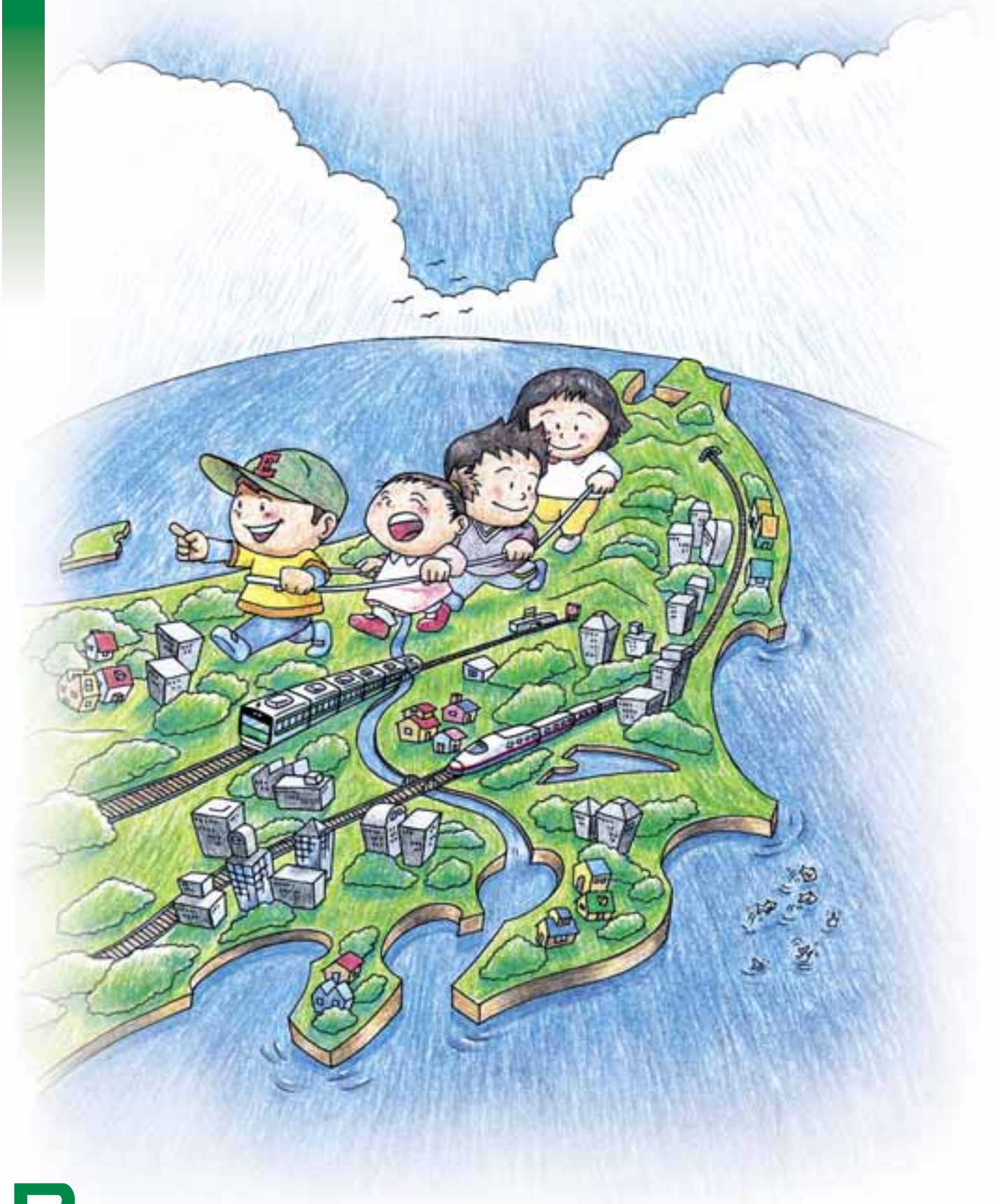
JR East Group
Sustainability Report 2004



JR East Group Profile

Corporate Profile (as of March 31, 2004)

Corporate name : East Japan Railway Company

Address : 2-2, Yoyogi 2-chome, Shibuya-ku, Tokyo, Japan

Established : April 1, 1987

Capital : 200 billion yen

Number of employees : 68,857

Passenger line network : *Shinkansen* lines : 1,052.9 km
Conventional lines : 6,473.9 km

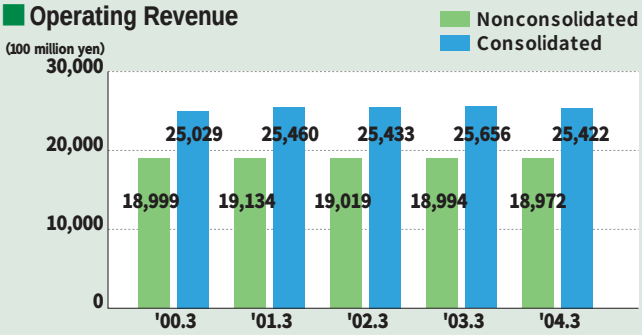
Number of stations : 1,697

Average daily train runs : 12,527 (based on the timetable in March 2004)

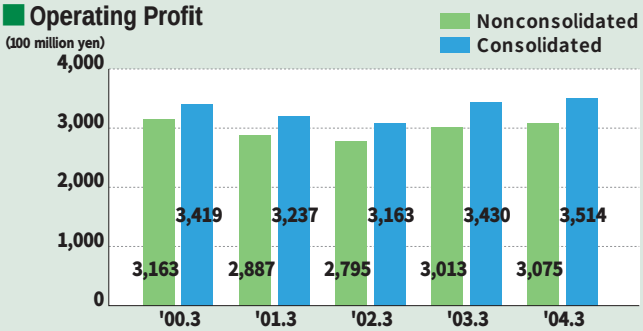
Average daily number of passengers : 16.08 million

Business description : Transportation service, station space-utilizing service, shopping center and office service, and other services

Operating Revenue



Operating Profit



Businesses in the JR East Group (as of April 2004)

Transportation Services

"Safety first" is our top priority. We strive to provide faster, more convenient, and more comfortable transportation services.

JR Bus Kanto Co., Ltd. /JR Bus Tohoku Co., Ltd. /Tokyo Monorail Co., Ltd.

Station Buildings and Shopping Centers

We develop and manage station buildings and shopping centers utilizing the convenient features of assets at stations and in their vicinity.

Tetsudo Kaikan Co., Ltd. /Omori Primo Co., Ltd. /Kamata Station Building Co., Ltd. /The EKIBIRU Development Co. TOKYO /LUMINE Co., Ltd. /Shinjuku Station Building Co., Ltd. /Ikebukuro Terminal Building Co., Ltd. /Akihabara Co., Ltd. /Boxhill Co., Ltd. /Kawasaki Station Building Co., Ltd. /Tsurumi Station Building Co., Ltd. /Yokohama Station Building Co., Ltd. /Lumine Chigasaki Co., Ltd. /Hiratsuka Station Building Co., Ltd. /Abonde Co., Ltd. /Kichijoji Lonlon Co., Ltd. /Kokubunji Terminal Building Co., Ltd. /JR East Department Store Co., Ltd. /Hachioji Terminal Building Co., Ltd. /Kofu Station Building Co., Ltd. /Utsunomiya Station Development Co., Ltd. /Kumagaya Station Development Co., Ltd. /Mito Station Development Co., Ltd. /Iwaki Chuo Station Building Co., Ltd. /Kinshicho Station Building Co., Ltd. /Chiba Station Building Co., Ltd. /Aomori Station Development Co., Ltd. /Hirosaki Station Building Co., Ltd. /Echigo Station Development Co., Ltd. /Station Building MIDORI Co., Ltd.

Hotel Operation

We provide hotel services meeting various customer needs.

Nippon Hotel Co., Ltd. /Hotel Edmont Co., Ltd. /Hotel Metropolitan Co., Ltd. /Takasaki Terminal Building Co., Ltd. /Sendai Terminal Building Co., Ltd. /Yamagata Terminal Building Co., Ltd. /Morioka Terminal Building Co., Ltd. /Akita Station Building Co., Ltd. /Hotel Metropolitan Nagano Co., Ltd.

Retail Shops and Food Services

Our shops and restaurants offer customers a convenient and pleasurable experience at stations and in their vicinity.

East Japan Kiosk Co., Ltd. /Nippon Restaurant Enterprise Co., Ltd. /JR East Food Business Co., Ltd. /JR East Station Retailing Co., Ltd.

Trading and Logistics

We play an important role in providing material procurement, delivery, and other services to facilitate the business activities of JR East Group companies.

East Japan Railway Trading Co., Ltd. /JR East Japan Logistics Co., Ltd. /JR East Logistics Platform Co., Ltd.

Travel Agency and Car Rental

We provide travel packages, car rentals, and other services to meet travelers' needs.

View World Co., Ltd. /JR East Rental Co., Ltd.

Sports and Leisure Businesses

Our leisure facilities and sports clubs support customers in leading healthy lives and in enjoying their time-offs.

JR East Sports Co., Ltd. /Gala Yuzawa Co., Ltd.

Real Estate Management

We develop and manage detached houses, apartment complexes, and stores under the theme "creating people- and environmentally-friendly housing."

JR East Urban Development Corporation /JR East Housing Development & Realty Co., Ltd.

Information, Financial, and Personnel Services

We provide comprehensive information services for the JR East Group companies.

JR East Japan Information Systems Company /JR East Netstation Company /JR East Management Service Co., Ltd. /JR East Personnel Services Co., Ltd.

Advertising and Publishing

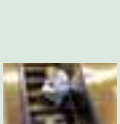
We provide information through in-train and station media.

East Japan Marketing & Communications, Inc. /Tokyo Media Services Co., Ltd. /The Orangepage, Inc.

Cleaning Services

We provide maintenance and cleaning services at stations and in trains to offer customers "clean travel."

Shinkansen Cleaning Service Co., Ltd. /Kanto Railway Servicing Co., Ltd. /East Japan Railway Servicing Co., Ltd. /East Japan Eco Access Co., Ltd. /Takasaki Railway Servicing Co., Ltd. /Mito Railway Servicing Co., Ltd. /Chiba Railway Servicing Co., Ltd. /JR Technoservice Sendai Co., Ltd. /East Japan Amenitec Co., Ltd. /Akita Clean Servicing Co., Ltd. /Niigata Railway Servicing Co., Ltd. /Nagano Railway Servicing Co., Ltd.



Construction Consulting and Maintenance Services

We provide consulting and maintenance services concerning railway facilities, machine equipment, and personal service facilities.

JR East Consultants Company /JR East Design Corporation /JR East Facility Management Co., Ltd. /JR East Mechatronics Co., Ltd. /Union Construction Co., Ltd. /East Japan Transport Technology Co., Ltd. /Tohoku Kotsu Kikai Co., Ltd. /Niigata Rolling Stock Machinery Co., Ltd.

Group Companies under Branch Offices

We develop unique businesses according to the character of each region.

JR Tokyo Planning & Development Co., Ltd. /JR Kanagawa Planning & Development Co., Ltd. /JR Kaiji Planning & Development Co., Ltd. /JR Utsunomiya Planning & Development Co., Ltd. /JR Takasaki Trading Co., Ltd. /Mito Service Development Co., Ltd./Keiyo Planning & Development Co., Ltd. /Tohoku Sogo Service Co., Ltd. /Juster Co., Ltd. /JR Atlis Co., Ltd. /Tokky Co., Ltd. /Shinano Enterprise Co., Ltd.

Editorial Policies

As was the case last year, this report is divided into two parts: the Highlight Section and the Comprehensive Section. It is intended to provide detailed information concerning the environmental and social activities of the JR East Group in an easily-understood manner.

Although last year's Highlight Section was intended to provide an overview of JR East's activities, this year, we are spotlighting several topics that are particularly significant, with a focus on the experiences and the perspectives of employees at forefront.

In the Comprehensive Section, we made reference to the GRI*1 guidelines on sustainability reporting, as we did last year, and addressed topics from environmental, social, and economic aspects. In the economic section, with a focus on our relationship with stakeholders, we disclosed information in a clear and easy-to-understand manner. In addition, we continue our active disclosures of environmental data in reference to Environmental Reporting Guidelines issued by the Ministry of Environment.

A new attempt of this year was introduction of the "First JR East Stakeholders' Dialogue," held on April 1, 2004 with various experts, in the section for communications.

Reference Guidelines
Sustainability Reporting Guidelines (Global Reporting Initiative)
Environmental Reporting Guidelines (2003 edition) (Japanese Ministry of the Environment)

Reporting Period
This report covers FY 2003 (April 1, 2003 through March 31, 2004). Data is based on the results during this period. However, initiatives begun prior to this period as well as some more recent activities are also referred to in certain sections.

Boundaries of Reporting
East Japan Railway Company and 98 Companies *2 of the JR East Group

***1 GRI (Global Reporting Initiative)**
An international organization that issues globally acclaimed *Sustainability Reporting Guidelines* – guidelines for reporting not only environmental issues but also social and economic issues. The GRI was established in cooperation with United Nations Environmental Programme (UNEP) and other organizations.

***2 East Japan Railway Company and 98 Companies of the JR East Group**
As of the end of fiscal 2003; the number of group companies was reduced to 94 in April 2004 as a result of consolidation.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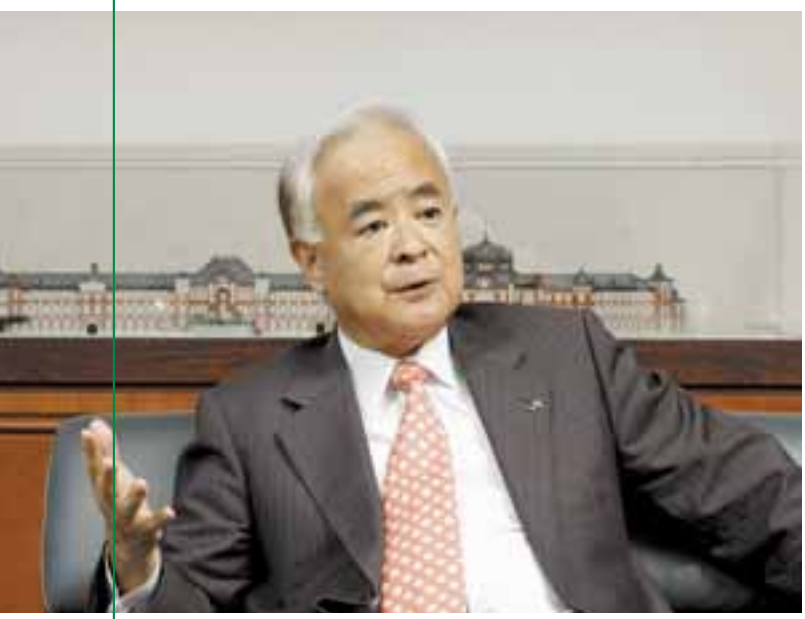
Pursuing to be a Trusted Corporate Group

Companies Cannot Fulfill their Social Responsibilities without Sound Management

The term corporate social responsibility (CSR) has recently come into widespread use with regard to the social responsibilities of corporations. There are various ideas concerning CSR, and I believe that sound management enables companies to fulfill their social responsibilities. In addition to fulfiling tax obligations, providing employment opportunies, and supplying goods and services needed by society, CSR is made up of what companies give back to society through corporate vitality, which is brought from sound management.

The Japanese National Railways, former company of East Japan Railway Company, was a government-run company. People might consider that as a public organization it was fulfilling its social responsibilities, but I do not think this was necessarily the case. The company accumulated tremendous debt and imposed a burden on the public, numerous labor strikes resulted in chaos in transportation, and the quality of services declined. After East Japan Railway Company was established as a private company, what needed to be done became much clearer. The key to fulfilling social responsibilities is to achieve sustainable growth under a system of sound corporate management.



Assisting Our Customers in Lead Enriched Lives

The railway business has a very close connection to the national life. In addition to fulfilling the function as a basic social infrastructure, I also believe that it is our social responsibility to respond to the needs of all stakeholders. I feel that the JR East Group exists expressly to provide a wide array of services centered on railway services so that we can assist our customers in leading enriching lives while constantly providing them with new value.

Efforts to Enhance Safety Have Reduced Accidents by 70%

The provision of safe and stable transportation services is an essential element of CSR in the railway business. It can even be said that ensuring safety above all else is the foundation of our CSR. We put considerable effort into ensuring safety, and about 40% of our annual investment goes into capital investments designed to improve safety.

As a result of our various efforts and innovations, the number of operational railway accidents has been reduced by more than 70% since the company was established. This achievement is even greater than the statistics indicate considering the fact that the number of train runs have increased.

Contrasting with this result are the inconveniences that our passengers experienced from train stoppages during the rail rerouting work on the *Chuo* Line during FY 2003. This project involved replacement of our most important line and since passenger inconvenience would have increased along with an increase in the number of times construction was performed, we had hoped to complete the work with the lowest possible frequency of construction. Unfortunately, our decisions could not prevent dissatisfaction among our passengers.

In response, we have inaugurated a special committee and have adopted a range of measures. Subsequently the large-scale rail rerouting work has been proceeding smoothly. We perform rail rerouting rather frequently to increase the convenience of passengers and local residents, and we vow to use the lessons gained from this construction experience in our future projects.

Needless to say, construction is not performed by JR East alone but is rather carried out with the cooperation of numerous other companies. In order to ensure that such incidents never reccur, I personally visited each of the participating companies and took the time to express our concerns. I called on them to take thorough measures to restore the trust of our passengers.

Environmental Initiatives are an Important Aspect of CSR in the Railway Business

Trains are a mode of transportation that emit low levels of carbon dioxide (CO_2) and boast high energy efficiency per unit transportation volume. Nonetheless, we are aware that with our scale of business of approximately 13,000 train runs with 16 million passengers transported daily, the environmental impact is quite significant. To put it another way, even though the environmental impact per unit is low, the total impact is considerably high.

We have set goals for reducing CO_2 emissions and introducing energy-saving railcars by FY 2005, and are currently taking action to meet these goals. It appears that we will meet our goals in several categories by the end of FY 2004.

We are also developing technologies that will contribute to environmental conservation. One result of such developmental measures is an energy-saving railcar that consumes about half the electricity of conventional railcars. We have already replaced 72% of our total railcars with this energy-saving model. In addition, we are also developing the NE Train – a hybrid type of railcar – and a new *Shinkansen* that travels at speeds up to 360 km/h. We are conducting research and development to limit environmental impact including noise and vibration resulting from *Shinkansen* traveling at higher speeds.

Environmental conservation initiatives enhance our competitiveness in terms of technological development and lead to greater overall corporate strength.

Aiming for the Development of a Sustainable Society

We seek to be a corporate group whose customers enjoy happy and plentiful lives. We are making a particular effort to provide added value to passengers while they are on board. We provide "satisfaction" to customers by responding to a variety of customer needs that include, for example, the desire to get work done or watch the news while being on the train.

We are also making a special effort to remodel the railway stations. In the past, stations were simply places for passengers to get on and off trains, but in the future we hope to develop them into exciting locations that inspire people. The creation of interesting stations as the "lightning rods for the city" also serves to make the city itself a more interesting place. Based on the idea that "station development means urban development," we hope to contribute to the revitalization of cities through the redevelopment of stations.

I am confident that Japan's railway technology is at the highest level in the world. It is likely that railways, particularly in Asia, will be modernized and converted to high-speed lines in the near future. I hope to promote global CSR by contributing to the development of railway technologies in these countries.

This Sustainability Report introduces our efforts toward the development of a sustainable society. It is our sincere hope that, through this report, we will be able to raise the level of dialog with all interested persons and parties. I look forward to receiving your candid opinions concerning this report.

Mutsutake Otsuka
President,
East Japan Railway Company

Development of Environmentally Friendly E231 Series

The E231 series reduces operational energy consumption by 50% compared to that of the 103 series, and in terms of weight, 90% of the E231 series railcar can be recycled. Servicing the *Yamanote*, *Takasaki*, *Utsunomiya*, and other metropolitan lines, the E231 series currently realized the most environmentally friendly design.

Hiroshi Kato
Deputy Manager,
Rolling Stock Design Division
Niitsu Rolling Stock
Manufacturing Factory

"The use of lighter trains brought us unintended additional benefits such as lessened frequency of rail replacement."

Substantial weight reduction for energy conservation

The noise of welding fills the factory large enough to house an entire set of train. Sparks fly as the workers weld together the stainless steel plates of the railcars. This is the Niitsu Rolling Stock Manufacturing Factory in Niitsu City, Niigata Prefecture, which has handled all aspects of E231 manufacture since 1994, from design to production. About half of the commuter and metropolitan area trains used by JR East are built here. It is also the first factory in the JR East Group to acquire ISO9001 and ISO14001 certification.

The E231 series is a train designed as a standard commuter and suburban train. Deputy Manager Hiroshi Kato of the Rolling Stock Design Division says that the major environmentally friendly feature of the new train is its low operational energy consumption.

▶ 15% reduction in flat car weight over the 103 series
Weight reduction is the key to reducing energy consumption

Operational energy consumption of the E231 series is 47% of the 103 series, which was the major metropolitan area commuter train when JR East was established. Lighter overall weight, effective use of braking energy, and greater motor efficiency are the three factors that have made such substantial energy conservation possible.

Compared to the 103 series whose weight is 40 tons, that of the E231 is mere 23 tons. Stainless steel has replaced iron in railcars, not only reducing weight but also the propensity to rust, thereby eliminating the need for painting. The number of railcars with motors per 10-car train has been cut from 6 in the 103 series to 4 in the E231 series. Lighter weight and progress in control technology have greatly contributed to bringing about this change.

Efforts to reduce weight started with the "halving railcar weight" target that initiated development of the 209 series, the predecessor of the E231 series. Energy savings achieved for the 209 series have been passed on in the development of the E231 series. An improved train information management system (TIMS) has reduced the amount of wiring per trainset by 34 %, or roughly 1.4 tons compared to the 209 series.

In addition to being light-weight, regenerative brakes are also contributing to reducing energy consumption. The regenerative brake is a mechanism which utilizes the driving electric motors to generate electricity when the brake is applied, and the generated electricity is fed back into the overhead electric line to be used efficiently.

Variable Voltage/Variable Frequency (VVVF) inverter control also contributes to energy conservation for its effective control of motor revolution through electronic control, without resorting to electrical resistance adjustments.

▶ A new E231 series railcar. Completed trainsets are delivered to the metropolitan rolling stock centers.

Superior recyclability and longer component lifespan

Superior recyclability means that about 90% of the weight of the E231 can be recycled. Almost all of the exterior material can be recycled. Resource saving artifices are also applied to the interior; the seats are now made of recyclable polyester resin and the seat covers are also designed for easy replacement when damaged.

