

A management system to promote environmental conservation activities

We at JR East promote environmental conservation activities across our departments by setting clear target and promoting individual employee's awareness.

Promotion of environmental activities at each work place

The "JR East Eco Activities" program is promoted to create "a business climate where employees are highly aware of environment issues" at each work place and to initiate specific environment conservation activities. By having each employee work on whatever related to environment they can do in their day-to-day work, we expect to reduce environmental impact and at the same time enhance the environmental awareness among our employees.

The "JR East Eco Activities" program launched on a trial basis in fiscal ended March 2005 was put into full-scale implementation in all work places by the end of fiscal March 2008.



In-house magazine "JR Higashi" features ecological activities at work places

Environmental education now underway

Environmental education & training system

Education of environmental-activity promoters at JR East Group's organizations and companies

Environment management training (group companies)

- Trainees: those responsible for environment at group companies
- Objective: improvement of ability in environment management
- Number of participants: 82

Practical environment management training

- Trainees: those responsible for environmental issues at local organizations, etc.
- Objective: improvement of ability to manage environment-related matters as a supervisor in the field offices, etc.
- Number of participants: 33

Training for personnel responsible for environmental measures

- Trainees: those responsible at each branch office
- Objective: acquisition of basic knowledge such as environment-related laws
- Number of participants: 24

Environment education targeting a large number of participants

Training for new recruits: 1,845
 Training for work-implementation managers: 204
 Training for new on-site supervisors: 151
 Training sessions and lectures were held in many other branches and organizations.

Award for environmental activities

To reward outstanding environmental activities and to share the activities with all employees of the JR East group, the award program for the organizations that had made environmental contributions was launched in fiscal ended March 2006. In fiscal ended March 2008, awards were given to 2 organizations and 3 group companies for their active and voluntary engagement in environmental activities.



Award winners in fiscal ended March 2008

Award winners	Activities awarded
Recognition from President	
JR East Takasaki Branch Office	Active involvement in the "JR East Eco Activities" program and establishment of rigid environment-friendly management promotion system in cooperation with branch offices and group companies.
JR East Facility Management Company	Reduction of energy consumptions through technology development, introduction of latest technology and promotion of energy management operations
Recognition from Director General of Corporate Planning Headquarters	
JR East Tokyo General Hospital	Active commitment to energy saving, reduction of waste and improvement of recycling rate.
The EKIBIRU Development Co. Tokyo	Reduction of energy consumptions and promotion of rooftop greening
JR East Retail Net Co., Ltd.	Dramatic reduction of the number of fluorescent lamps and CO ₂ emissions through the installation of reflectors inside illuminated signboards

ISO14001 certification

ISO14001-certified facilities

Certified facilities	Year and month of certification
JR East	
Niitsu Rolling Stock Manufacturing Factory	Feb-99
Kawasaki Thermal Power Plant	Mar-01
Tokyo General Rolling Stock Center	Mar-01
Niigata Mechanical Technology Center	Mar-01
Omiya General Rolling Stock Center	Mar-02
Shinkansen General Rolling Stock Center	Nov-02
Koriyama General Rolling Stock Center	Dec-03
Nagano General Rolling Stock Center	Feb-05
Akita General Rolling Stock Center	Jul-05
Group companies	
East Japan Eco Access Co., Ltd.	Nov-99
LUMINE Co., Ltd	Dec-00
Nippon Restaurant Enterprise Co., Ltd.(manufacturing section)	Sept-02
Nagano Railway Servicing Co., Ltd.	Jan-07
JR East Mechatronics Co.,Ltd.	Mar-08

Utilizing environmental accounting and the environmental management indicators in our management

JR East utilizes environmental accounting to ascertain benefits relative to the environmental conservation investments and expenses. The results are used, along with our own environmental management indicators, in decision-making by the management

Environmental accounting

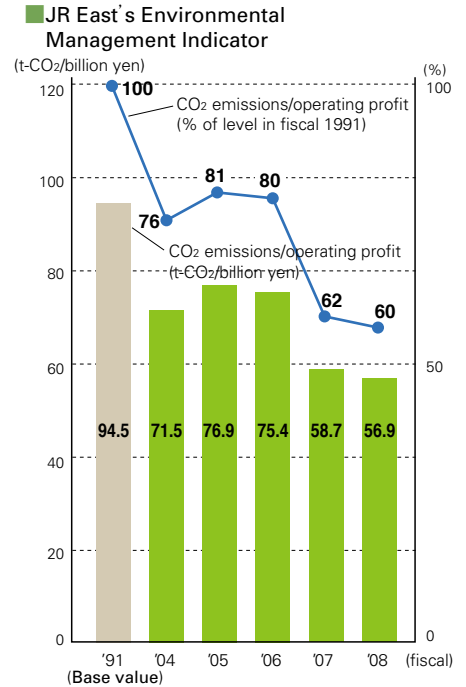
Summary of fiscal ended March 2008

In fiscal ended March 2008, our environmental conservation costs amounted to approximately 70.6 billion yen in investments and 12.6 billion yen in expenses. The cost of global environmental conservation activities, which accounted for a major part of our environmental investments, was increased by 7 billion yen due primarily to the introduction of energy-efficient trains on the Chuo, Keihin-Tohoku, and other conventional lines. It is estimated that the introduction of energy-efficient trains will reduce CO₂ emissions by 0.37 million tons over their total service life.

