Product Recycling

Advancing collection and materials recovery of end-of-life IT products through establishing and expanding recycling systems in Japan and overseas. Meeting our extended producer responsibility (EPR) to help create a recycling society.

Fujitsu Group Environmental Protection Program (Stage IV) Targets	
Overseas	• To establish recycling systems in Europe by the end of fiscal 2004, and in North America and Asia by the end of fiscal 2006.
Japan	• To increase the reuse and recycling rate of collected end-of life products in Japan to 90% by the end of fiscal 2006. • To increase the utilization rate*1 for recovered waste plastic for the Fujitsu Group in Japan to 20% by the end of fiscal 2006.

Fiscal 2004 Performance	
Overseas	• Each Fujitsu Group company in Europe has selected a system for recycling (individual or collective system) and logistics and recycling partners. Going forward, the companies will monitor and adjust their systems in accordance with regulatory developments.
Japan	• The resource reuse and recycling rate*2 reached 88.3%, up 1.7 points from the fiscal 2003 performance. • Separated plastics are recycled into goods for special events.

Overseas Activities

Establishing Recycling Systems Overseas

Overseas, the Fujitsu Group is establishing recycling systems, selecting logistics partners to collect end-of-life products and recycling partners to recycle these products.

Europe

Fujitsu Group companies in Europe hold a European Environmental Conference twice a year.

Through this conference, they have made their selection of partners, based on an understanding of the business situation of each Group company, the stances of industry organizations and the timing and contents of national laws

European Environmental Conference

in the various EU countries in accordance with the Waste Electrical and Electronic Equipment (WEEE) directive.

North America

A Fujitsu Group company in California has begun recycling of PC displays under the state government-led recycling scheme.

Looking the future, we will keep abreast of legislative changes as they occur, and we will be proactive in establishing recycling systems appropriate to the products we sell, the scale of our business and the nature of our sales channels.

Asia

Group companies in the Republic of Korea and Taiwan have already begun the recycling of PCs. In the future, they will expand their recycling systems. In the People's Republic of China as well, the demand for recycling of end-of-life IT products is increasing, and we will develop suitable recycling systems while taking local trends and relevant regulations into account.

Activities in Japan

Structure for Product Recovery/ Recycling in Japan

We use our seven recycling centers throughout Japan and a logistics network that covers the whole country to recover and recycle used IT products from corporate customers.

We are also intensifying our recovery and recycling efforts, having obtained approval from Japan's Ministry of the Environment to operate as a processor of industrial waste for wide-area recycling. We are recycling used computers from individual customers, recovering them through the joint industry recovery system operating in coordination with the Japanese Postal Service.

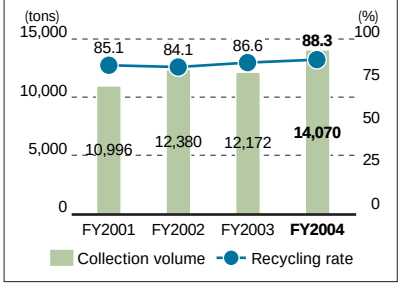
Collection and Recycling Performance

Due to such factors as the increase in ATM replacements based on the change to new currency notes in Japan, total collection of used IT products from corporate customers came to 14,070 tons in fiscal 2004.

The resource reuse and recycling rate rose to 88.3% up 1.7 points from the previous year's performance. This was due to intensified separation of plastic waste and the development of new uses for recycled material.

Because of the transfer of responsibility over recycling schemes from local governments to the manufacturer, recovery and recycling volume for used PCs from individual customers has shown a steady increase to 54,344 tons in fiscal 2004.

Trends in Collection Volume and Recycling Rate of Post-use IT Business Products



*1 Utilization rate: The ratio of the volume of recovered waste plastic material from post-use products reused in Fujitsu Group-developed products or fixtures to the total volume of waste plastic recovered from post-use products. Note, however, that plastic which contains halogen elements and plastic which is bonded to metal are not included in this calculation.