The lifespan of parts has also been extended. For example, brake shoes, disk brakes, and other parts that press against or pinch wheels or axles during braking are exposed to wear and have to be replaced regularly, but the higher efficiency of the E231 braking system reduces wear and significantly lengthens the interval between replacements.

"Being in charge of design, I would want to expand the use of environmentally friendly materials," Kato says of his aspiration. Completed railcars undergo a variety of inspections during test runs and are delivered to the metropolitan area through JR East's railway lines.

Yoshishige Honda

Assistant Manager
Mitaka Electric Car & Drivers Depot

"Reduced frequency of braking shoe replacement on the E231 series clearly shows the improved efficiency of TIMS braking system."

▶ Brake shoe(left: before use, right: after use) used to press against the wheel during braking and brake shoe replacement (above) at Mitaka Electric Car & Drivers Depot

▶ Niitsu Rolling Stock Manufacturing Factory, the only railcar manufacturing plant in Japan owned by the railway company. About 250 railcars are manufactured per year.

Kazuyoshi Machida

Manager, Rolling Stock Development Project,
Transport & Rolling Stock Department
Railway Operations Headquarters

Pursuing improvement of energy conservation and recyclability

Since the introduction of the 209 series in 1993, we have focused on making environmentally friendly railcars. Use of common parts in commuter trains and metropolitan area trains – until then two separate product lineups – started with the arrival of the E231 and since then we have gradually reduced use of resources and lowered energy consumption. Developing environmentally friendly railcars continues to be one of the most important challenges and it is our intention to further improve the efficiency of regenerative brakes to lower energy consumption, as well as raise the level of interior material recyclability at the same time. Development of the AC Train (Advanced Commuter Train) employing a drive system different from that of today will garner still greater energy efficiency and further reduction in energy consumption.

Using Renewable Energy for Our Trains

About half of the JR East trains in the Tokyo area run on electricity generated by hydroelectric power plants, which has lower environmental impact. JR East uses the hydraulic power of the Shinano River to generate electricity in its own power plant in Niigata Prefecture.

Kenji Naito
General Manager
Shinanogawa Power Station

"During the peak hours in the morning and at night we use a balancing reservoir to increase power generating efficiency."

The Shinano River starts off in Kobushigatake in the Oku-Chichibu mountain range and flows into the Japan Sea. The abundant water of the river provides JR East with around 1/4 of its total electricity needs. As for Tokyo metropolitan area, this electricity makes up 50% of its electricity consumption used for trains, lighting, and air conditioning of stations, etc.

JR East runs three hydraulic power plants in Kawanishi Town and Ojiya City in Niigata Prefecture. The Senju Power Plant, Ojiya Power Plant, and Shin-Ojiya Power Plants started generating electricity in 1939, 1951 and 1990, respectively. These three power plants generated a total of 1.78 billion kWh during FY 2003.

In addition, JR East owns its own electric power-cables and substations. Generated power is relayed via electric power-cables through the Tanigawadake Mountains to Musashisakai A.C. (alternative current) Substation in Tokyo, located 200 km to the south of the power station, and distributed from there to be used as a power source for trains via a number of local substations.

▶ Miyanaka Intake Dam takes the water needed to generate electricity

Kenji Naito, the general manager of the power station, says, "Accurate forecasts of water amounts at these hydraulic power plants are essential since some of the electricity is used to serve the railway's passengers." The output at Kawasaki Thermoelectric Power Plant, which generates about 1/3 of power needs, is adjusted depending on hydroelectric power plant output to maintain the proportion of clean energy at the highest possible level. To estimate the next day's energy production, rainfall data along the Shinano River as well as its tributaries is added to the precipitation data to forecast the amount of available water. Such forecasts are also required to maintain the water level of Miyanaka Intake Dam. The amount of water taken from the dam is adjusted to maintain a stable water level.

Power generation via natural means involves constant care such as to clean up floating debris and other rubbish that the river water carries into the dam. Driftwood arriving at the dam used to be discarded is now recycled as wood chips and compost.

Now that you know where the electricity for your commuter trains comes from, you will probably feel different when you ride them next time.

▶ Hydroelectric power, a source of energy with lower environmental impact, makes reliable train services possible.

▶ Shinanogawa Power station has a total generating capacity of 449,000 kW.

▶ The general control station controls all the machinery of a hydroelectric power plant and forecasts the generating capacity of the plant based on precipitation data.

For a Faster Yet Quieter *Shinkansen*

JR East is now in the process of developing a *Shinkansen* train with the speed of 360 km per hour. But higher speeds entailing greater noise are not an option. The efforts of the project team continue.

Takeshi Kurita
Manager, Environmental Technology Group,
Advanced Railway System Development Center,
JR East Research & Development Center

"Environmental conservation along railway lines is the key to higher *Shinkansen* speeds. It is a complex technical issue but one that is worth the challenge."

"All the countermeasures to the major noise sources have been taken so to further lowering *Shinkansen* noise will require comprehensive measures involving the entire trainset ," says Takeshi Kurita, Manager at the Advanced Railway System Development Center. Some of the major sources of *Shinkansen* noise include the overhead pantograph, a device that conducts electricity from the overhead electric line to power a train, and the front part of the train. The vastly simplified design of the current pantograph is the result of a series of development efforts. In the future it will be necessary to develop comprehensive countermeasures including the pantograph with even better noise-reduction property.

The objective of achieving speeds of 360 km/h and making the "world's fastest train" is to shorten travel time and enhance its competitiveness against airlines. Noise is, however, a major obstacle in the road ahead. Raising speeds of the current *Shinkansen* trains to 360 km/h will raise the noise level by 6 decibels, which means quadrupling of the sound energy.

As a first step, sophisticated measuring equipment has been specially developed to identify noise sources. One of these devices is the Spiral Array Microphone. Consisting of 114 microphones placed in a spiral arrangement on a 4-meter diameter circular frame, it can measure and map out on a sound source map how much noise the specific train components generate.

Measuring results have yielded a number of countermeasures, such as the use of a sound insulating board on the pantograph contact surface. Other measures include reducing the number of pantographs from two to one per trainset and covering the lower railcar sections with noise-absorbing panels to prevent noise reflected off the soundproof walls from bouncing back.

Results of the test runs conducted between March to April 2003 showed that we were able to meet the targeted noise levels. Kurita says with quiet confidence that JR East is steadily approaching its goal. By 2005, a prototype train capable of commercial operation at 360 km/h will be ready. This will be another step towards the world's fastest, but quiet, *Shinkansen* train.

▶ A Spiral Array Microphone developed for precisely measuring noise sources; it received The Technology Development Award for 2004 from the Acoustical Society of Japan.

▶ A sound source map is created from the measuring results. Red indicates louder noises.

▶ Setting up a Spiral Array Microphone and other preparations to enable noise measurements during test runs.

▶ Single pantograph trainsets require the technology to ensure constant contact between the overhead line and pantographs.

▶ Development of a 360 km/h *Shinkansen*, the world's fastest train, is underway.

JR East Department Store Co., Ltd.

Recycling Food Waste from Station Building Shops for Compost

Verry Merry is a flower shop on the first floor of Granduo, a department store in the JR Tachikawa station building. You can see the small bags filled with compost on the store shelves. The labels read "Recycled food waste from Granduo," signifying that the compost is made of recycled food waste from restaurants in the department store.

Norihiro Okuma

Manager, Management Administration Group, Management Planning Department, JR East Department Store Co., Ltd.

"The sale of compost from food waste is a recycling activity that produces tangible results and thus stimulated the environmental awareness of our employees."

Granduo Tachikawa has 40 restaurants under its roof, more than most other station buildings. These establishments produce 440 tons of food scraps and food waste annually, accounting for roughly 1/4 of all waste by weight. Granduo recycles all food waste as compost, part of which is sold at the flower shop.

"Turning food waste from restaurants into compost and returning the product to our customers is a recycling activity I have long dreamed of," says Manager Norihiro Okuma at the Management Administration Group of the Management Planning Department in explaining the rationale behind recycling.

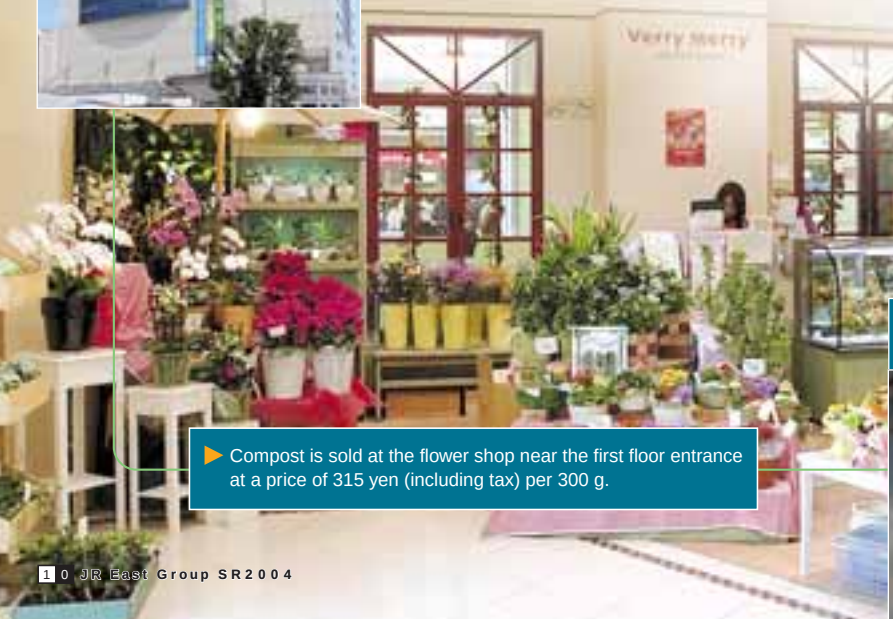
JR East Department Store Co., Ltd., which operates Granduo, is doing its best to lower the environmental impact of its activities based on a policy of harmonizing business activities with environmental consciousness. From its start, a cross-functional project team was set up to handle business, general affairs, and equipment of the Department Store. The environmental impact of business activities was identified and ways to process food waste, which turned out to be the greatest issue, were determined. As a result, food waste processors were installed at businesses opening in 1999.

▶ The restaurants on the 6th and 7th floors; leftover food accounts for 90% of food waste.

Food waste from restaurants is placed in a food waste processor at the Recycle Center on the first floor. The waste is then mixed with fermentation bacteria and dried at a temperature of 60 to 80°C for around 24 hours to produce compost material. This material is then sent to a fertilizer manufacturer in Gumma Prefecture where it is mixed with other materials and fermented to become compost in about 90 days.

One of the greatest challenges in recycling food waste is to ensure that other waste items do not get mixed into the food waste. Chopsticks and other items were often mixed into the food waste in the busy kitchens of restaurants. In response, training seminars were held to explain the significance of recycling to the staffs and managers of stores as well as told those with poor waste sorting practices to improve their operations. Food waste recycling is now a firmly established practice and other wastes are sorted into 19 different categories before disposal. Now that the recycle rate of wastes has been achieved 60%, therefore the next goal is to develop environmentally friendly products. "I would like to focus on the sale of products that are friendly to the environment," Okuma says passionately.

▶ Granduo Tachikawa, the department store located next to JR Tachikawa Station



▶ Compost is sold at the flower shop near the first floor entrance at a price of 315 yen (including tax) per 300 g.

▶ Organic compost Recycle Power GD300

▶ Food-waste processor; about 1.5 tons of food waste is processed every day.

JR East Japan Logistics Co., Ltd.

Promotion of Environmentally Friendly Driving Improves Safety

To encourage its drivers to adopt environmentally friendly driving practices, JR East Japan Logistics Co., Ltd. implemented a Vehicle Operation Management System for its integrated logistics services in 2001. This has greatly lowered the environmental impact of the service while increasing safety by reducing the rate of accidents at the same time.

Annual idling time for all branches of JR East Japan Logistics Co., Ltd. has gone down dramatically from around 3,000 hours in FY 2002 to around 650 hours in FY 2003. The average idling rate (ratio of idling time to total driving time) is just 0.3% for all branches.

A number of factors made possible the achievement of such quick and impressive results. One of them was accurate comprehension of driving status and management of drivers' driving data. From 2001 all vehicles were installed with Digital Travel Recorders to record data such as duration of idling times, frequency of sudden and quick accelerations, and time spent over the speed limit. Eisaku Taira, Deputy Section Chief in the Works Control Division, says, "Every month, drivers in each branch are ranked into one of the five categories – A through E – according to their driving data, and the results are announced. This led to quick improvement in driver attitudes." To preclude the need to turn the heater on and to stop idling the engine when the vehicle is parked for the driver to rest, rechargeable heat accumulation mats were also introduced.

The promotion of environmentally friendly driving (or so-called "Eco-Drive") practices has lowered the instances of quick acceleration and other dangerous driving maneuvers, and has improved safety by bringing down the accident rate by 38% over three years. Recognizing this achievement, 12 branches including those of Group companies were designated as "Outstanding Safety Office," a certification issued by The Japan Trucking Association on behalf of the Ministry of Land, Infrastructure and Transport, recognizing business entities that meet specific safety standards, in December 2003.

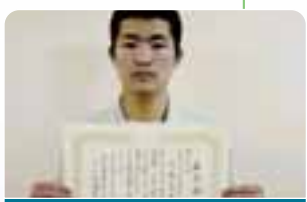
In June 2004, the company also received the "Green Management Certificate," which is issued by the Foundation for Promoting Personal Mobility and Ecological Transportation on behalf of the Ministry of Land, Infrastructure and Transport to the truck businesses whose business practices show concern for the environment. Taira says that "We are intending to promote the reduction of fuel consumption and CO_2 emissions based on the management system of the Green Management Certificate and to further introduce vehicles that run on natural gas. "

Eisaku Taira
Deputy Section Chief,
Works Control Division
JR East Japan Logistic Co., Ltd.

"We regard engines left revving longer than 5 minutes as idling and make sure they are strictly controlled."

▶ Digital Travel Recorders are used to record idling times and other operational data.

▶ The "Eco-Drive" seminar is held once a year. Positive results were quickly apparent in terms of lower fuel consumption figures, which improved by 23% over FY 2001, the year before the start of the seminar.

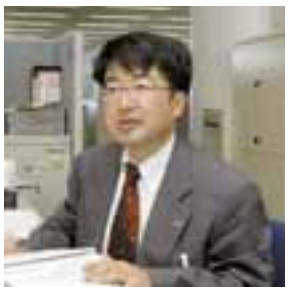


▶ Mr. Yoshitomo Mitsumori, the driver with the best "Eco-Drive" record at Ichikawa Branch, receives recognition for safe driving from The Japan Trucking Association.

▶ Utilizing the opportunity of vehicle replacement, the natural gas vehicles (NGVs) are proactively introduced. The company introduced 7 NGVs in FY 2003.

Challenges for Safe and Stable Transport Services

Each employee must address safety issues seriously to build more accurate railway system. We must learn from accidents, determine their causes, and make proactive efforts to prevent their recurrence.



Kenji Horioka

Manager, Planning & Disaster Prevention Group (currently: Rolling Stock Section, Transport & Rolling Stock Division at Tokyo Branch Office)

Transport Safety Department, Railway Operations Headquarters

"As a railway company, it is our greatest mission to provide safe and stable transportation."

"Safety Plan 2008" – Returning to the Fundamentals to Reexamine Safety Issues

Kenji Horioka, Manager in the Transport Safety Department says that the company has needed to reassess "safety," its most valuable asset, due to the stricter social standards that are being applied to the industry. "That is the major objective in initiating the 'Safety Plan 2008,' the latest five-year safety plan."

▶ Brochure describing "Safety Plan 2008," the new five-year safety plan

▶ A solid basic operation ensures stability and safety

During the 17-year period from its foundation up to 2003, JR East has formulated and carried out three 5-year safety plans, investing a total of 1,400 billion yen. As a result, railroad accidents have fallen by 75% from 376 in FY 1987 to 96 in FY 2003.

However, worrisome factors that may or may not directly cause accidents still exist. To eliminate such "seedlings of accident" and to fulfill the CSR as a railway company, JR East is reminding itself that the "safety" is one of its most important management assets and continuing its effort to build a railway system that delivers higher quality service.

Stable transport is crucial to ensure safety

"Safety depends on the smooth interplay of 'people,' 'equipment' and 'regulations.' In other words, hardware and software are both essential," says Horioka.

In terms of "hardware," JR East is reinforcing and expanding the maintenance of its automatic train stop (ATS) system, and is enforcing measures to prevent railroad crossing accidents. As a new addition, JR East is expanding its "System for Halting All Trains in the Event of an Earthquake" to include areas outside of the metropolitan area. This system automatically stops train operations in affected areas when an earthquake with a magnitude higher than 6 on Japan Meterological Agency (JMA) seismic intensity scale occurs. The "Image-Processing Type Fall-Detection System at Station Platfoms" is another new technology currently being introduced. The system alerts oncoming trains of

▶ Railroad overhead crossings on the *Saikyo* and *Yamanote* Freight Lines at Ikebukuro Station to ensure safe, stable transport, and to improve the transport ation network

obstacles along their paths by using two cameras that allow 3D detection of the obstacles.

In terms of "software," stopping trains in the event of an accident is a basic safety procedure but recovering to normal service as quickly as possible after the accident is also essential to maintaining safety because a system that operates erratically can lead to non-standard behavior and become a possible source of human error. Recognizing the above, JR East has set up a Committee for Improving Transport Stability to investigate the cause of accidents and devising methods for speedy recovery to enable early resumption of normal services.

Reviewing rail-rerouting work

A large-scale rail-rerouting project took place between Mitaka and Kokubunji Stations on the *Chuo* Line on September 27th, 2003 to replace the complicated multiple railroad crossings with overpasses. The completion of this work was considerably delayed. As a result, the 7-hour cancellation of services ensued great inconvenience to 180,000 passengers in the surrounding areas. Following this, the Review Committee for Large-scale Rerouting Work was set up to thoroughly investigate causes and risks involved in such projects and to come up with countermeasures.

To make sure that rail-rerouting work at Urawa in May 2004 was completed within the time limit, efforts were made to finish all construction work ahead of schedule. Later in June, all sorts of technologies were mobilized in the preparatory phase of a two-day rail-rerouting project in Ikebukuro to minimize risks. An evaluation meeting was held after the completion of work and a system was set up to utilize the ideas and opinions raised at the meeting for further improvement in the next construction project.

Esao Arakawa
Manager, Area & Infrastructure Development Group,
Construction Department

"We strive to make sure that trains are on schedule and devise measures to deal with delays when they occur."

In FY 2004, a great number of large-scale construction projects will be carried out, starting with the rerouting of tracks at Shinjuku Station, the largest station in metropolitan Tokyo. Esao Arakawa, Manager of the Construction Department says with confidence that "lessons learned from past troubles have helped us set up a system that systematically checks construction conditions from many angles to minimize risks."

▶ A test run after completing construction

▶ Final checks are carried out thoroughly.

▶ Rail rerouting site in Urawa; workers tensely await roll call.

Station-based Nursery Schools Assist Working Women

JR East opened nursery schools at 10 stations between 1996 and 2003. In April 2004, we opened three new facilities near stations on the *Saikyo* Line in an effort to develop communities in the vicinity of our railway lines that assist childrearing. New developments are taking place in the station childcare facility business.

Emiko Taguchi

Manager, New Business Development Group, Business Promotion Division, Life-style Business Development Headquarters

"It is natural that a railway company would make progress 'from a point to a line' and come up with the idea of developing communities in the vicinity of its railway lines that support childrearing. I hope to continue expanding nursery schools at stations to meet the needs of communities."

Development of station-based nursery schools expands childcare support from a "point" to a "line"

"Station-based nursery schools are intended to be a part of 'station renaissance' (i.e., an enhancement of station amenities) that responds to societal needs, including the higher demand for childcare services and declining birthrate," says Manager Emiko Taguchi of the Life-style Business Development Headquarters in explaining why the *Saikyo* Line was chosen. "We are not adopting the small-scale, single-site development of the past. Rather, we hope that this project series serves as a model for future development along the 'line'." The vision of *Saikyo* Line station-based nursery schools – creating a railway line that supports community childrearing – was born when demand for childcare services of the community met JR East owning unused land on a railroad.

This project has following prehistory; when the *Shinkansen* was constructed, former Japan National Railways purchased strips of land about 20 meters wide on both sides of the viaduct from Arakawa to the vicinity of Omiya to serve as a buffer zone against noise and vibration caused by the trains. "In 1999, we exchanged documents with the local community that enabled JR East to use this land. This was the beginning of the development of station-based nursery schools along the *Saikyo* Line," says Satoshi Tsunoda, Deputy Manager of the Omiya Branch.

He continued: "The biggest hurdle was obtaining the understanding of the local government bodies." Apart from Musashiurawa Station where there is a high demand for nursery schools, most of the local government bodies were hesitant to accept JR's proposal. "We went to explain the significance of station-based nursery schools many times, and finally they recognized our point." The project team was determined to obtain the understanding of the local government bodies and to receive approvals for the nursery schools because tuition can be lowered and users would place greater trust in the service. "In Saitama Prefecture, tuition must be set at a higher level if the facility is not licensed, and thus it would not 'support' the community's childrearing," explains Tsunoda. Now that three facilities have opened with the users pleased with the service, the local government bodies are requesting more be opened.

▶ The Ohisama Nursery School places great emphasis on warmth from the heart. The childcare system is supported by 12 experienced childcare providers, nurses and nutritionists.

Tailored services offer more than just a convenient location

Taguchi notes that "Commuters can farm out and pick up their children on the way to and back from work, and can also go shopping in the area while their children are at the childcare facility." The convenience of the station-based nursery schools is not limited to their location. Director Isao Takamura of the Ohisama Nursery School explains, "We want to help working mothers as much as possible. We hope to offer opportunities for meaningful time that parents and children can spend together by lightening the burden on mothers."

What users like most about the facilities is their extended hours. The Ohisama Nursery School is open from seven in the morning until eight in the evening. Most nursery schools have an initial period during which children's stays are limited to a half day so they can become accustomed to going to the facility, but Ohisama Nursery School did not adopt this system. This is because "mothers' jobs don't allow them a period for getting accustomed to." Futons (padded mattresses) for naps can be leased and the facilities provide dinner to children whose parents pick them up late. The locations are certainly convenient, but the true secret to their popularity is that the facility provides services that pay close attention to the parents' needs.

Nursery schools that are open to all community members

One of the foundations of the nursery schools is the interaction with the local community. The Ohisama Nursery School began offering childcare support programs in July of 2004. The school has a broad array of activities planned that are centered on communication with the children including toy making, cooking classes taught by a nutritionist, reading books to the children, first-aid training, inviting local senior citizens to spend time with the children, and so on. These activities are intended to involve not just the facility users, but also all local residents. The school also offers short-term childcare services for full-time housewives. "I am grateful to all of the childcare providers for their many ideas for making this a childcare facility that is truly open to the community," says Tsunoda.

