

Environmental Measures for Products

We are accelerating the development of Green Products and Super Green Products and are working to reduce environmental burdens throughout the product life cycle.

Green and Super Green Product Development

The Fujitsu Group has adopted a unified Group-wide approach to eco-design for newly designed products and strives to improve environmental performance throughout the product life cycle. We have been implementing our own environmental assessments for products since 1993, and we develop eco-friendly products that reflect environmental considerations in such areas as energy saving, 3R design,* non-use of hazardous chemical substances, packing materials, and information disclosure.

In 1998, to further strengthen development of eco-friendly products, we established Green Product Evaluation Standards and positioned the products that satisfy them as Green Products.

Then, in fiscal 2004, we combined what had previously been two separate sets of regulations—for product environmental assessment and for Green Product evaluation—into a single set of standards with even higher levels of consideration for the environment. We called these Product Environmental Green Assessment Regulations, and they have helped to both strengthen our Green Product development efforts and make them more efficient.

Furthermore, since fiscal 2004, we have been working on what we call “Super Green Product” development for newly developed products. Super Green Products are those that meet the required conditions for Green Products and are also top class in terms of low energy consumption, 3R design and technology, non-use of hazardous substances, packing materials and use of eco-friendly materials and technologies. Super Green Products are products or systems with superior environmental characteristics than others we supply or are available on the market.

In fiscal 2005, we offered Super Green Products in 21 new product categories, for a cumulative total of 33 product categories.

* 3R design

Design based on the principles of reduce, reuse and recycle.

Carrying out Life Cycle Assessment (LCA)

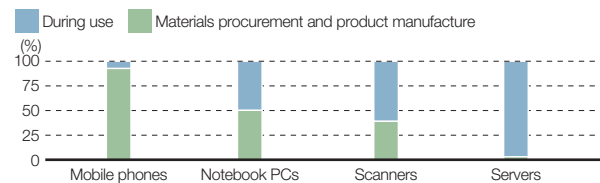
We carry out life cycle assessment (LCA) to evaluate Green Products and Super Green Products. Also, to respond quickly to industry or other organizations’ environmental labeling standards (see page 53), as well as to meet our customers’ procurement requirements, we reviewed our LCA evaluation

procedures and units of measurement, revising them and putting them into a database.

LCA enables us to perform granular analysis of a product’s environmental impact, such as determining whether products generate proportionally higher environmental burdens in the materials procurement or manufacturing stages, as well as which products consume large amounts of energy during use.

We carefully analyze the LCA data for each product category and use that analysis to advance environmentally conscious design that takes into account the particular characteristics of each one.

Comparison of Main Stages of CO₂ Emission



Super Green Product Development in Fiscal 2005

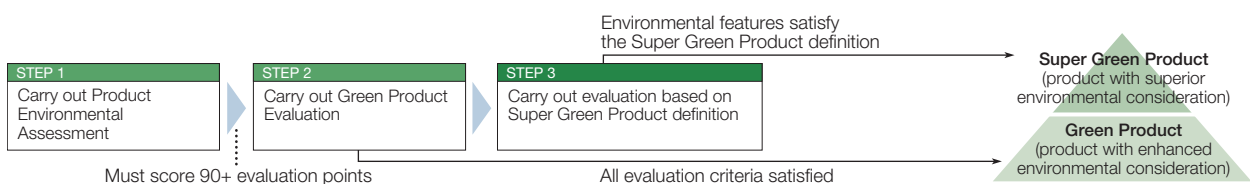
Fujitsu Limited (11 product categories)

- LSI packages
- IPCOM S2400 network server
- MAW3 series and MAX3 series magnetic disk drives
- Handy Drive magnetic disk drive
- PRIMERGY BX600 PC server
- W-CDMA wireless base stations
- FMV-BIBLO NB80L/NB80M/NB80R notebook PCs (3 product groups)
- FMV-C5200 desktop PC
- VL-153SS color LCD display