JR East has its own Environmental Management Indicators to assess the relation between our business activities and environmental impacts. These are calculated by dividing CO₂ emissions, which are a major factor in environmental impacts, by operating profits, which represent our Economic Value Added (EVA).

This means that the smaller the number calculated by this formula is, the more Economic Value Added we have created by giving smaller impacts on the environment. For fiscal ended March 2008 the value of the indicator was 56.9 t-CO₂/billion yen, compared with 94.5 t-CO₂/billion yen for fiscal ended March 1991.

$$\text{Environmental Management Indicator} = \frac{\text{Environmental Impacts}}{\text{Economic Value Added (EVA)}} = \frac{\text{CO}_2\text{emissions (t-CO}_2\text{)}}{\text{Operating profit (billion yen)}}$$



Environmental accounting for fiscal ended March 2008

Category	Environmental conservation costs (billion yen)		Environmental conservation benefits in relation to environmental targets	Economic benefit of environmental conservation activities (billion yen)		
	Investments	Expenses		Fiscal 2007	Fiscal 2008	
Environmental conservation (pollution prevention) activities along railway lines	5.51	5.31	Implementation of noise reduction measures along Shinkansen and conventional lines (soundproof walls, continuous welded rail, and other measures) NOx emissions from JR East's thermal power plant	25% 289 tons	63% 330 tons	—
Global environmental conservation activities	65.09	—	CO ₂ emissions through business activities CO ₂ emissions per unit of electricity generated at JR East's thermal power plant Energy-efficient train utilization rate Train energy consumption per unit of transportation volume Number of large refrigerators using specified chlorofluorocarbons (CFCs)	2.13 million t-CO ₂ 453g-CO ₂ /kWh 83% 18.0 MJ/car-km 7 units	2.12 million t-CO ₂ 456g-CO ₂ /kWh 85% 17.8 MJ/car-km 0 units	26.50
Resource circulation activities	—	5.21	Recycling rate for waste generated at stations and trains Recycling rate for waste generated at General Rolling Stock Centers, etc. Recycling rate for waste generated through construction projects Recycling rate for general waste Recycled paper utilization rate	50% 90% 90% 43% 92%	64% 93% 92% 48% 92%	3.90
Environmental management	0.02	0.57	Taking part in specific environmental protection activities every year (Railway Line Forestation Programs and Tree Planting under the Adataru Hometown Forestation Program)	35thousand trees planted at 17 locations by 4,400 participants	37thousand trees planted at 15 locations by 3,500 participants	—
Environmental research & development	—	1.42				—
Societal activities	—	0.06				—
Total	70.62	12.57				30.40

Notes
Capital investment for the period: 321.1 billion yen
Total R&D costs for the period: 15.5 billion yen (*1)
Targets for the JR East Group

*1 Total R&D costs
Total R&D costs include 5.8 billion yen for basic research and development commissioned to the Railway Technical Research Institute under research agreement.

Activities in above Table relate to those in the Table for targets and results (see page 34-35, Sustainability Report 2009) as follows:
"Environmental conservation activities along railway lines"="Environmental activities along railway lines" and "Chemical substance management"
"Global environmental conservation activities"="Measures to prevent global warming" and "Chemical substance management"
"Resource recycling activities"="Measures for resource recycling"
"Environmental management"="Environmental management" and "Environmental communication"
"Environmental research & development"="Research & development"
"Social activities"="Environmental communication"
Some items are on the website.

(Notes on calculation of environmental conservation costs and benefits)

Environmental conservation costs

- Data are for East Japan Railway Company only (i.e., non-consolidated data).
- Environmental conservation costs are calculated based mainly on data available in the current management system.
- The full amount of the costs having multiple objectives and large environmental benefits is allocated as environmental costs.
- (e.g., Global environmental conservation costs include the total amount invested in energy-efficient trains).
- Expenses do not include depreciation charges.
- Of the costs for resource recycling activities, the expenses for treating waste generated at stations and trains are calculated by multiplying the expenses for cleaning stations and train cars by the rates of recycling and waste disposal accounting for in the expense, on a specified model for cleaning stations and trains.
- Of the costs for resource recycling activities, the expenses for disposing waste generated in the construction projects are calculated by multiplying waste volume for fiscal ended March 2008 by the standard unit disposal charge by waste type and by region.

