JR East Group
Sustainability Report 2005

Aiming for a Sustainable Society

JR·EAST GROUP

JR East Group Profile

Corporate Profile (as of March 31, 2005)

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 : 66,207

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

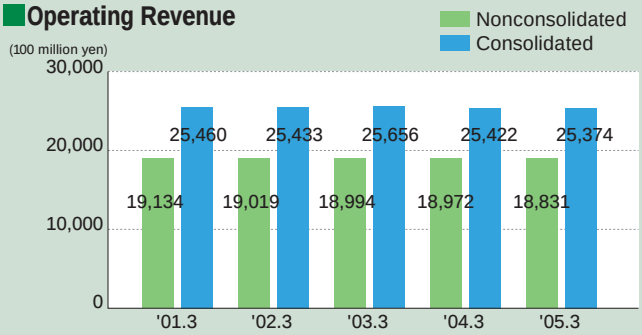
Number of stations : 1,699

Average daily train runs : 12,478 (revised timetable March 2005)

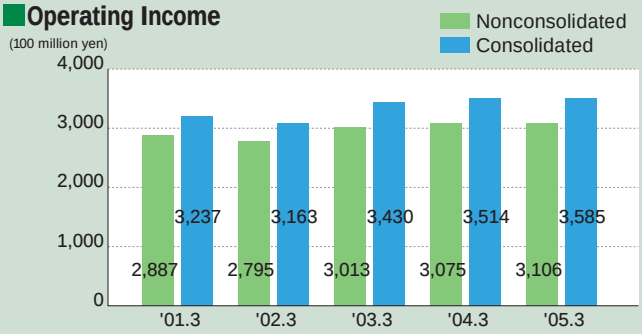
Average daily number of passengers : 16.06 million

Business description : Transportation, station space utilization, shopping centers and office buildings, and other services

Operating Revenue



Operating Income



Businesses in the JR East Group (as of July 2005)

Transportation Services

Safety is the top priority for the JR East Group. These companies work constantly to enhance the speed, convenience, and comfort of transportation services.

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

Shopping Centers

These JR East Group companies develop and manage shopping centers, utilizing the amenities offered by Group assets in and near stations.

Tetsudo Kaikan 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. /Boxhill Co., Ltd. /Kawasaki Station Building Co., Ltd. /Tsurumi Station Building Co., Ltd. /Yokohama Station Building Co., Ltd. /Shonan Station Building 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. /Mito Station Development Co., Ltd. /Iwaki Chuo Station Building Co., Ltd. /Kinshicho Station Building Co., Ltd. /Chiba Station Building Co., Ltd. /Hirosaki Station Building Co., Ltd. /Station Building MIDORI Co., Ltd.

Offices

This JR East Group company develops office projects that benefit from proximity to train stations. It is preparing for the new building project near Tokyo Station.

JR East Building Co., Ltd.

Hotel Operations

These JR East Group companies provide hotel services that respond to a variety of customer needs.

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

Retail Shops and Food Services

Shops and restaurants of the JR East Group companies offer customers a convenient and pleasurable experience both at and around stations.

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

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

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

Travel Agencies and Car Rental

These JR East Group companies 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

These JR East Group companies offer leisure facilities and sports clubs to support customers as they lead healthy lives and enjoy their free time.

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

Real Estate Management

These JR East Group companies develop and manage detached houses, apartment complexes, and stores under the theme of "creating people- and environmentally-friendly housing."

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

Information, Financial, and Personnel Services

These JR East Group companies provide comprehensive information services for other 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

These JR East Group companies provide information through in-train and station media.

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

Cleaning Services

These JR East Group companies provide maintenance and cleaning services to provide clean stations and trains for customers.

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

These JR East Group companies provide consulting and maintenance services concerning railway and personal service facilities, and machine equipment.

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

These JR East Group companies develop unique businesses catering 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

The JR East Group publishes this *Sustainability Report 2005* to provide information, in an accurate and easy-to-read format, concerning its activities on environmental and social dimensions.

As last year, the report consists of a "Highlights Section" and a "Comprehensive Section."

The Highlights Section introduces *New Frontier 2008*, our newly-formulated medium-term business plan, and shines the spotlight on noteworthy initiatives of the JR East Group, in many cases told in the words of our own employees.

In the Comprehensive Section, we summarize the "Environmental," "Social," and "Economic" aspects of our activities, with reference to the GRI[*1] guidelines on sustainability reporting. We have added four pages to this year's report, to provide additional information on the social aspect of the JR East Group and an article about the "Dialogue with Stakeholders." We also continue our proactive disclosure of year-by-year environmental data, with reference to the Environmental Reporting Guidelines issued by Japan's Ministry of the Environment.

In addition, we report the activities of JR East in response to the Niigata-Chuetsu Earthquake (Oct. 2004) and to a train derailment on the Fukuchiyama Line of JR West (April 2005).

References

Sustainability Reporting Guidelines (2002 edition), Global Reporting Initiative.
Environmental Reporting Guidelines (2003 edition), Japan Ministry of the Environment.

Reporting Period

This report covers fiscal 2004 (April 1, 2004 through March 31, 2005). Activity data are based on this period, although some sections also cover some initiatives that started before and some that occurred after this period.

Scope of Reporting

East Japan Railway Company and 92 companies[*2] of the JR East Group

***1 GRI (Global Reporting Initiative)**

The Global Reporting Initiative (GRI) is an international organization that issues the "Sustainability Reporting Guidelines," globally-recognized guidelines for reporting on the environmental, social and economic aspects of corporate activities. The United Nations Environmental Programme (UNEP) was one of the main players in the establishment of the GRI.

***2 East Japan Railway Company and 92 Companies of the JR East Group**

This figure is as of 31 March 2004. The number was further reduced to 84 in April 2005 due to corporate consolidation, etc.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Securing the People's Trust

Three Reforms, Six Challenges

Ms. Takeshita: The JR East Group is operating businesses that are intimately connected with our daily lives; so many people are interested in knowing how you aim to evolve in the future. What can you tell us about your future objectives?

Otsuka: We are implementing initiatives based on *New Frontier 2008*, our newly-formulated medium-term business plan starting in fiscal 2005. This plan was set to help us rise to a higher level as a Trusted Lifestyle Service Creating Group, and clarify our new management orientation. It includes our three Reforms: the 'Mind-Set Reform' that encourages all employees to offer services that reflect the customer's standpoint, the 'Business Reform' to build a robust group and enhance the competitiveness and collective strength of the corporate group, and the 'Management Reform' with the double aim of fulfilling social responsibility and achieving sustainable growth. For the Mind-Set Reform in particular, we uphold our policy to "challenge ourselves to meet customer expectations," as our basic management philosophy, based on the knowledge that realizing customers' expectations is far from easy. However, we must clear the hurdles and take on the challenge for a range of possibilities.

