

Creating Green Products

Green Products

Working to develop superior eco-friendly products based on internal standards

Fujitsu takes the environment into consideration with every product it manufactures. This approach underpins the Green Products system implemented in 1998. We develop products featuring superior eco-friendly performance based on internal criteria referred to as the "Green Product Evaluation Standard."

Green Product Development Results

In fiscal 2000, the list of Green Products was extended to include consumer goods such as personal computers and mobile telephones as well as mainstay products such as UNIX servers and disk arrays. The number of products developed as "Green Products" totaled 134, bringing the cumulative total to 275.

Green Products

Notebook computers .. 41 models	Financial institution workstations .. 2 models
Desktop PCs 24 models	Line printers * 1 model
CRTs (cathode-ray tubes)/ LCDs 15 models	Network shelters 1 model
Scanners 8 models	Data communications terminals * 1 model
Page printers 7 models	Secure archivers * 1 model
Small magnetic disks 6 models	Bar-code readers * 1 model
UNIX servers * 6 models	Card readers * 1 model
Disk arrays * 6 models	Store servers * 1 model
IA servers 4 models	Total: 134 models
Mobile telephones 4 models	* indicates new product category.
Opto-magnetic disks 4 models	

Examples of Green Products

Notebook computer FMV-BIBLO LOOX T5/53W



Conforms to Energy Conservation Law 2005 target standards (energy efficiency* 0.001 S classification)
Use of halogen-free flame retardant in plastic computer case
Use of Eco-mark approved recycled paper for manual

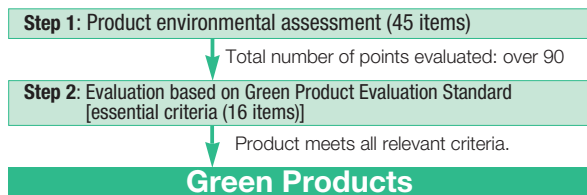
Disk arrays GR720 (GR72A01)



Conforms to Energy Conservation Law 2005 target standards (energy efficiency 0.59 G classification)
Labeling of all plastic parts weighing more than 25 g

Green Product Evaluation Standard

Process for Evaluating Green Products:



Eco-mark Approved Products

As of January 2001, four Fujitsu desktop PC models had received Eco-mark certification from the Japan Environmental Association. Fujitsu was the first PC manufacturer in Japan to receive Eco-mark certification. (Excluding display)

Eco-mark product approval number: 00119005
Product brand name: FMV desktop series
Models: FMV6MLB120
FMV6MLB121
FMV6MLB160
FMV6MLB161



Green Product Evaluation Standard [essential criteria (16 items)]

Resource Conservation	Minimum recyclability of 75% for all parts Minimum recyclability of 70% by weight of all plastics weighing 25 g or more
Energy Saving	Compliance with Japanese legal energy consumption efficiency labeling requirements and related standards Compliance and registration with the International Energy Star Program Power-saving function
Recyclability	Capable of separation and disassembly into component materials or units, either by hand or with general-purpose tools Labeling of any plastic parts weighing more than 25 g Minimizing use of painting or coating on plastic parts weighing more than 25 g Clear labeling of products requiring nickel-cadmium (Ni-Cd) batteries; making batteries easily removable
Compliance with Hazardous Materials Regulations	Freedom of product and packaging materials from PCBs, asbestos or ozone-destroying substances Freedom of product and packaging materials from internally regulated hazardous materials such as alternative freons or halons
Environmental Information Disclosure	Attachment of warning labels to packaging to ensure proper disposal of products containing toxic substances such as cadmium or mercury
Packaging	Making packaging boxes only from recycled paper and eliminating surface treatment that prevents recycling Limitation of expanded polystyrene foam to a maximum of 10% of all packing materials by weight Use of only easily recyclable polyethylene or paper as materials for protective bags Marking of any plastic used as packaging weighing more than 20 g or greater than 200 cm ² in volume

“We are pursuing Green Product development centered on notebook PCs.”

“Our section is mainly concerned with PC development. We try to reduce the environmental burden of products throughout their life cycle. In fiscal 2000, we completed development of 41 models, bringing the total number of Green Products to 78. We will continue to design more Green Products that help save energy, conserve resources and include less chemical content and more recycled materials.”