Environmental conservation benefit

- Environmental conservation benefits are calculated based on the figures set as our environmental targets.
- Economic benefit of environmental conservation activities**
- For the global environmental conservation activities, economic benefit over the entire service life is calculated by multiplying annual savings (estimates are used in some cases) in electricity and repair costs resulting from the introduction of energy-efficient trains by the expected service life.
- Income from the sales of waste generated at General Rolling Stock Centers and in construction projects is included in the economic benefit of resource recycling activities.

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 m³ 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 m³ of water used in our Head Office building, 21 thousand m³ 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

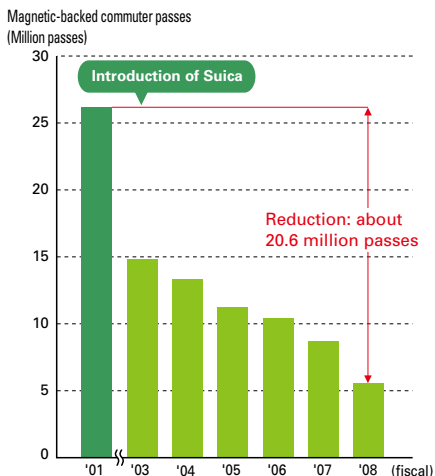
IC Suica fare cards are effective in reducing waste generation. Suica eliminates the need to purchase tickets, can be used repeatedly and contributes to saving a great deal of resources. The more Suica is used, the more the waste is reduced. To discourage customers to throw away the card after use, they 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.

Compliance with laws and setting goals for reduction of chemical substances

In view of the significant impact of chemical substances on human bodies and the ecosystem, their control and replacement is of pressing urgency. JR East strictly follows legally prescribed standards and also sets its own goals for achievement.

Reducing and replacing ozone depleting substances

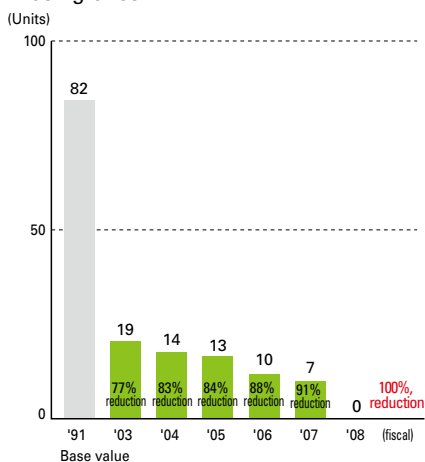
JR East is making efforts to accelerate reduction and replacement of chlorofluorocarbons (CFCs) that deplete the ozone layer.

- Large heat exchangers (Large refrigerators) – JR East had used heat exchangers in which CFCs is used as refrigerant. But they have been gradually replaced with non-CFC equipment. All heat exchangers using specified CFC have been completely removed from buildings by the end of fiscal March 2008.

- Rolling stock – Except for some diesel railcars, all of our cars use CFC substitutes. As of the end of fiscal March 2008, we were using 90 tons of CFC substitutes and only 0.6 ton of CFCs. We routinely check for gas leaks, and collect the refrigerants when scrapping retired railcars in accordance with applicable laws and regulations.

- Fire-extinguishing agent – Although 72 tons of halon gas was still in use as a fire-extinguishing agent as of the end of fiscal March 2008, we have it under proper control and are replacing it with non-halon agents (such as powder agents and CO₂) when building new facilities or renovating existing ones.

Number of large heat exchangers using CFCs



Chemical substance management

As JR East uses chemical substances primarily for painting and repairing our railcars, we take rigorous steps for their use and management in order to prevent their leakage. As a company that handles a considerable amount of specified chemical substances, JR East's 13 facilities submitted the data regarding the release and transfer of these substances to relevant authorities in fiscal ended March 2008, pursuant to the PRTR Law. (*1)

We are also promoting the introduction of stainless steel railcars that do not require painting. At the end of fiscal March 2008, as many as 76% of the 10,677 cars operated on our conventional lines were stainless steel railcars.

Beside our initiatives for railcars, we used 695 tons of organic solvents for painting railway facilities and stabilizing track beds in fiscal ended March 2008

*1 PRTR stands for "pollutant release and transfer registers."