Photograph: Kōji Arimitsu

Ms. Takeshita: My impression of the JR East Group is that it enriches our lives and makes them more convenient. Can you give us some concrete examples of your thoughts on adapting to changes in user lifestyles?

Otsuka: In order to fulfill customer expectations, we have developed a series of business strategies we call the "Six Challenges." The first is: Continue relentless efforts to provide safe and reliable transportation with the aim of providing ultimate safety. The second is: Reinvent our stations. We are promoting what we call a *Station Renaissance* to have customers see train stations as a second base for living, after their homes.

The third challenge is: Enhance the convenience and comfort of railway operations. Fourth: Enhance lifestyles through the *Suica* brand of train card and services. During fiscal 2006, we will start to offer customers interchangeable use of their *Suica* card with other transportation companies, and will expand the number of stores where it can be used for payment.

The fifth challenge is to expand our office space and hotel-related businesses, that is: Grow non-transportation operations further. Here, we are putting effort into our "Station Nursery Schools" business concept, and are in the process of intensive promotion of the service along the Saikyo Line.

The sixth challenge is: Focus on research and development. We are currently developing a high-speed Shinkansen train with a top speed of 360 km/h. We emphasize safety, of course, but comfort and convenience are also important. Another initiative is working to put a low-environmental-impact hybrid railcar, the NE Train, into service.

Fulfilling Corporate Social Responsibility, Achieving Sustainable Growth

Ms. Takeshita: I understand that the Niigata-Chuetsu Earthquake in October of 2004 caused some major damage, including the derailment of a Shinkansen train. Can you tell us about that?

Otsuka: Yes, the quake certainly did cause some damage, and the inconvenience to customers lasted for a while during the recovery, but thanks to the combined efforts of everyone involved, we succeeded in restarting services on all lines. The appreciation expressed by the people of Niigata when the Joetsu Shinkansen Line reopened underlined to me the extent of our impact – as a railway – on the local economy, and it also made me realize the degree of responsibility we have. I was reminded how important it is for us fulfill our responsibility to society as a corporation. I am deeply conscious that safety and peace of mind must be at the core of our service. We are working hard to clarify the exact causes of the damage that occurred during the earthquake, and to do seismic upgrades and reinforcement work.

Ms. Takeshita: In recent years, the topic of corporate social responsibility has attracted a lot of attention. In your *New Frontier 2008* plan, I understand that you have included this as one of the basic themes. Can you tell us more?

Otsuka: Our business at the JR East Group is, in essence, intimately connected with society and communities. In this sense, we fulfill our responsibility to society by sustainably offering a safe and highly reliable railway service, as well as through businesses involved in lifestyle services that respond to customer needs.

We intend to continue to secure the trust placed in us by customers, shareholders, and communities, by maintaining a high sense of ethics and fully complying with laws and regulations, and through highly transparent management practices, as well as by dealing sincerely with the key issues of our day – issues like: adapting to the aging of society, protecting personal information, and recognizing the need for vitalization in local communities. In addition, since rail has lower environmental impacts than other modes of transportation, we will further promote the initiatives we have been working on,

Photograph: Kōji Arimitsu

Profile: Keiko Takeshita

Keiko Takeshita usually takes the heroine role, particularly on NHK television, and became a popular actress in Japan when still a student at Tokyo Women's University. She has played a wide range of roles on film and on stage, and has become an accomplished actress in both name and ability as the recipient of many awards.

Ms. Takeshita has served many social causes, including participating in a charity concert for relief efforts after the Hanshin-Awaji Earthquake of January 1995. She has also been active in environmental issues and, at the 2005 World Exposition, Aichi, Japan, served as the head of the Japan Pavilion.

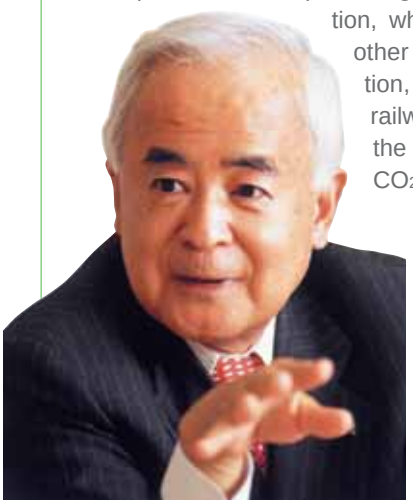
and further enhance the environmental advantages of rail over other modes of transportation.

Achieving Both Environmental Protection and Business Growth

Ms. Takeshita: In effect, what you are talking about is balancing efforts of environmental protection with business growth, correct?

Otsuka: That's right. We have established some quantitative targets to help us make steady progress in the environmental aspects of our business activities. Since we achieved most of our targets for fiscal 2005 by the end of fiscal 2003, including our goal to reduce CO_2 emissions to 20% below 1990 levels, we have set higher targets for fiscal 2008, and this time have also included new quantitative targets for the entire Group. We will be introducing energy-efficient railcars, and companies in the Group will be promoting the recycling of various kinds of waste, for example.

In the future we will continue to exert our full effort offering railways and other services that are a pleasure for our customers to use, and will continue in the expansion of business – with consideration toward the environment underpinning management thinking. For example, we will be promoting intermodal transportation, which combines rail and other modes of transportation, so that energy-efficient railways can contribute to the reduction of the overall CO_2 emissions associated with the movement of goods and people in society.



Photograph: Kōji Arimitsu

This interview took place in February 2005.

Mutsutake Otsuka
President
East Japan Railway Company

Mutsutake Otsuka

Reflections on the Train Derailment on the Fukuchiyama Line of JR West

"Safety" has been the top priority for JR East since the day it was founded, and will continue to be so.

In April 2005, on the Fukuchiyama Line of JR West, a huge tragedy occurred, caused by a train derailment that resulted in the loss of 107 lives, and injury to over 500 people. I pray for the souls of those who lost their lives, and for the fast recovery of those who were injured.

