaging materials: over 5% reduction in packaging materials compared with previous products, or reduction of empty space to less than 30%
	Recyclable design	(23)	Elimination of all kinds of plastic attachments that prevent recycling from paper materials
		(24)	Compliance of labels on packaging and plastic parts with the following standards: 1) Labeling of all plastic parts weighing more than 20 grams (more than 10 grams in case of plastic foam) 2) Location of labels in easy to see positions
		(25)	Elimination of PVCs from plastic materials used in packaging
		(26)	Use of only easily recyclable plastics or paper as protective bag materials
	Hazardous chemical restrictions	(27)	Freedom from PBB (polybrominated biphenyl) or PBBO (polybrominated biphenyl oxide)

## Category-specific Standards (Electronic Parts)

Major category	Characteristic	Category-specific standards	
Environmental ISO	All electronic devices	(1)	Establishment and operation of EMS meeting ISO14001 standards or similar EMS at all manufacturing and related sites
Chemical substances information disclosure	LSIs	(2)	Ability to issue usage-free certificates for any chemicals whose use in a given product is prohibited
		(3)	Ability to label products with the amounts of compounds containing any of the following chemicals: arsenic, halogens, antimony, organic phosphorus, nickel
Chemical substances composition regulations	LSIs	(4)	Ability to use lead-free solder in manufacturing
Packaging materials	Recyclable design	(5)	Restriction of use of expanded plastic foam in packaging materials to maximum of 20% of total packaging weight

### Category-specific Standards (Portable/compact products weighing less than 3kg)

Major category	Characteristic	Category-specific standards	
Resource conservation	Recycled plastics/reused parts (magnetic disk devices, scanners)	(1)	Use of at least one or more recycled plastics or reused parts for product parts
Energy saving	Compliance with the Energy Saving Law (magnetic disk devices)	(2)	Inclusion in product catalogs of a display based on the Energy Saving Law, plus attainment of target standards for fiscal 2005 (top runners) specified in the Energy Saving Law
	Compliance with the International Energy Star Program (scanners)	(3)	Attainment of restraint values for the low-electricity mode specified in the International Energy Star Program and completion of application for registration
Chemical substances composition regulations	LCD units and products employing them	(4)	Assessment of mercury content in LCD fluorescent pipes
		(5)	Restriction of mercury content in LCD fluorescent pipes to 5 mg or less per pipe
Packaging materials	Recyclable design	(6)	Restriction of use of plastic foam in packaging materials to maximum of 10% of total packaging weight

### Category-specific Standards (Medium-sized/large products weighing 3kg or more)

Major category	Characteristic	Category-specific standards	
Resource conservation	Recycled plastics/reused parts (electronic calculators, magnetic disk devices, scanners)	(1)	Use of at least one or more recycled plastics or reused parts for product parts
Energy saving	Compliance with the Energy Saving Law (electronic calculators, magnetic disk devices)	(2)	Inclusion in product catalogs of a display based on the Energy Saving Law, plus attainment of target standards for fiscal 2005 (top runners) specified in the Energy Saving Law
	Compliance with the International Energy Star Program (electronic calculators, scanners)	(3)	Attainment of restraint values for the low-electricity mode specified in the International Energy Star Program and completion of application for registration
Chemical substances composition regulations	LCD units and products employing them	(4)	Assessment of mercury content in LCD fluorescent pipes
		(5)	Restriction of mercury content in LCD fluorescent pipes to under 5 mg per pipe
Packaging materials	Recyclable design	(6)	Restriction of use of plastic foam in packaging materials to maximum of 10% of total packaging weight

### Category-specific Standards (Personal computers)

Major category	Characteristic	Category-specific standards	
Resource conservation	Maintenance parts supply	(1)	Guaranteed supply of maintenance parts for a minimum of 5 years after completion of manufacture
	Recycled plastics/Reused parts	(2)	Use of at least one or more recycled plastics or reused parts for product parts
	Ratio of reused resources	(3)	Completion of calculation of resources reuse ratio for the following machinery based on the Effective Resources Use Promotion Law <ul style="list-style-type: none"> <li>• Desktop PCs, main body: 50 % or more</li> <li>• Notebook PCs: 20% or more</li> <li>• CRTs/LCDs: 55% or more</li> </ul>
Recyclable design	Plastic parts	(4)	Use of polymers (homo-polymers, co-polymers) or polymer alloys for any plastic parts of products weighing 25 grams or more
		(5)	Elimination of metal implants (types of inserts) for any plastic parts of products weighing 25 grams or more (not applicable to metal implants allowing disassembly with general-purpose tools)
Chemical substances composition regulations	Primary/secondary batteries	(6)	Freedom from cadmium, mercury and lead
	CRT	(7)	Freedom from cadmium
Energy saving	Compliance with the Energy Saving Law	(8)	Inclusion in product catalogs of a display based on the Energy Saving Law, plus attainment of target standards for fiscal 2005 (top runners) specified in the Energy Saving Law
	Compliance with the International Energy Star Program	(9)	Attainment of electricity consumption values during low-power mode operation and in the deep sleep display mode specified in the International Energy Star Program and completion of application for registration
	Guaranteed operation after long-term neglect	(10)	Normally operational after four or more weeks without power supply (with disappearance of such timer data as date and time not considered a fault)
Environmental information disclosure	—	(11)	Inclusion in product documentation of information on long-term use
		(12)	Inclusion in product documentation of information on cadmium, cyanogens, lead, chromium, arsenic, mercury, fluorine, boron, selenium and antimony, if included in the product
		(13)	Inclusion in product documentation of information on energy consumption (power on/off status, maximum and minimum electricity consumption, ways to minimize energy consumption)
Packaging materials	Recyclable design	(14)	Satisfaction of the below standard values for plastic foam use <ul style="list-style-type: none"> <li>• Restriction of use of plastic foam in packaging materials for main PC bodies to maximum of 10% of total packaging weight</li> <li>• Restriction of use of plastic foam in packaging materials for displays to maximum of 20% of total packaging weight</li> </ul>

### Category-specific Standards (Printers/large printers)

Major category	Characteristic	Category-specific standards	
Resource conservation	Maintenance parts supply	(1)	Guaranteed supply of maintenance parts for a minimum of 5 years after completion of manufacture
	Recycled plastics/reused parts	(2)	Use of at least one or more recycled plastics or reused parts for product parts
Recyclable design	Plastic parts	(3)	Use of polymers (homo-polymers, co-polymers) or polymer alloys for any plastic parts of products weighing 25 grams or more
		(4)	Use of maximum of four kinds of separable polymers (homo-polymers, co-polymers) or polymer alloys for any plastic parts of cases weighing 25 grams or more
Chemical substances composition regulations	Primary/secondary batteries	(5)	Freedom from cadmium, mercury and lead
Energy saving	Compliance with the International Energy Star Program	(6)	Attainment of electricity consumption values in the low-electricity mode specified in the International Energy Star Program and completion of application for registration
Collection/recycling systems	Toner cartridges	(7)	Collection and recycling of toner cartridges
Printing paper	—	(8)	Ability to use recycled paper from waste paper for printing
Packaging materials	Recyclable design	(9)	Restriction of use of plastic foam in packaging materials to maximum of 20% of total packaging weight

## Post-use Product Collection Results

**Changes in collection volume:** We are striving to recycle post-use products effectively Group-wide through the Fujitsu Recycling System with the aim of achieving effective use of global resources and a cyclical economic society system.

### Changes in Collected Post-use Products

(Unit: tons)