The formal name of this law is the Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in their Management. The law encourages the assessment and control of toxic chemical substances emitted into the environment and measures to prevent negative impact on the environment

Amount released and transferred from 13 reporting-required facilities (kg)

Chemical substance	Released into air	Released into sewerage	Transferred to other facilities
HCFC-141b	1,600	0	0
2-Aminoethanol	0	1,100	200
Bisphenol A-type epoxy resin	0	0	2,100
4,4'-methylenedianiline	0	0	260
o-toluidine	0	0	120
Ethylbenzene	5,010	0	1,402
Ethylene glycol	0	0	11,700
Xylene	25,130	7	2,737
Chromium and chromium (III) compounds	0	0	60
Dichloromethane	6,320	0	1,690
Styrene	1,800	0	0
Toluene	23,180	7	16,050
m-tolylene diisocyanate	830	0	180

*Note:

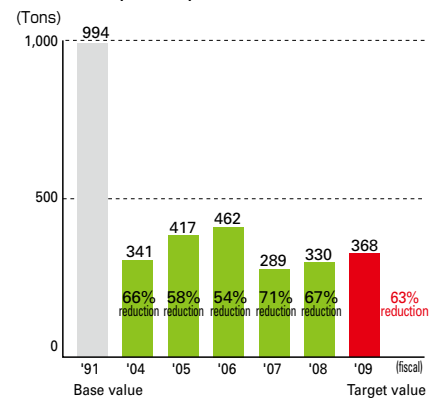
There was no release to soil, public water supply or disposal by landfills.

Among the substances for which reporting is required, those that were actually released or transferred are posted here.

Efforts at JR East's thermal power plant

Our own thermal power plant uses natural gas, kerosene, and low-sulfur heavy oil as fuels with relatively low environmental impact. Since the plant emits nitrogen oxides (NO_x), sulfur oxides (SO_x), and soot, we are making efforts to reduce the emission of these pollutants by using desulfurization equipment, dust collectors, and other devices.

NO_x emissions from JR East's thermal power plant



Management of PCBs

Although JR East has long used polychlorinated biphenyls (PCBs) as insulating oil in locations such as railcars and substations, we are actively replacing PCB-using devices with ones that do not contain PCBs.

We now store the retired PCB-equipment at 82 locations under stringent supervision, and report its status as stipulated by applicable laws and regulations.

We are currently studying ways to render PCBs harmless, taking into account the status of PCB waste treatment facilities and government policies.



PCBs are kept in special storage under stringent control

JR East takes measures to create better environment along railway lines

For the co-existence between train operations and environment along railway lines, JR East endeavors to improve the environment along railway through noise and pollution control .

Measures for dioxin generated at waste incinerators

JR East used to incinerate some waste in its own incinerators. They could generate dioxins under certain internal conditions. During fiscal ended March 2003 we stopped using all but one of our incinerators, and this one, which was large, was retired in fiscal ended March 2005. We are now dismantling and removing them.

Harmonization with landscape

Large structures such as bridges, stations, and station buildings affect the landscape and cityscape of surrounding areas. In order to harmonize structures with the surrounding landscape and cityscape, JR East has set up Design Committees in our construction offices responsible for planning and designing of these structures. We also encourage our employees to pay more attention to the surrounding areas in the design stage by giving awards to those who designed scenically attractive structures.

The bridge over the Temma River between Kamikita-cho and Ottomo on the Tohoku Main Line, where a multiple concrete arch design was adopted in an effort to create harmony with the beautiful scenery of the mountains of Aomori.



The bridge over River Tenma between Kamikita-cho and Ottomo on Tohoku Main Line, where serial concrete arch design is adopted in an effort to create harmony with the beautiful scenery of the mountains of Aomori.

Reducing the usage of herbicides

For safe train operation, we must periodically remove weeds around railway tracks. In addition to manual weeding, we also use some herbicide.

We minimize the amount and area of herbicide usage, and use herbicides with the lowest of three toxicity levels (ordinary substances) for humans and animals and with the lowest of five toxicity levels (A type substances) for fish. We have also established rules to lessen the herbicide effects on surrounding areas, such as suspending herbicide spraying when conditions are not suitable. In fiscal ended March 2008, our usage of herbicides amounted to 317 tons.

Utilizing spring water in tunnels

In cooperation with local governments, we have made joint efforts to improve the quality of river water by supplying spring water welling up from our underground tunnels to rivers nearby. In the Tokyo metropolitan area, we started supplying such spring water to the No River in fiscal ended March 2002 and the Tachiai River in fiscal ended March 2003, and began pumping spring water welling up from the ground near Ueno Station into the Shinobazu Pond in fiscal ended March 2004.

In fiscal ended March 2008, we have constructed a new water supply system in the pumping room and laid down conduits to discharge spring water in the Kosugi tunnel on the Musashino Line into rivers. The discharge into the Yahagi River began in October 2007.