Learning from this tragedy, JR East is looking back on our operation and making the utmost effort once again to ensure compliance with train speed limits, compliance with maintenance standards for railcars and structures, and health management of crews. We also had all our executives visit our local offices and facilities to exchange views with many employees, identifying any potential risks that may have been overlooked. It would be unacceptable to ignore the lessons of other companies, or to brush them off as if they don't concern us. There is no "finish line" when you're talking about safety measures. We will make our greatest possible effort each and every day to achieve "ultimate safety."

The number of railway operational accidents has dropped to about one-third what it was when JR East was established (fiscal 1987), but the fact is that the accident rate is still not zero. It is difficult to achieve a perfect safety record, but we aim for zero major accidents resulting in serious damage or injury. With a target of "zero customer and employee fatalities and injuries," we are now implementing our *Safety Plan 2008*, our fourth five-year plan.

After the Fukuchiyama Line accident, the ATS-P automatic train stop system has become the focus of much attention in terms of equipment-related safety measures. JR East has installed this system in almost all track sections of the Tokyo metropolitan area, and is working now to expand its coverage to other areas.

Putting Group Policies into Practice: *New Frontier 2008*

– By continuing to fulfill our role as a Trusted Lifestyle Service Creating Group, we will contribute to the building of a sustainable society –

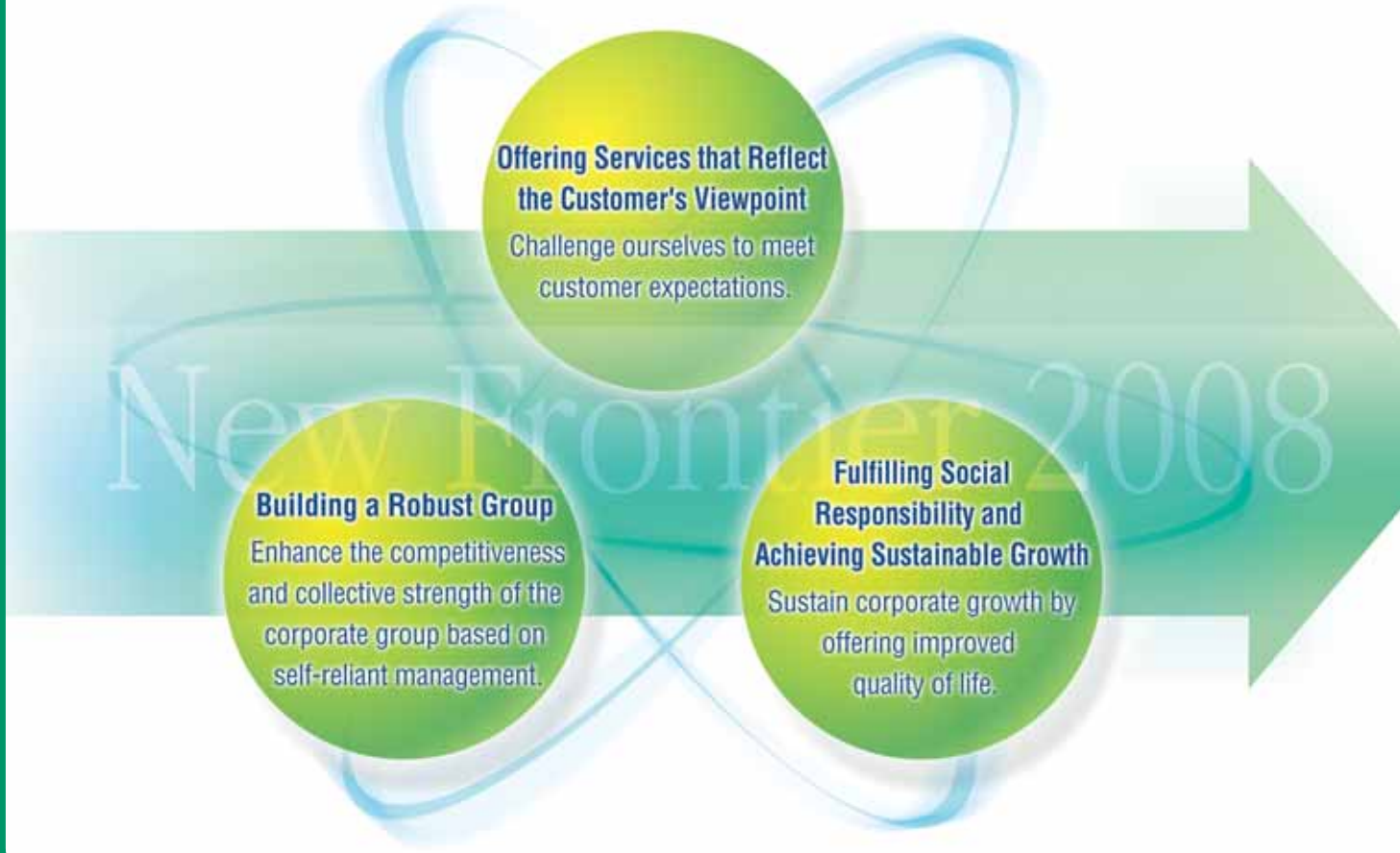
***New Frontier 2008*, which we announced in January 2005 as our new medium-term business plan, indicates our targets to be achieved over the four years to 2008, based on the Group Policies and Action Guidelines that make up our philosophy.**

The JR East Group will fulfill its corporate social responsibility by playing a part in the development of local communities, through providing reliable transportation services and value creation, while growing sustainably as a corporate group.

JR East Group Medium-Term Business Plan

New Frontier 2008: New Creation and Evolution (2005-2008)

Basic Management Policy (3 Reforms)



Group Policies

The JR East Group will aim to function as a corporate group capable of providing high quality and advanced services with station and railway businesses at its core.

For this purpose, every individual employee of the group will endeavor, looking from the customers' viewpoint, to support safe and punctual transportation and supply convenient and high-quality services, and take 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 our customers.

As a Trusted Life-Style Service Creating Group, we will go forward with our customers, to perform our social responsibility while ensuring profitability for the group's sustainable growth.

Action Guidelines

1. Customer Focus

We meet our customers' expectations by offering cordial, user-friendly services.

2. Safety and Quality

We provide safe and punctual transportation and high-quality services.

3. Group Development

All employees work together for growth of the Group, through self-reliance, collaboration, and a willingness to challenge.

Creating New Customer Values (6 Challenges)

Continue relentless efforts to provide safe and reliable transportation.

- Consistently implement *Safety Plan 2008*.
- Make transportation safer.
- Take countermeasures against large earthquakes.

The seismic upgrade project

Reinvent stations.

- Make stations easy to navigate and use.
- Make stations reliable and safe.
- Make stations comfortable and convenient.