"This is a business that truly contributes to the community made possible through the collaborative efforts of local government bodies, childcare providers, and the JR East Group. There is definitely value in pursuing a business that brings happiness to all the parties involved as well as customers," says Taguchi. Tsunoda notes that "on April 1, 2005, an authorized nursery school and senior day service center will open at the Yono-Honmachi Station. Plans also call for two schools to be opened on the New Shuttle Line. Eventually, we hope to have facilities at every station on the *Saikyo* Line." Based on local needs and the cooperation of childcare providers, they will open station-based nursery schools at additional stations and continue to expand this business to further develop communities that support childrearing.

Satoshi Tsunoda
Deputy Manager, Development Section, Enterprises Division
Shinkansen Land Development Project (currently JR Utsunomiya Planning & Development Co., Ltd.) Omiya Branch Office

"The *Saikyo* Line station nursery schools will enhance its image as a railway line that facilitates parenting and will ultimately contribute to an invigoration of the Line."

Isao Takamura
Director, Ohisama Nursery School
Toda Ekimae Childcare Center
Tetsudou Kousaikai (Railway Welfare Association)

"The Ohisama Nursery School has 60 children, from those who are one year of age or less to five-year-olds. It is a great environment that exists as a small community."

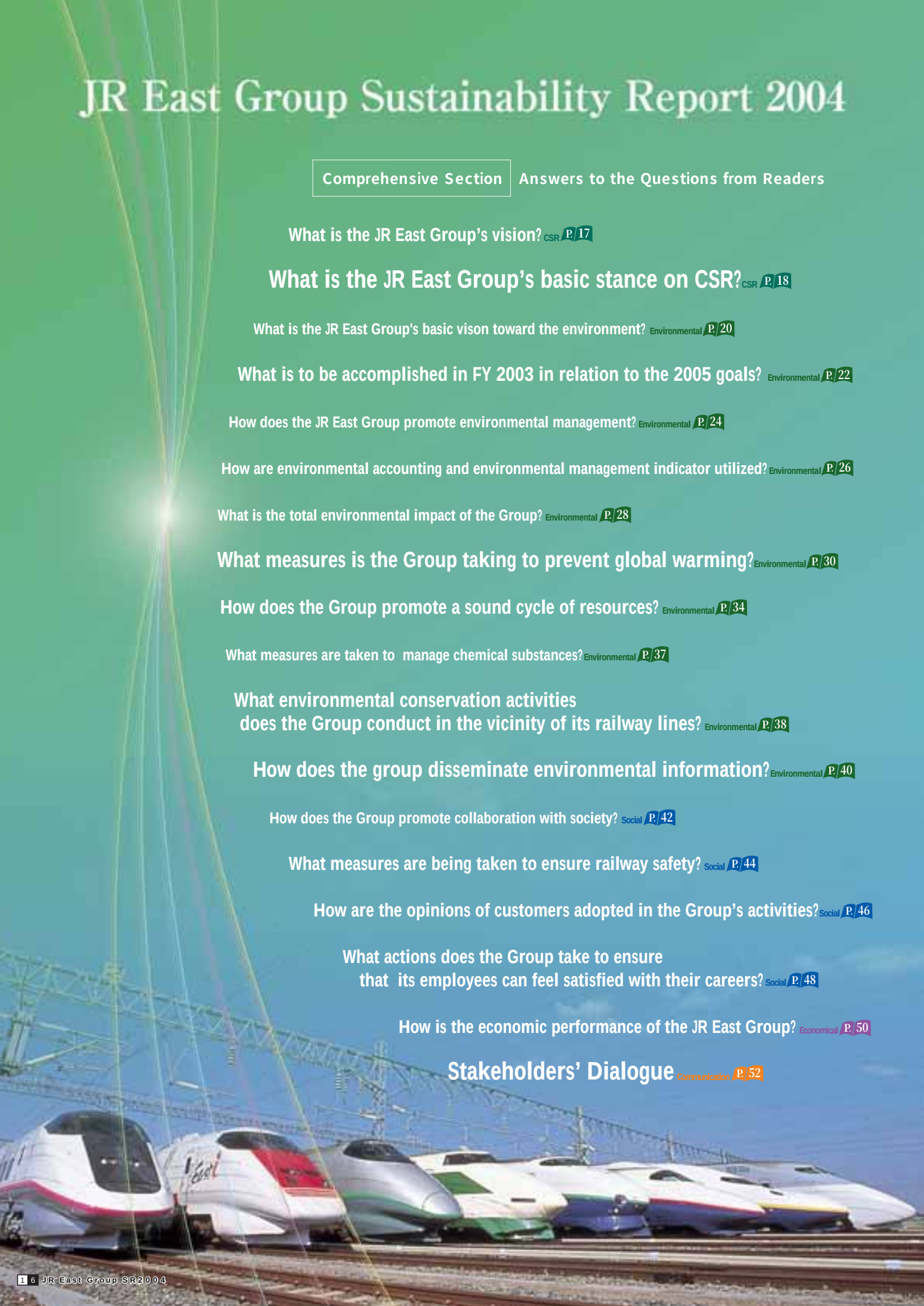
▶ The Ohisama Nursery School is located just a 5-minute walk from the Toda Station on the *Saikyo* Line. Because it is located close to an elevated railway line, the building was constructed with particular attention to natural illumination and noise-reduction.

▶ Musashiurawa J Kids Station (Musashiurawa Station)

▶ Toda Koen Ekimae Sakurasou Nursery School (Toda Koen Station)

JR East Group Sustainability Report 2004

Comprehensive Section | Answers to the Questions from Readers



What Is the JR East Group's Vision?

The JR East Group seeks to be a corporate group that takes on the challenges of creating services that support people in their day-to-day lives and hopes to become a corporate group that is trusted by its customers and all other stakeholders. In other words, the JR East Group aims to be a " trusted life-style service creating group."

Group Policies

The JR East Group aims to function as a corporate group providing high quality and advanced services with railway businesses at its core while achieving sound management. For this purpose, every employee of the Group endeavors to support safe and punctual transportation and supply convenient and high-quality products. Every employee takes on the challenge of improving the standard of services and raising the level of technology in order to further gain the confidence and trust of customers. As a "trusted life-style service creating group," we go forward with our customers to contribute to the achievement of better living, the cultural development of local communities, and the protection of the global environment.

The New Frontier 21

The New Frontier 21, announced in November 2000, is the JR East Group's medium-term business plan for the period from 2001 to 2005. In pursuit of the Group's goal to be a "trusted life-style service creating group," the plan specifies four vital roles and five specific directions that the JR East Group is pursuing. These include achieving harmony with society and coexisting with the environment. To these ends we are encouraging the development of a barrier-free society and the revitalization of local communities while promoting environmental management to become a "corporate group advanced in environmental conservation." Through such activities, we aim to act as a responsible corporate citizen providing ongoing services to the community.

Action Guidelines

1. Customer Focus
We offer cordial, user-friendly services.

2. Safety and Quality
We provide safe and punctual transportation services and other high-quality services.

3. Group Development
We establish trustworthy corporate group with autonomy, collaboration, and challenging spirit.

Stakeholders*1 and CSR

The JR East Group, serving approximately 16 million customers daily in its railway business alone, has various relationships with an enormous number of stakeholders including shareholders and investors, business partners, employees and their families, non-profit organizations, and local communities. There has been particular focus on corporate social responsibility (CSR) in recent years, and the Group believes that its business activities with a focus on railway services are the means for the Group to fulfill its corporate social responsibilities. Based on the Group Policies and Action Guidelines, we are working to achieve continuous growth, and through the gain of trust from all of our stakeholders, we will carry out our corporate social responsibilities.

A Trusted Life-Style Service Creating Group
" New Frontier 21 "

Four Vital Roles

We believe that the JR East Group should perform the following four major roles in the twenty-first century.

1. Provide safe, comfortable, and convenient transportation services and create new services (spatial and temporal designs)
2. Achieve steady growth and returns
3. Drive technological innovation and integrate advanced technologies
4. Fulfill our social responsibilities and work in partnership with local communities

Five Specific Directions

We are committed to the realization of a group vision, based on five specific directions.

1. Creating Customer Value and Pursuing Customer Satisfaction
— Building a corporate group for providing customers with "trust," "comfort," and "excitement."

2. Innovation of Business through the Creation of Technologies
— Building a corporate group for the integration of advanced technologies.

3. Harmony with Society and Coexistence with the Environment
— Building a corporate group which harmonizes with society and gains the respect of global community.

4. Creating Motivation and Vitality
— Building a corporate group offering a working motivation and a sense of accomplishment through a free and liberal approach to work.

5. Raising Shareholder Value
— Building a corporate group meeting shareholder expectations through the improvement of consolidated performance.

*1 **Stakeholder**
Persons or parties who have a relationship with the JR East Group including customers, shareholders and investors, business partners, employees and their families, non-profit organizations, and local communities.

Our Philosophy on CSR

What is the JR East Group's Basic Stance on CSR?

In order to firmly fulfill our corporate social responsibilities (CSR), the JR East Group is working to strengthen its management structures in four areas: corporate governance, compliance, accountability, and risk management.

Basic Philosophy on CSR

The railway business that JR East is primarily engaged with is an infrastructure that derives its history as a mean to progress the society, and thus it has extremely strong ties with the general public and local communities. Therefore, awareness of the importance of contributing to society through business activities and fulfilling corporate social responsibilities is part of JR East's corporate culture.

Our "New Frontier 21" medium-term business plan states that "fulfilling our social responsibilities and work in partnership with local communities" is one of our Vital Roles, and our Group Policies provide that "as a 'trusted life-style service creating group,' we will go forward with our customers to contribute to the achievement of a better living, the cultural development of local communities, and the protection of the global environment."

In recent years, CSR has become a focus of attention, and businesses are being called upon to take affirmative and serious action in response to various issues that affect all of society from maintaining high ethical standards to practicing transparent management and addressing global environmental issues. By faithfully implementing our Vital Roles and Group Policies in our business activities, we will maintain our status as a corporate group that meets the expectations of the public and gains the trust of stakeholders.

Management Structures for Implementing CSR

Establishing corporate governance

The East Japan Railway Board of Directors is comprised of 23 directors including 2 outside directors. A resolution to reduce the number of directors from 31 to 27 was passed at the General Meeting of Shareholders in June of 2003 in order to promote more active discussion of issues at board meetings and to accelerate the decision-making process.

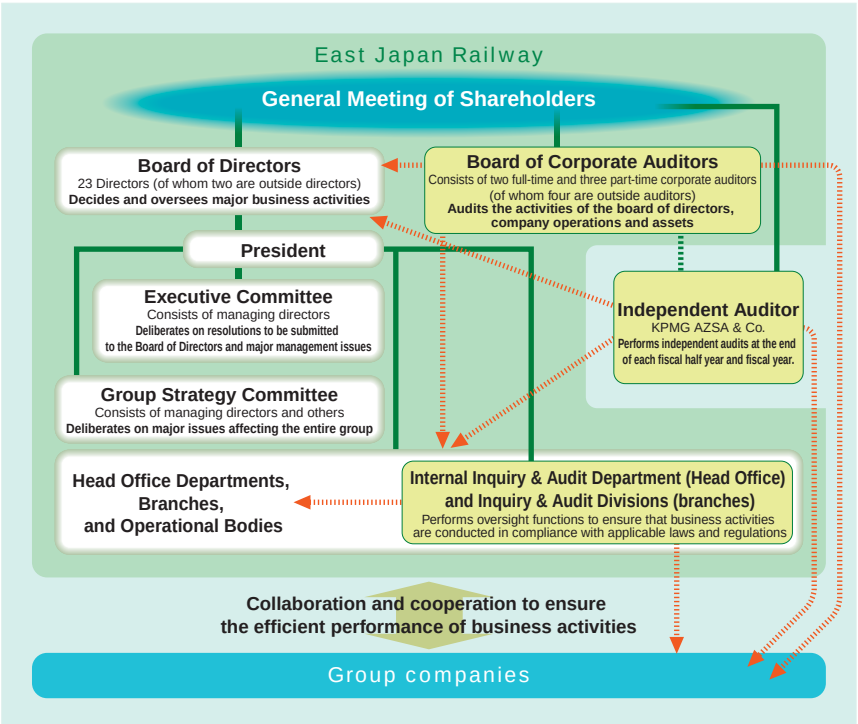
The number of directors was further reduced to 23 at the General Meeting of Shareholders in June 2004. In addition, an Executive Committee consisting of all managing directors was established to deliberate major management issues. A Group Strategy Committee consisting of executive directors and others was established to consider major issues affecting the entire Group.

We have been organizing the necessary structures for internal governance including the incorporation of external perspectives in the system.

In order to maintain transparency in management and to strengthen audit functions, we have appointed outside directors and auditors who have extensive experience and knowledge. The Board of Corporate Auditors is comprised of 2 full-time and 3 part-time auditors, of which 4 are outside auditors. Each auditor conducts job performance audits of the directors in compliance with policies set by the Board of Corporate Auditors. Furthermore, regular liaison meetings with group company auditors are held to exchange information and to encourage CSR practices.

JR East has a relationship with KPMG AZSA & Co., an accounting firm, which con-

■ **Corporate Governance System**



ducts independent audits at the end of each fiscal half year and fiscal year.

We maintain Inquiry & Audit Department at the head office and Inquiry & Audit Divisions at all branches as internal auditing bodies. The Corporate Audit Department also performs audits of group companies.

Ensuring compliance

Recognizing that corporate management based on compliance and high ethical standards are prerequisites for continuous corporate existence, we built a framework to respond rapidly to legal issues and legal risks affecting group companies. The framework is centered around the Legal Department, formally a part of the Administration Department, established in June 2002. We strive to maintain compliance with applicable laws and regulations in all our business activities reflecting the advice received from our legal counsel and other professionals.

In addition, periodic training is provided at branches and group companies to enhance compliance and ethical standards. In FY 2003, we conducted compliance training for branch personnel, and management seminars and basic legal training for group company employees.

Disclosing more information to maintain accountability

We engage in public relations and investor relations activities to actively disclose information concerning the JR East Group in order to deepen the understanding and trust of stakeholders. We also use web sites to provide accurate key corporate information in a timely manner.

Strengthening risk management sysmem

The Crisis Management Headquarters was established in January 2001 to gather and manage information and to implement initial responses in the event of a major crisis affecting JR East's business operations. By involving senior management in the initial stages, disclosing appropriate information, and maintaining compliance, we minimize any potential damage or loss.

Furthermore, in order to maintain a corporate culture that encourages the communication of risk information, we are reinforcing risk and information management structures by conducting seminars and other training for group companies.

■ **Compliance Training in FY 2003**

Name of training	Number of times conducted	Participants	Contents and Objectives	Number of participants
Management Seminar (Compliance Course)	2	Group company administration managers	Compliance, risk management, fair hiring practices, and human rights education	60
Legal Skills Seminar	1	Branch legal affairs managers	Deepening legal knowledge, legal reasoning, and decision-making abilities based on real issues	14
Basic Legal Training	2	Group company legal affairs personnel	Acquisition of basic legal knowledge	55

Environmental

環境

Global environmental capacity is limited as are global resources. It is now obvious to anyone that human activity must take place within these confines.

In the restructuring of the JR East Group in 1992, we seriously started to address environmental issues. As for our core business – the railway business, we are promoting various approaches, such as the use of railcars with half the energy consumption and of renewable energy, as well as the reduction and recycling of wastes in large variety and quantity, to offer transportation with lower environmental impact.

As for group companies, we are also assessing the impacts on the environment to grasp their extent, and to promote countermeasures. To this end, we will provide our employees with environmental education to maintain and reinforce the reduction of the environmental impact of the Group as a whole.

Basic Vision Toward the Environment

What Is the JR East Group's Basic Vision Toward the Environment?

Since 1992, the JR East Group has adopted the basic philosophy of balancing environmental protection with the pursuit of our business activities. We have established activity guidelines and numerical goals to more specifically measure environmental conservation activities.

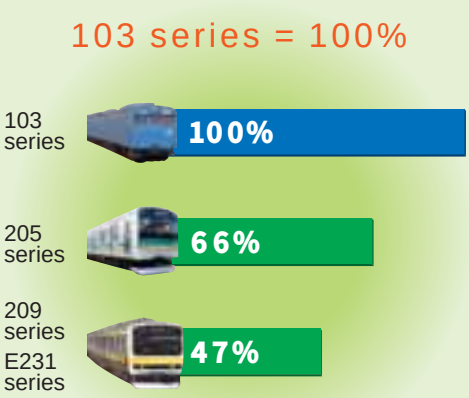
Two Approaches to the Promotion of Ecological Activities

Taking advantage of the special traits of our business, JR East uses the following two approaches to address environmental issues.

Creating a railway with low environmental impact

On a voluntary basis, we are promoting efforts including adopting energy-saving railcars and recycling wastes to reduce the environmental burden of our business activities.

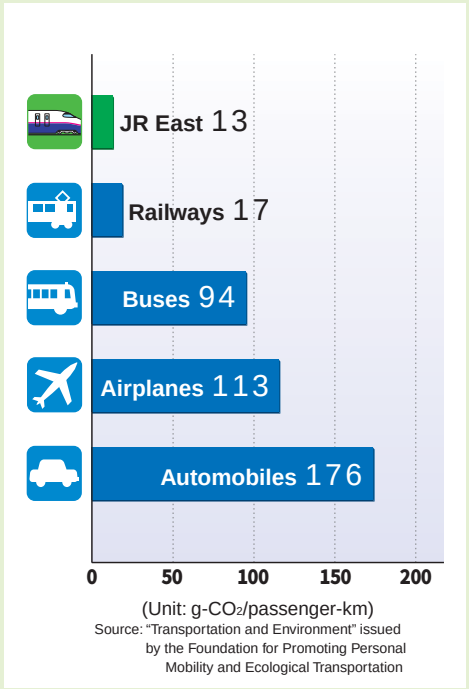
■Electric consumption by series



Creating a convenient railway system

To maximize the characteristics of the railways that its environmental impact per unit of transportation volume is lower than other transportation means, we are promoting the intermodal transportation, an integration of railways and cars, to reduce the overall impact of all means of transportation.

■CO_2 emission levels by transportation type



Source: "Transportation and Environment" issued by the Foundation for Promoting Personal Mobility and Ecological Transportation

Basic Philosophy and Policy for Promoting Ecological Activities

Basic Philosophy (established in May 1992)	Basic Policies (established in May 1992)
The entire JR East Group, working together, will diligently strive to balance environmental protection with our business activities.	●To contribute to customers' lives and local communities by providing a comfortable environment. ●To develop and provide the technology needed to protect the global environment. ●To maintain an awareness of environmental protection and raise the environmental awareness of our employees.

Activity Guidelines and Goals for the Promotion of Ecological Activities

Activity Guidelines (established in March 1996)

1. We work to prevent the waste of precious energy resources and to reduce CO_2 emissions – a known source of global warming – by enhancing our energy efficiency and introducing cleaner forms of energy.
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 the usage and generation of such substances, and to adopt environmentally responsible substitutes when they are available.
3. We ensure the appropriate processing of various types of waste generated at our offices, establishments, stations, trains, etc. We strive to recycle waste and reduce the generation thereof, and to use more recycled and resource-saving products to minimize our burden placed upon the environment.
4. We respect the natural environment as a nurturer and source of life, and therefore we endeavor to reduce noise and vibration caused by train operations, thus achieving a harmonious relationship with the communities we serve.
5. We work to make railways a more attractive and environmentally friendly form of transportation.

Goals to be met by FY 2005

(Based on figures for FY 1990) (established in March 1996; revised in November 2000 and partially revised in September 2002)

- ●A 20% reduction of CO_2 emissions in general business activities
- ●Realization of an energy-saving railcar ratio of 80%
- ●A 30% reduction of CO_2 emissions in proportion to unit electric power generation at dedicated thermal power plant
- ●A 15% reduction in energy consumption for train operations in proportion to unit transportation volume
- ●An 85% reduction in the number of large-size refrigerating machines using specific chlorofluorocarbons (CFCs)
- ●Realization of a 40% recycling rate for waste generated at stations and on trains
- ●Realization of a 75% recycling rate for waste generated in rolling stock workshops[*1]
- ●Realization of an 85% recycling rate for waste generated in construction projects
- ●Realization of a 100% rate for usage of recycled paper as office stock
- ●Reduction of noise to less than 75dB in designated residential areas along the *Tohoku* and *Joetsu Shinkansen* Lines*
- ●A 60% reduction of NOx emissions at company-run thermal power plant
- ●Implementation of specific environmental conservation activities on an annual basis

∗ Goal achieved in FY 2002

***1 Rolling stock workshops**

The rolling stock workshops were renamed General Rolling Stock Centers in April 2004. However in this report, the term "rolling stock workshop" refers collectively to both General Rolling Stock Centers and the Niitsu Rolling Stock Manufacturing Factory.

What is to be Accomplished in FY 2003 in Relation to the 2005 Goals?

JR East has established environmental goals to be met by FY 2005. Each year we review performance on a qualitative and quantitative basis, looking for ways to achieve goals. As for tasks that remain, we develop strategies to make improvements in the following fiscal year.