We also have been using spring water to melt snow on Joetsu Shinkansen tracks in the Echigo-Yuzawa area ever since this line opened

Environmental Targets for Group Companies

Environmental Targets for Group Companies (fiscal ending March 2009)

Type of business	Company name	Target
Transportation services	JR Bus Kanto Co., Ltd.	• 3% increase in fuel consumption efficiency for each vehicle (from fiscal ended March 2008 levels)
	JR Bus Tohoku Co., Ltd.	• 2% increase in fuel consumption efficiency for each vehicle (from fiscal ended March 2008 levels)
	Tokyo Monorail Co., Ltd.	• 100% recycling of plastic bottles (from fiscal ended March 2008 levels)
		• 100% green procurement of office supplies (from fiscal ended March 2008 levels)
		• 100% recycling (appropriate processing) of waste food oil (from fiscal ended March 2008 levels)
		• 4% reduction in tap water usage (from fiscal ended March 2008 levels)
• 5% reduction in electricity usage other than monorail train operations (from fiscal ended March 2008 levels)		
• 5% reduction in usage of paper resources (from fiscal ended March 2008 levels)		
Station buildings and shopping centers	Tetsudo Kaikan Co., Ltd.	• 8% reduction in greenhouse gas emissions (from fiscal ended March 2005 levels)
		• 100% recycling of industrial waste (continued from fiscal ended March 2006)
		• 39% reduction in general waste (maintaining fiscal ended March 2008 levels)
		• 10% reduction in copy paper usage (from fiscal ended March 2008 level)
	The Ekibiru Development Co. Tokyo	• 5% reduction in energy usage (from fiscal ended March 2005 levels)
		• 2% reduction in copy paper usage (from fiscal ended March 2005 levels)
		• 70% green procurement rate
		• 14% reduction in plastic bag use as a function of sales amount (from fiscal ended March 2007 levels)
	LUMINE Co., Ltd.	• 0.71% reduction in electricity for lighting (from fiscal ended March 2006 levels)
		• 1.01% reduction in electricity for air conditioning (from fiscal ended March 2006 levels)
		• 0.96% reduction in general waste (from fiscal ended March 2006 levels)
		• 4.11% reduction in gas usage (from fiscal ended March 2006 levels)
		• 102 environmental improvement activities
	Ikebukuro Terminal Building Co., Ltd.	• Reductions exceeding 1% in fuel usage from fiscal ended March 2008 (fuel use / total floor area)
		• 7% overall reduction in CO ₂ emissions (between fiscal ending March 2006 and 2010) from the average between fiscal ended March 2003 and 2005
		• 100% recycling of dry cell and fluorescent tube
		• 100% recycling of industrial waste
		• Exchanging lightings to fluorescent-type LED lighting in parking facilities
		• Environmental improvement activities twice per month
	BoxHill Co., Ltd.	• 90% recycling of industrial waste by fiscal ending March 2011
		• 4% reduction in electricity usage by fiscal ending March 2011 (from fiscal ended March 2008 levels)
• 1% reduction in gas usage		
• 5% reduction in water usage		
Kawasaki Station Building Co., Ltd.	• A more than 1% annual average reduction in the energy usage basic unit between fiscal ending March 2007 and 2011	
	• Recycling in excess of 50% of general waste produced in business activities by fiscal ending March 2011	
Tsurumi Station Building Co., Ltd.	• Maintenance of a 96% recycling rate for industrial waste	
Yokohama Station Building Co., Ltd.	• 5% reduction in copy paper purchases (from fiscal ended March 2008 levels)	
	• 2% reduction in waste produced (from fiscal ended March 2008 levels)	
	• 1% improvement in waste recycling rate (from fiscal ended March 2008 levels)	
	• 1% reduction in electricity for lighting (from fiscal ended March 2008 levels)	
	• 1% reduction in electricity for air conditioning (from fiscal ended March 2008 levels)	
	• 1% reduction in gas usage for air conditioning (from fiscal ended March 2008 levels)	
• 2% reduction in plastic bag purchases (from fiscal ended March 2008 levels)		

Environmental Targets for Group Companies (fiscal ending March 2009)