Creating attractive urban spaces

Further enhance the convenience and comfort of railway operations.

- Enhance convenience and comfort of railway operations.
- Offer new services.
- Enhance the level of hospitality services.

Introducing of new railcar models

Grow non-transportation operations further.

- Utilize synergies between new services and the railways.
- Boost market competitiveness.
- Reorganize and integrate corporations according to industry type and structure.

Utilizing station space

Enhance lifestyles through the *Suica* brand.

- Promote interchangeable use with other transportation companies.
- Develop new services.
- Expand number of stores accepting *Suica* as electronic payment.

Mobile *Suica*

Focus on research and development.

- Enhance safety and reliability.
- Enhance convenience and comfort.
- Reduce costs.
- Contribute to global environmental protection.
- Promote the development of existing stations.

Prototype Shinkansen FASTECH 360S

Utilize the Synergies of the Group

Creating the World's Most Environmentally-Friendly High-Speed Train

JR East is endeavoring to develop the world's leading high-speed train – the Shinkansen that superior in many ways: speed, safety, comfort, and environmental performance. Creating this new high-speed train will increase the convenience of rail transport while reducing the CO_2 emissions. It will promote a shift from other modes of transport, and lead to the reduction of society's overall CO_2 emissions.

"We have already made a variety of improvements in the environmental features of *Hayate* Shinkansen trains, which are now in use," says Yusuke Wakabayashi, of the Environmental Technology Group, Advanced Railway System Development Center, JR East Research & Development Center.

The major environmental impacts of the Shinkansen are noise, energy consumption, and the sonic boom when the train enters a tunnel. As an example of the measures taken, to eliminate wind-noise from the pantograph which draws electricity from the overhead wires, the pantograph covers and the overall shape of the pantograph were improved. Also, meticulous changes were made to produce more streamlined railcar bodies.

As for energy consumption, by making improvements such as reduction in the weight of railcar bodies, the Shinkansen's energy consumption was reduced by about 30% compared to 20 years ago. Regenerative brakes utilize energy generated during the braking of trains: the train motors generate electricity during braking, and return this electricity to the overhead wires.

To deal with the sonic boom, an explosive sound caused by compressed air exiting a tunnel when a train enters it at a high-speed, the shape of railcars and tunnel entrances were redesigned. In such ways as these, countless

Yusuke Wakabayashi
Environmental Technology Group
Advanced Railway System Development Center
JR East Research & Development Center

"There are no other examples of this many environmental technologies being built into a train. I am excited to see how high we can improve the overall environmental performance of the Shinkansen."

Profiles of Shinkansen trains currently in operation. Many steps have already been taken to reduce their environmental impacts.

improvements were made to reduce the environmental impacts of the Shinkansen.

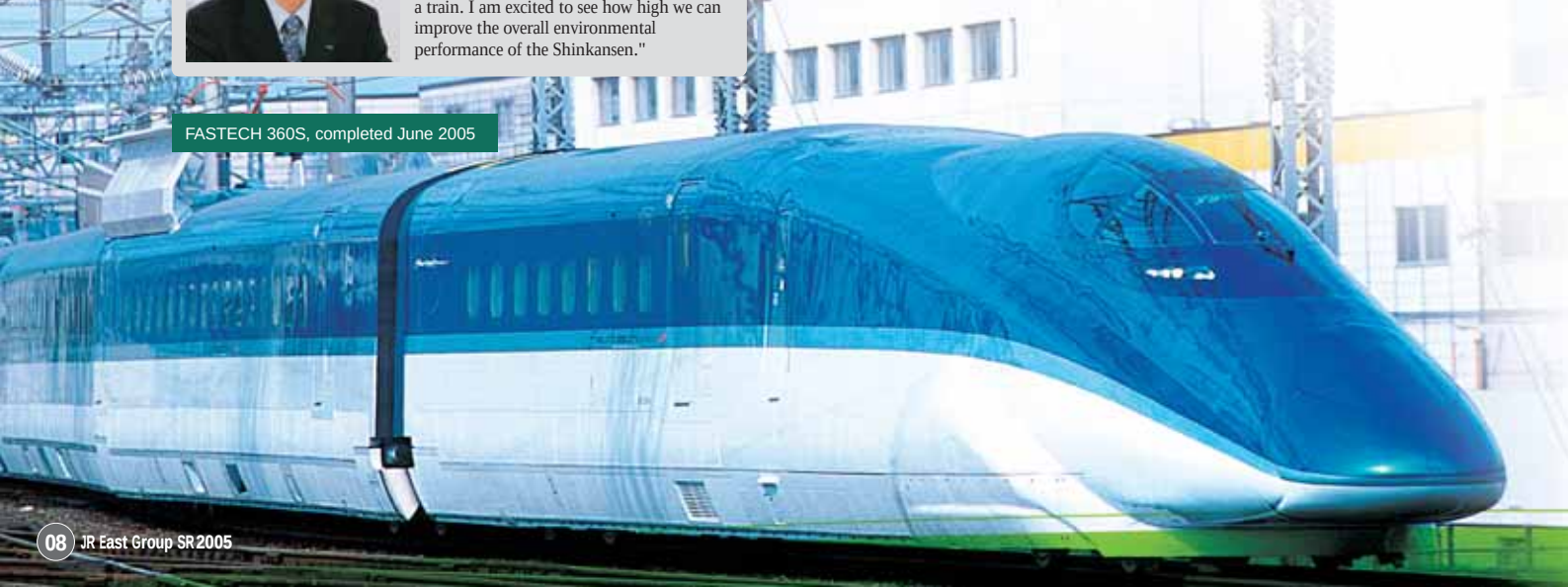
These certainly make a train excellent, but in order to become the best high-speed train in the world, it is still necessary to take further measures for the environment. Three years ago, JR East set a goal of developing the best high-speed train in the world: a train that could run safely and comfortably at 360 km/h, and also be environmentally sound. Since then, the development team has been tackling this bold challenge.

Innovative ideas create a quieter train

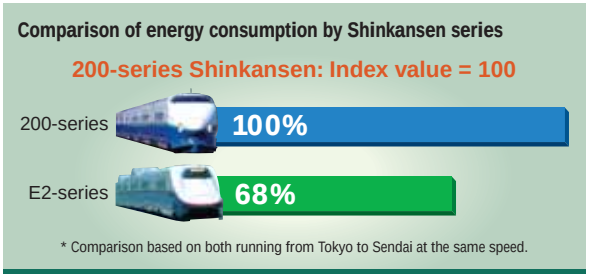
In June 2005, a prototype model of FASTECH 360S, with the aim of creating the world's best high-speed train, was completed. Besides improvements in all technologies and better overall environmental performance, the prototype railcars incorporate designs that overturn conventional engineering wisdom.

