

How is the JR East Group working to create a sound material cycle?

JR East is making efforts to help build a sound material cycle society by taking such upstream approaches as *reducing* the amount of resources that we consume, *reusing* resources as long as possible to prevent them from becoming waste, and *recycling* waste.

Measures to create a sound material cycle

Waste recycling

JR East generates various types of waste, such as general waste from trains and stations and industrial waste from our General Rolling Stock Centers, through our railway operations. In addition, restaurants and retail stores in our lifestyle business also produce garbage, general waste, and other waste.

In fiscal 2005, the JR East Group generated 770,000 tons of waste, and 79% of the waste was reused or recycled. Regarding industrial waste produced through construction projects, the largest source of waste at the JR East Group, we are taking various measures by setting recycling targets for each waste category, because the amount of waste varies from year to year in accordance with changes in the scale of projects. As for general waste, the JR East Group is aiming at achieving a recycling rate of 43% by fiscal 2008, and has already reached the rate of 42% in fiscal 2005.

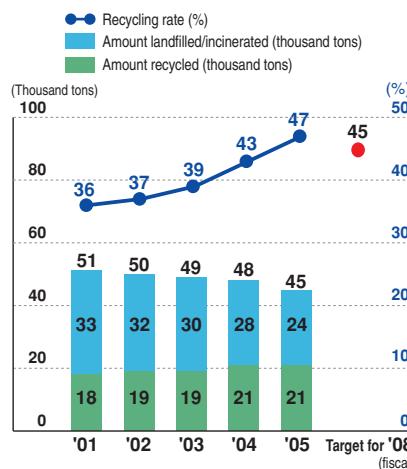
Recycling waste collected from stations and trains

Approximately 16 million passengers use JR East's trains daily. In fiscal 2005, waste collected from our stations and trains amounted to 45,000 tons, which is equivalent to the amount of household waste generated by 110,000 people per year in Japan. Since waste collected from our stations and trains includes recyclable materials such as newspapers, magazines and cans, it must be properly sorted and recycled. JR East has installed separate refuse bins for different types of waste at stations, and established our own recycling centers to ensure sorting of waste after it has been collected. Although we had set the recycling target at 45% to be met by fiscal 2008, we have already achieved the target and were at 47% in fiscal 2005.

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. East Japan Eco Access Co., Ltd. operates recycling centers in three locations (Ueno Station, Omiya and Shin-kiba). In fiscal 2005, the recycling centers at Ueno Station and in Omiya collected 4,257 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, 4,937 tons of news-papers and magazines collected at the recycling center in Shinkiba were sent to paper factories and recycled into copy paper in fiscal 2005.

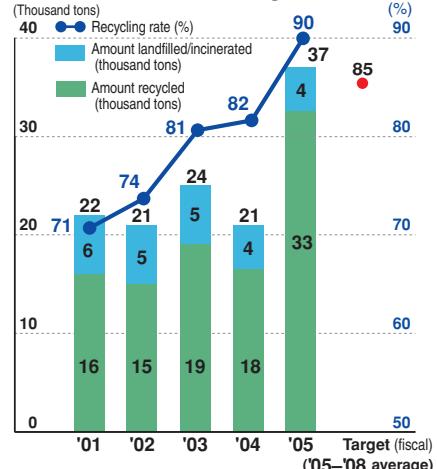
Waste from stations and trains



Recycling initiatives at General Rolling Stock Centers, etc.

JR East manufactures commuter and suburban trains at the Niitsu Rolling Stock Manufacturing Factory, and overhauls and repairs railcars at our General Rolling Stock Centers. To further promote waste reduction and recycling, we are fully taking into account the railcars' entire life cycle from their designing to disposal. Our General Rolling Stock Centers are also making efforts to improve their recycling rates by sorting waste into 20 to 30 categories, and sending each to specialized waste disposal contractors. Starting from fiscal 2005, we have included our retired railcars that were sold to outside parties and later scrapped into the amount recycled by the JR East Group when calculating our recycle rates.

Waste from General Rolling Stock Centers



The recycling center in Shinkiba handles newspapers and magazines

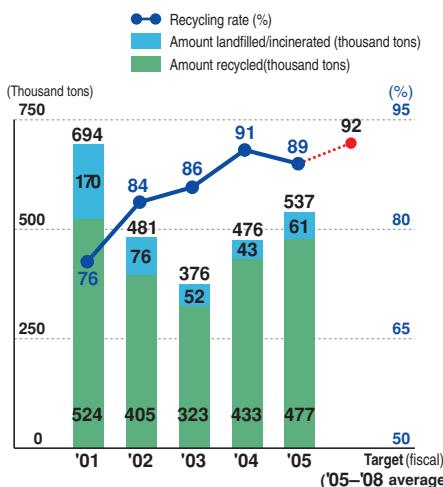


The Niitsu Rolling Stock Manufacturing Factory obtained ISO14001 certification in 1999, the first time for an on-site division in Japan's railway industry.

Reducing construction waste

In fiscal 2005, JR East generated 537,000 tons of waste through construction projects at our stations and other structures, including 120,000 tons of waste through entrusted work^{*1}. Although Japan's Waste Disposal and Public Cleansing Law deems waste through subcontracted work to be generated by subcontractors, as an ordering party of these works, we also strive to reduce the amount of waste generated by them by preparing civil engineering specifications that require them to properly dispose construction

► Waste generated through construction projects



byproducts, and use designs and construction methods to minimize waste.