Type of business	Company name	Target
Station buildings and shopping centers	Shonan Station Building Co., Ltd.	• 2% reduction in energy through measures including the optimal operation of a central control unit, a variable air volume control facility for air conditioners, and a cooling water pump inverter control facility usage (from fiscal ended March 2005 levels)
		• A reduction in electricity usage exceeding 50% through the use of fluorescent-type LED lighting in multilevel parking facilities in fiscal ending March 2010 (from fiscal ended March 2008 levels)
	JR East Department Store Co., Ltd.	• Maintenance of fiscal ended March 2008 industrial waste levels
		• 1% reduction in electricity usage (from fiscal ended March 2008 levels)
	JR Tokyo West Development Co., Ltd.	• 6% reduction in CO ₂ emissions (for the Kokubunji store) and a 1.8% reduction (for the Hachioji store)* based on a 5-year plan for fiscal ending March 2006 to 2010
	Utsunomiya Station Development Co., Ltd.	• 2% reduction in usage of paper resources
	Mito Station Development Co., Ltd.	• 30% overall recycling rate for fiscal ending March 2011
		• 20% reduction in plastic bag purchases in fiscal ending March 2011 (from fiscal ended March 2008 levels)
		• 100% green purchase rate in fiscal ending March 2011
	Kinshicho Station Building Co., Ltd.	• 20% recycling rate for food waste
	Chiba Station Building Co., Ltd.	• 1% annual reduction in CO ₂ emissions
		• 50% recycling rate for general waste
		• 80% recycling rate for industrial waste
Hirosaki Station Building Co., Ltd.	• 1% annual reduction in CO ₂ emissions	
Station Building Midori Co., Ltd.	• 5% reduction in electricity and gas usage for the Nagano store (from an average of fiscal ended March 2004 to March 2006)	
	• 8.4% reduction in electricity and kerosene usage for the Matsumoto store (from an average of fiscal ended March 2004 to March 2006) (6.18% total reduction for Nagano and Matsumoto stores)	
Office services	JR East Building Co., Ltd.	• 1 - 3% reduction in CO ₂ emissions for Shinagawa East Building, JR Ebisu Building, and JR Tokyu Meguro Building for fiscal ending March 2006 through March 2010
Hotels	Nippon Hotels Co., Ltd.	• Maintenance of current CO ₂ emission reduction rates (7.2% for Hotel Metropolitan and 6.1% for Hotel Metropolitan Edmont)
		• 1% improvement in recycling rate for general waste
		• Maintenance of 91% recycling rate for industrial waste
	Takasaki Terminal Building Co., Ltd.	• 5% reduction in electricity for office computers (from fiscal ended March 2008 levels)
	Sendai Terminal Building Co., Ltd.	• An energy saving of more than 1% for the basic energy unit (from fiscal ended March 2008 levels)
		• 100% use of recycled paper
	Morioka Terminal Building Co., Ltd.	• 40% reduction in CO ₂ emissions from automobiles (from fiscal ended March 2008 levels)
		• 10% reduction in general waste (from fiscal ended March 2008 levels)
• Recycling rate exceeding 25% for general waste		
Akita Station Building Co., Ltd.	• 1% annual reduction in copy paper usage (targeting 95% of fiscal ended March 2008 levels)	
Hotel Metropolitan Nagano Co., Ltd.	• No increase in electricity usage	
Retail sales and food and beverage operations	JR East Retail Net Co., Ltd.	• 25% increase in recycling rate through the conversion of food waste to electricity
	Nippon Restaurant Enterprise Co., Ltd.	• 40% food recycling rate (as outlined in the revised Food Recycling Law)
		• 210t reduction in annual CO ₂ emissions through the replacement of disposable chopsticks (annual use is approximately 22 million chopsticks) with eco chopsticks in fiscal ending March 2010 (from fiscal ended March 2008 levels)
	JR East Food Business Co., Ltd.	• Increase in food recycling rate to 24% by fiscal ending March 2011
		• 113t approximate reduction in annual CO ₂ emissions through the replacement of disposable chopsticks (annual use is approximately 12.5 million chopsticks) with eco chopsticks (from fiscal ended March 2008 levels)
Delicious Link Co., Ltd.	• An increase exceeding 20% in the food waste recycling rate	

Environmental Targets for Group Companies (fiscal ending March 2009)

