

We assume responsibility for creating a society in which the people of today, as well as those of the next generation, can live satisfying lives. Here we introduce specific activities we are pursuing regarding environmental and social issues toward a sustainable society, including safety measures, customer service, relationship with local communities, and more.



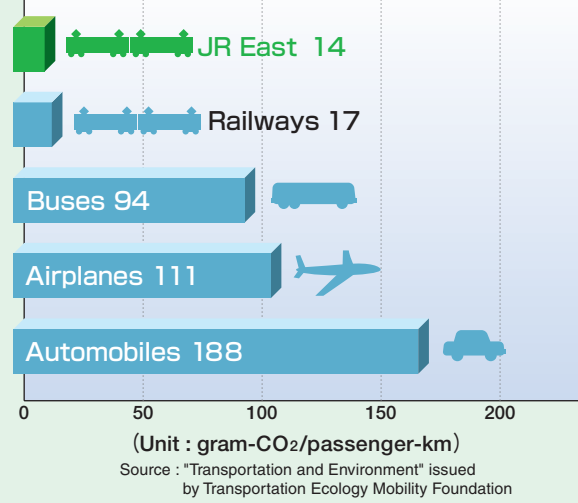
What is environmentally friendly transportation?

Trains emit the lowest level of CO₂

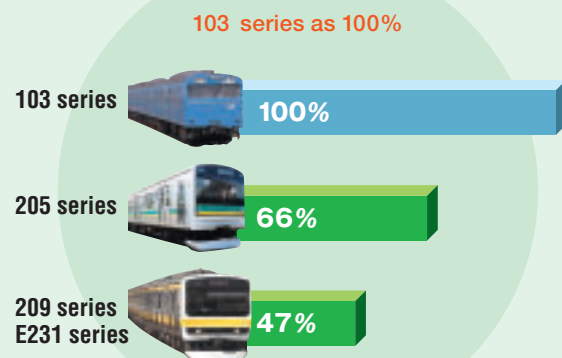
Railway transportation is quite energy efficient. When we compare fuel and energy consumed to CO₂ emissions emitted, we see trains generate approximately one-tenth of that of automobiles (see graph at right). However, because of serving 16 million customers daily, JR East itself emits considerable levels of CO₂. In order to reduce the environmental impact as much as possible, we are developing and incorporating energy-efficient railcars.

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CO₂ emission levels by transportation type



Energy needed for train operations



Energy-efficient railcars consume about half the energy of conventional units

Our energy-efficient railcars cut operational energy consumption by 66% and 47% respectively of that of conventional railcars. To accomplish this, we developed various technologies, redesigned railcar structure, and used stainless steel instead of iron when possible to reduce weight. Furthermore, by harnessing the energy generated during braking, we have greatly reduced overall energy consumption. These steps achieved significant reduction of CO₂ emissions.

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Energy-efficient railcars account for 68% of our fleet

JR East continues to introduce energy-efficient railcars such as the E231 and E205. The number of energy-efficient railcars is steadily increasing, reaching 68% by the end of FY 2002.

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Life cycle of rolling stock

The reduction of energy consumption in operation has a significant effect on environmental conservation, but we need to extend this effort to every stage — from development and designing to manufacturing and refuse disposal. Taking advantage of our business resources at each stage, JR East continues to work toward increased energy-efficiency, reuse, and recycling throughout the entire lifecycle of our rolling stock.

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Introduction of energy-efficient railcars