Environemtal Conservation Activitiy Category	Main Activities	FY 2005 Goals	Reference value (FY 1990)	Target value	FY 2002 Achievement	FY 2003 Achievement ( ) actual figures	Evaluation	Reference pages
Environmental conservation along railway lines	●Continue noise reduction measures along *Shinkansen* and conventional lines (constructing soundproof walls, installing continuous welded rails, etc.) ●Reduce environmental pollutants from the Kawasaki Thermoelectric Power Plant ●Conduct appropriate management and treatment of organic solvents, etc.	Reduction of noise to 75 dB or less in designated residential areas along the *Tohoku* and *Joetsu Shinkansen* Lines NOx emissions at Kawasaki Thermal Plant	– 994t	100% (goal to be met by FY 2002) 60%reduction (402 tons)	100% 60%reduction (399 tons)	**100%** **66%reduction** **(341 tons)**	🚃🚃🚃 🚃🚃🚃	37-39
Global environmental conservation	●Introduce energy-saving railcars ● Increase energy conservation at stations and office buildings (introduce co-generation) ●Promote intermodal transportation (Park & Ride, Rail & Rent-a-Car, etc.)	Total CO_2 emissions from general business activities CO_2 emissions in proportion to unit electric power generation at Kawasaki thermal plant Ratio of energy-saving railcars Energy consumption for train operations in proportion to unit transportation volume Number of large freezer units using specific chlorofluorocarbons (CFCs)	2.76 million tons-CO_2 726g-CO_2/kWh – 20.6 MJ/car-km 82 units	20%reduction (2.2 million tons-CO_2) 30%reduction (508 g – CO_2/kWh) 80% 15%reduction (17.5 MJ/car-km) 85%reduction (12 units)	16%reduction (2.32 million tons-CO_2) 29%reduction (519g-CO2/kWh) 68% 10%reduction (18.6 MJ/car-km) 77%reduction (19 units)	**20%reduction** **(2.2 million tons-CO_2)** **31%reduction** **(504 g-CO2/kWh)** **72%** **11%reduction** **(18.3 MJ/car-km)** **83%reduction** **(14 units)**	🚃🚃🚃 🚃🚃🚃 🚃🚃 🚃🚃 🚃🚃	30-33, 37
Resource conservation	●Reduce and recycle waste generated at stations and on trains. (categorized collection of waste, maintenance of recycling centers, etc.) ●Recycle train tickets ●Recycle waste generated at rolling stock workshops and construction projects ●Recycle newspaper collected at stations, and introduce recycled office paper, etc.	Recycling rate of waste from stations/trains Recycling rate of waste at rolling stock workshops Recycling rate of waste from construction projects Rate of recycled paper used for office stock	– – – –	40% 75% 85% 100%	37% 74% 84% 98%	**39%** **81%** **92%** **99%**	🚃🚃 🚃🚃🚃 🚃🚃🚃 🚃🚃	34-36
Environmental management	●Environmental management led by the Committee on Ecology at JR East Head Office and branch offices. ●Acquire ISO14001 certification at the Koriyama General Rolling Stock Center ●Conduct forestation along railway lines ●Publish the Sustainability Report, conduct environmental publicity, etc.	Specific annual environmental protection activities	–	–	13 locations 10,000 trees planted 3,500 participants	**15 locations** **12,000 trees planted** **2,400 participants**	🚃🚃	24-27, 40-41
Research and development of environment-related technologies	●Develop *AC Train* – the next-generation commuter trains ●Develop the hybrid *NE Train* ●Develop noise reduction technology and other technologies							9, etc.
Social activities	●Environmental conservation and other activities in cooperation with local governments and other organizations							40-41

Satoshi Seino, JR East Vice President, Committee on Ecology, Vice-Chairman

"In FY 2003 we made significant progress in 4 subjects towards our FY 2005 goals such as increasing the rate of recycling of waste generated at our rolling stock workshops and at construction sites. We also continued to improve recycling of waste from stations and trains, and increased the ratio of energy-saving railcars to non-energy efficient railcars. These achievements have led to a drastic revision of our environmental goals and therefore new targets will be introduced later this year. CO_2 emitted by our business activities has been reduced to 2.2 million tons, a substantial reduction from the last fiscal year. This is the result of a variety of efforts and the considerable influence of external factors such as an increase in river water that increased the amount of power generated by the hydraulic power plants. Consequently, we must not be satisfied with these achievements and must continue to take measures proactively to lower CO_2 emissions.

Progress toward FY 2005 goals

🚃🚃🚃 ····· excellent
🚃🚃🚃 ····· satisfactory
🚃🚃 ····· behind schedule

How Does the JR East Group Promote Environmental Management?

The entire JR East Group strives to strengthen its environmental management system for promotion of environmental conservation. At the same time, we provide environmental education to raise the environmental awareness of each employee.

Implementation of Environmental Management

In-house Committee on Ecology

We established the Committee on Ecology to responsively exercise the establishment of the environmental goals as well as the implementation of the environmental impact assessment for all operations and of environmental activities. The Committee also confirms the achievement of the goals and the executive oversight. This cross-departmental committee – having its secretarial office in the Management Administration Department – consists of general managers from every department and is chaired by the Chairman of JR East.

In FY 2003, the "JR East Group Environmental Management Advancement Conference" was established to strengthen the overall initiatives carried out by the group.

ISO14001 Certification

We are promoting the acquisition of ISO14001 Certification, the international standard for environmental management systems, particularly for sectors of our business that have a comparatively high environmental impact. Beginning with the Niitsu Rolling Stock Manufacturing Factory in FY 1998, several other sites have acquired the certification, and in FY 2003 the Koriyama General Rolling Stock Center has added its name on the list.

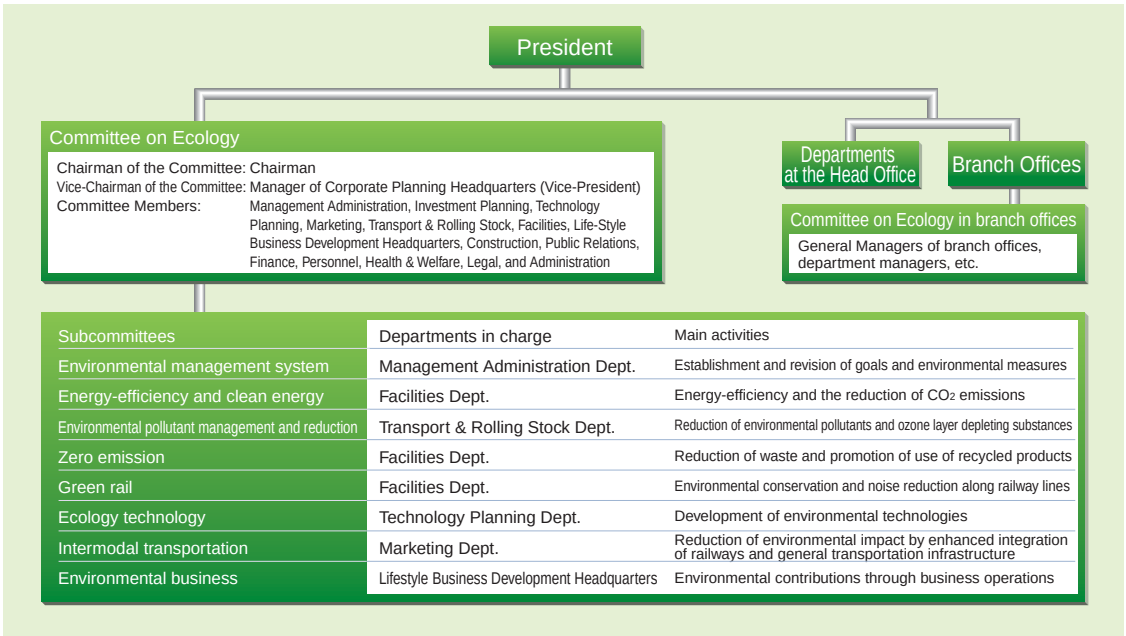
As for our group companies, East Japan Eco Access Co., Ltd., LUMINE Co., Ltd. and the Production Operation Division for box lunches and other products in Nippon Restaurant Enterprise Co., Ltd. have obtained certification as well.

Koriyama General Rolling Stock Center has just acquired ISO14001 Certification.

Acquisition of ISO14001

Site	Date
Niitsu Rolling Stock Manufacturing Factory	February 1999
Kawasaki Power Plant	March 2001
Tokyo General Rolling Stock Center	March 2001
Niigata Mechanical Technology Center	March 2001
Omiya General Rolling Stock Center	March 2002
Shinkansen General Rolling Stock Center	November 2002
Koriyama General Rolling Stock Center	December 2003

Environmental Management Advancement Structure



Subcommittees	Departments in charge	Main activities
Environmental management system	Management Administration Dept.	Establishment and revision of goals and environmental measures
Energy-efficiency and clean energy	Facilities Dept.	Energy-efficiency and the reduction of CO_2 emissions
Environmental pollutant management and reduction	Transport & Rolling Stock Dept.	Reduction of environmental pollutants and ozone layer depleting substances
Zero emission	Facilities Dept.	Reduction of waste and promotion of use of recycled products
Green rail	Facilities Dept.	Environmental conservation and noise reduction along railway lines
Ecology technology	Technology Planning Dept.	Development of environmental technologies
Intermodal transportation	Marketing Dept.	Reduction of environmental impact by enhanced integration of railways and general transportation infrastructure
Environmental business	Lifestyle Business Development Headquarters	Environmental contributions through business operations

Internal environmental audit

JR East performs environmental activities based on a concept of Plan-Do-Check-Action (PDCA) cycle under the supervision of the Committee on Ecology.

At the rolling stock workshops, for example, we conduct regular audits carried out by internal auditors, who had been sent to take external trainings, to evaluate our own environmental activities. In an internal environmental audit, it was indicated that some activities, such as the reevaluation of environmental impact assessment and the records following education and training, have not been fully and correctly executed. These activities have since been improved to meet set standards.

Environmental risk management

Strict management of chemical substances has been implemented to prevent environmental disasters.

We have compiled emergency response manuals for the handling of chemical and other hazardous substances at the thermoelectric power plant and rolling stock factories. Personnel involved in handling such materials participate in study groups and/or in treatment trainings, share information and knowledge and are given on-site training exercises in their safe use.

Environment-related accidents

In FY 2003 we had no accidents that adversely affected the environment and were subject to no fines.

Environmental education

Environmental management makes it essential that all employees are properly aware of environmental issues. We therefore provide environmental education to all new recruits and new management staffs, and provide lectures in environmental subject through seminars or online; a total of 2,800 employees received environmental education during FY 2003.

We also provide information on environmental issues through digest version of our sustainability report, which was distributed to all employees, as well as monthly in-house magazine *JR Higashi*, newsletters published by each branch, intra-branch office LAN, and posters.

Evaluation of environmental performance

JR East evaluates and encourages employee efforts toward environmental conservation. For example, at the 17th Presentation Meeting of Small Group Activities held in December 2003, the group "Norarikurari" of Takasaki Mechanical Technology Center received an Award for Outstanding Activities.

The group had noticed that wastewater from the railcar cleaning facility could be reused. Upon completion of water quality survey, they decided to use it in the pollutant processing facility. This led to a substantial reduction in the use of water resources and has reduced water and sewage costs as well.

Providing information on environmental issues through distributing Digest version of the sustainability report, distributed to all employees, and our in-house magazine *JR Higashi*

Posters introducing organic vegetables produced using recycling-based agricultural techniques outside the staff canteen

Environmental education

Seminars and lectures	Number of sessions	Number of participants
Training for new on-site supervisors	8	160
Training for implementation managers	1	200
Training for new recruits	1	1,330
Training for new management staff	5	70
Environmental seminars	20	790
Online training	–	250

How are Environmental Accounting and Environmental Management Indicator Used?

JR East utilizes environmental accounting to understand the cost effectiveness of our expenditures and investments for environmental conservation. The results, together with our own environmental management indicator, are used to assist management decision-making.

Environmental Accounting for FY 2003

(billion yen)

Categorization of environmental conservation activities	Environmental conservation costs (billion yen)		Effects of environmental conservation attained through environmental goals			Economic benefits accompanying environmental conservation activities
	Investment	Expenses		FY 2002	FY 2003	
Environmental conservation along railway lines (Anti-pollution activities)	6.62	6.68	Reduction of noise to 75dB or less in designated residential areas along the *Tohoku* and *Joetsu Shinkansen* Lines NOx emissions at the Kawasaki Thermal Plant	100%-achievement 399t	**100%-achievement** **341t**	–
Global environment conservation	59.68	–	Total CO_2 emissions from general business activities CO_2 emissions in proportion to unit electric power generation at the Kawasaki Thermal Plant Ratio of energy-saving railcars Energy consumption for train operations in proportion to unit transportation volume Number of large freezer units using specific chlorofluorocarbons (CFCs)	2.32 million tons-CO_2 519g-CO_2/kwh 68% 18.6 MJ/car-km 19 units	**2.2 million tons-CO_2** **504g-CO_2/kwh** **72%** **18.3 MJ/car-km** **14 units**	21.36
Resource-recycling	–	4.86	Recycling rate of waste from stations/trains Recycling rate of waste at rolling stock workshops Recycling rate of waste from construction projects Rate of recycled paper used for office stock	37% 74% 84% 98%	**39%** **81%** **92%** **99%**	3.95
Environmental management	0.03	0.45	Forestation along railway lines	13 locations 10,000 trees planted 3,500 participants	**15 locations** **12,000 trees planted** **2,400 participants**	–
Research and development of environment-related technologies	–	1.30				–
Social activities	–	0.04				–
Total	66.33	13.33				25.31

Reference
Investment in facilities for the period: 235.5 billion yen
Total expenditures for research and development for the period: 15.7 billion yen[*1]

*1 **Total R&D costs**
Covers research and development in basic fields, including funding of the Railway General Research Institute (5.9 billion yen) in accord with the Agreement on Research Activities.

Environmental Accounting

Summarized results for FY 2003

In FY 2003, the cost of environmental conservation activities in the form of investment reached 66.3 billion yen while that of expenditures were 13.3 billion yen.

Global conservation activities, which account for a major part of the investments, were 59.6 billion yen, 14.4 billion yen less than the previous fiscal year when implementation of energy-saving railcars was accelerated in response to the extension of the *Tohoku Shinkansen* to Hachinohe. The introduction of energy-saving railcars and other facilities have reduced CO_2 emissions by 430,000 tons-CO_2.

Investment in environmental conservation along railway lines increased by 1.6 billion yen, raising the total expenditures to 6.6 billion yen, mainly due to the increase in investment for measures to reduce *Shinkansen* noise.

Verification through an environmental management indicator

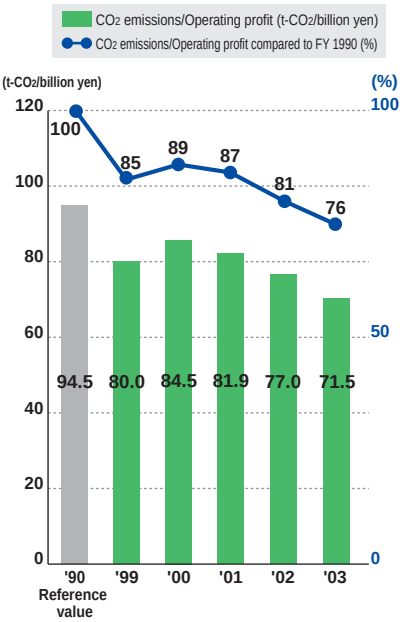
JR East established an environmental management indicator used to determine the relationship between our business activities and environmental impact. The indicator is refered to as "Added Economic Value" based on operating profits with having CO_2 emissions, one of our top priorities, as our environmental impact factor. We utilize this indicator to guide our business planning and decision-making for management.

In this equation, a smaller value indicates that the business is earning added economic value with fewer burdens on the environment. Due to our efforts over the last decade, the value of 94.5 (t-CO_2/billion yen) recorded in FY 1990 improved to 71.5 (t-CO_2/billion yen) in FY 2003.

Environmental management indicator

$$= \frac{\text{Environmental impact}}{\text{Added economic value}} = \frac{\text{CO}_2\text{ emissions (t-CO}_2\text{)}}{\text{Operating profit (billion yen)}}$$

Changes in environmental management indicator



Calculation of environmental conservation costs

Environmental conservation costs

- Data refers to East Japan Railway Company only (on a non-consolidated basis).
- Based on "Environmental Accounting Guidelines" (FY 2002 edition) by the Ministry of Environment.
- "Environmental conservation costs" cover only those that are identifiable by the current management system.
- Among the multipurpose expenditures, the total cost is reported for those with significant environmental benefits; (The cost for pollution prevention includes all expenses incurred in installing continuous welded rails, etc., as this is considered to contribute to enhanced functionality. The cost for global environmental conservation includes the total amount invested in energy-saving railcars.)
- Expenses do not include depreciation
- Expenses for processing refuse generated at stations and on trains (under resource-recycling costs) are calculated as follows: A model is set up for cleaning stations and trains. Then the percentage taken up by waste recycling and processing is calculated (in proportion to the entire model). By multiplying the overall cleaning expenses for stations and trains by this percentage, the amount of expenditure is obtained.
- Of the resource-recycling costs, the cost of processing waste from construction projects and rolling stock workshops is calculated for each facility by multiplying the waste volume in FY 2003 by a standard per unit cost.

Benefits of environmental conservation

- The benefit of environmental conservation is calculated based on figures that represent environmental targets.

Economic benefits of environmental conservation activities

- As for global conservation, the economic benefit is calculated by determining the annual reduction of electricity and maintenance costs generated by the introduction of energy-saving railcars, cogeneration, etc. (including partial estimates), then multiplying this amount by the legally accepted depreciation lifespan.
- Cost of processing waste generated by construction work and rolling stock workshops incorporates revenue generated from the resale of reusable resources.

What is the Total Environmental Impact of the Group?

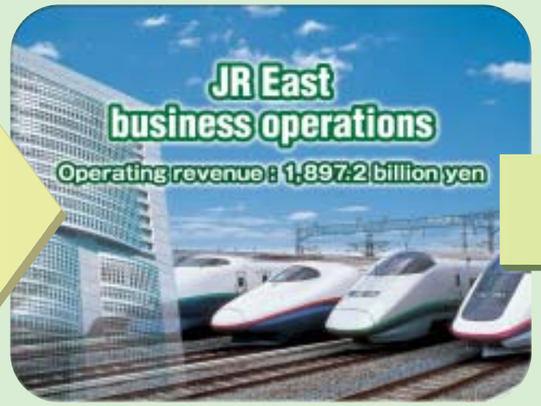
The JR East Group uses a large amount of resources in the course of its business operations and discharges a variety of substances into the environment. For this reason, we have come up with numerical values to gauge our impact on the environment.

INPUT

Energy
- Electricity 6.21 billion kWh (56% from company-run power plant)
- City gas 10.4 million m^3
- Other fuels 82,000 kℓ (crude oil equivalent)

Water
11.7 million tons

Office paper
1,606 tons (99% of which is recycled paper)



Energy
- Electricity 0.89 billion kWh
- City gas 32.87 million m^3
- Other fuels 53,000 kℓ (crude oil equivalent)

Water
10.31 million tons

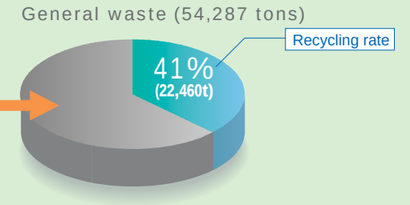
Office paper
1,847 tons (73% of which is recycled paper)

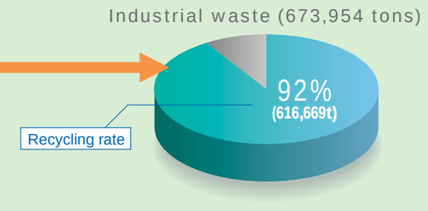
OUTPUT

CO_2 emissions
2.2 million t-CO_2

General waste
- Offices 2,749 tons
- Stations and trains 49,007 tons
- Rolling stock workshops 1,771 tons
- Tickets 760 tons

Industrial waste
- Construction projects 651,701 tons
- Rolling stock workshops 22,151 tons
- Medical waste 102 tons

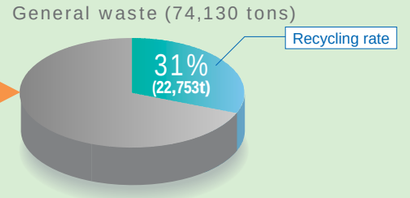


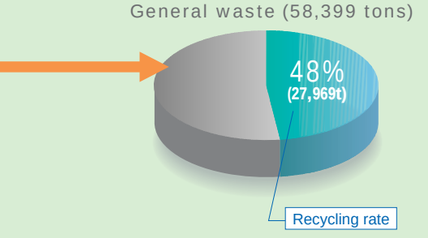


CO_2 emissions
0.54 million t-CO_2

General waste
74,130 tons

Industrial waste
58,399 tons





What Measures is the Group Taking to Prevent Global Warming?

JR East Group takes a two-pronged approach to lower its CO_2 emission levels. First, we use energy efficiently and utilize natural energy. Second, we promote intermodal transportation, that is, an effective integration of various means of transportation.

Measures to Prevent Global Warming

Energy supply and consumption of JR East

The JR East power supply consists of electricity and other power sources. Our electricity comes from company-run power plants along with electricity purchased from power companies. We use this energy to power our trains as well as to light and air condition stations and offices. Other forms of energy such as diesel oil and kerosene are used to operate diesel vehicles and air-conditioning systems at stations and offices.

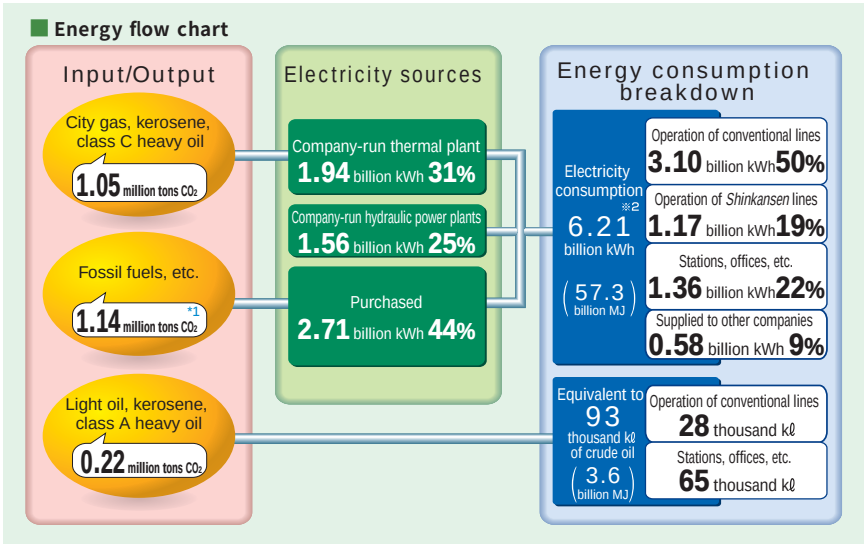
More efficient use of energy has reduced the amount of CO_2 emissions in FY 2003 by 20% from FY 1990 figures.

