Operating a nationwide network to convert post-use products into resources and pursuing development of new recycling technologies

Fully aware of our wide-ranging responsibilities as a producer (EPR), we are actively retrieving post-use products from corporations, promoting post-use product collection and converting these products back into resources. We have also developed original technologies for recycling waste plastics and magnesium alloy. Through this integrated approach, we are doing our part to contribute to establishment of a resources cyclical society.

Overview of the Fujitsu Recycling System

Our recycling network in Japan, which is linked to our national distribution network, comprises five recycling centers organized to collect post-use products from corporations and convert them into new resources. We collected 12,380 tons of post-use products and achieved a resources reuse rate of 84.1% in fiscal 2002. This result represented a decline of 1% in the resources reuse rate compared with the preceding year owing to a rise in the volume of waste plastic comprising unidentified materials collected. We are installing more identification machines for waste plastic materials with the intention of raising the resources reuse rate.

Recycling Technology Development

Semi-closed recycling of waste plastics

Industry first: Collection by maker itself of PC cases and recycling of resin for reuse in notebook computers

Fujitsu, Fujitsu Kasei and Fujitsu Laboratories have developed a new recycling system for reuse of ABS resin from post-use PC bodies (cases) as a material for making new notebook PC cases in cooperation with UMG ABS, Ltd., a major materials maker conducting ABS resin production. Already applied in product manufacturing, the new recycling system is a semi-closed system combining closed recycling and open recycling. By blending and adjusting recycled resources collected by our recycling centers (closed materials) and recycled resources procured by UMG ABS, Ltd. (open materials), we have succeeded in ensuring a level of performance that compares favorably with case manufacture using only primary materials. This represents another step forward in promoting reuse of resin from cases collected from customers.
Reuse of in-house recycled magnesium alloy in notebook computers

World’s first: Realization of burden reduction, with a CO2 conversion ratio approximately 1/5 that of the molding process used previously

The Fujitsu Group became the first in the world to achieve practical application of a technology for recycling magnesium alloy from the cases of notebook computers collected in-house and began employing the technology in product manufacturing in the autumn of 2002. We plan to extend the application of this technology, which reduces the CO2 conversion ratio to approximately 1/5 that of conventional molding processes, to recycling of as many magnesium alloy cases as we can collect from customers.

Customer data leakage prevention

Fujitsu prevents leakage of customer data, either by using software to erase the data or employing a special machine to destroy the disk physically. We have standardized these procedures and are educating operators in their full application. We have also established a system to respond to customer requests for physical destruction or complete erasure of data from memory media such as magnetic tapes and floppy disk drives.

Recycling of printer consumables

Fujitsu and Fujitsu CoWorCo have established a joint system for collection and recycling of all post-use consumables from corporate-use Fujitsu laser printers at no charge to the customer. Under the system, which is already in full-scale operation, toner cartridges are returned to a Fujitsu manufacturing plant after inspection and cleaning for incorporation into the production process.

Recycling of magnesium alloy cases (environmental burden reduction to approximately 1/5 that of cases made from primary materials)

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European recycling system construction

The European Union member nations are currently developing legislation in response to the EU’s Waste Electrical and Electronic Equipment (WEEE) instructions implemented in February 2003. Fujitsu and the Fujitsu Europe Group bases have moved ahead of the individual countries’ legislation to develop an optimal structure for a European recycling system and are currently cooperating in concrete preparations. We intend to pursue the system’s construction, keeping in mind the necessity of maintaining information exchange with IT industry organizations in the various countries and making effective use of the know-how in recycling systems cultivated in Japan over the years.

Principal Plans for Fiscal 2003

• Since there are many waste plastics with an unidentified material makeup among those collected, we will install material identification machines in each recycling center and implement thorough separation and removal of impurities (metal, etc.) after dismantling to improve the resources reuse rate.
• Concrete efforts to establish an optimal recycling system for the various European countries