Initiatives in the lifestyle business

The JR East Group is endeavoring to reduce or recycle waste generated at stations and station buildings.

Lunch-box maker and vendor Nippon Restaurant Enterprise Co., Ltd., for example, has established a system to recycle food waste. Under this system, food waste generated at its lunch-box factories is recycled into compost, which is later used in its own organic recycling farm and contracted farms. Then, vegetables grown in these

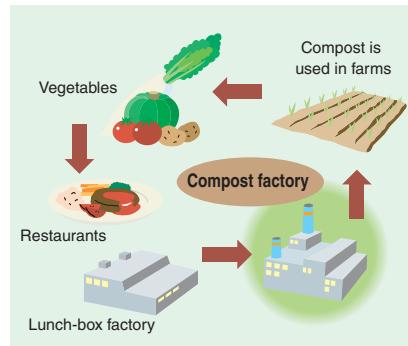
farms without using pesticides and chemical fertilizers are used as food ingredients in restaurants.

Meanwhile, Kichijoji Lonlon Co., Ltd. has built a compost facility in its station building, and the Granduo Tachikawa sells own-made compost in its station building.

Initiatives at offices

JR East is taking various steps to make our offices "paperless" and recycle waste that our offices generate. In fiscal 2005, our efforts to sort waste into various categories made it possible for us to recycle 1,847 tons of waste, which accounts for 63% of a total waste of 2,912 tons generated at our offices.

► Mechanism of food waste recycling



Recycling at the JR East General Education Center

With the aim of coexisting with local communities, the JR East General Education Center has recycled food waste generated at its cafeteria into compost, which is later provided to local farmers.

Nippon Restaurant Enterprise Co., Ltd., which caters meals to the center, is also taking various measures when deciding menus and procuring food ingredients in order to reduce food waste. Meanwhile, the JR East Facility Management Co., Ltd., which maintains and manages garbage treatment equipment, has been

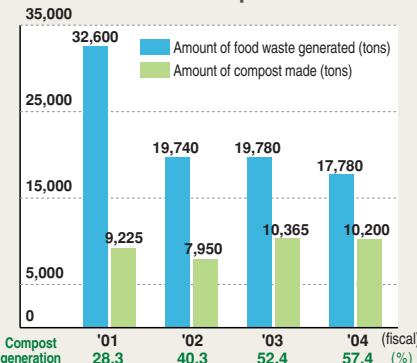
successfully raising compost generation rates year after year at its Shin-Shirakawa Center, by lowering equipment failure rates and improving equipment management methods.

Compost recycled from food waste through these efforts is well received by local farmers for its high quality.



Compost recycled from food waste.

► Amount of food waste generated and amount of compost made



*1 Entrusted work

Construction work at non-JR East facilities that local governments have entrusted to JR East in order to ensure safe train operations.

*2 Recycled wastewater

Rainwater or used water that is not suitable for drinking but still reusable for some purposes.

Reducing train ticket waste

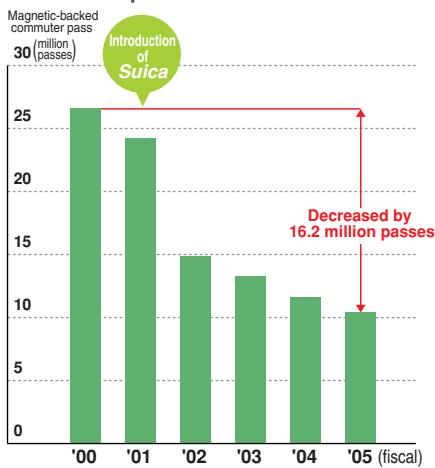
For the purpose of reducing train ticket waste, JR East is endeavoring to recycle train tickets and magnetic-backed commuter passes while promoting the popularization of our IC *Suica* fare-card that can be reused many times.

Train tickets collected are sent to paper factories for separating iron powder on their back from paper. In fiscal 2005, 666 tons of all train tickets sent to the factories were recycled into toilet paper, cardboard, and business cards. In addition, all magnetic-backed commuter passes used and collected are utilized as solid fuel.

Meanwhile, more widespread use of reusable *Suica* could eventually save resources. In order to prevent our customers from throwing the card away after use, they are required to pay a deposit at the time of purchase.

An increase in *Suica* users helps reduce the number of magnetic-backed commuter passes issued. The annual issuance of magnetic-backed commuter passes in fiscal 2005 was about 16.2 million passes fewer than that in fiscal 2000, which was before the introduction of *Suica*.

► The number of magnetic-backed commuter pass issued



Green procurement

In line with our Green Procurement Guidelines established in 1999, JR East strives to procure materials with low environmental impacts 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, 44% 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 have also gathered information about environmental and CSR efforts taken by suppliers, which is then used as an indicator for 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. 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. Newspapers collected from separate refuse bins at our stations are recycled into copy paper to be used at our offices. In addition, we recycle used magazines into coated paper, which is then used to produce *Tranvert*, a magazine for Shinkansen passengers.



Newspapers collected from our stations are recycled into paper at paper factories.



JR East purchases and uses recycled paper as copy paper.



Toilet paper recycled from used train tickets is utilized at major stations in the Tokyo Metropolitan Area.



Tiles recycled from glass bottles are used at the poolside of Jexer in Ueno, a sports club run by our Group company.