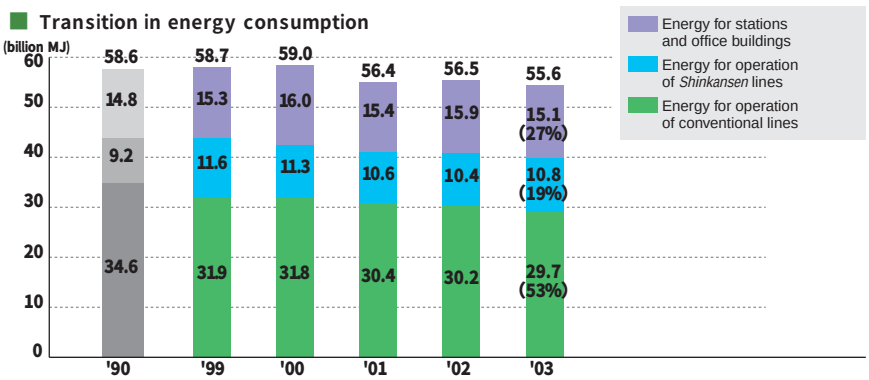
Using Energy Efficiently

Energy consumption and rate of change

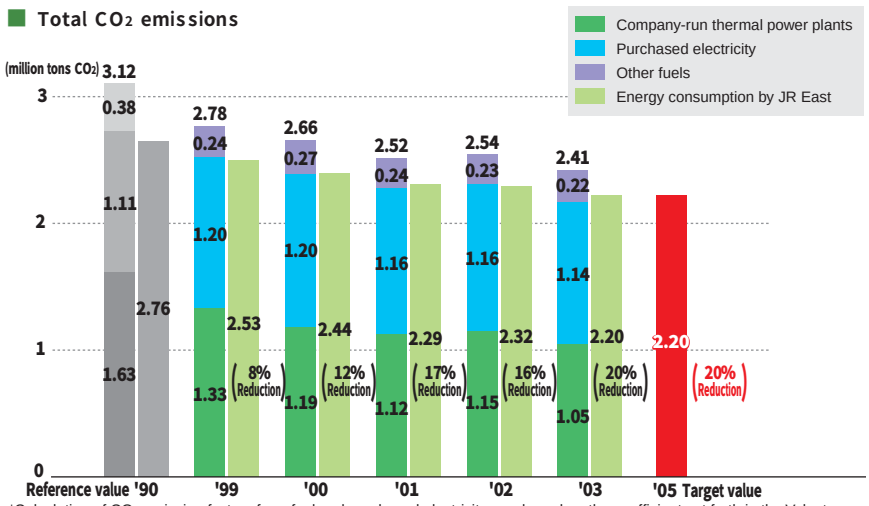
In FY 2003, energy consumption for JR East was 55.6 billion mega joule (MJ) while the resulting CO_2 emissions stood at 2.2 million tons-CO_2, a substantial reduction compared to the previous fiscal year.

This achievement was the result of a variety of efforts, but was also due to external factors such as an increase in the amount of river water available for power generation at our hydraulic power plants. Thus we must not be satisfied about our achievements and should keep striving to reduce energy used for train operations, which currently accounts for 73% of energy consumption, through continuous introduction of energy-saving railcars.





*Purchased electric power and electric power from company-run hydraulic power plants were calculated based on 9.42 MJ/kWh. Power generated by company-run thermal power plant and other fuels was calculated from actual fuel consumption.



*Calculation of CO_2 emission factors from fuel and purchased electricity was based on the coefficient set forth in the Voluntary Action Plan established by the Japan Business Federation and the Federation of Electric Power Companies Japan.

***1 1 1.14 million tons CO_2**

To maintain simple comparability with historical figures, FY 1990 CO_2 emission coefficient of the Federation of Electric Power Companies Japan was used to derive the figure; substitution with the FY 2002 coefficient would result in a figure of 1.11 million tons CO_2.

***2 6.21 billion kWh**

Equivalent to the annual electric power consumption of 1.68 million households

Reducing energy consumption in train operations

As of FY 2003, 8,813, or 72% of all JR East railcars, were of the energy-saving type. We are gradually replacing old conventional railcars with energy-saving railcars equipped with the "regenerative brakes" and "VVVF inverter*1 controls." For *Shinkansen* lines, we are introducing lighter, more energy-saving railcars with lower air resistance with smoothed design.

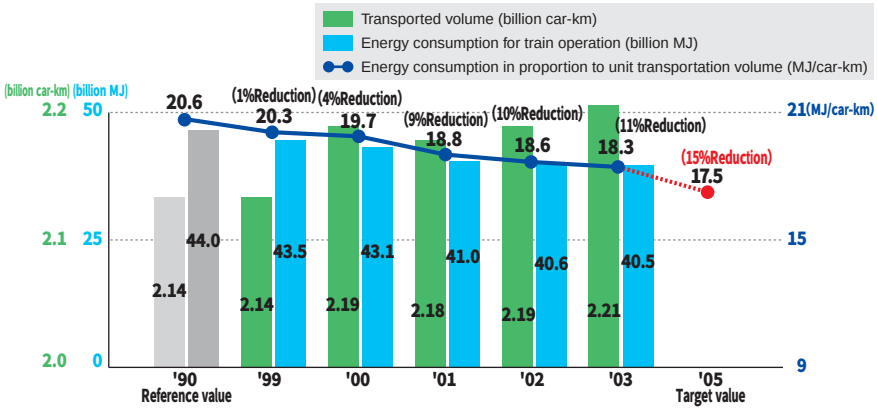
These energy saving measures reduced energy consumption in proportion to unit transportation by 11% in FY 2003 when compared to figures for FY 1990.

Developing the NE Train

We have developed a prototype NE Train, the first hybrid railcar system*2 to make train operation even more energy efficient. Test runs have been conducted since May 2003. This new train is expected to reduce energy consumption by about 20%. Fuel cell powered NE Trains are part of our future development plans.

NE Train, a hybrid system that saves energy and reduces gas emissions

Energy consumption during train operation and unit transportation volume

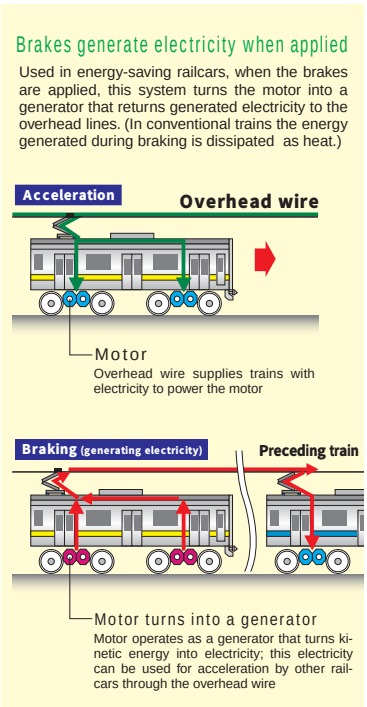


E231 series: VVVF railcars run on the *Yamanote*, *Chuo*, *Sobu*, *Utsunomiya* and other lines

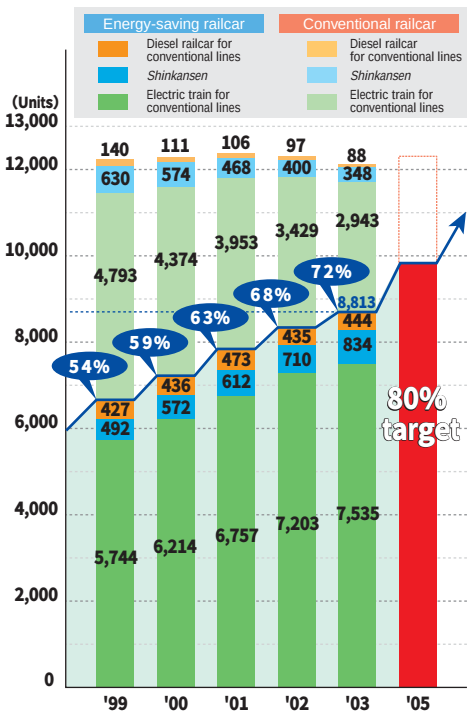
E2 series: VVVF railcars for "Asama" and "Hayate" *Shinkansen*

Kiha 110 series: diesel railcars for conventional lines feature fuel-efficient and low-polluting engines

Regenerative brake configuration



Transition in proportion of energy-saving railcars



*1 **VVVF inverter**
VVVF stands for variable voltage variable frequency. It enables efficient control of motor revolution without the use of electrical resistance.

*2 **Hybrid railcar system**
The motor is powered by electricity generated by an engine. The power generated during regenerative braking is stored in the battery and used during acceleration.

Saving energy in motor vehicle operation

In addition to trains, JR East uses many types of vehicles, including those to maintain facilities, to transport equipment and materials, and to provide transportation services. We are now introducing low-emission vehicles such as hybrid cars, natural gas vehicles, and fuel-efficient vehicles with idling-stop functions. At the end of FY 2003, 18% of our fleet of 3,191 vehicles was replaced with low-emission vehicles.

Improving energy efficiency in stations and office buildings

We are working to reduce energy consumption at the JR East stations and station buildings. One major undertaking has been to install cogeneration systems, which utilize the electricity produced as well as heat generated as a by-product. In FY 2003, we installed the system at the Niigata *Shinkansen* Rolling Stock Center and added 17 gas heat pump air conditioners to provide more efficient air conditioning.

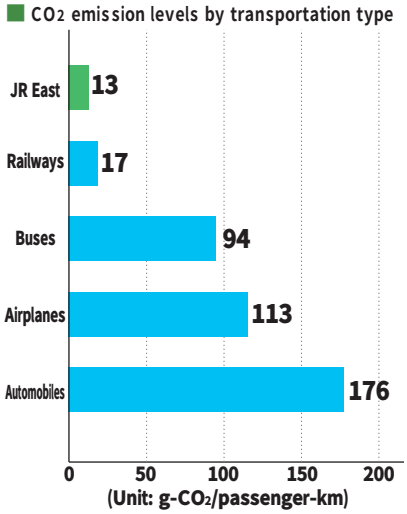
Improving Energy Efficiency with Integrated Transport Systems

Intermodal transportation

Although railways use energy in a highly efficient manner and the impact on the environment is low, this alone is insufficient to satisfy all customer transportation needs. To lower the environmental impact of the overall transportation infrastructure, JR East is encouraging intermodal transportation, the integration of trains with other modes of transportation.

As of March 2004, car parking lots at 527 stations have been expanded to accommodate 60,000 vehicles, promoting our Park & Ride program that links cars and trains. We also provide "Rail & Rent-a-car," a service that integrates trains with rental cars, as well as "Air Rail," a discount service that combines train and air travel. Tours that combine trains and buses are also available to customers.

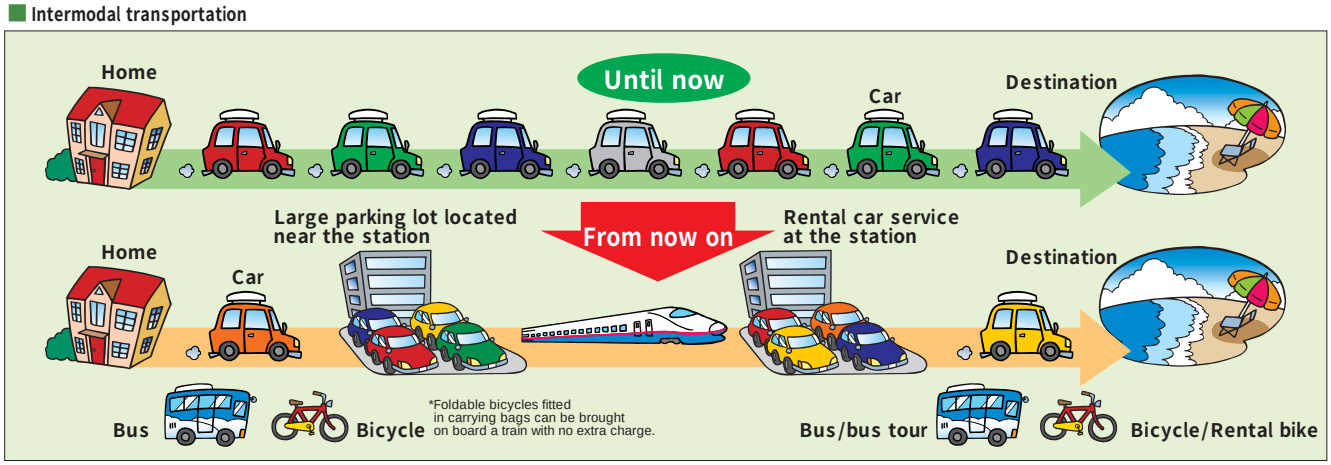
■ CO_2 emission levels by transportation type



Source: *"Transportation and Environment"* issued by the Foundation for Promoting Personal Mobility and Ecological Transportation

A Park & Ride at Kurikoma Kogen Station on the *Tohoku Shinkansen*

■ Intermodal transportation



Supplying Electricity Efficiently

Load-dispatch center improves supply efficiency

JR East's demand for electric power fluctuates throughout the day, reaching a peak during rush hours. To supply electricity efficiently in the face of such varying conditions, we combine and balance the amount of electricity generated at our power sources*1, which are company-run thermal and hydraulic power plants and purchased electricity. Our "load-dispatch center" plays a vital role through monitoring and controlling energy supply in real time to optimize our use of energy.

Improving thermoelectric power generation

The company-run thermoelectric power plant with a total output of 655,000kW is located in Kawasaki, Kanagawa Prefecture. The plant has reduced its CO_2 emissions by 31% per unit electric power generation in FY 2003 from that in FY 1990 through replacement of its four power generating units sequentially to a "combined-cycle power-generating unit"*2 and optimization of their operations.

Improving hydroelectric power generation

Hydroelectric power is a cleaner energy source that does not emit greenhouse gases. JR East has a hydroelectric power plant on the Shinano River with total output of 450,000 kW, generating 1.4 to 1.8 billion kWh per year.

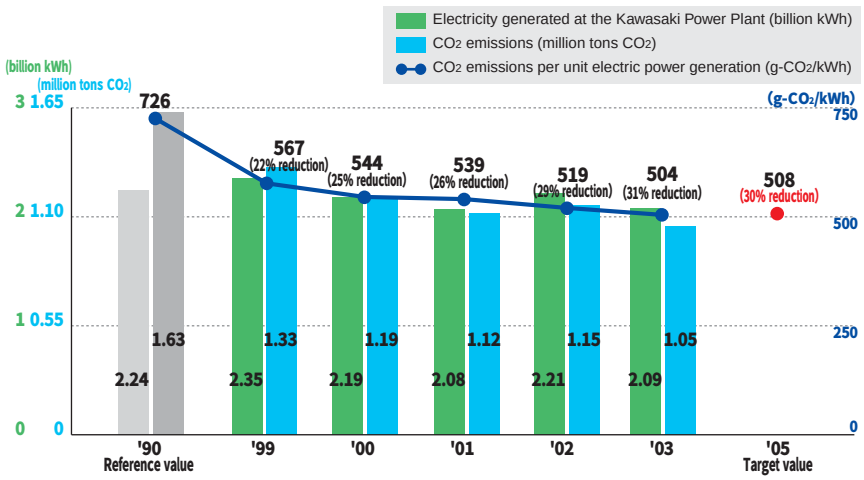
Since FY 2001 we have been working with the Shinano River Construction Office of the Ministry of Land, Infrastructure and Transport to improve the aquatic environment in the middle stretch of the river. We have begun increasing the dam discharge volume in summer when water temperature rises, and also during the fall, when salmon run. As a result, an increase in the number of fresh-run salmon has been confirmed.

Using renewable energy sources

We also promote the use of renewable energy sources such as solar and wind power. Photovoltaic (PV) generators have been installed at Tokyo Station, Takasaki Station, the General Education Center, and the Research & Developing Center. In FY 2003, we doubled the amount of PV panels at Takasaki Station.

The Group companies have followed; in FY 2003 "Kokubunji L" Terminal Building in Kokubunji, Tokyo installed wind power and PV generator systems to produce electricity for lighting.

CO_2 emission levels from the Kawasaki Power Plants



Kawasaki Thermoelectric Power Plant; aging power-generating unit 4 is scheduled for upgrade to highly efficient high-output combined-cycle power-generating units.

Three plants, Senju, Ojiya and Shinojiya, make up the Shinanogawa Power Station with a total output of 450,000 kW.

The number of solar panels on the *Shinkansen* platforms at Takasaki Station has been doubled

Wind power generator on the roof of Kokubunji L Terminal Building. The amount of power generated at any given time can be checked on a monitor screen inside the building.

***1 JR East electricity sources**
Company-run thermoelectric power plant : 31%
Company-run hydroelectric power plants: 25%
Purchased electricity: 44%

***2 Combined-cycle power-generating unit**
A power-generating unit combining "gas turbines" propelled by gas combustion with "steam turbines" propelled by steam from exhaust heat.

How Does the Group Promote a Sound Cycle of Resources?

We are striving to build a sound material-cycle society by methods such as reducing our use of resources as well as reusing and recycling used products to reduce overall generation of waste.

Waste Recycling

The railway business generates various types of waste from the discarded refuse at stations and on trains to industrial waste generated in rolling stock workshops.

In FY 2003, JR East generated 730,000 tons of waste, 88% of which was reused or recycled. Since construction projects, the greatest waste generator among our activities, differ from year to year, it is impossible to make valid comparisons. We have, however, set recycling targets for each category of waste that are to be met by 2005, and are implementing various measures to achieve these targets.

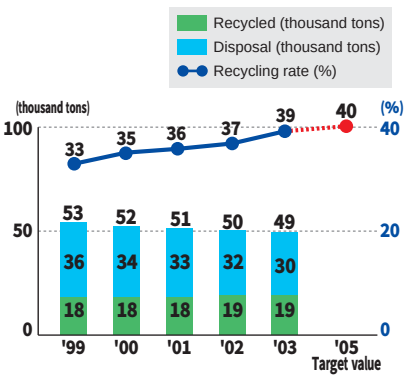
Recycling waste from stations and trains

Approximately 16 million passengers use JR East daily. In FY 2003, these passengers generated 49,000 tons of waste at stations and on trains – equivalent to the annual amount of household waste produced by 120,000 people. Since the waste includes newspapers, magazines, cans and other recyclable resources, it must be properly sorted to enable recycling. We place several refuse bins labeled with each of waste categories and request our passengers to discard waste accordingly. Collected waste is then sent to our recycling centers where it is again sorted for recycling. The target is to achieve a 40% recycling rate by FY 2005 while we have managed to achieve a recycling rate of 39% by fiscal 2003.

Utilizing recycling centers

The greatest amount of waste at stations and on trains is generated within the Tokyo Metropolitan area, and this is where we locate recycling centers. East Japan Eco Access Co., Ltd. operates these recycle centers at the Ueno Station, Omiya, and Shinkiba. In FY 2003, the recycling centers at Ueno station and Omiya collected 3,047 tons of cans and bottles and 662 tons of PET bottles from Tokyo and Saitama Prefectures. The collected waste was then sorted, compressed, and sent to recycling contractors. In FY 2003, the Shinkiba Recycling Center treated 6,630 tons of discarded newspapers and magazines to be sent to paper manufactures for reworking as copy paper. We are using those papers at JR East offices, establishing a material circulation system.

Waste generated at stations and on trains



Station refuse bins are transparent for safety and ease of recycling

The Shinkiba Recycling Center sorts and compresses discarded newspapers and magazines to be recycled as copy paper

Recycling used train tickets and commuter passes

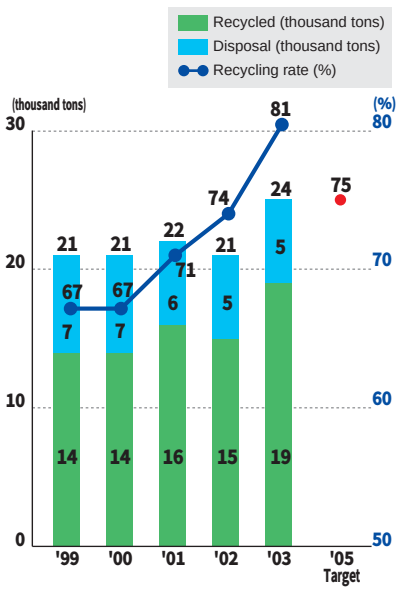
Tickets with a magnetic backing can now be recycled thanks to the new technology that enables separation of iron powder from paper fiber. In FY 2003, 99.9% of the 760 tons of used tickets were recycled by paper manufacturers to produce toilet paper, corrugated fiberboard, and business card paper. Some used commuter passes with a magnetic backing were reused as a reducing agent for steel plant blast furnaces until August of 2003, but now they are being reused as solid fuel. We are also promoting the introduction of the “Suica” IC card, which reduces overall waste by replacing tickets and commuter passes. The number of Suica users exceeded 9 million as of June 2004.

Discarded tickets are recycled as business cards, corrugated fiberboard, and toilet paper

Recycling at rolling stock workshops

JR East manufactures commuter and suburban trains at the Niitsu Rolling Stock Manufacturing Factory and repairs and maintains railcars at seven other General Rolling Stock Centers. To reduce the generation of waste and promote recycling, railcar design now takes the entire life cycle of a product into account by striving, for example, to use materials that are easily recycled. At the General Rolling Stock Centers, we sort waste in 20 to 30 categories and recycle them; some of which is sent to collection traders while scrap metal is melted for brake parts and old wheels are processed to manufacture connecting bases for disk brakes.

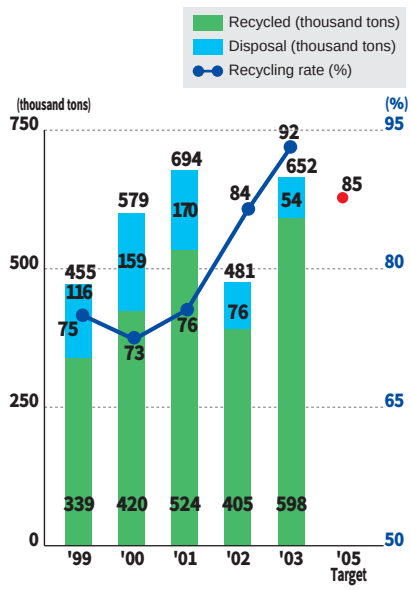
Waste disposal and recycling at rolling stock workshops



Reducing construction waste

In FY 2003, 650,000 tons of construction waste – 90,000 tons of which was from contract work[*1] – was generated through construction projects at stations and other facilities. The Waste Disposal and Public Cleansing Law requires that subcontractors dispose of the waste they generate. However, being the promoter, JR East is striving to reduce the generation of waste through application of standard civil engineering specifications that ensures the appropriate disposal of construction byproducts, and determines design and construction methods that inhibit waste.

Waste disposal and recycling at construction projects



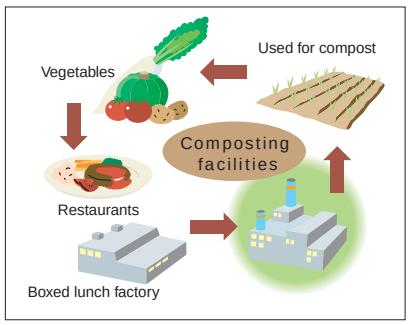
Recycling is also performed at rolling stock workshops where railcars are maintained, repaired, and dismantled

Efforts by retailers and restaurants

East Japan Kiosk Co., Ltd., Nippon Restaurant Enterprises Co., Ltd. (NRE) and other group companies, managing retailers and restaurants at stations, have started the effort to reduce the amount of packaging materials used, such as shopping bags.
Boxed lunches are now being sold with minimal packaging such as eco-containers[*2] introduced by NRE in 2002.

Recycling food waste has also been promoted; Granduo in Tachikawa and Ron-Ron in Kichijoji recycle food waste by installing compost facilities. Using a similar process, NRE recycled 191 tons of food waste in FY 2003 as compost, which was used at its own organic recycling farms as well as at contracted farms. The organic vegetables produced on these farms are then used at restaurants, establishing the closed-loop food recycling system.

