

## Creating a system for recycling and reusing waste materials as resources

In order to reduce the amount of waste that is produced from railway and life-style business, JR East is reducing waste, reusing resources and recycling waste into resources.

### Operation of recycling centers

JR East has set up our own recycling centers in the Tokyo metropolitan area, where an extremely large amount of waste is collected from our stations and trains, at three locations (Ueno Station, Omiya and Shin-kiba). In fiscal ended March 2008, the recycling centers at Ueno Station and in Omiya collected 5,354 tons of cans, glass bottles and PET (polyethylene terephthalate) bottles in our stations in the Tokyo metropolitan area and Saitama Prefecture. This collected waste was then sorted, compressed, and sent to recycling contractors. Meanwhile, 6,908 tons of newspapers and magazines collected at the recycling center in Shinkiba were sent to paper factories and recycled into copy paper. These recycling centers are operated by East Japan Eco Access Co., Ltd., a JR East group company.



Omiya Recycling Center sorts and compresses cans, glass bottles and PET bottles.

### Initiatives at offices

JR East is taking steps to make our head office and branch offices "paperless," and to reduce and recycle the waste that they generate. In fiscal ended March 2008, our thoroughgoing efforts to sort waste made it possible to recycle 2,253 tons of waste, which accounts for 78% of the total of 2,895 tons generated at our offices.

### Initiatives in the life-style business

The JR East Group is actively working to reduce or recycle waste generated at stations and station buildings. Ekiben (box lunch) maker and vendor, Nippon Restaurant Enterprise Co., Ltd., for example, is operating a system to recycle and reuse food waste. It uses food waste generated in shops and their factory (Toda, Saitama Prefecture) to produce compost in the Food Recycle Center and uses it in their organic recycling farm (Tomobe, Ibaraki Prefecture). Vegetables and other agricultural produce are used as ingredients of boxed lunch in shops and their factory. Moreover, efforts to reduce and recycle raw garbage are under way on in many station buildings. For example, Kichijoji Lonlon, operated by The EKIBIRU Development Co. Tokyo, has installed a dryer facility for compositing inside the building, while the Granduo Tachikawa store, operated by JR East Department Store Co.,Ltd., sells its own-brand compost made from waste generated in the station building.



Organic recycling farm (Tomobe)



Vegetables (taro) harvested in an organic recycling farm

### Efficient use of water resources

As JR East uses 11.86 million m<sup>3</sup> of water annually, we actively use recycled wastewater (\*1), such as rainwater and water used for washing hands, to flush toilets. In fiscal ended March 2008, out of 45 thousand m<sup>3</sup> of water used in our Head Office building, 21 thousand m<sup>3</sup> were reused.

\*1 Recycled water

Water categorized in between clean water and sewage water; recycled water used for limited purposes.

### Joint efforts with customers to reduce load on environment

In Japan 30 billion plastic shopping bags are discarded after use per year. NEWDAYS stores, operated by JR East Retail Net Co., Ltd. are striving to reduce the use of plastic bags by asking customers if they really need them. Another effort is to reduce the thickness of the plastic by 2 to 5 microns.

Atre Meguro and others operated by The EKIBIRU Development Co. Tokyo run "No, Plastic Bag" campaigns, while Granduo Tachikawa store operated by JR East Department Store Co., Ltd. promotes simple packaging. JR East is thus striving to reduce environmental impact with help of customers.

### Reducing and recycling train tickets

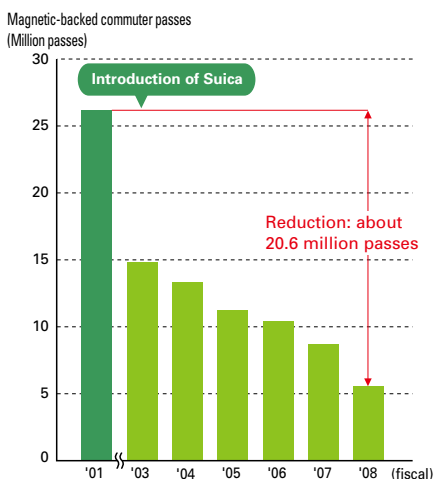
IC Suica fare cards are effective in reducing waste generation. Suica eliminates the need to purchase tickets, can be used repeatedly and contributes to saving a great deal of resources. The more Suica is used, the more the waste is reduced. To discourage customers to throw away the card after use, they are required to pay a deposit when they buy Suica for the first time. The increase in Suica users also leads to a reduction in the number of magnetic-backed commuter passes issued. The annual issuance of magnetic-backed commuter passes in fiscal ended March 2008 was about 20.6 million passes fewer than that in fiscal ended March 2001, which was before the introduction of Suica.

Almost 100% of used tickets and magnetic-backed commuter tickets are recycled.

Used railway tickets collected are sent to paper factories for separating paper from iron powder on their back. In fiscal ended March 2008, all of the 536 tons of used tickets were sent to the factories and recycled into toilet paper and cardboard.

All magnetic-backed commuter passes used and collected are utilized as solid fuel.

### Number of magnetic-backed commuter passes issued



### Green procurement

In line with our Green Procurement Guidelines established in 1999, JR East strives to procure materials with low environmental impact and encourages our suppliers to use recycled materials and reduce waste.

Since fiscal ended March 2001, we have used uniforms made of polyester fiber that is recycled from PET bottles. Additionally, 54% of items used at our offices are those covered by the Law on Promoting Green Purchasing, and recycled paper accounts for 99% of all copy paper used in our company.

We gather information on the efforts for the environment and CSR by our suppliers, and use it as one of the factors to be considered in selecting suppliers.



Uniforms made of polyester fiber recycled from PET bottles and other sources.



Newspapers collected at stations are recycled into copy paper, which JR East buys for in-house use.

### Use of waste collected in stations and recycled

JR East is making efforts to expand the cyclical use of waste collected in stations, not only by recycling it, but also by reusing it in our company.

For example, paper recycled from train tickets is utilized as toilet paper at major stations in the Tokyo metropolitan area.

Also, magazines collected from separate refuse bins at our stations and trains are recycled into coated paper, which is then used to produce Tranvert, an informational magazine made available to passengers on Shinkansen trains. Newspapers are collected and recycled into copy paper and used at JR East offices.



Used tickets collected at stations are recycled and returned finally to major stations in the Tokyo metropolitan area as toilet paper.



Tranvert, an information magazine placed in Shinkansen cars, uses recycled paper from magazines discarded in stations and passenger cars.