Type of business	Company name	Target
Retail sales and food and beverage operations	JR East Station Retailing Co., Ltd.	• 10% increase in recycling rate for industrial waste (from fiscal ended March 2008 levels)
	JR East WATER BUSINESS Co., Ltd.	• 25% reduction in electricity consumption through the introduction of 1,600 new energy-saving vending machines (from fiscal ended March 2008 levels)
		• Introduction of 1,000 3-slot trash boxes for large vending machines to promote sorted trash collection
Trading and distribution services	East Japan Railway Trading Co., Ltd.	• 100% green purchase rate
	JR East Logistics Co., Ltd.	• 1% increase in energy-efficiency through eco-driving(from fiscal ended March 2008 levels) • 0.01% improvement in idling rates (from fiscal ended March 2008 levels)
Travel agency and car rental	JR East VIEW Travel Service Co., Ltd.	• 10% reduction in office paper usage (from fiscal ended March 2008 levels)
	JR East Rental & Lease Co., Ltd.	• 2% reduction in electricity, water, and copy paper usages (from fiscal ended March 2008 levels)
Sports and leisure services	JR East Sports Co., Ltd.	• 1% reduction in annual electricity and gas usages(from fiscal ended March 2008 levels) • 100% use of recycled paper
	Gala Yuzawa Co., Ltd.	• 10,000kg annual reduction in CO ₂ emissions(from fiscal ended March 2008 levels)
Real estate management	JR East Urban Development Corporation	• 1% reduction in general waste (from fiscal ended March 2008 levels)
		• 1.5% reduction in water usage (from fiscal ended March 2008 levels)
• 2% reduction in copy paper usage (from fiscal ended March 2008 levels)		
	JR East Housing Development & Realty Co., Ltd.	• Improvement in industrial waste recycling rate (targeting a 75% recycling rate for fiscal ending March 2011)
Information, accounting and personnel-related services	JR East Japan Information System Company	• 3.5% reduction in electricity usage by the end of fiscal March 2012 (from fiscal ended March 2008 levels)
		• 1% reduction in automobile fuels by the end of fiscal March 2012 (from fiscal ended March 2008 levels)
		• 90% recycling rate for paper resources by the end of March fiscal 2012 (from fiscal ended March 2008 levels)
		• Commitment to Team Minus 6% by 60% of all employees by the end of fiscal March 2011 (from fiscal ended March 2008 levels)
	JR East Netstation Co., Ltd.	• 1% reduction in general waste (from fiscal ended March 2008 levels)
	JR East Personnel Service Co., Ltd.	• 100% use of recycled paper by fiscal ending March 2011
Advertising and publicity	East Japan Marketing & Communications, Inc.	• 3% reduction in copy paper purchases in fiscal ending March 2010 and 5% reduction in fiscal ending March 2011 (from fiscal ending March 2009 levels)
		• 3% reduction in electricity usage in fiscal ending March 2010 and 5% reduction in fiscal ending March 2011 (from fiscal ending March 2009 levels)
		• 3% reduction in general waste in fiscal ending March 2010 and 5% reduction in fiscal ending March 2011 (from fiscal ending March 2009 levels)
		• Recycling rate of more than 40% for general waste in fiscal ending March 2010 and 2011
		• More than 1 environment-friendly plan proposal in each of fiscal ending March 2010 and 2011
	• Proposals for environment-friendly materials numbering in excess of 50 in fiscal ending March 2010 and 100 in fiscal ending March 2011	
	Tokyo Media Service Co., Ltd.	• 6% reduction in electricity usage for the 4,157.9m ² total floor space for workshops and offices in fiscal ending March 2013 (from fiscal ended March 2008 levels)
	The Orange Page, Inc.	• Use of eco-paper for printed publications (15% use of recycled papers for Orange Page)
Cleaning services	Railway Servicing Co., Ltd.	• A green purchase rate of more than 30%
	Kanto Railway Servicing Co., Ltd	• 100% use of recycled paper (from fiscal ended March 2008 levels)
		• 10% reduction in paper use for conference materials (from fiscal ended March 2008 levels)
	East Japan Railway Servicing Co., Ltd.	• 5% reduction in copy paper usage (from fiscal ended March 2008 levels)

Environmental Targets for Group Companies (fiscal ending March 2009)

Type of business	Company name	Target	
Cleaning services	East Japan Eco Access Co., Ltd.	• Number of offices with standard consumption of floor-cleaning detergent: 100%	
		• Number of offices with standard consumption of wax: 100%	
		• Recycled paper usage rate for copy paper: 100%	
		• 20% reduction in the number of cleaning products used (from fiscal ended March 2005 levels)	
		• 3% reduction in electricity usage (from fiscal ended March 2006 levels)	
	Takasaki Railway Services Co., Ltd.	• 10% reduction in gasoline usage for automobiles (from fiscal ended March 2008 levels) • 5% reduction in copy paper usage (from fiscal ended March 2008 levels)	
	Mito Railway Servicing Co., Ltd.	• 100% usage of recycled paper • 90% green purchase rate	
	Chiba Railway Servicing Co., Ltd.	• 10% reduction in gasoline usage for automobiles (from fiscal ended March 2008 levels)	
	JR Technoservice Sendai Co., Ltd.	• 70% recycling rate for general waste from business activities for all offices • Maintenance of 100% usage rate of environment-friendly detergent for outside panels of railcars • Maintained use of glass coating for flooring of E2 and E4 Series electric trains of the Shinkansen General Rolling Stock Center (No use of separating materials for floor wax)	
		East Japan Amenitec Co., Ltd.	• 5% reduction in electricity usage (from fiscal ended March 2008 levels)
	Akita Clean Servicing Co., Ltd.	• 70% green purchase rate for office supplies by fiscal ending March 2010 • Replacement of company cars by fuel-efficient cars	
		Niigata Railway Servicing Co., Ltd.	• 43% recycling rate for general waste • 100% usage of recycled paper for office
	Nagano Railway Servicing Co., Ltd.	• 7% reduction in plastic bag usage for trash collection (from fiscal ended March 2006 levels) • 5% increase in paper recycling rate to promote reductions in waste (from fiscal ended March 2006 levels)	
		Shinnihon Linen Co., Ltd.	• A green purchase rate exceeding 30% • Recycled paper usage exceeding 90%
	Construction	JR East Consultants Company	• Completion of 5 rooftop forestation undertakings
JR East Design Corporation		• 70% green purchase rate • 100% use of recycled paper for office	
		JR East Facility Management Co., Ltd.	• 1% reduction in energy consumption for electricity, gas, and fuel oils (kJ/m ² per year) (from fiscal ended March 2008 levels)
JR East Mechatronics Co., Ltd.		• Development of EM10 multiple ticket vending machines; 40% reduction in electricity consumption in comparison with existing EP1 type • 5% reduction in copy paper usage (from fiscal ended March 2007 levels) • 100% usage of recycled paper	
		Union Construction Co., Ltd.	• 5% reduction in paper usage (from fiscal ended March 2008 levels)
		East Japan Transport Technology Co., Ltd.	• More than 30% reduction in CO ₂ emissions through the introduction of energy-saving equipment in facility renewals (compared with existing facilities) • 30% green purchase rate for office and other supplies
Tohoku Kotsu Kikai Co., Ltd.			• 100% usage of recycled paper for copy paper • 15% reduction in paper usage by fiscal ending March 2011 (from fiscal ended March 2008 levels) • 10% increase in green purchase rate by fiscal ending March 2011 (from fiscal ending March 2009) • 5% increase in energy-efficiency through eco-driving by fiscal ending March 2011 (from fiscal ended March 2008)

