JR East is recycling and reusing waste materials as resources

A great deal of waste is produced from railway business and lifestyle business. JR East is making efforts to help build sound material cycles by taking three approaches: reducing waste as much as possible, reusing resources repeatedly, and recycling waste into resources.

Turning Waste into Usable Resources

Recycling goals are set for each type of waste

JR East generates many kinds of waste through our railway operations, such as daily trash removed from trains and stations and industrial waste from our General Rolling Stock Centers. In addition, restaurants and retail stores in our lifestyle business produce garbage and general waste. In fiscal 2006, the JR East Group generated 640 thousand tons of waste, 77% of which was reused or recycled.

The amount of waste from construction projects, which are the largest source of waste, varies from year to year with changes in the extent and type of construction. Accordingly, JR East does not set a target for the amount of waste, but sets a target recycling rate for each waste category, and strives to achieve it.

For general waste, the JR East Group is aiming at achieving a recycling rate of 43% by fiscal 2008, and has already reached 43% in fiscal 2006.

Recycling waste collected from stations and trains

On the average, approximately 16 million passengers use JR East's trains daily. In fiscal 2006, waste collected from our stations and trains amounted to 45 thousand tons, which is equivalent to the amount of household waste generated by 110 thousand people per year in Japan. Since waste collected from our stations and trains includes recyclable materials such as newspapers, magazines and cans, we endeavor to properly sort it and recycle it. JR East has installed separate refuse bins for different types of waste at stations, and established our own recycling centers in the Tokyo metropolitan area to ensure thorough sorting of waste after it has been collected

We set the recycling target at 45% to be met by fiscal 2008. In fact, we have already achieved the target and were at 50% in fiscal 2006.

Operation of recycling centers

JR East has set up our own recycling centers in the Tokyo metropolitan area, where the amount of waste collected from our stations and trains is extremely large, in three locations (Ueno Station, Omiya and Shin-kiba). In fiscal 2006, the recycling centers at Ueno Station and in Omiya collected 5,076 tons of cans, glass bottles and PET (polyethylene terephthalate) bottles from our stations in the Tokyo metropolitan area and Saitama Prefecture, which were then sorted, compressed, and sent to recycling contractors. Meanwhile, 6,780 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 is sorting and compressing cans, bottles and PET bottles.

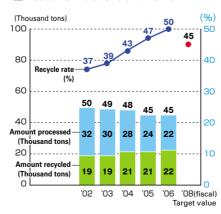
Recycling initiatives at General Rolling Stock Centers, etc.

JR East Group is recycling waste generated during the manufacture and maintenance of rolling stock. At Niitsu Rolling Stock Manufacturing Factory where commuter and suburban trains are manufactured, we promote waste reduction and recycling by taking into account the railcars' entire life cycle from designing to disposal. Also, to reduce waste and improve recycling, regional General Rolling Stock Centers, where rolling stock is maintained and repaired, sort waste into 20 to 30 categories and send it to specialized waste disposal contractors. We are thus making efforts to improve the recycle ratio by thorough sorting. Starting in fiscal 2005, we have included our retired railcars that were sold to outside parties and later scrapped as part of the quantities recycled by the JR East Group when calculating our recycle rates.

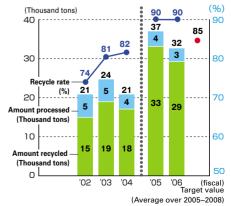


At Nagano General Rolling Stock Center, retired wheels are recycled into brake disk parts.

Waste from stations and trains



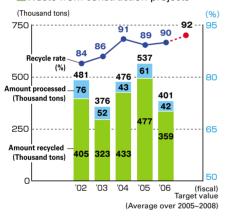
Waste from General Rolling Stock Centers



Reducing construction waste

Although Japan's Waste Disposal and Public Cleansing Law treats subcontractors as the generators of waste from subcontracted work, we, as an organization that orders this work, strive to reduce the amount of waste that they generate by preparing civil engineering specifications that require subcontractors to properly dispose of construction byproducts, and use designs and construction methods to minimize waste In fiscal 2006, JR East generated 401 thousand tons of waste through construction and maintenance projects at our stations and other structures, including 75 thousand tons of waste through work entrusted to JR East. *1

Waste from construction projects



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 2006, our thoroughgoing efforts to sort waste into various categories made it possible for us to recycle 2.219 tons of waste, which accounts for 72% of the total of 3,089 tons generated at our offices

Initiatives in the lifestyle **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 food waste. Under this system, food waste is recycled into compost, which is later used in its own organic recycling farm and contracted farms. Then, vegetables grown in these farms without using pesticides and chemical fertilizers are used as food ingredients in restaurants. Meanwhile, efforts to reduce and recycle raw garbage are going on in many station buildings. For example, Kichijoji Lonlon Co., Ltd. has built a compost facility in its station building, and the Granduo Tachikawa store sells its own-brand compost made in the station building.



Vegetables (taro) harvested from an organic recycle

Efficient use of water resources

As JR East uses 11.89 million m³ of water annually, we actively use recycled wastewater *2, such as rainwater and water used in washing hands, to flush toilets. Out of 42 thousand m³ of water used in our Head Office building, 21 thousand m³ were reused in fiscal 2006.

Joint efforts with customers to reduce load on environment

Today in Japan 30 billion plastic shopping bags are discarded after use. Our NEW-DAYS stores, operated by JR East Retail Net Co., Ltd. *3, are trying to reduce this waste from plastic shopping bags by asking customers if they really need them and by reducing the thickness of the bag by 2 to 5 microns

Also, we distributed Suica Eco Bags made of cloth to the first 200,000 customers to arrive to commemorate the 5th anniversary of the introduction of Suica. After the distribution, we ran a campaign to give credit points to those customers who would continue to use the Suica Eco Bags in order to encourage their continued use and to help reduce the number of plastic shopping

At other station buildings, Perrie Chiba/Inage and Merrina Nishichiba are offering discounts by means of stamp cards to customers who bring their own bags. Granduo Tachikawa is promoting simpler wrapping by designating the 5th day of each month as Smart Wrapping Day.





NEWDAYS, a station convenience store chain, is carrying out a campaign to reduce the number of plastic shopping bags used and to reduce their thickness.

Reducing and recycling train ticket waste

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. As Suica is used more, the waste reduction is increased. To discourage customers from throwing away the card after use, they are required to pay a deposit when they buy their first Suica. The increase in Suica users also leads to a reduction in the number of magneticbacked commuter passes issued. The annual issuance of magnetic-backed commuter passes in fiscal 2006 was about 17.1 million passes fewer than that in fiscal 2000, 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 iron powder on their back from paper. In fiscal 2006, all of the 640 tons of used tickets sent to the factories were recycled into toilet paper, cardboard, and business cards.

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

Number of magnetic-backed commuter

Reduction: about 17.1 million passes

passes issued Magnetic-backed commuter passes

(Million passes)

30

25

20

15

10

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 2000, we have used uniforms made of polyester fiber that is recycled from PET bottles. Additionally, 51% of items used at our offices are covered under the Law on Promoting Green Purchasing, and recycled paper accounts for 99% of all copy paper used in our company.

We gather information on environmental and CSR efforts taken by our suppliers, and use it as a factor in selecting desirable suppliers.

Cyclical use of waste collected from stations

JR East is making efforts to expand the cyclical use of waste collected from 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, and as business cards for our employees.

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 collected are recycled into copy paper and used at JR East offices.



bottles and other sources





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



Used tickets collected at stations are returned to major stations in the Tokyo metropolitan area as toilet



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