## **Environmental Targets for FY2015 and Beyond**

Since 1996, the JR East Group has undertaken environmental preservation activities based on concrete targets. With the implementation period of environmental targets set in FY2012 having come to an end in FY2014, and toward our targets for FY2021 (an 8% reduction in the volume of energy consumed through railway operations), continuous efforts are required, and for this we have established environmental targets with the aim of achieving them during FY2017.

Category of environmental conservation activities	Performance Indicators	Targets to be met by FY2021	Newly Established Targets (to be met in FY2015 and Beyond)
Measures to Prevent global warming	Energy consumption from railway business activities	8% Reduction (MJ relative to FY2011 level) 52.7 ⇒ 48.5 (billion MJ)	Continuous Implementation
	CO <sub>2</sub> emission per unit of electricity generated at JR East's own power plants	30% Improvement (kg-CO <sub>2</sub> /kWh:relative to FY1991 level) $0.457 \Rightarrow 0.320 \text{ (kg-CO}_2/\text{kWh)}$	Continuous Implementation
Category of environmental conservation activities	Performance Indicators	Targets to be met by FY2014	Newly Established Targets (to be met by FY2017)
Measures to prevent global warming	Electricity used for railway operations per unit of transport volume	6.8% Reduction (kWh/car-km: relative to FY2007 level) 1.85 ⇒ 1.72 (kWh/car-km)	5.9% Reduction on Shinkansen and Conventional Lines (kWh/car-km:relative to FY2011 level) Shinkansen: 2.71 ⇒ 2.55 (kWh/car-km) Conventional Lines:1.65 ⇒ 1.55 (kWh/car-km)
	Energy consumption per unit of floor area at branch offices.etc.	3% Reduction (kL-crude oil equivalent/m²: relative to FY2011 level) 0.0467 ⇒ 0.0453 (kL-crude oil equivalent/ m²)	15% Reduction (kL-crude oil equivalent/m²:relative to FY2011 level) 0.0467 ⇒ 0.0397 (kL-crude oil equivalent/ m²)
	New: Implementation of more ecoste Model Stations	_	Total of 8 Stations
	New: Change to LED for Platform Illumination (2015 – within FY2017)	_	More than 50% of the lighting equipment is switched to LED at 60 stations
	New: Optimization of Large-scale Air-conditioning Systems (2015 – within FY2017)	_	5 Locations (reduction of 47 million MJ)
	New: Reduction Rate of Energy Consumption Intensity Established by Each JR East Group Company	_	Continuous reduction at an annual rate of 1% on average Groupwide
Measures for resource circulation	Recycling Rate for waste generated at stations and on trains	90%	94%
	Recycling Rate for waste generated at General Rolling Stock Centers, etc.	95%	96%
	Recycling Rate for waste generated in construction projects	95%	96%
	New: Implementation Rate of Recycling by Group Companies	-	100%
Environmental Activities Along Railway lines	Measures to reduce noise to 75 dB or less along the Tohoku and Joetsu Shinkansen Lines* (for areas subject to noise limitation measures)	100% [Targets to be met by FY2016]	Being implemented
Environmental Management	Setting of numeric targets by all group companies	Targets to be revised continually	Targets to be revised continually

Targets for the JR East Group

<sup>\*</sup> Measures to reduce noise to 75 dB or less have been completed in the designated areas in accordance with government guidance. Currently, improvement work is being carried out step by step in other areas, to be completed by the fiscal year ending March 2016.