One of these is the installation of sound-absorbing material as part of the train body. The bottom and sides of train bodies are covered with such sound-absorbing material, which reduces the amount of noise that would otherwise reverberate between soundproof walls along the railway tracks and the train body, before disappearing into the surrounding air. However, because sound-absorbent material is not strong, it is easily damaged by bouncing gravel and other objects. Engineers had originally thought that it made no sense to attach sound-absorbent materials to the exterior surfaces of the railcar body. Other noise-reduction innovations include a newly-developed, low-noise pantograph with better performance, allowing them to reduce the number from two to one per train. In addition, new and higher-performance sound-dampening panels with improved cross-sectional profile were developed and installed.

In order to further reduce the noise caused by trains



FASTECH 360S, completed June 2005



Trains such as the *Hayate* and *Asama* use the E2-series of railcars to conserve energy as a result of a variety of improvements.

entering tunnels, two designs were developed – both 16 meters long – that optimize the shape of the prototype train's front end to minimize the sonic boom. Such measures reduce the changes in air pressure when a train enters a tunnel.

"We aim to feed back as much prototype test-data as possible into future development, so that we can make railcars with the lowest possible environmental impacts," concludes Mr. Wakabayashi.

The culmination of all technology to date

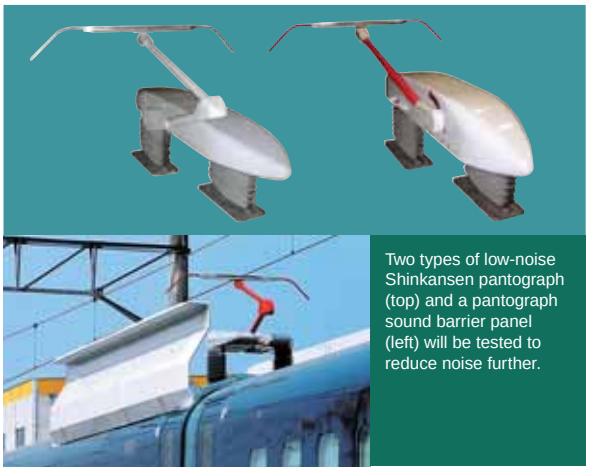
A variety of improvements are also made on the speed, safety, and comfort aspects of the new Shinkansen. "FASTECH 360 is the culmination of all our previous Shinkansen technologies," says Seiichi Watanabe, Manager (Rolling Stock Basis Technology), Advanced Railway System Development Center, JR East Research & Development Center.

For example, in order to boost speed, they reduced the size and boosted the output of motors as well as the equipment that drives those motors. Three types of newly developed high-output equipment, enabling the prototype train to be driven at a top speed of about 400 km/h, will be installed and compared. In addition, installed into the pantograph is a newly developed multi-split strap-board that allows the equipment to draw a stable supply of electricity from overhead wires, even at high speeds.

In the safety dimension, to shorten stopping distances, for the first time in the world spoilers are installed on a train as air brakes. During sudden braking, aluminum plates in the railcar body are released, thereby reducing stopping distance by boosting air resistance. By enhancing this and other braking functions, they aim to reduce braking distance to about the same or less than for a train stopping from 275 km/h (about 4 km).

Improvements to boost comfort are also included. For example, active suspension, which *Hayate* was the first Shinkansen train in Japan to use, has been modified. The floors, windows and walls are designed to have excellent sound-dampening features, reducing the noise from running and from electrical equipment.

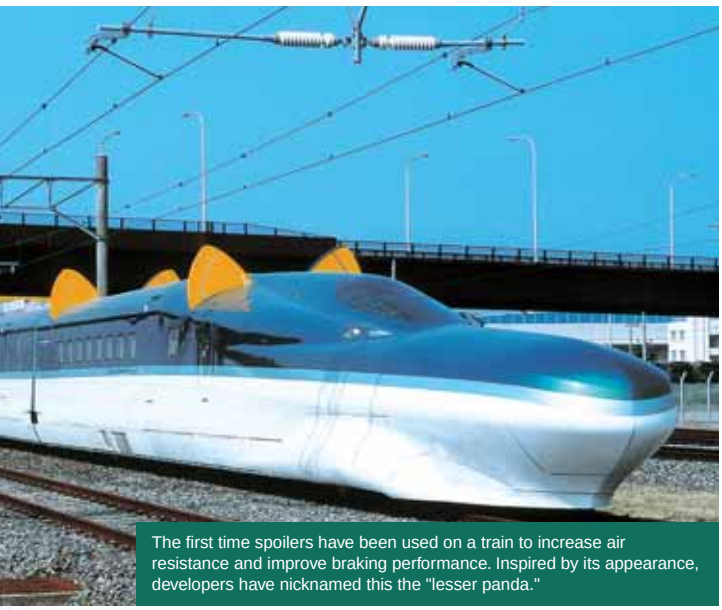
"The Shinkansen is not just railcars. It is an integrated system, of many things – the rails, the maintenance, the method of operation, and so on," says Watanabe. And as one would expect, the development of the world's best high-speed train involves many people from a wide range of departments at JR East. "In applying all our energy to the tough challenge of being the best in the world in environmental terms, JR East Japan can meanwhile boost the level of its technological capabilities," says Mr. Watanabe.



Two types of low-noise Shinkansen pantograph (top) and a pantograph sound barrier panel (left) will be tested to reduce noise further.

Seiichi Watanabe
Manager (Rolling Stock Basis Technology)
Advanced Railway System Development Center
JR East Research & Development Center

"The Shinkansen is a system. It involves many different departments of the company, and we are all concentrating our efforts into creating the FASTECH 360."



The first time spoilers have been used on a train to increase air resistance and improve braking performance. Inspired by its appearance, developers have nicknamed this the "lesser panda."

In addition to environmental and safety performance, the new Shinkansen train incorporates improvements in comfort, themed "futuristic comfort mobility space."

The new train offers a variety of "spaces:" Special type Car 5 (above) and ordinary type Car 6 (right).

JR East Consultants Company

Rooftop Greenery: Good for the Environment, Good for People

A "Sky Garden" of rooftop greenery sits atop the Lumine Tachikawa Store, connected with JR Tachikawa Station. The green grass promotes a good feeling – just stepping on it helps you relax. But there are also significant environmental benefits; this new installation is expected to help as a measure against global warming.