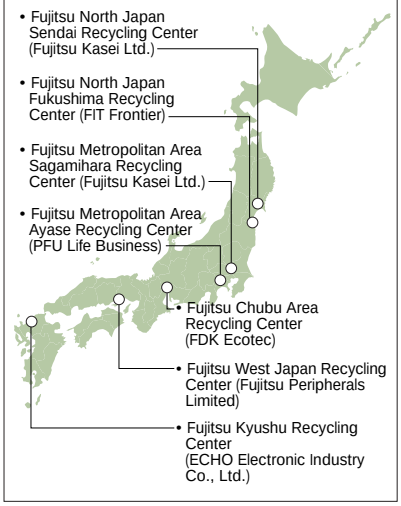
*2 Resource reuse and recycling rate: The ratio of reused parts and reused resources to the processed amount of used goods, based on a computational method produced by the Japan Electronics and Information Technology Industries Association.

Promoting the Reuse of Resources

Expanding Our Network of Recycling Centers

In February 2005, we established the Fujitsu North Japan Fukushima Recycling Center to further improve our recycling system and convenience for our customers.

Fujitsu Recycling Center Locations



Recycling with Corporate Partners

Recycling of Measurement Equipment

Making use of the Fujitsu recycling system, we have worked with Advantest Corporation to recover Advantest products (semiconductor testing devices and measurement devices), and helped to establish an Advantest Recycling System that began operations from August of 2004.

Toner Cartridge Recycling

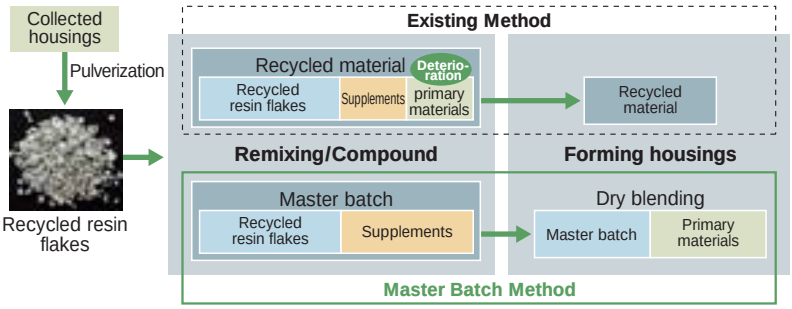
Fujitsu Limited and Fujitsu CoWorCo Ltd. now recover and recycle used consumable supplies for all Fujitsu brand laser printers for corporate use. Recovered toner cartridges are first examined and cleaned, then returned to the plants to be made into a recycled product.

Development of Recycling Technology

Material Recycling Technologies for Glass-fiber-reinforced Polycarbonate

Together with a glass fiber manufacturer, Fujitsu Limited and Fujitsu Laboratories Ltd. have developed a “master batch method”* for recycling the glass-fiber-reinforced polycarbonate used in notebook PC housings. The method enables the physical state of the material to be retained as a new notebook PC housing is manufactured.
We can thus reduce the energy used for material procurement by using the recycled material in creating our products. As a result, carbon dioxide emissions over the whole product life cycle are cut by about 20%.

* Master batch method: A method in which deterioration of materials is avoided by adding supplements in with the recycled resin flakes from the very start, producing compounded pellets and blending this in with primary materials during casting.

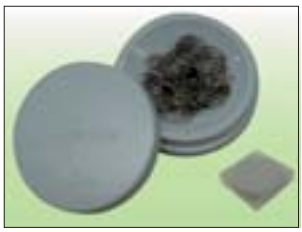


Promoting the Upgrading of Plastic Separation and Recycling

We have upgraded our waste separation, introducing a special discrimination device in our recycling centers that can distinguish not only between qualities of plastic but also whether flame-resistant material is included or not.

Separated plastic is also recycled into goods for special events, like Eco clip cases and fans.

Fan



Eco clip

Designing an Electronic Monitoring System for Dismantling Procedures

We have developed a web-based system that provides Fujitsu recycling centers with information about procedures for dismantling of and disposing of used Fujitsu products in an appropriate manner. This system provides a manual for dismantling procedures given in an animated form, together with product recycling information, such as the chemical substances included, the materials used in plastic parts, and units that still retain customer data.

Fortifying Our Measures to Prevent Leakage of Customer Data

In order to prevent the leaking of customer data from recovered products, the Fujitsu recycling system makes use of software and powerful magnets that can delete all data, and specialized equipment that can physically destroy specified components.