Food waste recycling flow



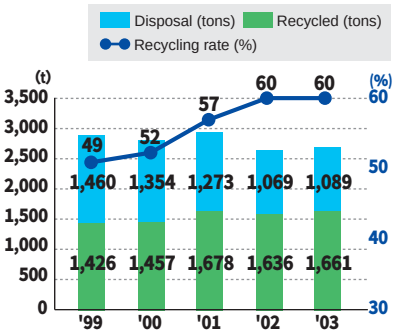
***1 Contract work**
Construction of non-company facilities consigned to JR East by local governments to ensure safe operations of trains.

***2 Eco-container**
A container that can be reused after removing a peel-off film.

Efforts at offices

We are shifting to a paperless office environment and striving to recycle waste generated. With thorough sorting, in FY 2003, 1,661 tons out of a total of 2,749 tons of waste was recycled.

■ Reduction of office waste



Efficient use of water resources

Using 11.7 million tons of water annually, JR East is actively utilizing wastewater*1 such as rainwater or hand-wash water to flush toilets. In the head office building, 20,000 tons out of the 42,000 tons of water used in FY 2003 were recycled in this manner.

Proper treatment of medical waste

JR Tokyo General Hospital and JR Sendai Hospital offer medical services to our employees as well as to members of the local community. JR East Health Promotion Center and the railway medical examination centers in each branch office also conduct medical checkups of our employees. In FY 2003, these medical institutions generated a total of 102 tons of medical waste, which was stored and disposed of as specially controlled industrial waste in compliance with applicable laws and regulations.

Green procurement

In compliance with its "Green Procurement Guidelines" of 1999, JR East encourages itself as well as its business partners to select materials with low environmental impact and reuse materials to reduce waste. In FY 2000, polyester fiber from recycled PET (Polyethylene Terephthalate) bottles was used to fabricate staff uniforms, and in FY 2003 this material was also used in new summer uniforms and summer shirts. Now 43% of office supplies are green procurement items and 99% of copy paper used is recycled paper.

From FY 2004 JR East started to grasp the status of environmental and CSR efforts of its business partners.

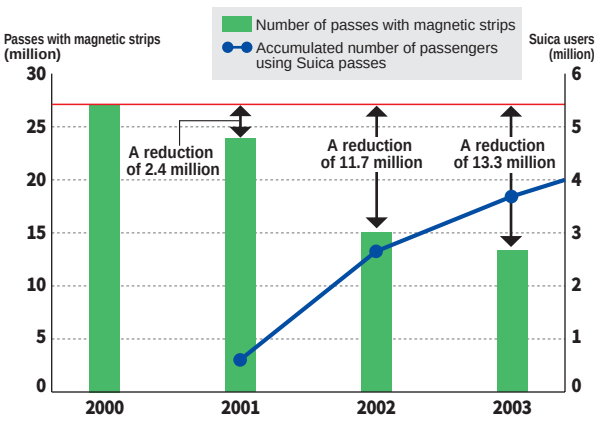
New summer uniforms use polyester fiber from PET bottles.

"Suica" – A reusable commuter's pass

A Suica (acronym for Super Urban Intelligent Card) is a reusable commuter pass that can be renewed repeatedly by making additional payments. Therefore, it can be said that as the number of Suica users increases, the amount of resources used decline.

Until Suica was introduced in FY 2000, approximately 26.6 million commuter passes with magnetic strips were issued annually. Setting above as a reference value, the total number of commuter passes with magnetic strips issued during the period between November 2001 and March 2003, after Suica was introduced, decreased by about 27.4 million.

This considerably exceeds the 4 million Suica passes issued and proves that this new reusable card has had the intended effect of reducing waste.



*1 **Wastewater**
This refers to water that is somewhere between potable water and sewage. The recycled water may be used for limited purposes.

What Measures are Taken to Manage Chemical Substances?

In the use of chemical substances, we must consider the potential effect such substances have on the human body and the ecological system. Aside from complying with all applicable laws and regulations, JR East has set its own voluntary targets to reduce the use and discharge of hazardous substances, and to substitute chemicals with low profile alternatives.

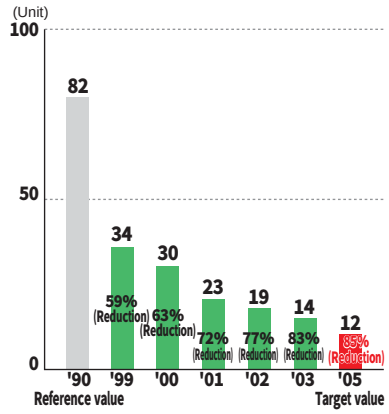
Reducing Emissions of Chemical Substances

Reducing substances that deplete the ozone layer

Air conditioning systems using specific chlorofluorocarbons (CFCs) that deplete the ozone layer are now being gradually replaced with new systems that use alternative refrigerants. At the end of FY 2003, the number of specific CFC-based air conditioning systems for buildings had been reduced to 14 units (compared to 82 at end of 1990). CFC-substitute air conditioning is now the rule on most trains except some diesel cars and passenger cars; using 95 tons of CFC substitute as of the end of FY 2003 while specific CFCs used was 2 tons. We periodically check for gas leaks and recover CFCs when scrapping railcars as mandated by law.

At the end of FY 2003, 71 tons of halon gas was being used as a fire-extinguishing agent. Powder or CO_2 fire-extinguishing agents are now being introduced in new facilities and replacing CFC equipment when old facilities are renovated.

■ Number of large-size, specific CFC-based refrigeration machines



Status of chemical substance management

JR East uses chemical substances primarily when painting and repairing railcars. Use and management of these chemicals are strictly regulated to prevent leaks and other hazards. Since FY 2001, as an enterprise handling more than a certain amount of specified chemical substances, 19 of our business locations now report volumes of emissions and transfers to the appropriate prefectural authorities in compliance with PRTR*1.

We are also introducing more railcars with stainless steel bodies that require no painting. At the end of FY 2003, 58% of 10,478 railcars of conventional lines were stainless steel cars. Organic solvents are used in painting railway facilities other than rolling stocks, and in FY 2003, 474 tons was used.

■ Notified volume released and transferred in 19 business locations

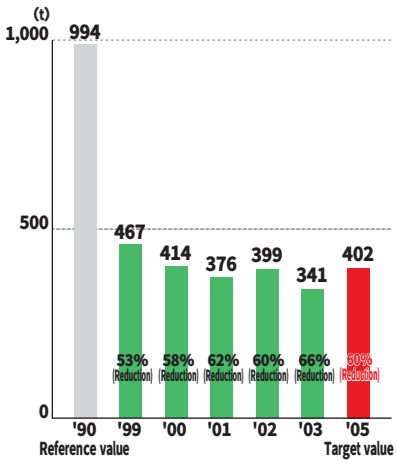
Name of chemicals	Level of emissions into atmosphere	Amount transferred to sewers	Amount transferred to outside the facilities
2-Aminoethanol (kg)	1	1,300	0
Bisphenol A type epoxy resin (kg)	0	0	1,300
Ethylbenzene (kg)	4,970	0	1,420
Ethylene glycol (kg)	0	0	22,316
Xylene (kg)	40,770	9	3,203
Chromium and chromium (III) compounds (kg)	0	0	130
1,1-dichloro-1-fluoroethane (kg)	2,300	0	0
Dichloromethane (kg)	8,600	0	2,700
Styrene (kg)	4,470	0	100
Dioxins (mg-TEQ)	19	0	32
o-toluidine (kg)	0	0	72
Toluene (kg)	28,670	11	19,840
m-tolylene diisocyanate (kg)	1,300	0	110
4,4'-methylenedianiline (kg)	0	0	160

Note: There were no discharges to soil, landfill disposals, or discharges in public water bodies.

Efforts at thermoelectric power plant

Fuels with a relatively low environmental impact such as city gas, kerosene, and low-sulfur heavy oil are used at the company-run Kawasaki Power Plant. However, these fuels emit nitrogen oxide (NOx), sulfur oxide(SOx), and smoke dust, and therefore we use denitration equipment and dust separators to reduce their emissions. The NOx emission level in FY 2003 was 341 tons, which continuously met our goal of 60% reduction over FY 1990 level for FY 2005 since FY 2001.

■ NOx emissions from company-run thermoelectric power plant



Management of polychlorinated biphenyls (PCB)

JR East is replacing PCB used as insulation oil in equipment for railcars, substations, etc. with non-PCB substitutes. The removed PCB (about 2,200 tons of equipment weight) is under strict management in storage and has been reported to the authorities as stipulated by law. We are examining the processes of detoxifying the stored PCB.

*1 **PRTR (Pollutant Release and Transfer Register)**
The Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in their Management; The objective of the law is to promote the assessment and control of emissions of hazardous chemical substances into the environment and prevent the negative impact on the environment from such substances.

What Environmental Conservation Activities Does the Group Conduct in the Vicinity of its Railway Lines?

As a railway company we take a keen interest in improving and maintaining the environment along our railway lines. JR East is doing its utmost to reduce noise, protect the natural beauty of the landscape along railway lines, and ensuring that we do not negatively impact the life of local residents.

Noise Reduction along Railway Lines

Noise reduction measures

Among all the noise caused by railways, *Shinkansen* noise levels are the most strictly regulated by the *"Environmental Quality Standards for Shinkansen Super-express Railway Noise"* established by the national government. Building soundproof walls, using sound-absorbent materials, and smoothing rails*1 as well as noise reduction of the railcars themselves are some of the measures JR East takes to reduce the noise. By FY 2002 we had succeeded in reducing noise levels in "residential areas" to below 75 dB. We will continue implementing noise-reduction measures to improve the quality of life along railway lines and fulfill environmental standards.

Although no specific government-mandated environmental standards apply to conventional lines, we are carrying out measures such as laying continuous welded rails*2 and performing wheel truing*3 to reduce noise. For new construction projects or large-scale remodeling, we observe the "Policy on Noise Measures for Construction of New Conventional Railways or Large-scale Remodeling" enacted by the national government.

Measures to reduce maintenance work noise

In addition to train operation noise, noise is also a problem during maintenance work, particularly since it has to be carried out late at night when trains are not operated. Local residents are notified in advance of maintenance work, the type of work to be done and its duration, and we make every effort to minimize the noise caused by construction equipment. On double-track lines, we carry out what we refer to as "refresh installation work" that involves performing work during the daytime on one track while the other track is used for train traffic. To reduce the overall need for routine maintenance, we are currently replacing conventional ballast roadbeds with TC-type low-maintenance roadbeds.

We are developing a rail track vehicle*4 for overhead line work with a platform that can be lowered, raised and rotated using a battery powered motor, rather than an engine, to reduce noise during operation. Tests conducted on a prototype vehicle in FY 2003 were successful.

Preventing electromagnetic interference

Television interference is sometimes caused along *Shinkansen* lines by the high frequency electromagnetic waves generated when pantographs momentarily bounce away from overhead wires. We support the installation of communal television reception systems and other solutions for affected households.

Reducing herbicide use

JR East uses herbicides to eliminate weeds in the areas around tracks but we strictly limit the amount used and the areas applied. Only herbicides with the lowest zoonotic and aquatic toxicity are sprayed. In FY 2003, 255 tons of herbicides were used.

Rail alignment vehicle trims and flattens rails between Iidabashi and Ichikawa Stations on the *Chuo/Sobu* Line.

A low-noise rail track vehicle for overhead wire work operates using batteries with a high degree of quietness

***1 Smoothing rails**
Train wheels constantly rolling over the rails force rails out of alignment. We can reduce excess noise from passing trains by realigning uneven rail segments.

***2 Continuous welded rails**
Extra-long 200-meter rails require fewer welded joints to connect rail segments. Trains pass over fewer joints thereby generating less noise.

***3 Wheel truing**
Trimming and smoothing worn edges on train wheels for increased performance.

***4 Rail track vehicle**
A vehicle that uses tires on roads and flanged wheels on railway tracks.

Considerations for aesthetic impact

Bridges, stations, and station buildings are often large and tend to impact the aesthetics of the landscape. JR East sets up a design committee within construction departments and other organizations undertaking the planning and designing to ensure that low-impact architectural concepts are applied to any construction work undertaken, so the resulting structure harmonizes with the landscape. In addition to revising projects whenever there are concerns for a negative impact on the landscape, awards are given to designs that harmonize with the landscape in order to encourage taking the landscape into consideration at the design phase.

Protecting railway trees

JR East owns about six million trees on a total of 4,300 hectares of land along its railways. These trees fulfill vital environmental roles such as preventing soil erosion, serving as windbreaks near tracks, and absorbing 17,000 tons of CO_2 emitted by JR East (equivalent of 0.8% of its annual emissions). The rich greenery of these trees is a source of delight to local residents. JR East sees it as its mission to contribute to local communities through protecting the trees along our railways.

Utilizing spring water from tunnels

With cooperation from local governments, we have been promoting a program to improve the water quality of nearby rivers by pumping the water that wells up in tunnels. In Tokyo, we pumped water into the Nogawa River in FY 2001, and into the Tachiagawa River in FY 2002. In FY 2003, we started pumping water from tunnels around Ueno Station into Shinobazu Pond.

Water pumped up in the Echigo-Yuzawa area along the *Joetsu Shinkansen* Line has been used since the line was brought into service to melt snow on the tracks.

The bridge between Minamikoshigaya and Yoshikawa Stations has v-shaped bridge supports to harmonize with the surrounding environment

The railway trees protect railways from natural phenomena and contribute to the local environment

Since FY 2003 we have been conveying water to Shinobazu Pond to improve the quality of its water

Building Annaka-Haruna – Environmental consciousness in housing-land development

In the fall of 2003, JR East opened "View Verger Annaka-Haruna" as a residential area based on the concept of a "21st century suburb that integrates nature and culture" near Annaka-Haruna Station on the *Nagano Shinkansen* Line. As a part of promoting forestation and community building by hands of citizens, we have held events, such as planting trees indigenous to the area and nurturing those planted trees. About 25% of Annaka-Haruna is a green area with seven parks. They are linked by a network of greenways paved with porous pumice stone to let rainwater permeate, and walls of natural stone to harmonize with the surrounding environment.

Natural stone walls and greenways paved with pumice stones

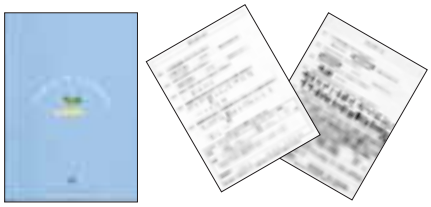
How Does the Group Disseminate Environmental Information?

The JR East Group disseminates environmental information to the public through a variety of media, including the Internet and the *Sustainability Reports*. We are striving to promote further environmental undertakings through our interactive communications with our stakeholders.

Disclosure of Environmental Information

Provision of information through various media

JR East had been publishing an annual environmental report since 1996. In 2002, aspects concerning corporate social responsibility were added to the report and the title was changed to a *Sustainability Report*. In 2003, we began issuing an environmental digest version of the report to promote its wider distribution. In addition, we have produced illustrated booklets for children entitled *"Mr. Polar Bear Returns by Train"* and *"Thinking More about the Environment,"* and distributed them at events such as the "Eco-Products Exposition." We also actively disclose information through a variety of media, including the Internet,[*1] newspapers, magazines, and posters on trains. In FY 2003, we conducted an advertising campaign using posters on trains regarding the energy-saving railcars.

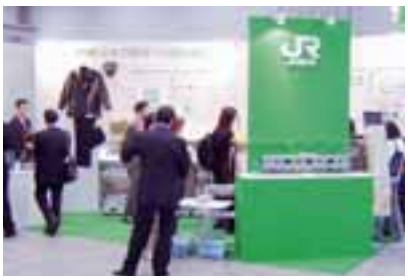


We received 30 replies to the questionnaire on the children's booklet Thinking More about the Environment.

"3 Minute Eco-Seminar until Next Station" provide information in the form of quizzes.

Disclosure of information at events

In December 2003, we exhibited at the "JR East Environmental Actions" booth at the "Eco-Products Exposition 2003." We introduced our activities to the 114,060 visitors to the exposition by displaying information about our recycling activities and initiatives for intermodal transport as well as by presenting a model of the energy-efficient 209 series railcar and the mechanisms of the NE train.



About 1,500 persons took part in an environmental quiz held at the JR East booth.

Participation in environmental events

Branch	Event	Date	Main Sponsor and Co-sponsor
Akita Branch	Akita Environment and Recycling Festival 2003	03/9/27、28	Akita Prefecture
Mito Branch	Global Environment Partnership Fair	03/10/18、19	Ibaraki Prefecture
Takasaki Branch	Takasaki Global Citizens' Environmental Exhibition	03/10/26	Takasaki City
Head Office	Eco-Products Exhibition 2003	03/12/11～13	Japan Environmental Management Association for Industry, etc.
Sendai Branch	JR East Ecology Campaign & NE Train Test Rides	04/1/31～2/1	JR East, Sendai City Environmental Bureau
Head Office	Gas & Railway	04/3/11～13	JR East, Tokyo Gas Co., Ltd.
Sendai Branch	Children's Eco Club National Festival in Sendai	04/3/27～28	Children's Eco Club

Collaboration with local government and other companies

Every year, JR East holds events with a wide range of different organizations to disseminate environmental information. The Sendai Branch held the "JR East Ecology Campaign" in cooperation with the Sendai City Environmental Bureau in January 2004 to explain our activities concerning recycling and regenerative brakes. In March of 2004, we held the "Gas and Railways – Tokyo Gas and JR East's Environmental Initiatives" at Tokyo Station with the cooperation of Tokyo Gas Co., Ltd. Information on the environmental activities of both companies was provided while an orchestra made up of employees from the two companies gave a performance. The combination of the issue of the environment and the pleasing music was a hit with the guests.

PCs linked via a wireless LAN were used at an event held in cooperation with the Sendai City Environmental Bureau to offer quizzes and questionnaires concerning waste sorting.

The "Gas and Railways" event exhibited the potential to develop a sustainable society of energy-efficient railways and natural gas, both of which have a relatively low impact on the environment.

***1 JR East website**
Ecology page
http://www.jreast.co.jp/eco/

Sharing Experiences in Nature

Railway Lines Forestation Programs

Since 1992, employees from all branches have been volunteering to plant trees with the help of local residents. As of FY 2003, a total of about 29,000 people have participated and 230,000 trees have been planted. In 2002, tie-ups with local governmental bodies began; in 2003, for example, the Yokohama Branch held a "*Sagami* Line hiking" event in cooperation with local governments along the railway line, during which 650 participants planted 1,000 trees.

A total of 29,000 people had participated in *Railway Lines Forestation Programs* by FY2003.

During the *Onuma Hometown Forestation Program*, a forestation event in Hokkaido, participants planted 25,000 seedlings in pots and planted 2,400 Japanese oak trees.

Native Forest Regeneration Project in Fukushima

Based on a sense of gratitude toward the natural environment and a desire to contribute to the future of the planet, JR East plants trees indigenous to each region and promotes reforestation. As one aspect of these activities, the JR East Group employees and members of the public planted 45,000 trees of 22 different species in May 2004, as the first step of the 3-year Native Forest Regeneration Project in Fukushima. Participants planted trees and went on nature walks that allowed them to experience the natural environment and observe the diverse ecological systems that trees support.

600 volunteers including company employees and members of the public participated in the *Native Forest Regeneration Project in Fukushima* to plant trees.

Promoting eco-tourism

JR East offers a variety of eco-tours designed to allow people to experience the wonders of nature. In May 2003, the "First Shirakami Mountains Beech School, Tokyo Branch" was held, which introduced participants to the wonders of the Shirakami Mountains, the first place in Japan to be designated as an UNESCO World Heritage site. In addition, as in FY 2002 the "Shirakami Mountains Beech School" tour was held, with 150 people participating. The "Hiking from Stations" program, in which visitors take nature walks from stations, was continued. In FY 2003, total of 200,000 people have attended to 350 the event courses, which requires reservations in advance.

A pamphlet from the "Beech School" tour; a guided tour that allows participants to experience the wonders of nature

The "Hiking from Stations Program" is comprised of an event course available only by advance reservation and a recommended course that requires no reservation.

How does the Group Promote Collaboration with Society?

As a responsible corporate member of society, the JR East Group is strengthening its ties with local and international communities. JR East participates in community development, philanthropic, cultural, and international cooperation programs to better fulfill its roles as a good corporate citizen.

A company exists within a societal context, and therefore the trust of the public, the very foundation of a company, is the prerequisite for conducting business. The most important social responsibility of the JR East Group, whose business is centered on railway operations, is the provision of safe and reliable transportation services. Since its establishment, the JR East Group has put the highest priority on research and development and investment related to safety measures while seeking to achieve customer satisfaction. We value the opinions of all customers who use railways and group companies' services to raise the quality of the services we provide. At the same time, we are continuing our efforts towards the development of a beneficial social environment centered on our stations, based on our relationships with the residents of the communities where we conduct business.

We believe that in order to carry out these roles, it is vital that we provide workplaces where all JR East employees can work with pride.

The JR East Group will ceaselessly continue its efforts to be a trusted corporate group.

Community Development Centered on Stations

Station nursery schools and nursing care business

The JR East Group is cooperating with local government and childcare agencies to provide "station nursery schools" at locations close to stations. A total of 13 facilities were opened during the period from 1996 to April 2004. The convenient locations are hugely popular among working parents. JR East entered the nursing care business in FY 2000, and Nippon Restaurant Enterprise Co., Ltd. opened the NRE *Omori Yayoi Heights* fee-charging nursing home for the aged in Ota-ku, Tokyo in April 2004.

NRE *Omori Yayoi Heights* opened in the spring of 2004.

Efforts for community revitalization

To JR East, a station is more than a "point of departure and return" – it is a place where a great number of people gather and information and culture is diffused. It is believed, therefore, that stations serve a significant role in community revitalization.

To this end, we are cooperating with the establishment of joint public facilities, such as community centers and libraries, which are located adjacent to stations. We also work closely with local governments to revitalize communities through the elimination of railway crossings by installing overpasses and underpasses.

The Date Station of the *Tohoku Main* Line, a wooden structure modeled after the Ryozen Shrine, was selected as one of the Ministry of Land, Infrastructure and Transport's "100 Tohoku Stations." The station features a plaza called "Ekinaka (inside the station) Plaza" that serves as a community space.

Social Contribution Activities

Supporting the Activities of the Children's Railway Association

The Children's Railway Association is an organization intended to raise awareness about proper railway etiquette among children, which is run by the Traffic Manners Association. Approximately 450 members at 15 branches conduct station beautification activities and fieldtrips to various railway facilities. JR East actively supports the Children's Railway Association by establishing offices at its branches and providing space for railroad operation simulators.

The Children's Railway Association conducting beautification activities. These activities lead to improved railway etiquette.