Consolidated subsidiaries and affiliates (10 product categories)

- CSSD Filter SAW filter (Fujitsu Media Devices Limited)
- MBH7BTZ20 Bluetooth module (Fujitsu Media Devices Limited)
- FRS1000 waste plastic recycling system (Fujitsu Automation Limited)
- MIPF Series compact chip components (FDK Corporation)
- Media Converter (compact MC71) access network equipment (Fujitsu Access Limited)
- GF Series office system desks (Fujitsu CoWorCo Limited)
- FTR-H3 power supply compact silent relay (Fujitsu Component Limited)
- TeamPoS3000 POS terminal (Fujitsu Frontech Limited)
- PalmSecure palm vein authentication unit (Fujitsu Frontech Limited)
- fi-5900C scanner (PFU Limited)

Mechanism for Green and Super Green Product Evaluation



Super Green Product Development Examples

World's First Bio-based plastic used in full-size notebook PC chasis FMV-BIBLO NB series



Environmentally friendly material:
Bio-based plastic used throughout* the chasis

* Except for plastic used in keyboard, mouse, one-touch function buttons, and a few other parts.

Chemical substances:
RoHS compliant

Bio-based plastic

This new polymer, jointly developed by Fujitsu Limited, Fujitsu Laboratories Ltd., and Toray Industries, Inc., is comprised of roughly 50% bio-based materials (polylactic acid primarily from corn and other plant starches), which reduces the usage of petrochemical resources. When used for the chasis of a notebook PC, CO₂ emissions for the whole life cycle of the chasis are reduced by about 15% compared to chasis made from conventional petrochemical-based polymers, thus reducing the environmental burden of the product.

Industry's First POS terminal to acquire EcoLeaf environmental label

TeamPoS3000 POS terminal



Environmental label:
The industry's first POS product to acquire third-party EcoLeaf environmental label certification

3R design technology:
Uses recycled plastic (in the main unit and the display's external shell)

Eco-friendly materials:
Uses bio-based plastic (for part of the multi-item electronic keyboard)

Chemical substances:
RoHS compliant

EcoLeaf Environmental Label certificate



Palm Vein Authentication Unit (PalmSecure)



3R design technology:
Size reduced by 75% from previous version

Chemical substances:
RoHS compliant

Eco-friendly materials:
Uses bio-based plastic (all structural components)

Media Converter (Compact MC71)



3R design technology:
Uses recycled plastic (all parts weighing 25g or more)

Achieves at least 50% faster disassembly time through screw-free structure

Weight reduced by 38% from previous products

Compact Silent Power Supply Relay (FTR-H3)



Quiet operation:
The world's first* silent compact-profile 10A1 relay (power "make" relay) with a product height of 19mm
Average acoustic pressure: 55 dB (previous model: 70 dB)

* As of April 10, 2006 (according to a Fujitsu study)

Image Scanner (fi-5900C)



Energy conservation:
Among best in the large-format scanner class

Eco-friendly materials:
Uses bio-based plastic for part of the paper ejection unit

Chemical substances:
RoHS compliant

Other:
Achieves a 55% reduction in CO₂ emissions compared to previous models through improvements in total processing capacity, including more efficient scanning operations.

LSI Packages



Chemical substances:
Lead-free, halogen-free, and antimony-free

Eco-friendly materials:
Uses bio-based plastic in embossed tape

Hard Disk Drives (MAW3 series and MAX3 series)



Energy conservation:
Energy efficiency significantly greater than previous products*

Chemical substances:
RoHS compliant

* MAW3300NC/NP: 0.0316 W/GB.