Lumine Tachikawa Building, beside JR Tachikawa Station

It's called the "Sora Niwa," or "Sky Garden." It is a healing space that was completed in cooperation with three companies: Tachikawa Store of the Lumine Co., who seeked to make effective use of its rooftop; JR East Sports Co., who designed the Futsal Stadium; and JR East Consultants Comapany (JRC), who is an advocate of rooftop greenry project.

It is designed in layers, with a root-prevention sheet over the rooftop concrete; soil; and then grass. The soil is *roofsoil*, a special soil made with peat brought from a 3,500 meter plateau in China. Both drainage and water retention are good, and its high oxygen content prevents the growth of pathogens. For rooftop greenery, a minimum depth of 15cm is normally required, but with *roofsoil*, it is possible to plant with only about 7cm in depth. This means a big reduction in costs. "Seen in the long term, it's hard to imagine how great the benefits will be," says Naoto Kato of JRC.

Naoto Kato

Assistant Manager, New Business Development Office, Corporate Planning Department
JR East Consultants Company
(Currently in Business Section, Marketing Division, Mito Branch, JR East)

"I would like to promote the idea of putting greenery on rooftops of buildings in the heart of the city. This is a possibility not only for train station buildings, but also apartments and multi-purpose structures."

"Since it absorbs CO_2, there is a global warming prevention effect. There are other merits on the environmental, economic and human aspects, such as: mitigating the urban heat island effect; saving energy for air-conditioning; increasing the service life of buildings; attracting customers; soothing people, and so on."

So far, JRC has been involved in comprehensive technological consulting projects relating to railways, including design. As an innovative type of business, it is currently putting effort into information technologies as well as environmental strategies, and this rooftop greenery project is one of the latter. What they are aiming for is to create train stations that are 'good for the environment, good for people.'

"Rooftop greenery is not just for station buildings. It can be used elsewhere too," says Mr. Kato. To date, rooftop greenery has been installed on five stations and other buildings in the Tokyo area – The JR Tokyo General Hospital is one of the proposed locations for further rooftop greenery projects.

"This is not just planting vegetation for the sake of it. It can be used for many things, such as gardening programs to provide space for customers to grow vegetables. We hope to explore all the potential uses in the future."

Organic peat *Roofsoil* is lightweight, drains well, and retains water well.

View of rooftop of the JR East Shinjuku Nambu Gengyo Office, the first of JRC's rooftop greenery projects.

"Sora Niwa" (Sky Garden) on the rooftop of the Lumine Tachikawa store was completed in March 2005 (area: about 130 m^2).

Nippon Restaurant Enterprise Co., Ltd

Recycling Resources, Growing Vegetables

The Tomobe Recycling Farm grows organic vegetables using compost made with organic waste from JR East trains, stations, and stores. It has been a long road, but a lot of effort combined with trial and error has transformed this rocky field into a land of rich harvests.

It was in June 1998 when Nobuyoshi Shibuya, who was then working in a JR East dining car, first set foot on this land that was originally a railway yard. Squeezed between the outbound and inbound tracks of the JR Joban Line, the drainage was terrible. "Can this really be transformed into a farm?" "Is it really possible to grow anything here?" Mr. Shibuya, who at the time had no experience with farming, had many doubts.

But through great perseverance, employees from Nippon Restaurant Enterprise Co. (NRE) and from its farming subsidiary, Nisshoku Estate, reclaimed the land. By September, after three months of continuous effort to collect stones, tires, and railroad ties, the plot had transformed into what looked more like a farm.

This Tomobe Recycling Farm was born from NRE's strong principles on food safety. NRE started its move to emphasize product quality more than eight years ago, with initiatives to ensure the soundness of food production. This is a project that started with the ideas of "acquiring growing techniques for organic vegetables," and "using resources wisely."

Agriculture is a struggle with nature. After opening the farm, the work was even more difficult. The fertilizer is made by adding about 40 kg of cooking oil waste and a bit of water to each ton of compost from organic waste. This method uses no chemical fertilizers and no pesticides, but because the plants easily attract insects and disease, it takes three times as much effort to grow things. Weeds grow wild, and even after spending two weeks clearing weeds, they soon start to take over the land once more. It is also necessary to clear away stones on a regular basis. Last year, the farm was flooded by a big typhoon. Those involved have learned all about the difficulties of farming.

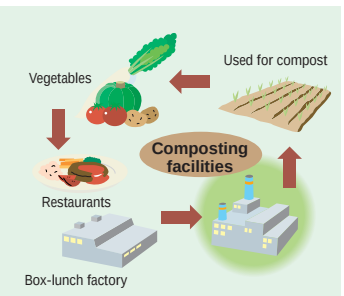
There is a constant repetition of hardship and failure. That is why the satisfaction at harvest time is so great. "What makes me the happiest is when someone who eats this food tells me it's delicious," says Mr. Shibuya, beaming with pride. Vegetables that are good for nature and the body also have a great taste.

The crops planted here include spinach, Chinese cabbage, *chingensai*, green onions, crown daisy, potherb mustard, mini-tomatoes, cucumbers, cabbage, *daikon* radishes, onions, potatoes, eggplant, and taro and red potatoes. The variety is great, from leafy vegetables to root crops. "It's just like raising kids, you can't grow good vegetables unless you're constantly involved," he says. On the 30,000 square-meter plot, fresh vegetables are awaiting harvest today.

Nobuyoshi Shibuya
Manager,
Tomobe Recycling Farm
Nippon Restaurant Enterprise Co., Ltd.

"I never imagined I would ever get involved in farming. But today my purpose in life is to use my hands and grow vegetables."

The Tomobe Farm's vegetables are being used at NRE's noodle shops. Organic waste from the shop goes back as nutrients to grow more food.



Composting started at the Kita-Toda headquarters in September 1998. Since April 2001, the NRE Food Recycling Center has collected all food leftovers, organic waste and uneaten food from NRE restaurants, the Yayoi Kaikan and JR Tokyo and Ueno Stations (including leftovers from *bento* lunch boxes separated from non-organic waste) for use at the Tomobe Farm, JA Yasato and contracted farmers. The vegetables that are grown then become food ingredients for bento, employee cafeterias, and station restaurants, etc. In fiscal 2004, 1,053 tons of organic waste were composted.