Gift of travel

JR East supports the "Gift of Travel," a program that invites people with handicap who have few opportunities to go on trips to travel to Hokkaido. Approximately 7,000 people have participated in this program since its launch in 1994.

International contributions and cooperation

As one aspect of its activities intended to contribute to international community, JR East dispatches its employees to foreign countries and accepts foreign trainees in response to requests from the Japan International Cooperation Agency (JICA). We conduct training and inspection tours for trainees, primarily from Asia, Eastern Europe, and Africa.

JR East has also concluded cooperative agreements with German Rail, Italian National Railways, and French National Railways concerning sharing information on technological developments and management as well as station and rolling stock designs and maintenance, customer service, and employee training.

International Cooperation Activities in FY 2003

Dispatched	Long term (1 year or more)	1 employee to 1 country
	Short term (less than 1 year)	3 employees to 1 country
Accepted	JICA trainees	148 trainees under 13 programs

Activities through East Japan Railway Culture Foundation

JR East established the East Japan Railway Culture Foundation[*1] in 1992 to contribute a rich, people-oriented railway and transportation culture.

Promoting regional culture

The Tokyo Station Gallery has been holding exhibitions since 1988 under the motto "a small yet authentic art museum."

The Foundation has also been supporting the revival of traditional regional culture throughout eastern Japan since FY 1993. In FY 2003, the Foundation provided 54.6 million yen to 12 projects.

Promoting and supporting surveys and research

The Foundation held a symposium, the theme of which was "Railway Culture and the Future Transportation Society," where researchers announced the results of creative scientific surveys and research concerning railways including railway operations, railway technology, and the future of railways.

The "Kemanai Bon Festival Dance" in Akita Prefecture, which was supported financially in 2003.

Promoting international understanding and exchanges

The Foundation invites young managers from railway companies throughout Asia to study railway operations and technology under the "JR East Fellowship Program" and the "JR East International Course." The Foundation also publishes the *Japan Railway & Transport Review* (JRTR) in English to serve as a forum for international discussion where transportation specialists from around the world can exchange ideas.

Trainees accepted

Fiscal year	JR East Fellowship	JR East International Course	Ministry of Railways of China Training
1998	7 trainees from 4 countries	–	34 trainees
1999	8 trainees from 4 countries	–	13 trainees
2000	8 trainees from 4 countries	–	35 trainees
2001	10 trainees from 5 countries	✱10 trainees from 5 countries	22 trainees
2002	8 trainees from 5 countries	✱10 trainees from 5 countries	21 trainees
2003	9 trainees from 5 countries	16 trainees from 9 countries	10 trainees

✱Former Training for Middle Management Executives

*1 East Japan Railway Culture Foundation
URL: http://www.ejrcf.or.jp/
Telephone: +81-3-5334-0623

What Measures are Being Taken to Ensure Railway Safety?

Safety has been the highest priority for JR East since our establishment, and we have been continuously promoting safety since. JR East is committed to becoming the world's safest railway company under the new "Safety Plan 2008" adopted in FY 2004.

Pursuit of Railway Safety

Safety Plan 2008

Since its foundation, JR East has adopted and implemented three 5-year safety plans. The plan that covers the 5-year period beginning in FY 2004 has as its goals "zero passenger injuries and zero employee fatalities" (including employees of group companies). The slogan of the "Safety Plan 2008*1" is "Returning to the Fundamentals and Taking up the Challenge of Safety Again." Under the plan, we will invest approximately 400 billion yen during those 5 years in safety measures to make JR East an even safer railway company.

Measures at crossings and stations

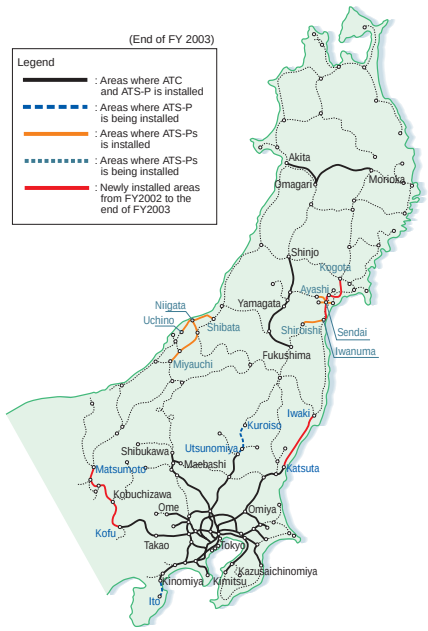
In FY 2003, there were a total of 96 accidents, the lowest figure since the company's establishment. Of these, 46 were accidents at railroad crossings. We are taking aggressive action under the "Railroad Crossing Accident Prevention Campaign," including the installation of crossing obstruction detectors and large crossing gates.

Railway accidents resulting in injury*2 numbered 47, also the lowest figure since the company's foundation. To protect passengers while they are on platforms, we are installing sensors to detect when someone is caught in the doors, mats that detect when a person has fallen upon the tracks, and guide blocks for the visually impaired. We are confident that the low number of accidents is at least in part attributable to such measures and the "Platform Safety Campaign" that has been conducted since FY 1999.

Safe railcar operations

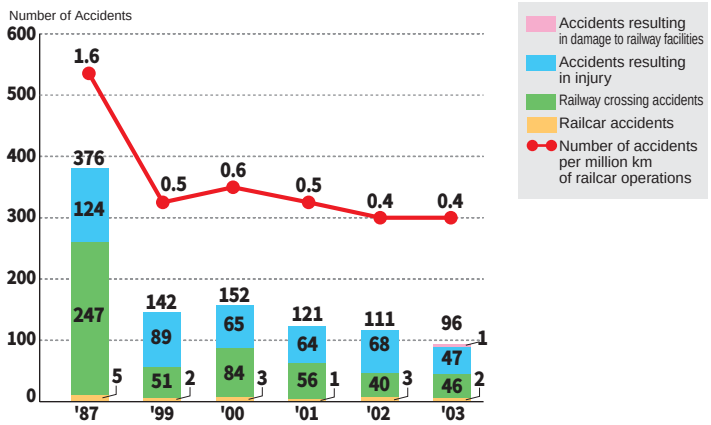
JR East is introducing a range of cutting-edge technologies to ensure safe railcar operations. For example, we are digitalizing our automated train control (ATC) systems and installing digital ATC systems for smoother deceleration. We are also installing ATS-P and ATS-Ps systems (automated train stop systems) to bring trains to a halt in response to stop signals.

Installation of ATC, ATS-P, and ATS-Ps



We are installing a variety of safety systems on station platforms, including mats that detect when a person has fallen upon the tracks (left) and emergency stop switches (right).

Railway Accidents



*1 **Safety Plan 2008**
Information is available at:
http://www.jreast.co.jp/safe/index.html

*2 **Railway accidents resulting in injury**
Accidents involving the operation of trains or railcars that result in death or injury

Systemizing maintenance works

In 2002, JR East introduced the *Shinkansen Electricity and Tracks General Inspection Car*, also called *East-i*, as a part of its activities to maintain facilities. The *East-i* improved the safety, efficiency, and accuracy of inspection during high-speed operations on *Shinkansen* and conventional lines.

We have also introduced an Autonomous Decentralized Transport Operation Control System (ATOS) on major track segments in the Tokyo area. With this system, maintenance workers can designate work areas and prevent trains from approaching using handheld terminals, ensuring safety during their maintenance work.

Safety education

We use a variety of training equipment at the JR East General Education Center and the General Training Centers of branches as tools for employee education on safety systems and ensuring safety. In November 2002, we established the "Accident History Exhibition Hall," emphasizing our social responsibility of learning from past accidents and placing the highest priority on safety.

Practical safety education is conducted at general training centers of branches.

Ensuring safety during earthquakes

JR East has decided to expand the installation of systems to stop all trains in the case of a major earthquake in the Tokyo metropolitan area, to include train lines that exist outside the Tokyo area by FY 2004.

If the system detects vibrations in excess of a certain level at two locations along railway line it automatically sends wireless emergency stop signals to all railcars in the vicinity, causing them to stop immediately. This will minimize damage if a major earthquake occurs.

Safety-related technological development

Since 1999 JR East has been developing a large obstruction detection system that uses image-processing technology as a means of preventing crossing accidents. With the development of inexpensive image-processing technology, it is possible to install such systems at a greater number of locations.

The system has performed well during on-site testing (including tests under fog, heavy rain, and accumulated snow conditions). Testing is being carried out to verify that the system can operate stably under actual conditions and to determine the effects of lightning and high temperatures.

Disaster response training

We are developing systems in preparation for major disasters. Disaster response training is held regularly, and 12,000 persons participated in comprehensive disaster response training held on September 1, 2003. We have prepared a manual on ensuring passenger safety and regularly conduct safety training for employees.

Disaster response training conducted in September 2003

JR Bus Kanto drunk driving incident

On August 18, 2003, a JR Bus Kanto Co., Ltd. employee operated a bus while under the influence of alcohol. As a public carrier, this is the sort of incident that we can never allow and which can result in a loss of customer trust. We sincerely apologize to all concerned.

Following this incident, JR Bus Kanto and JR Bus Tohoku implemented full alcohol testing at the time of departure and arrival, and instituted other measures including tighter management controls. We continue to implement bus safety measures under our new 5-year safety plan which includes measures for the complete eradication of the operation of vehicles under the influence of alcohol.

How are the Opinions of Customers Adopted in the Group's Activities?

Utilizing sincere customer comments and opinions for management feedback is essential for improving the quality of our services. JR East determines customer needs through a variety of means including front-line employees, Customer Help Desks, and the Internet, and utilizes these customer comments and opinions to improve our services.

Seeking Ever Higher-Quality Services

Basic policy on customer comments

JR East's basic policy on improving services is "to determine the existence of problems in areas of customer contact from the customer's perspective, and to make continuous improvements in order to achieve total customer satisfaction." We receive information on customer opinions through front-line employees, Customer Help Desks, and the Internet and use it in improving services.

Service managers have been assigned to 30 stations within the JR East domain to provide customers with vitalizing services.

Systems for improving services

JR East engages in repeated discussions concerning customer opinions so that those opinions can lead to improved services. Through discussions in service conferences held at work sites and service improvement conferences held at the head office and branches, we are working to improve services based on the customer comments that we receive.

Receiving and understanding customer opinions

In FY 2003, we received 135,000 customer comments, an increase of 16% from the previous year. Of these, 97,000 or about 70% were received by front-line employees. About 20,000 comments were obtained via the Internet, and another 18,000 came from Customer Help Desks. In addition, JR East conducts a customer satisfaction survey each year to measure customer satisfaction and needs, and to aid in the improvement of services.

Cases of Customer Opinions Reflected in Our Services

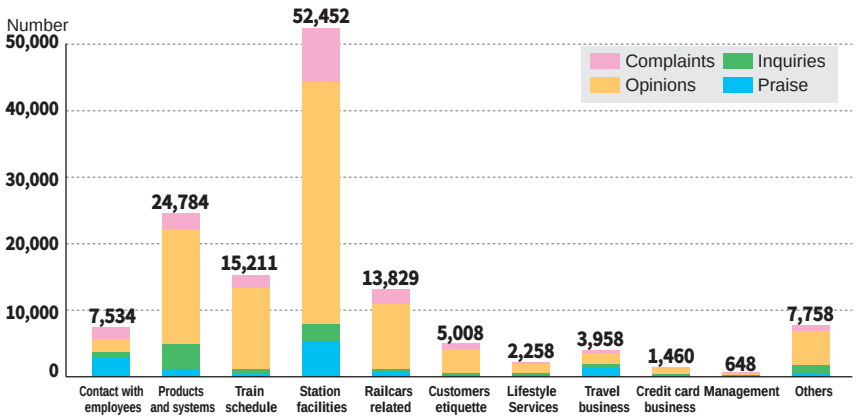
JR East is taking a variety of actions to improve services based on the opinions we receive from customers.

No-Smoking and Smoking Areas

In order to provide a comfortable experience for both smoking and non-smoking passengers, taking into consideration the opinions of our customers and developments in society, JR East is designating stations and trains smoke-free with designated smoking areas.

March 1997	Dedicated Smoking Areas established at all stations Eliminated partial non-smoking green cars without air purifiers Smoking banned on all local trains
December 2000	No-smoking signs posted on decks without ashtrays
December 2001	Smoking banned on all green cars
May 2003	No-smoking times set at six stations along the *Yamanote* Line
March 2004	Platform smoking areas consolidated No-smoking times instituted for the Tokyo metropolitan area Smoking permitted in one non-reserved seating and one reserved seating car on each *Shinkansen* and conventional limited express trains; smoking banned in all other cars No-smoking rooms established on *Shinkansen* platforms (Tokyo, Omiya, Sendai and Niigata Stations)

Breakdown of customer comments received in FY 2003



In order to promote prohibitions on smoking, completely-enclosed rooms with exhaust facilities have been installed as smoking areas on some *Shinkansen* platforms.

Lost & Found System

JR East introduced a lost item database and installed a centralized lost item management information system to enable speedy and accurate responses to inquiries concerning items lost in stations and on trains. The Lost & Found System was initially installed at 29 stations on the *Yamanote* Line, but it has subsequently been expanded to include all stations in the Tokyo metropolitan area (487 stations). Inquiries can also be made at 28 telephone centers[*1]. The system now covers about 87% of all items lost on JR East territories.

Measures taken at stations

We have improved signs at Akihabara Station, which has a complex platform structure, and increased foreign-language signs at stations on the *Nikko* Line, which is used by large numbers of international passengers. As a part of major renovations to the Fukushima Station, based on comments received from our customers, we made the labels on ticket machines easier to understand.

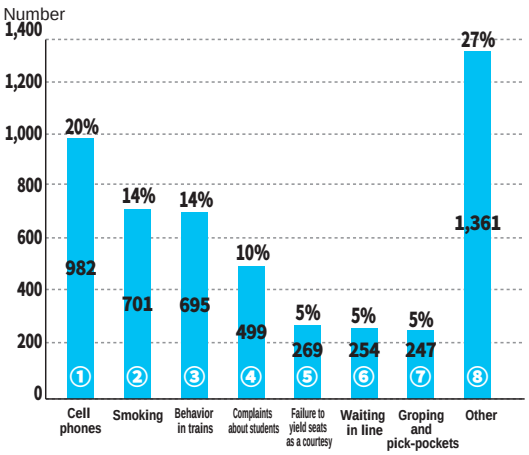
Improving manners on trains

In FY 2003, we received approximately 5,000 comments from our customers concerning passenger manners. The most frequent comments concerned the use of cell phones on trains. JR East encourages customers to practice good manners through announcements and posters on trains.

Promotion of barrier-free transportation

In compliance with the Barrier-Free Transportation Law, JR East is cooperating with local governments to install mechanical lifting devices in stations. Specifically, considering elevators to be a fundamental facility for promoting mobility, we have set a goal of installing elevators in all subject stations[*2] by 2010. We are also committed to installing more escalators.[*3]

Customer comments regarding passenger manners received in FY 2003



① Some passengers want the use of cell phones prohibited; others want it permitted.
② Smoking outside designated smoking areas
③ Eating and drinking on trains; putting feet on seats
④ Middle and high school students making excessive noise, sitting on the floor and obstructing passageways, etc.
⑤ Passengers failing to yield priority seats
⑥ Remaining on return trains to claim seats
⑦ Groping of passengers and pick-pockets
⑧ Requests for control of improper behavior, enforcement of foot traffic flow directions on stairs, and other miscellaneous topics

Large signs at the Electric City Entrance giving directions at Akihabara Station. This has resulted in a decrease in the number of inquiries concerning which platform to use.

Signs above ticket vending machines at Fukushima Station are now color coded to make them understandable at a glance even when viewed from a distance.

We are installing elevators to eliminate barriers to mobility.

***1 JR East Telephone Center**
Telephone: +81-3-3212-4441
Open from 6:00 a.m. to 12:00 a.m.

***2 Stations slated for elevator installation**
Approximately 390 stations serving at least 5,000 passengers a day with a vertical difference greater than five meters between levels

***3 Stations slated for escalator installation**
Approximately 300 stations serving at least 10,000 passengers a day with a vertical difference greater than five meters between levels

What Actions Does the Group Take to Ensure that its Employees Can Feel Satisfied with their Careers?

In order to promote the well-being of its employees and their families, the JR East Group fosters a corporate culture of open and honest debate and supports personal development, promoting the development of workplaces where employees can engage in meaningful work with a sense of purpose.

Efforts for Human Resources

Basic policies on personnel and employment

JR East strives for group management that fosters a corporate culture of affirmative development by each employee, seeks to enhance individual value through personal development, and provides each employee with a sense of accomplishment and fulfillment. To this end, we are reconstructing our personnel systems and developing personnel training programs premised on a system of long-term employment.

Employment situations

JR East seeks to maintain stable employment and engage in fair and impartial hiring practices that observe basic human rights.

Employing individuals with disabilities

JR East is aware of its social responsibility to employ individuals with disabilities. As of June 2004, the handicapped accounted for 1.89% of our work force. Government regulations concerning passenger safety, however, make many jobs in the railway industry unsuitable for the disabled. Nonetheless, in an effort to integrate the disabled into society, we take into consideration the type and degree of handicap and provide appropriate employment whenever possible.

Human Rights Education

Raising employee awareness of human rights

JR East has established human rights committees at its corporate head office and all branches. These committees, as stipulated in our *Basic Policy on Human Rights*, are designed to protect and enhance the human rights of all employees. We conduct human rights seminars for different occupations and publish a newsletter for employees and their families. JR East has also joined the *Corporate Conference on the Advancement of Human Rights,* an inter-company human rights organization devoted to information sharing and mutual advancement.

Developing Motivating Work Environments

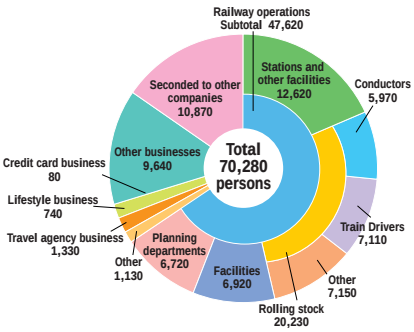
Creating work environments favorable to women

In the past, JR East had few female employees because of restrictions in the Labor Standards Law on work by women during the late-night hours. When revisions to the Labor Standards Law and the Equal Opportunity Law went into effect in 1999, we expanded both the number of women employed and the types of jobs in which they work. When East Japan Railway was established, it had 680 female employees; by April 2004, this number had increased to 2,330 which account for 3.3% of all employees. In order to promote the development of work environments that foster women, in April 2004 we launched the "*F Program* of positive actions", improved our systems to support working mothers, and we are currently taking measures to reform the workplace culture.

■ Overview of the *F Program*

1. Expand employment and job opportunities for women
1. Expand employment
2. Expand job opportunities
2. Improve systems that support working mothers
1. Extend childcare leave periods
2. Introduce a system to support rehiring
3. Provide childcare allowances
4. Distribute the "Working Mothers Support Guidebook"
5. Introduce a "Working Mothers Support and Consultation Hotline"
3. Adopt measures to increase women in management positions
4. Reform work environment and culture
1. Implement equal participation in workplaces
2. Develop a system to follow employees while on childcare leave and to improve support after their returns
5. Take measures to change the awareness of female employees

■ Employment by job type



As of April 1, 2004

Women also take an active part of train conductors and drivers

Reducing working hours

JR East is systematizing and automating operations to reduce working hours for improved job satisfaction and increased productivity. The average total working time in FY 2003 was 1,831 hours, approximately 360 hours less than when the company was founded in 1987.

Acquiring certification for Occupational Health and Safety Management System

In March 2002, JR East's Tokyo General Rolling Stock Center acquired OHSAS (Occupational Health and Safety Management System) 18001 certification, as the first railway company, in compliance with international standards for its occupational health and safety management system. In May 2003, the Omiya General Rolling Stock Center also obtained JISHA (Japan Industrial Safety and Health Association)-type OSHMS(Occupational Health and Safety Assessment Series) Certification. We plan to continue improving our heath and safety system over time and to raise standards to even higher levels.

Work environment-related data (FY 2003)

Disabled employees ratio	1.89%
Total annual working hours	1,831 hours
Overtime work	113 hours
Ratio of annual vacation time used	93%

*The percentage of disabled employees is as of June 2004.

Preventing occupational accidents

Unfortunately, two employees of JR East contractor were victims of fatal accidents in FY 2003. Under the "Safety Plan 2008," the entire JR East Group is working together toward preventing on-the-job accidents to achieve zero customer and employee fatalities and injuries.

Improved Training Systems

Basic policies on training

The JR East Group encourages employees not only to perform their assigned duties, but also to engage in voluntary training on topics that they can decide themselves. We promote personnel development based on our fundamental guiding principle that "personnel are the most important resource of the company" and that "the company develops through the enhancement of capabilities and personal growth of each employee."

Training at the JR East General Education Center

A range of training programs

JR East has established a variety of training programs to help employees develop their skills. Numerous seminars on safety, services, and management are given at the JR East General Education Center and at branches. We also promote self development by encouraging employees to take correspondence courses on general topics or to obtain specific qualifications, and we conduct internal correspondence courses on topics relating to the railway business. To help employees broaden their perspectives and develop their abilities, JR East strongly encourages employees to pursue outside training including enrolling in business management school, attending public seminars and training on the ocean, training overseas, or taking courses at domestic colleges or universities.

Training programs conducted in FY 2003

Training Categories
Training for Human Resource Development•••••**32,800 participants** <Major Programs> Seminars for new directors and auditors of group companies Marketing seminars Training for new supervisors (on-site supervisors and assistant supervisors) Training for new recruits and junior staff Training for employees who passed promotion examinations Training for employees who support small group activities Training for instructors of small group activities and administrative staff
Training for Enhancing Knowledge and Technology Skills•••••••**59,900 participants** <Major Programs> Training for train drivers and conductors Training in training centers and business training centers Training to improve business knowledge and technology skills
External Training••••••••••••**3,100 participants** <Major Programs> Training for management and exchanges between different industries Training for acquisition of various qualifications Training overseas and training on the ocean
Total••••••••••••••••••95,800 participants

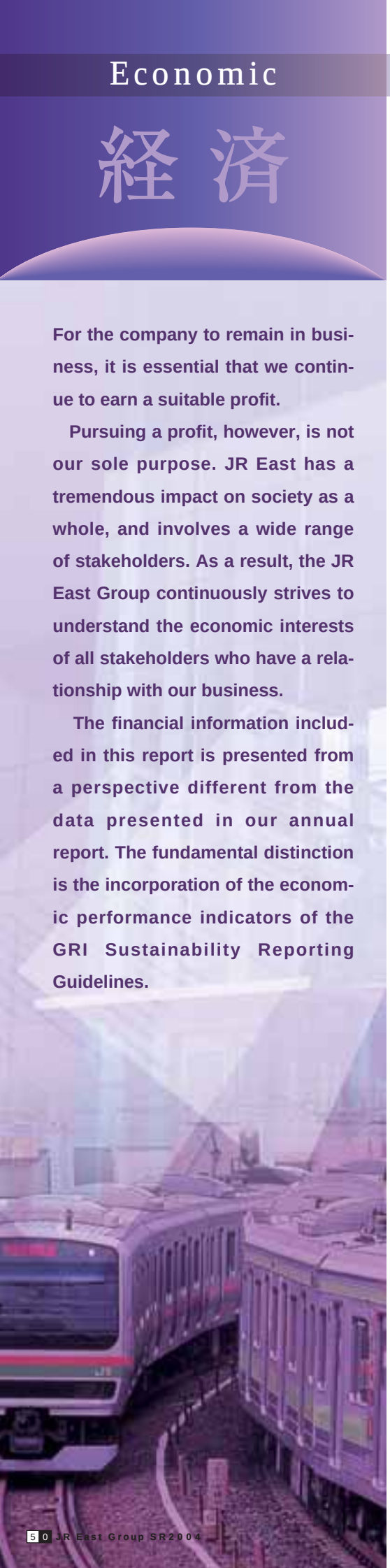
How is the Economic Performance of the JR East Group?

