







Measures for resource circulation

■Waste reduction and recycling

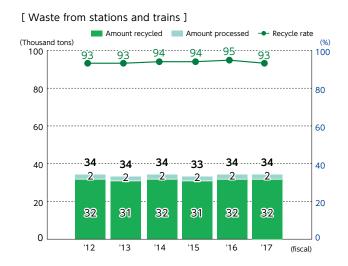
JR East generates many kinds of waste through its railway operations, including daily general trash removed from trains and stations and industrial waste from our General Rolling Stock Centers. Restaurants and retail stores in our lifestyle businesses also produce garbage and general waste. In order to reduce all these various forms of waste, JR East actively supports the approach known as "reduce, reuse, and recycle." For recycling in particular, goals are set for each type of waste.

■Recycling waste collected from stations and trains **

Since trash from stations and trains contains recyclable materials, we placed separation bins in stations to have customers cooperate in separating trash. In October 2010, to further improve recycling rates by implementing thorough separation of trash, we built the JR East Tokyo Materials Recycling Center (operated by East Japan Eco Access Co., Ltd.) and started its operation.



JR East Tokyo Materials Recycling Center



Recycling trash within the company

JR East promotes in-company recycling of trash generated at stations. Magazines, newspapers and similar paper items collected from our segregated trash boxes at stations and trains are being recycled into coated paper and stationery and used in our offices.





Newspapers and other papers collected in stations and elsewhere are recycled into office paper used by our company.









■Reducing waste at offices☆

In departments at the Head Office and Branch Offices, we strive to reduce waste by promoting elimination of paper and by recycling, including the use of creative, employee designed trash cans. In FY2017, we recycled 1,728 tons out of a total of 2,159 tons of waste (80%).



Separate trash bins for different types of trash (inside Chiba Branch Office)

■ Taking Part in Initiative to Recycle Food Waste into Biogas

In August 2016, the JR East Group entered the food recycling business with J Bio Food Recycle Co., Ltd., established as a joint venture with JFE Group.

The Yokohama facility scheduled for completion in the summer of 2018 will receive up to 80 t of food waste per day from across the city, including JR East Group stations and station buildings, convert it into biogas via a methane fermentation process, and generate power. It is projected to generate enough renewable energy to power 3,000 households, and it will also make efficient use of some waste heat inside the facility.



J Bio Food Recycle Yokohama Facility

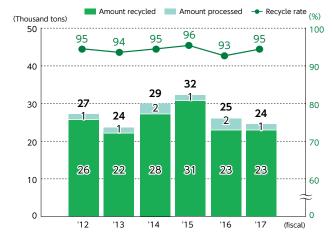
Recycling waste PET bottles into civil engineering materials

JR East has constructed a recycling system that produces resin weed-barrier sheets (product name: Nakusa R-PET) by recycling the PET (polyethylene terephthalate) bottles discarded in stations and trains. The main ingredient for resin weed-barrier sheets used to be polyethylene, but JR East has developed and commercialized a weed-barrier sheet composed mainly of waste PET bottles after tests were successful and in 2009 put it into practical use.

■Recycling at General Rolling Stock Centers☆

JR East Group is recycling waste generated during the manufacture and maintenance of rolling stock. At our regional General Rolling Stock Centers, waste is sorted into 20 to 30 categories to reduce waste generation and promote recycling. Starting in FY2006, we have been collecting data on the volume of retired railcars that are sold as scrap to be recycled so as to monitor the progress.

[Waste from General Rolling Stock Centers]









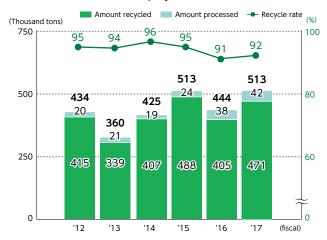
■Reducing construction waste[☆]

JR East endeavors to reduce waste from construction by standardizing design and construction methods that help to properly dispose of construction byproducts and to minimize waste.

JR East reduced waste from construction and maintenance works at stations and other structures. including approximately 72 thousand tons of waste from work entrusted to JR East*.

*Work entrusted to JR East Construction work contracted to JR East by local governments etc., to be done at non-JR East facilities, for such purposes as to ensure safe train operations.

[Waste from construction projects]



■Efficient use of water resources☆

As a consumer of 10.88 million m³ of water annually, JR East actively promotes the use of recycled waste water*, using, for example, rainwater and water already used for washing hands to flush toilets. At the Head Office building, 25 thousand m³ out of 33 thousand m³ of water was reused in FY2017.

*Recycled waste water Defined as water of a quality level between clean water and sewage water. It is used for limited purposes as a recycled resource.

■Reducing and recycling tickets☆

Collected used tickets are sent to a paper mill. After the iron powder has been separated from the backs of the tickets, the paper is recycled to make toilet paper and corrugated cardboard. In FY2017, all of the 292 tons of collected tickets were recycled. Collected magnetic season tickets were recycled into solid fuel.



Used tickets collected at stations are recycled into toilet paper.





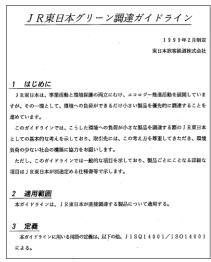




Promoting green procurement

JR East is procuring products with lower environmental impact. As part of those efforts we formulated the "JR East Green Procurement Guidelines" in 1999. Outlined in these guidelines is our philosophy with regard to materials, conservation of resources, and packaging.

We also are promoting the procurement of environmentally friendly office supplies.



JR East Green Procurement Guidelines

■CSR Procurement

With regard to selecting suppliers for material procurement, we have published a Code of Conduct Regarding Material Procurement of JR East on our website, which states that we focus on the fulfillment of our corporate social responsibilities when procuring materials by considering factors such as legal compliance and environmental preservation. We also request that all our suppliers comply with the relevant laws and regulations and seek to reduce their environmental footprint.

In addition, we seek to understand the current status of all material-related suppliers by conducting a survey of their CSR initiatives once a year, as a rule, which indicates whether or not they are implementing initiatives relating to green procurement and environmental footprint reduction, initiatives that consider employees' human rights, other compliance initiatives that have an impact on society, and so forth. The results of these surveys are used as one of our decision-making criteria when selecting suppliers.

> Reference: Code of Conduct Regarding Material Procurement of JR East (on our corporate website)

https://www.jreast.co.jp/e/data/procurement/code_of_conduct.html