

# Creating Eco-Friendly Products

Based on the "Green Products Evaluation Standard," an internal criterion developed to encompass global environmental measures, Fujitsu is working to develop more eco-friendly products.

## Development of eco-friendly products

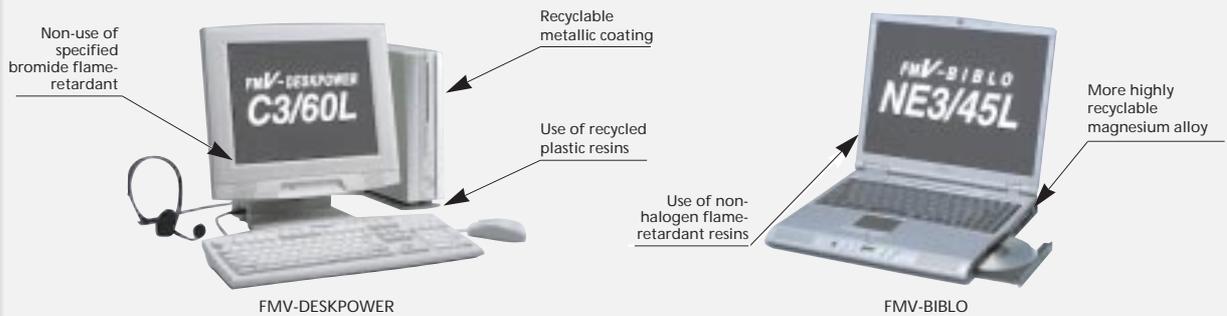
During fiscal 1999, Fujitsu developed a total of 96 products that passed the internal "Green Products" standard. This range included products as varied as ATMs, mobile telephones and servers. Since fiscal 1998, the cumulative total of such products has risen to 141.

### Green Products

● Desktop PCs .....	33 models
● Notebook computers .....	22 models
● Cathode-ray tube/liquid crystal displays .....	12 models
● Page printers .....	5 models
● Point-of-sale terminals .....	4 models
● Network equipment .....	2 models
● ATMs * .....	4 models
● IA servers * .....	4 models
● Scanners * .....	3 models
● Mobile telephones * .....	2 models
● Small magnetic disks * .....	2 models
● Opto-magnetic disks * .....	2 models
● Workstations * .....	1 model
	Total: 96 models

\* Indicates new product categories (total: 7)

### Examples of Green Products



- FMV-DESKPOWER**
- Recyclable metallic coating on electronic information equipment (an industry first)
  - Use of recycled plastic for PC legs
  - Non-use of specified bromide flame-retardant
  - Use of EcoMark approved recycled paper for manuals

- FMV-BIBLO**
- Use of more highly recyclable magnesium alloy in computers
  - Use of non-halogen flame-retardant materials on computer plastic covers
  - Use of EcoMark approved recycled paper for manuals

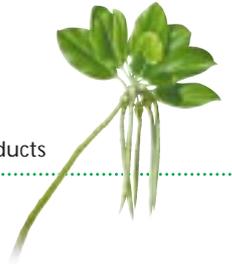
## Implementation of Product Environmental Assessments

Since January 1996, Fujitsu has applied an internal design standard to all new products to assess their eco-friendliness. This product environmental assessment covers 40 specific items. In fiscal 1999, 440 products received such assessment, aiding the development of a wide range of eco-friendly products (including word processors, supercomputers, road video detection equipment, and color plasma displays). To date, a total of 1,294 assessments have been carried out.

### Assessment items

● Compliance with environmental legislation .....	(9)
● Environmental protection .....	(1)
● Resource conservation .....	(2)
● Energy saving .....	(4)
● Recyclability .....	(6)
● Ease of processing and disposal .....	(4)
● Ease of collection and transportation .....	(1)
● Disclosure of information .....	(2)
● Packaging .....	(11)

The numbers in brackets indicate the number of criteria applied within each assessment item (total = 40).



**Comment**

Since we are mainly involved in the development of desktop computers, we are acutely aware of the importance of making Green Products to reduce the environmental impact of Fujitsu's operations. During fiscal 1999, we completed the development of a further 33 Green Products, bringing the cumulative net total to 48 models. We are continuing to work to reduce the power consumption of the products that we develop, and to use materials that are more highly recyclable or reusable.



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**Green Products Evaluation Standard [essential criteria (16 items)]**

**Resource conservation**

- Minimum recyclability of 75% for all parts
- Minimum recyclability of 70%, by weight, of all plastics used weighing 25g or more

**Energy saving**

- Compliance with Japanese energy-saving laws
- Compliance and registration with the International Energy Star Program
- Power-saving function

**Recyclability**

- Capable of being separated and disassembled into component materials or units with either hands or general-purpose tools
- Marking of any plastic parts weighing more than 25g
- Painting or coating of any plastic parts weighing more than 25g kept to a minimum
- Products requiring nickel-cadmium (Ni-Cd) batteries to be clearly marked; batteries must be easily removable
- Use of recycled paper for all packing boxes, without any surface processing that could prevent recycling

- Expanded polystyrene foam to be limited to a maximum of 10% of all packing materials by weight
- Use of only polyethylene or paper as materials for protective bags
- Marking of any plastic parts used as packaging weighing more than 20g

**Compliance with hazardous materials regulations**

- Absence from product or packaging materials of any externally regulated hazardous materials (such as asbestos or PCB, etc.)
- Absence from product or packaging materials of any internally regulated hazardous materials (such as tetrachloroethylene, trichloroethylene, etc.)

**Environmental information disclosure**

- All matters requiring special attention at time of final disposal to be clearly marked

Note: A further 27 more stringent criteria are being applied to the next generation of Green Product models.

**Use of "Environmental Emblem" to mark Green Products**

Since November 1998, to demonstrate the company's environmental credentials to a wider audience and to mark environmentally friendly products clearly, Fujitsu has been applying an internally designed "Environmental Emblem" to catalogs and packing boxes to delineate Green Products.



Example

**Adoption of internal hazardous materials standard**

With the objective of developing more environmentally friendly products, Fujitsu adopted a voluntary internal standard banning or restricting the use of a variety of hazardous chemicals. These rules come into force in the earliest stages of product design.

- Banned materials: PCB, asbestos, Polychlorinated Naphtalene, CFCs, specified halons, carbon tetrachloride, etc. (30 substances in total)
- Regulated materials: Cadmium, hexavalent chromium, arsenic, mercury, selenium, lead, HCFCs, HFCs, halogenated compounds, etc. (155 substances in total)

**Principal plans for fiscal 2000**

- Expand applicability of main Green Product lines  
Move into UNIX servers, system printers, etc.
- Improve Green Products Evaluation Standard  
Establish standards for each product, and make the standards stricter