Staff include six persons (three employees from Nisshoku Estate, on loan from NRE, and three local housewives). Main harvests in fiscal 2004 included onions (27 tons), cabbage (3 tons), *daikon* radish (13 tons), and potatoes (10 tons). The plot's area is 27,725 square meters. There are plans to increase this to 33,725 square meters.

Learning from Disaster: Responses to the Niigata-Chuetsu Earthquake

It was 5:56 p.m. on October 23, 2004. The Chuetsu region of Niigata Prefecture was rocked by a JMA scale intensity seven earthquake. What happened there on the ground? And what lessons were learned? Here we look at coordinated efforts by the entire JR East Group to ensure safety and provide rapid responses.

Routine training pays off

As soon as JR East received word of the earthquake, the Risk Management Headquarters was in action. At 6 p.m., four minutes after the quake, the response headquarters were set up, and by the next morning, company officials were already in the quake area, with the response order in place.

At about the same time, Masaaki Kobayashi, Assistant Depot Chief for the Niigata Shinkansen Transportation Depot was at work at the Niigata Station when the quake occurred. He collected information and made preparations on the assumption that the train schedule would be disrupted by the earthquake. By a dedicated phone line he received information from crews about the situation in trains. On that day, employees on their days off work came in to help organize the incoming information and verify the situation.

Then the most shocking news came in: a Shinkansen train might have been derailed. "I heaved a sigh of relief when I heard that no one was hurt!" says Mr. Kobayashi. No one had been hurt, but the crew still had to guide passengers to evacuate from the Shinkansen.

It was pitch black outside due to a power failure, and due to bad conditions, no vehicles could reach them by road, so some people had to walk several kilometers, and others from another train had to climb a 500-step flight of stairs to get out of a tunnel. It was difficult, but with the help of other passengers, they were able to complete the rescue operation without a single injury.

Masaaki Kobayashi
Assistant Depot Chief
Niigata Shinkansen Transportation Depot
JR East

"Some passengers even gave a hand to help during the evacuation. I've heard from crew members that they were quite moved when it was all over and passengers called out to thank them."

"Crews put passenger safety above all, and responded as the situation demanded. I think that it's in extreme situations that the results of routine training come out." Besides routine training of two hours per month for all employees, and night-time emergency training once each year, special training sessions are also conducted to prepare to respond to events such as the subway fire that happened recently in South Korea. In all of this, the training is made as realistic as possible, pushing the crew to the best of their ability. It is because of routinely conducted training sessions where they can build up their own experience that they were able to respond efficiently to the earthquake.

"With this earthquake, I was convinced that all of our training to date was worth the effort. I think it's important to record events and continue routine training, so the lessons we learned this time don't fade with time."

The Shinano River Hydraulic Power Plant, operated by JR East, was damaged by the earthquake. Amid a heavy snowfall, repair work continued day and night to get the water flowing again as soon as possible.

A Major Lesson: Never Stop Improving Safety

"I've been doing maintenance work on Shinkansen tunnels for ten years now. It almost brought me to tears of shock to see the collapsed inner wall of a tunnel after the earthquake because I had been confident of its maintenance condition," says Hideo Kobayashi, Deputy Manager of the Nagaoka Depot of the Niigata Civil Engineering Center.

The general thinking used to be that tunnels were resistant to earthquakes, because if the mountain moved, the tunnel would move with it. The collapse of this wall was a big shock not only to JR East but to everyone.

It was early in November that the main repair work began: "We worked with the goal of re-opening the line by

Toki 325 derailed on the Joetsu Shinkansen Line between Urasa and Nagaoka. Aftershocks continued during removal, inspection, and recovery work.

Scene of the Joetsu Shinkansen Uonuma Tunnel, about 2.4 km from the tunnel entrance. The earthquake damage was far greater than generally expected.

the end of the year or early the next year." Driven by the sense of mission to open the route for the many people waiting, JR East Group worked in coordinated fashion day and night. Thanks to the cooperation and supports of many, including members of construction companies, they succeeded in opening the Joetsu Shinkansen route on December 28.

The fact that there were no injuries among passengers and train crews, despite the size of this earthquake, tells us that the seismic upgrades have been effective. In this particular case, although the section of track where the Shinkansen was derailed was outside of what had been identified as the priority regions of the Tokyo metropolitan area and Sendai area, JR East had decided to make seismic upgrades here too, in light of the size of the active fault here. Meanwhile, Japan's Ministry of Land, Infrastructure and Transport is also investigating to determine the cause of the derailment and what countermeasures are needed for the future, but as a matter of social responsibility as the first company ever to experience a train derailment on a Shinkansen due to an earthquake, JR East is also conducting its own thorough investigation.

"With this earthquake, we were strongly reminded that there is no such thing as perfect safety. I deeply felt that the status quo is never enough. It is important to always aim for one level higher when it comes to safety. We are in a position to convey this technology to younger employees, and this is one of the lessons I need to pass on to them."

Hideo Kobayashi

Deputy Manager, Nagaoka Depot
Niigata Civil Engineering Center
JR East

"We had conducted seismic upgrades on the Joetsu Shinkansen, aware that the elevated railway tracks had collapsed during the Kobe earthquake in 1995. We were very relieved that no serious damage arose on the elevated tracks after the Chuetsu quake."

Supporting the local post-quake economic recovery

"Although the actual area that was seriously damaged by the earthquake was fairly limited, Niigata Prefecture as a whole suffered as a result of the image of destruction," says Hiroyuki Nakamura, Section Chief of the Sales Section, Marketing Division, JR Niigata Branch Office. Even places quite far away from the earthquake-affected area, such as Senami Hotsprings and Sado Island, were inundated with travel cancellations just because they were in the same prefecture of Niigata.

Immediately after the earthquake, he felt strongly that he had to take steps to revive tourism. Preparations were made for the reopening of the Shinkansen line, and JR East was able to launch a marketing campaign starting on December 28th, the first day of renewed operations, and running until the end of March, under the slogan "Gambatte-masu!! Niigata" (roughly translated as "Niigata. We're Going For It!").

JR East offered special discount tickets and travel products. It also launched a prize reward campaign in the Tokyo area. We arranged special Shinkansen trains from the Tokyo area to a festival in the city of Nagaoka, which had been hard-hit by the earthquake, and to events organized by Kuramoto (Sake brewers) in Niigata Prefecture, and both of them were almost fully booked. Attracting a total of 190,000 people, the Niigata support campaigns surpassed our original target of 180,000 and ended as a success. "JR East covers all regions of eastern Japan, so we are in a position to both send and receive customers. In that sense, I felt that our role in restoring tourism was significant."

