

Environment

Contents

[Priority commitment goals]



[Related goals]



- Basic Concept for Ecology Promotional Activities 94
- Environmental Management 95
- Measures to Prevent Global Warming... 100
- Measures for resource circulation..... 109
- Chemical substance management ... 112
- Environmental Conservation Activities 113

[Topics]

- Achieving a Sustainable, Low-Carbon Society through the Use of Hydrogen 105
- Food Waste Reduction Initiatives at Hotels 111

Basic Concept for Ecology Promotional Activities

■ Basic philosophy and basic policies for promoting ecological activities (established May 1992, partially revised in September 2012)

The JR East Group formalized its basic philosophy and policies in 1992 and established activity guidelines in 1996.

Our specific environmental protection measures are based on these.

Basic philosophy

The entire JR East Group, as a member of society, will diligently strive to balance global environmental protection with our business activities.

Basic policies

To contribute to creating a global environment for the future through our business activities for our customers and local communities.

To develop and provide the technology needed to protect the global environment.

To maintain our concern for the global environment and raise global environmental awareness of our employees.

■ Activity guidelines for the promotion of ecological activities (established March 1996 and partially revised in February 1998 and September 2012)

- 1 While working to reduce total energy consumption by enhancing energy efficiency and introducing cleaner forms of energy, we endeavor to reduce CO₂ emissions, a contributor to global warming.
- 2 We ensure the proper management and processing of environmental pollutants and ozone-depleting substances, in compliance with laws and regulations. Moreover, we do our best to reduce generation of such substances and adopt environmentally responsible substitutes as much as possible.
- 3 We ensure the appropriate processing of various types of waste generated at our offices, establishments, stations, trains, and other locations. We strive to recycle waste and to reduce its generation, and to use more recycled and resource-saving products to minimize the burden we place on the environment.
- 4 We respect the natural environment, which nurtures diversified life, and endeavor to reduce noise and vibrations caused by train operations, thus achieving harmony with the environment along railway lines.
- 5 We are looking carefully at the impact of railways on the environment once again, in order to enhance the environmental superiority of railways and to spread that awareness throughout the world.

■ Committee on Ecology

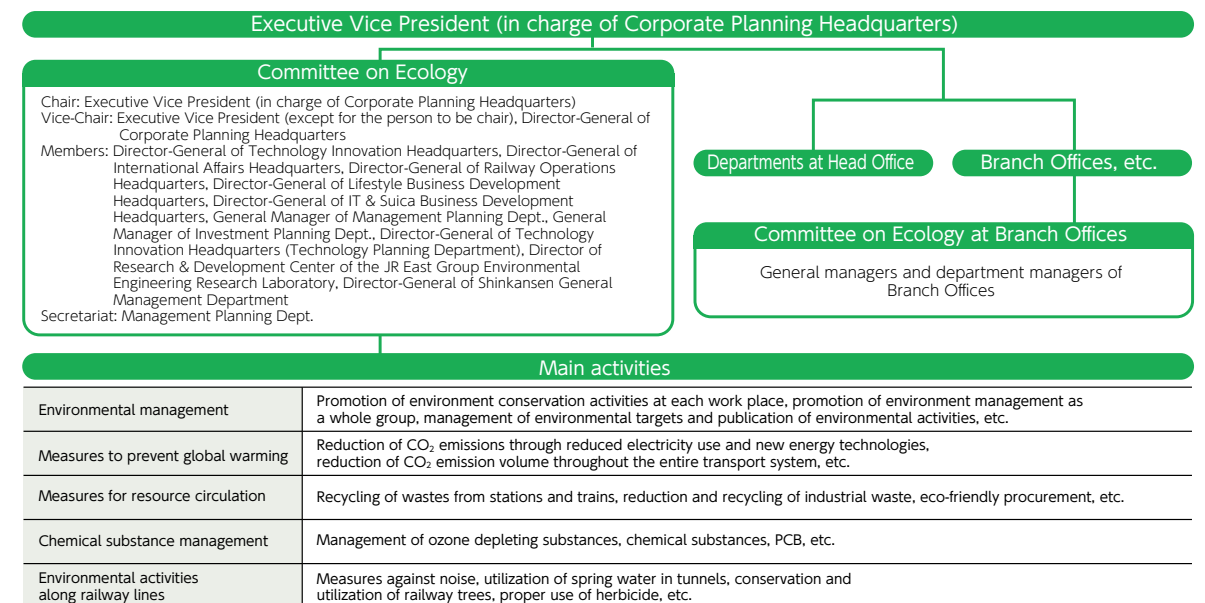
JR East established our Committee on Ecology Promotion, which is chaired by the executive vice president, as a management organization to promote environmental activities. It sets environment-related targets, implements environmental conservation activities, surveys the environmental impact of business activities, monitors progress toward target achievements, and so forth.

Furthermore, the Management Planning Dept. serves as the secretariat overseeing environmental management for the entire JR East Group.

■ Compliance with environmental laws and regulations

There were no major violations of environment-related laws and regulations resulting in penalties in FY2019.

[Organizational structure to promote environmental management (as of July 2019)]



Environmental Management

Management of Environmental Goals

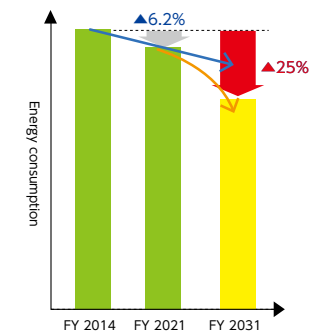
■ FY2031 goals

With the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) held in December 2015 adopting the Paris Agreement which will be a new international framework for global warming countermeasure after 2020, JR East has set environmental goals which plan to be achieved in FY2031.

Category of environmental conservation activities	Performance indicators	Targets to be met by FY2031
Measures to prevent global warming	Energy consumption from railway business activities	25% reduction (compared to FY2014)
	CO ₂ emission volume from railway operations	40% reduction (compared to FY2014)

Reduce energy consumption and CO₂ emissions in railway operations

Towards realizing the FY2031 goals, we pursue achieving reduction of energy consumptions by 25% and reduction of CO₂ emission volume by 40% in railway operations (compared with FY2014) by accelerating the pace of reduction through FY2021 through activities



such as installation of power storage facilities, self-consumption of renewable energy, and expanded introduction of E235 series trains. In addition, we aim to achieve further system innovation such as enabling energy-saving automated operation.

As for the reduction of CO₂ emission volume, based on the assumption that power company emission factors will be 0.37 kg-CO₂/kWh in FY2031, we have set goals on CO₂ emission volume, or reducing energy consumption by 25%.