Environmental Measures for Products

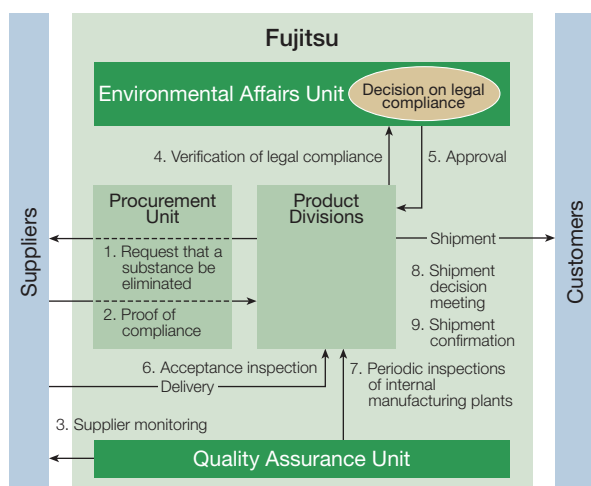
Elimination of Restricted Chemical Substances for Use in Products

In compliance with Japanese and international laws and regulations, we have drawn up a list of hazardous substances that must not be used in products or materials, and through our Green Procurement activities we are working to eliminate use of these specified substances. From April 2006 we began shipment of products that do not contain any of these Fujitsu Group-stipulated hazardous materials.

In fiscal 2005 we strengthened our internal systems to assure that our products are in compliance with the European Union's RoHS* directive, including, for example, measures to confirm that our product design procedural framework is able to verify that RoHS-specified substances are not included in the products we design.

* RoHS (Restriction of the use of certain Hazardous Substances in electrical and electric equipment), the European Union directive.

Framework for RoHS Directive Compliance



Disclosure of Environmental Information on Products

We actively disclose environmental information on our products, both via the Internet and in the form of environmental labels.

Disclosure of Environmental Information via Environmental Labels

We apply environmental labels to our product packing boxes, catalogs, and other materials in accordance with ISO14020 (the international standard for environmental labels).

Disclosure of Environmental Information on Products via the Internet

On the Fujitsu website, we actively disclose to our customers environmental information such as environmental labeling related to our products. In fiscal 2005 we created a new

content area for environmental information related to Fujitsu PCs sold in Japan.

Note that environmental information on our hard disk drives, displays, printers, and scanners that are subject to Japan's Green Procurement laws*1 are disclosed on the Green Procurement Network website*2.

*1 Green Procurement laws

Japanese laws affecting procurement on environmental grounds

*2 Green Procurement Network

This is a nationwide network in Japan encouraging consumers, enterprises and government to further green procurement

Environmental Labels

(Classification based on ISO14020 international standards concerning environmental labels)

• Type I

Label certifying approval by a third-party organization of environmental details concerning products for which voluntary application has been submitted by the manufacturer.

Eco-mark (Certified by the Japan Environmental Association)

Since becoming Japan's first desktop PC manufacturer to receive Eco-mark certification in January 2001, we have acquired certification for printers as well. <http://www.ecomark.jp/english/index.html>



• Type II

Label indicating that environmental details concerning products meet independent criteria set by the manufacturer.

Environmental Emblem

This is our own environmental label. It is indicated on Green and Super Green products for which special consideration has been given to environmental factors. http://www.fujitsu.com/global/about/environment/policy/emblem_1994.html



Energy-saving Labeling

This is indicated on products that meet the Law Concerning the Rational Use of Energy.



3R Eco-label for PCs

This label is used for PCs that meet Japan Electronics and Information Technology Industries Association standards. <http://www.jeita.or.jp/english/>



The International Energy Star Program

This logo is displayed for computers (PCs, workstations), displays, printers and scanners registered with the program. http://www.eccj.or.jp/ene-star/index_esu.html



• Type III

Label indicating a product's quantitative environmental burden throughout its life cycle.

In fiscal 2005, we acquired new certification for desktop PCs and POS terminals.

EcoLeaf Environmental Label (Certified by Japan Environmental Management Association for Industry)

In May 2003, Fujitsu became Japan's first notebook PC manufacturer to receive EcoLeaf environmental label certification. <http://www.jemai.or.jp/english/ecoleaf/index.cfm>