Environmental Targets for Group Companies (fiscal ending March 2009)

Type of business	Company name	Target
Construction	Niigata Rolling Stock Machinery Co., Ltd.	• More than 8% reduction in electricity usage by fiscal ending March 2012 (from fiscal ended March 2008 levels)
		• More than 8% reduction in utility gas usage by fiscal ending March 2012 (from fiscal ended March 2008 levels)
		• More than 10% reduction in copy paper usage by fiscal ending March 2012 (from fiscal ended March 2008 levels)
		• Recycled paper usage exceeding 90% by fiscal ending March 2011 (from fiscal ended March 2008 levels)
Group companies by branch offices	JR Tokyo Planning & Development Co., Ltd.	• 1% reduction in electricity usage (from fiscal ended March 2008 levels)
	JR Kanagawa Planning & Development Co., Ltd.	• 30% green purchase rate
	JR Kaiji Planning & Development Co., Ltd.	• 30% recycling rate for general waste by fiscal ending March 2011
	JR Utsunomiya Planning & Development Co., Ltd.	• 100% usage of recycled paper for copy paper and business cards
		• 100% two-sided printing of conference materials
		• 100% usage of recycled paper for receiving faxes and for memo pads
		• 100% sorted trash collection
		• 75% recycling rate for various mill ends in manufacturing
	JR Takasaki Trading Co., Ltd.	• 1% annual reduction in CO ₂ emissions for company gasoline-powered cars (from fiscal ended March 2008 levels)
	Mito Service Development Co., Ltd.	• 10% reduction in electricity costs (from fiscal ended March 2008 levels)
		• 100% use of recycled paper and 20% reduction in copy paper usage for all worksites (from fiscal ended March 2008 levels)
	Keiyo Planning & Development Co., Ltd.	• 0.7% reduction in electricity usage (from fiscal ended March 2008 levels)
		• 100% use of recycled paper for copy paper and business cards
		• 40% reduction in copy paper through two-sided printing of conference materials (from fiscal ended March 2008 levels)
		• 100% individual commitment to Team Minus 6% (all employees at Head office)
Tohoku Sogo Service Co., Ltd.	• 10% reduction in food waste by fiscal ending March 2011 (from fiscal ended March 2008)	
Juster Co., Ltd.	• 30% recycling rate for industrial waste	
JR Atlis Co., Ltd.	• 10% reduction in copy paper usage by fiscal ending March 2010 (from fiscal ended March 2008 levels)	
Tokky Co., Ltd.	• 24.4% reduction in energy consumption (electricity, gas, etc.) and 27% reduction in CO ₂ emissions at CoCoLo Nagaoka (from an average of fiscal ended March 2002 to 2004)	
	• 43% companywide recycling rate for general waste by fiscal ending March 2011	
Shinano Enterprise Co., Ltd.	• 20% My-Bag usage at Seisen Ichiba (Fresh Food Market) JC store	

* Targets listed have been set by each individual group company.

* Targets set by each group company are generally those to be achieved within fiscal ending March 2009. Some targets are set to be achieved in and after fiscal ending March 2010.

* Targets have not been included for Iwaki Chuo Station Building Co., Ltd. as the company is scheduled to be dissolved.

* Targets have not been included for JR East Green Partners Co., Ltd. as the company was established in April 2008.