

Accomplishments in fiscal 2006 in relation to targets to be met by fiscal 2008

JR East has set environmental targets to be met by fiscal 2008. Each fiscal year, we quantitatively and qualitatively review our performance in order to identify the causes of issues, and use this information for improvement in the following fiscal year.

Category of environmental conservation activities	Main activities	Target to be met by fiscal 2008	Base value	Target value
			(base year: fiscal 1990)	
Environmental management	<ul style="list-style-type: none"> ● Environmental management led by the Committees on Ecology at JR East Head Office and branch offices ● Commencement of JR East Eco Activities 			
Measures to prevent global warming	<ul style="list-style-type: none"> ● Introduction of energy-saving railcars ● Promotion of intermodal transportation (Park-and-ride schemes, Rail & Rent-a-Car service, etc.) ● Reduction of CO₂ emissions from power generation and supply 	CO ₂ emissions through business activities	2.76 million t-CO ₂	22% reduction (2.15 million t-CO ₂)
		CO ₂ emissions per unit of electricity generated at JR East's thermal power plant	726g-CO ₂ /kWh	40% reduction (436 g-CO ₂ /kWh)
		Energy-efficient train utilization rate	—	82%
		Train energy consumption per unit of transportation volume	20.6 MJ/car-km	19% reduction (16.7 MJ/car-km)
		Number of large refrigerators using specified chlorofluorocarbons (CFCs)	82 units	100% reduction (0 units)
Measures for resource circulation	<ul style="list-style-type: none"> ● Reduction and recycling of waste collected from stations and trains (sorted waste collection, more recycling centers) ● Reduction and recycling of train tickets ● Recycling of waste generated at General Rolling Stock Centers and through construction projects ● Utilization of office paper made from recycled newspapers collected at stations 	Recycling rate for waste generated at stations and on trains	—	45%
		Recycling rate for waste generated at General Rolling Stock Centers, etc.	—	85% average for 4 years of plan*
		Recycling rate for waste generated through construction projects	—	92% average for 4 years of plan*
		Recycling rate for general waste	—	43%
		Recycled paper utilization rate	—	100%
Chemical substance management	<ul style="list-style-type: none"> ● Reduction of environmental pollutants generated at the Kawasaki Thermal Power Plant ● Appropriate management and treatment of waste with PCBs 	NO _x emissions from JR East's thermal power plant	994 tons	63% reduction (368 tons)
Environmental activities along railway lines	<ul style="list-style-type: none"> ● Implementation of noise reduction measures along Shinkansen and conventional lines (soundproof walls, continuous welded rail, and other measures) ● Utilization of spring water in tunnels 	Reduction of noise to 75dB or less in designated residential areas*1 along the Tohoku and Joetsu Shinkansen lines	—	100% target to be met by fiscal 2009
Environmental communication	<ul style="list-style-type: none"> ● Communicating environmental information through railcar advertisements and at stations ● Tree planting along railway lines ● Tree planting under the Adatara Hometown Forestation Program ● Publishing the Sustainability Report, environmental campaigns 	Taking part in specific environmental protection activities every year	—	
Research & development	<ul style="list-style-type: none"> ● Development of fuel-cell hybrid railcar ● Development of noise reduction technology ● Research and development on cyclical use of resources 			

■ Targets for the JR East Group

* "average for 4 years of plan" is the fiscal 2005-2008 average.

Results for fiscal 2005 *actual value in parentheses	Results for fiscal 2006 *actual value in parentheses	Evaluation	Described on pages
			42 - 43
7% reduction (2.58 million t-CO ₂)	23% reduction (2.13 million t-CO ₂): (calculated using new coefficient) 28% reduction (1.99 million t-CO ₂): (calculated using former coefficient) *2	Achieved	46 - 49, 53
26% reduction (534 g-CO ₂ /kWh)	38% reduction (453 g-CO ₂ /kWh): (calculated using new coefficient) 41% reduction (431 g-CO ₂ /kWh): (calculated using former coefficient) *2	Achieved	
81%	83%	Achieved	
15% reduction (17.6 MJ/car-km)	13% reduction (18 MJ/car-km): (calculated using new coefficient) 17% reduction (17.2 MJ/car-km): (calculated using former coefficient) *2		
88% reduction (10 units)	91% reduction (7 units)		
47%	50%	Achieved	50 - 52
90%	90%		
89%	90%		
42%	43%	Achieved	
92%	92%		
54% reduction (462 tons)	71% reduction (289 tons)	Achieved	53
Target was met in residential areas	25%		54 - 55
31,000 trees planted at 18 locations by 3,600 participants	35,000 trees planted at 17 locations by 4,400 participants		56 - 57
			45

Results for Fiscal 2006

In fiscal 2006, we achieved our targets in 6 activities.

Beginning in fiscal 2006, due to law revision, newly defined coefficients were used for 3 of our performance indicators among the measures to prevent global warming. However, to clearly represent the effects of our measures on a year-to-year basis, we also reported values calculated using the former coefficients. In working toward our targets, we have chosen to use values calculated using the former coefficients.

In CO₂ emissions, we were successful in making massive reductions. Since JR East owns its own hydroelectric power plant and thermal power plant, an increase in the production of electricity at the hydroelectric power plant, which does not consume fossil fuel, led to the reduction in the volume of CO₂ emissions. In March 2006, our hydroelectric power plant, damaged by the Niigata Chuetsu Earthquake in October 2004, was restored, with repair of all components affected by the earthquake. Substantial improvements also resulted from our partial shifts from kerosene to natural gas at our thermal power plant in June 2006, along with progress in the introduction of energy-saving railcars. There were also external causes, such as an increase in electricity generation volume at our hydroelectric power plant because the volume of river water was greater than usual. We will strive even harder in the future to reduce our total CO₂ emissions.

Two of the four years of working toward our fiscal 2008 targets have now passed. In the two years to come, while continuing to work on measures for targets we have already achieved, we will work harder on areas in which we are behind schedule.

Progress toward fiscal 2008 targets

AchievedAchieved
Satisfactory
Behind schedule

*1 Measures to reduce noise along the Tohoku and Joetsu Shinkansen lines

As we have expanded the coverage of noise reduction measures along Shinkansen lines since fiscal 2006, we are now working on the targets to be achieved by fiscal 2009.

*2 Change in calculation methods

For CO₂ emission volumes due to use of electricity and fuel and energy consumption volume, up until fiscal 2005 calculations have been done with reference to Nippon Keidanren's Keidanren Voluntary Action Plan on the Environment. From fiscal 2006, JR East changed the methods to those stipulated in the Act Concerning the Rational Use of Energy and Act on Promotion of Global Warming Countermeasures. For fiscal 2006, figures calculated by both former and revised methods are shown.