In FY 2003, unconsolidated and consolidated operating income and net income hit historical highs. We have moved up our targets in the "New Frontier 21" medium-term business plan and will maintain our efforts to achieve continuous growth and strive to contribute even further to society.

For the company to remain in business, it is essential that we continue to earn a suitable profit.

Pursuing a profit, however, is not our sole purpose. JR East has a tremendous impact on society as a whole, and involves a wide range of stakeholders. As a result, the JR East Group continuously strives to understand the economic interests of all stakeholders who have a relationship with our business.

The financial information included in this report is presented from a perspective different from the data presented in our annual report. The fundamental distinction is the incorporation of the economic performance indicators of the GRI Sustainability Reporting Guidelines.



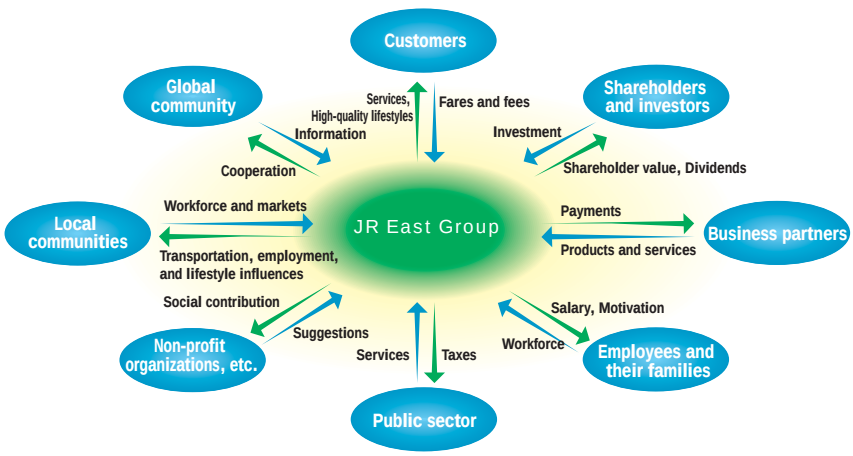
Financial Results for FY 2003

Transportation centered on the railways is the core business of the JR East Group and accounted for about 70% of our consolidated operating income in FY 2003. The remaining 30% was earned primarily from lifestyle-related businesses such as shopping centers, hotels, and retail sales located in station buildings. Although consolidated operating income declined from the prior year, net income was up 22.3% to 119.8 billion yen, a historical high. The increase in net income resulted from higher revenues in the shopping centers and office buildings as well as lower interest payments achieved through a reduction in interest-bearing debt and lower personnel expenses resulting from natural attrition in employment.

Economic Relationship with Stakeholders

The business activities of the JR East Group give rise to economic relationships with a variety of stakeholders. With the intention of explaining the economic relationships between our business activities and stakeholders, a breakdown of expenses by stakeholder is shown here. To maintain the objectivity of the figures when performing the calculations, figures from our consolidated financial statements are used. The stakeholders included here are shareholders, business partners, employees, creditors, and the public sector (government). Our economic relationships with stakeholders also include the relationships with customers and others, thus we admit that the indication of expenses by stakeholders shown here is not exhaustive. In the future, we will work to improve the quality and clarity of this and other economical information disclosures.

■ Relationships with Stakeholders



Consolidated Financial Statements and Breakdown of Expenses and Others by Stakeholder

Consolidated Statement of Income		100 Million yen	
Operating revenues		25,422	
Transportation, other services and cost of sales		16,950	(1)
Selling, general, and administrative expenses	Personnel expenses	2,798	(2)
	Taxes	132	(3)
	Other expenses	2,027	(4)
	Total	4,958	
Operating income		**3,514**	
Other income (Expenses)	Interest expense	1,609	(5)
	Other income	323	
	Total	1,285	
Income before income taxes		**2,228**	
Income taxes-Current		1,429	(6)
Income taxes-Differed		– 429	(7)
Minority interests in Net income of Consolidated Subsidiaries		30	(8)
Net income		**1,198**	(9)

* Figures may not add up to totals due to rounding.

* For those figures that require modifications, rounded figures from marketable security reports were used.

Breakdown of expenses and others by stakeholder	100 Million yen	
Business partners	14,373	(1)–★ +(4)
Employees	7,402	(2)+★
Creditors	1,609	(5)
Shareholders	1,229	(8)+(9)
Public sector	1,132	(3)+(6)+(7)

★•••Nonconsolidated Statement of Income and Loss – Transportation Operating Expenses: Personnel Expenses 4,604

Method of Calculating Expenses and Others by Stakeholder

When calculating personnel expenses, the consolidated statement of income and loss includes "transportation, other services and cost of sales," and accordingly, "transport operating expenses: personnel expenses" from the nonconsolidated statement of income and loss were calculated to provide data that is closer to actual conditions.

Business partners:
The amount determined by subtracting "personnel expenses" within transportation operating expenses in the nonconsolidated statement of income and loss from "transportation, other services and cost of sales" and adding to that "other expenses" from selling, general, and administrative expenses.

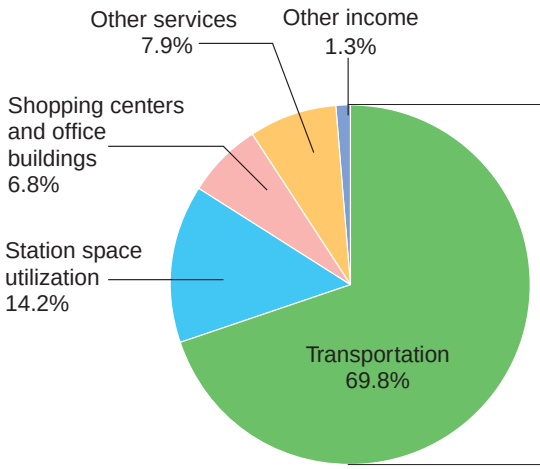
Employees:
The amount determined by adding "personnel expenses" within selling, general, and administrative expenses and "personnel expenses" within transportation operating expenses in the nonconsolidated statement of income and loss.

Creditors: "Interest expense" within non-operating expenses.

Shareholders: The total of "net income" and "minority interests in net income of consolidated subsidiaries."

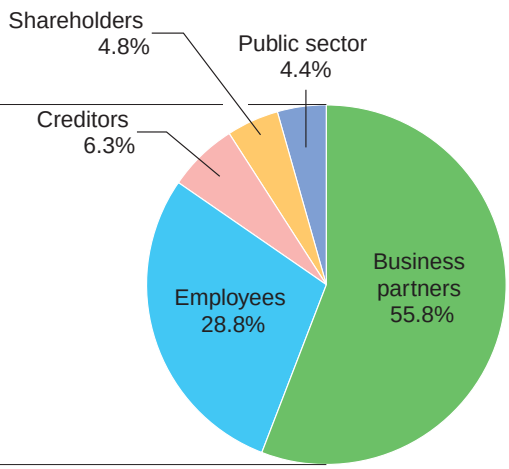
Public sector:
The total of "taxes" within selling, general, and administrative expenses, "income taxes-current," and "income taxes-differed."

Breakdown of the JR East Group Revenues



* Other income refers to the amount determined by offsetting non-operating income, extraordinary income, non-operating expenses excluding interest expense and extraordinary losses.

Breakdown of Expenses and Others by Stakeholder



Stakeholders' Dialogue

JR East invited experts from a wide range of fields to participate in its First Stakeholders' Dialogue, held on April 1, 2004. The theme of the dialogue was "The Roles JR East Group is Expected to Fulfill Toward the Development of a Sustainable Society."

Takashi Kiuchi
Chairman
NPO · The Future 500

Kikuko Tatsumi
Board Member
Nippon Association
of Consumer Specialists

JR East Has Tremendous Potential to Contribute to the Development of a Sustainable Society

Mr. Kiuchi: Japan is currently in a very difficult situation, and there are even questions as to whether it can continue as a nation. When discussing this topic in international circles, however, one of the things mentioned to show that Japan is not in danger is the reliability of its trains, particularly the *Shinkansens*.

Mr. Maeda: Railway companies have tremendous responsibilities to society, the first of which is safety. Other responsibilities include environmental conservation and community revitalizations around stations.

Developing Intermodal Strategies

Dr. Nakamura: I am extremely pleased when I hear that JR East is developing "intermodal" strategies that efficiently combine various means of transportation. Added value is created by linking different types of transportation. I do think, however, that the creation of more strategic concepts would be beneficial.

What do you think, for example, about increased use of railways for transport of merchandise? Since the greater part of the traffic congestion in Tokyo is due to transport of goods, by reducing the volume of vehicles on the roads, the city will become a place where bicycles can circulate with less difficulty. If this is also connected in a roundabout way to the greater use of railways, there are likely to be a variety of benefits.

In the case of "park & ride" as well, which involves driving to a train station in one's car and then taking a train. This is not the notion of building a parking lot because there happens to be some open space, but rather is a project that prevents cars from amassing in the center of cities.

Mr. Tsuzuku: In urban areas I think, it is more appropriate to have "bike & ride" using bicycles rather than "park & ride;" it would be nice if this could be implemented as well.

Increased use of environmentally-friendly railcars

Mr. Tsuzuku: JR East is already using hydroelectric power from the Shinano River to operate its trains, and I would like to see the further introduction of the use of renewable energy sources, such as trains that run on wind-generated power. JR East has high levels of internal consumption and can enjoy economies of scale, so it is in a favorable position to implement such measures. This would have a significant impact on the introduction of natural energy in Japan, and I look forward to JR East taking up the challenge. I would like to know specific figures on what percentage of the energy used for train operations comes from natural energy and how much this will increase in the future.

Mr. Maeda: In terms of the use of hydroelectric power generated in the Shinano River, in 2000 an arts exhibition in Niigata had works by a certain foreign artist that depicted the operation of the *Yamanote* Line using hydroelectric power generated at the Shinano River. I learned this fact from this work of art and was deeply impressed. I think it is necessary for JR East to convey this information to the passengers of the *Yamanote* Line.

Ms. Tatsumi: In Sweden, trains that operate on environmentally-friendly energy sources have environmental labels on their doors. JR East indicates that the toilet paper used in stations is made from recycled tickets; I would like to see more innovative measures

Ken Tsuzuku
President
Renewable Energy Promoting Peoples' Forum

Fumihiko Nakamura
Associate Professor
Graduate School of Environment and Information Sciences
Yokohama National University

Masanao Maeda
Director General
Policy Planning Department
Development Bank of Japan

like this to convey to passengers information about the company's activities. In Germany, advertising space is used for environmental communications that are both effective and very attractive. JR East should also use such spaces for environmental communication. The educational effect on passengers would be significant. I would also like to see educational programs instituted for frontline personnel so they can respond immediately to inquiries from customers concerning environmental matters.

Mr. Maeda: JR East is already taking a variety of measures with respect to safety and disaster responses, and I would like the company to provide more information about these activities through its Sustainbility Report and other methods.

High expectations concerning urban development

Mr. Maeda: Stations are an important point of contact for the public and local communities. There are needs for stations to be made easier to use and more accessible.

Mr. Kiuchi: In that regard, many signs currently in use are not as helpful as they should be. There is plenty of room for improvement so that even people who don't use the trains very often will not get lost.

Dr. Nakamura: To broaden the topic of discussion here somewhat, there is also the issue of urban development that facilitates the use of railways. The idea that local residents, rather than tourists, can perform certain tasks by going to stations should be adopted. For example, libraries could be located in stations, or taking care of certain governmental procedures at station without going to city halls. I would like to see the promotion of the "compact cities" concept that centers on train stations – in other words, sustainable urban development that is rooted in the local community so that people who live in the vicinity of a station have no need for a car. In a city where the transportation systems function efficiently, it is most likely that bus drivers and station employees perform their jobs with pride. This type of urban development certainly requires the cooperation of local government, but JR East can use its comprehensive abilities to promote this.

Ms. Tatsumi: The Company is already setting up nursery schools in the vicinity of stations. This is something that is truly helpful to working women and I would like to see even more sites introduced.

Mr. Kiuchi: The expectations towards JR East are certainly high. As a leading means of transportation, JR East must adopt a long-term view of 20 to 50 years regarding station-centered urban development in order to present a vision of a promising future. I am sure that the public will support such efforts.

Responding to the Stakeholders' Dialogue

Since its establishment with the privatization of the national railways in 1987, JR East has made the utmost effort to achieve profitability and total privatization; and in this process, I feel that our sense as being one of the foundations of society has weakened somewhat.

When we adopt our new medium-term business plan, I am willing to discuss rightly to clearly define the mission of the Group. The mission as to what we can do for the benefit of the pubic and society, Japan, and the development of a sustainable society, and what our role should be. Listening to today's dialogue has reinforced my views on this subject.

Kazuyuki Kogure
Director, Management Administration Department

KPMG

Independent Review Report on "Sustainability Report 2004"

To the Board of Directors of East Japan Railway Company

1. Purpose and Scope of our Review
We have reviewed the "Sustainability Report 2004" (the "Sustainability Report") of East Japan Railway Company (the "Company") for the year ended March 31, 2004. The Sustainability Report is the responsibility of the Company's management. Our responsibility is to report the results of our review of the Sustainability Report. The review consisted of performing certain procedures as described below in relation to the collection, compilation and calculation of the information included in the Sustainability Report. As this is the fifth year of our review, any indicators for years prior to the year ended March 31, 2000 were not subject to these procedures.
Our work does not constitute an audit or examination. We therefore do not express an opinion on the accuracy or completeness of the indicators or databases used to compile the information or the representations made by the Company in the Sustainability Report.

2. Procedures Performed
We have performed the following review procedures agreed to by the Company's management:
1) Obtained the environmental information supporting the environmental performance indicators and the environmental accounting indicators for the purpose of understanding the processes and the procedures of the Company for collecting the data information used to compile the Sustainability Report.
2) With respect to the environmental performance indicators and the environmental accounting indicators in the Sustainability Report, tested mathematical accuracy of the indicators on a sample basis and compared them on a sample basis with the supporting data compiled from the information collected by the Company.
3) With respect to the descriptive information in the Sustainability Report other than the indicators referred to in the above procedures, interviewed the Company's responsible personnel, made on-site inspections, and compared such descriptive information with the data collected by the Company or the data found in certain published materials.

We believe that the procedures performed provide a reasonable basis for the following.

3. Results of the Procedures Performed
As a result of the procedures performed:
1) We are not aware of any material modifications that should be made to the environmental performance indicators, or the environmental accounting indicators in the Sustainability Report in order for them to comply with the Company's policies and procedures for gathering and reporting such information.
2) We are not aware of any material modifications that should be made to the descriptive information other than the indicators in the Sustainability Report to be consistent with the information the Company collected and other information we obtained.

AZSA Sustainability Co., Ltd.
AZSA Sustainability Co., Ltd.

Tokyo, Japan
July 26, 2004

Maho Yao
Manager, CPA
AZSA Sustainability Co., Ltd.

Following the last year style, this Sustainability Report 2004 is divided into two sections – highlights and comprehensive sections. In the highlights section, the interview with President Otsuka clearly describes the company's basic policies. Attending the interview, I strongly felt JR East (group)'s commitments for "sound management" as a corporation, for "safety" as a railway operator, and for "environmental and social contribution" as JR East as its "corporate social responsibility," taking the term much more than just a trendy one.

Based on the belief that ensuring safety is one of its primary responsibilities, negative information concerning construction difficulties is also reported in the highlights section, including an analysis of the causes and a description of the countermeasures implemented. As a result of its various activities, the environmental goals for FY 2005, which were set in 1996, have been revised (i.e., made more stringent) twice according to the degree of attainment. Even with the more stringent targets, JR East is still on its way to achieving them on time.

In this manner, we expect that JR East will further implement a PDCA cycle by conducting "activities" based on "principles," disclosing the results, taking the opinions of stakeholders into account, and reflecting them in future actions.

Aspirations for the Next Fiscal Year

In FY 2003, we held the first ever JR East Group Environmental Management Promotion Conference with the participation of all group companies to strengthen the environmental conservation activities of the entire group. We continue our efforts to achieve harmony between our business activities and environmental conservation.

As for our environmental goals, we were able to achieve some of the goals for 2005 by the end of FY 2003, and it appears that we will meet our 2005 goals on time for other categories. In conjunction with the adoption of the JR East Group's next medium-term business plan this year, we will thoroughly review our environmental goals and set new quantitative targets.

Kazuyuki Kogure
Director, Management
Administration Department

History of Environmental and Social Activities

Year	Month	JR East Group's Environmental and Social Activities
1987	April	Japanese National Railways divided and East Japan Railway Company established. First Railway Safety Promotion Committee meeting held.
	June	Green Campaign begins. Green Counter opens for taking customer comments.
1988	September	"Challenge Safety Campaign" conducted companywide.
1989	April	Safety Research Laboratory and General Training Center established.
	May	ATS-P, a train-control system for safety improvement, installed between Ueno and Ogu on the *Tohoku* Line.
1990	September	"First Railway Safety Symposium" held.
	October	"Future 21," a business plan for the twenty-first century, adopted. "Ladys' Car" for female passengers only introduced on express trains with sleeping cars.
1992	March	East Japan Railway Culture Foundation established.
	April	Committee on Ecology established.
	May	Tree planting conducted to mark the 5th anniversary of JR East's foundation (later becomes an annual event as the Forestation along Railway Lines Program).
	August	Trial collection of waste sorted into three categories at Sugamo Station on the *Yamanote* Line begins.
1993	March	All-day smoking ban extended to major stations in the Tokyo suburban area.
1994	February	Ueno Station Recycling Center begins operations (automated sorting of cans and bottles). Sorted waste collection starts at 36 stations on the *Yamanote* Line
	March	"Basic Safety Plan" announced.
1995	February	Recycling of used train tickets starts in the Tokyo metropolitan area.
	March	First anti-noise initiatives for the *Shinkansen* Lines completed.
	April	Ecology education for all new recruits initiated. "Torenta-kun," a discount car rental service for park & ride users launched.
1996	March	JR East website set up. Quantitative environmental targets such as CO_2 emissions set. Annual "Environmental Report" published.
	December	Use of Autonomous Decentralized Transport Operation Control System (ATOS) begins.
1997	March	Recycling facility at Minami-Akita Operations Center starts operation. Separate smoking areas established at all stations and smoking banned on all local trains.
	October	Recycling factities start operation at *Nagano Shinkansen* Rolling Stock Center and Tokyo Station.
	December	JR East participates in COP3 with the UIC.
1998	March	Second anti-noise initiatives for the *Shinkansen* Lines completed.
	November	Shinkiba Recycling Center starts operation (collection and sorting of used newspapers and magazines). Financial Times places East Japan Railway 27th among the most respected enterprises in the world.
1999	February	"Safety Plan 21" announced. Niitsu Rolling Stock Manufacturing Factory acquires ISO14001 certification.
	March	Omiya Recycling Center starts operation (automated sorting of cans/bins)
	April	Service Managers introduced to some stations
	May	Use of copier paper recycled from newspapers collected at stations begins.
	September	Cell phone text service for train information begins. "JR East General Education Center" opens.
2000	April	Recycled uniforms using recycled PET bottles introduced. Eki Net, an integrated travel website, launched.
	September	Environmental accounting included in the Annual Environmental Report.
	November	Environmental targets revised in conjunction with the adoption of "New Frontier 21," the Group's medium term business plan.
2001	March	Oi Workshop, Kawasaki Thermoelectric Power Plant, and Niigata Mechanical Technology Center acquire ISO14001 certification.
	July	Trial operation of "Ladies Only cars" for female passengers begins on the *Saikyo* Line.
	September	Wireless Internet connectivity testing in stations begins.
	December	"JR East Research & Development Center" established.
2002	February	Test runs of the AC Train, a next-generation commuter train, begin.
	March	Omiya Workshop acquires ISO14001 certification.
	April	Digital ATC introduced on the *Yamanote* Line.
	September	Sustainability Report including coverage of social and economic aspects published.
	November	Sendai General Rolling Stock Workshop acquires ISO14001 certification.
2003	January	Children's illustrated booklet *Mr. Polar Bear Returns by Train* published.
	March	*Guide to Barrier-Free Station Facilities* distributed.
	May	Test runs of the NE Train, the world's first hybrid railcar, begin.
	September	First JR East Group Environmental Management Advancement Conference held.
	November	Children's illustrated booklet *Thinking more about the Environment* published.
	December	Koriyama Workshop acquires ISO14001 certification.
2004	March	"Safety Plan 2008" announced.
	May	First Native Forest Regeneration Project in Fukushima held.

Editor's Note

What roles is JR East expected to carry out? In order to address this question, not only through internal debate but also by taking into consideration the frank opinions of stakeholders from various spheres, we recently held our first Stakeholders' Dialogue. The comments were too numerous to include in their entirety, but we strongly felt the tremendous expectations towards JR East in the development of a sustainable society. At the same time, we were encouraged to address many issues concerning the future that we are confronting.

This report was prepared with the cooperation of environmental coordinators from numerous divisions and organizations.

Sustainability Report 2004

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East Japan Railway Company
Committee on Ecology

2-2, Yoyogi 2-chome, Shibuya-ku, Tokyo
151-8578, Japan
Phone: +81-3-5334-1122
E-mail: eco@jreast.co.jp
http://www.jreast.co.jp/e/

eco-train

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<Cover message>

Playing train has long been common pastime for children and remains so today.
The question is what we must do today so that children in the future can enjoy playing train
and to ensure that a safe environment remains for them to play in.
The JR East Group is striving for active fulfillment of its responsibilities towards the development
of a sustainable society in which people of today and tomorrow can lead meaningful and happy lives.

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