Yuji Isobe Director, Platform Design Department, Mobile Computing Division



Green Product Evaluation Standard Revision

Fujitsu revised its Green Product Evaluation Standard in March 2001 to make all products “Green Products,” and divided it into common standards applicable to all products and five “specific standards” applicable to specific product groups.

Points of Revision

- Resources conservation: Improvement of designs to reduce resources consumption by increasing product durability and extending warranty periods
 - Hazardous chemicals: Expansion of internal regulations to prohibit use of hazardous materials in plastic components, printed circuit boards, etc.
 - Energy saving: Meeting all criteria deemed essential for those products marked as compliant with the Energy Saving Law or International Energy Star program
- Products must conform to both “common standards” and “specific standards” for five separate product groups.

Common Standards Applicable to All Products (27 items)

Resource conservation	Product durability *1	Ensuring expandable product structures that support function or performance improvements
	Product warranties *1	Extension of unconditional manufacturer’s warranties by six months, and of those for PC products by one year
	Reduction in product size, weight, parts number	10%+ reduction in product weight, size and parts number compared to past products, or 30%+ reduction per unit of performance
	Ratio of easily recyclable and recyclable plastics used *1	Achievement of a usage ratio of recyclable or easily recyclable plastics of at least 90% for products with a minimum of 25 g of plastic by weight
	Potential resource recyclability *1	Minimum use of potentially resource-recyclable parts of 75% of product weight; minimum use of 50% for products with LCD unit
Recyclable design	Plastic parts	Labeling of all plastic parts weighing more than 25 g, and/or parts with flat surface areas exceeding 200 mm ² Minimized painting or coating of any plastic parts weighing more than 25 g Elimination of PVC use in plastic parts
	Primary/secondary batteries	Products whose batteries are changed by the consumer: adoption of structures permitting battery exchange or removal Products whose batteries are not changed by the consumer: adoption of structures permitting battery exchange without complete PCB exchange
	Disassembly and separation capabilities *1	Permitting separation and disassembly into component materials or units by hand or with general-purpose tools Creation of manuals for equipment disassembly (effective April 2002)
Products containing chemicals	Plastics	Freedom of plastic parts from PBB, PBBO*2 or chlorinated hydrocarbons
	Printed circuit boards	Freedom of printed circuit boards from PBB, PBBO or chlorinated hydrocarbons
	Lead	Freedom of in-house manufactured products from lead solder (beginning January 2003)
Prevention of global warming	LCA	Assessment of product carbon dioxide emissions (effective October 2001)
Energy saving	Energy-saving function *1	Products to be equipped with an energy-saving function
	Power consumption	Reduction in average power consumption per unit of product performance from previous products
Environmental information disclosure *1		Inclusion in product documentation of information on waste product collection and recycling system
Manual		All documents to be produced using a minimum of 70% recycled paper
Packaging	Resource conservation	Use of a minimum of 70% recycled paper in boxes Over 5% reduction in packaging materials compared with previous products, or reduction of empty space to less than 30%
	Recyclable design	Elimination of all kinds of plastic attachments from paper materials
		Compliance of labels on packaging and plastic parts with the following standards: <ul style="list-style-type: none"> • Labeling of all plastic parts weighing more than 20 g (with polystyrene foam, those weighing more than 10 g) • Location of labels in easily perceptible positions
		Elimination of PVCs from plastic materials
Hazardous chemicals	Use of only easily recyclable plastics or paper as protective bag materials Freedom from PBB or PBBO	

*1 Not applicable to electronic parts or customer-specified products
*2 PBB: Polybrominated biphenyl; PBBO: Polybrominated biphenyl oxide

Green Product Labeling

Since November 1998, Fujitsu has labeled Green Products with an “Environmental Emblem,” both in catalogs and on packing boxes. Since fiscal 2000, a separate exclusive Fujitsu logo indicating compliance with fiscal 2005 original Energy Conservation Law standards has also been applied.



Expand the number of Green Products compliant with revised standards, such as electronic parts and communications equipment.

