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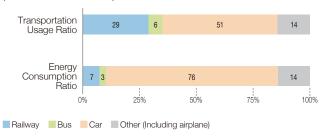
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## **Environmental Data**

#### THE ENVIRONMENTALLY FRIENDLY NATURE OF RAILWAYS

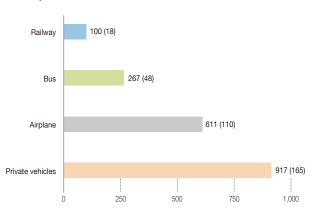
TRANSPORTATION USAGE RATIO AND ENERGY CONSUMPTION RATIO OF DOMESTIC MODES OF TRANSPORTATION (FY09.3, NATIONWIDE)



Source: Summary of Transportation Statistics, Transport Research and Statistics Office, Ministry of Land, Infrastructure, Transport and Tourism The GHGs Emissions Data of Japan, Greenhouse Gas Inventory Office of Japan

# CO<sub>2</sub> EMISSIONS BY MODE OF TRANSPORTATION (TOURISTS) (FY09.3)

Value for railway scaled to 100



Source: Ministry of Land, Infrastructure, Transport and Tourism homepage Numbers in parentheses are actual CO<sub>2</sub> emissions volumes (g-CO<sub>2</sub> / passenger-kilometers)

### INITIATIVES TO REDUCE CO2 EMISSIONS AND CONSERVE ENERGY

#### • Introducing energy-saving rolling stock

In order to reduce the energy consumed by railway operations, which accounts for approximately 80% of our total energy consumption, JR-West is introducing new rolling stock equipped with VVVF inverter control systems, regenerative brakes, and other energy-saving features.

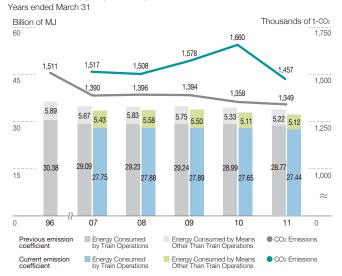
#### • Improving ground facilities

JR-West is improving its ground facilities to fully utilize the characteristics of its energy-saving rolling stock. This includes the installation of the DC feeding systems between up and down lines, hybrid electric power supply systems, and other facilities to help the Company better take advantage of the electricity acquired through the regenerative brakes of our energy-saving rolling stock.

#### Reducing the energy used by stations, offices, and other facilities

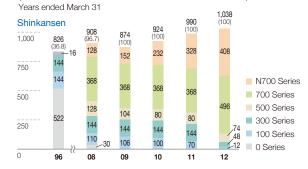
While stations use relatively low amounts of energy in comparison to the amount consumed by train operations, the move to make JR-West's stations barrier free has a tendency to increase energy consumption. In addition to continuing its development of technologies to reduce energy consumption, JR-West is also advancing efforts to make its stations into environmentally friendly "eco-stations."

## ENERGY CONSUMPTION AND CO2 EMISSION S ASSOCIATED WITH BUSINESS ACTIVITIES

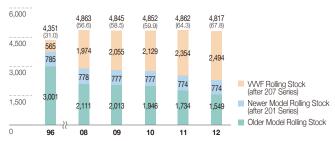


Note: Factory-use liquid fuel is included in energy consumed by means other than train operations for FY 07.3 and years thereafter.

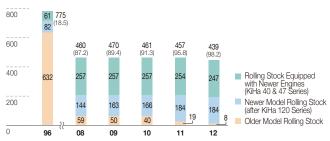
# INTRODUCTION OF ENERGY-SAVING ROLLING STOCK (ROLLING STOCK CURRENTLY IN OPERATION )



#### Conventional Lines—Electric Trains



### Conventional Lines - Diesel Trains



Note: Numbers in parentheses represent the percentage of energy-saving rolling stock.