Mr. Nakamura continues, "The earthquake gave us the impetus to develop stronger links in the local community. I'd like to nurture these, and continue with our efforts in the broadest sense to promote tourism and the local economy." The earthquake was a great misfortune, but they will not allow the lessons of this experience to be forgotten. They will be put to good use in the future. This sense of conviction is the same in all employees, regardless of their department or position in the company.

Hiroyuki Nakamura

Section Chief, Sales Section, Marketing Division
Niigata Branch Office, JR East

"People of Niigata have a tradition of saying ' I'm all right' and refraining from asking for help in a disaster. But this time, I've heard people say that thanks to this campaign, people worked together to overcome the difficulties."

Many sections of conventional line tracks were also damaged. Efforts to inspect the damage were conducted while taking care to avoid secondary disasters.

In September 2004, the annual comprehensive disaster prevention drill was conducted based on an intensity-six earthquake scenario. About 15,000 employees participated. Only routine preparations ensure a calm response to emergencies.

Special discount travel pamphlets were distributed at major stations through the cooperative efforts of travel companies and local businesses.

Station Reinvention: From "A Place to Pass Through" to "A Place to Be"

***Station Renaissance*. Reinventing the very nature of the station. The act of transforming stations into places where people wish to spend their time is expected to create a ripple effect of prosperity. We are continuing to evolve our stations, while aiming for positive coexistence with the local community.**

Our First Major Station Renovation: *Ecute Omiya*

On March 5, 2005, *Ecute Omiya* in JR Omiya Station celebrated its grand opening after completion of major renovations. It appeared on the scene with a bold impact and challenged conventional thinking about how train stations should be. When you leave the train platform and rise by escalator to the concourse, you are under the illusion of somehow having found your way into a department store, or a shopping center, with rows of food shops, fashion stores and restaurants. To your surprise, however, you are actually still inside the ticket-paid area of a JR station.

A total of 68 shops make up *Ecute Omiya* – designed as a conceptual 'market avenue' with everything a person might need in daily life. It boasts many shops in an innovative business concept taking advantage of its location inside the station. There are escalators, elevators, multi-function restrooms, and restaurants with menus in braille and designed for easy wheelchair access. In addition, all employees of JR East Station Retailing Co. Ltd., which operates *Ecute Omiya*, including the president, have obtained Service Assistance[*1] certification, one of many measures taken to ensure that the facilities provide "barrier-free" access to all users. This is the first train station in Japan with such a major in-station development – in every corner we tested the potential for the next generation of train stations.

*1 Official certification by the non-profit Japan Care Fit Service Association. This association certifies that persons working in industries providing direct service to customers (railways, hotels, restaurants, etc.) have obtained the skills to provide proper care for the elderly and persons with disabilities, etc.

Station Renaissance. Not "Passengers" but "Customers"

Station Renaissance is the concept of reinventing stations through a variety of initiatives. It is at the core of the medium-term business plan *New Frontier 21*, which was announced by JR East in November 2000, and the *New Frontier 2008* plan that followed it. The start of this was the re-opening of the renovated Ueno Station in 2002. Later, major improvements were made at 11 locations, including Asagaya, Nishi-Funabashi, and Koriyama, as well as various upgrades, including those in medium and small size stations.

As the culmination of these efforts and the starting point of the next big step in this process, Omiya Station was redeveloped with construction of a manmade ground level above the tracks, and station improvements covering 5,000 square meters (including previously-existing sections). As a result, besides ensuring usability as a railway facility that offers comfort and spaciousness, and providing easy-to-read signage to guide those passengers changing trains, the bold move of placing *Ecute Omiya's* retail facilities inside the ticket-paid area was made.

The promotional catchphrase for *Station Renaissance* is "From 'A Place to Pass Through' to 'A Place to Be'." This is the concept that a station is not just a place for getting on and off trains but – if we can increase its comfort and convenience – it can become a place where people will want to spend time.

"It meant re-thinking things, by seeing the people who use the stations no longer as merely passengers, which

Food section with fresh items on display. In a station, products can be purchased both in bulk and in small packages, but it's important to ensure that purchases can be made quickly.

Ecute Omiya, where railway facilities and shops co-exist. All are located inside the ticket-paid area for convenience.

we did in the past, but rather as customers who have various needs – the station is then based on a holistic customer-oriented perspective. The shift in thinking was huge," says Nobuhiro Matsuhashi, Manager of the Lifestyle Business Development Headquarters. "It is true that stores have been located in stations in the past. But, their response to the diverse needs of customers was far from adequate. What the *Station Renaissance* aims for is to create an appealing place where people will want to go even if they don't have to go to the station to ride a train, or where they will want to get off the train even if they don't have to make a transfer there."

Ecute Omiya boasts 68 shops, including fashion, general goods and food shops, a supermarket, a drugstore, and more. All purchases can be made using *Suica* cards.

Nobuhiro Matsuhashi
Station Renaissance Project Group Leader
Manager, Property Promotion Division
Life-Style Business Development Headquarters, JR East

"We aim to re-think the station from the perspective of the customer. Of course, safety is important, but we are also aiming for convenience and comfort."

Aiming to stimulate and coexist with local communities

"About 600,000 customers use Omiya Station every day, including people making transfers between trains. What kind of services do these customers need? That was the starting point of our thinking," says Koichi Egoshi, General Manager of Ecute Omiya. The date was three months after the opening of Ecute Omiya. The crowds have continued to arrive since the opening as "a place where people want to be" which is the aim of Station Renaissance. The evidence is in the lines that appear every day in front of popular shops, and the passengers who intentionally get off the train at Omiya just to do something here.

After Ecute Omiya was completed, the number of customers getting off trains at Omiya Station reportedly increased by about 8,000 people per day. Says Mr. Matsuhashi, "By attracting people to the station, I am hoping we can also help to stimulate local business. I would like to continue promoting the Station Renaissance that can create those effects, and to coexist positively with the local community." "Because a station is also one of the landmarks in a town, I believe that making a station more attractive also helps to make a town more attractive," says Mr. Egoshi. The evolution to JR East stations is going to continue.

Koichi Egoshi
General Manager, *ecute Omiya*
JR East Station Retailing Co., Ltd.

"Because many of our customers use the station every day, there is a tendency for them to lose interest quickly. We would like to learn from experience and continue to evolve."

Ueno Station concourse before major reinventions was cluttered and poorly lit.

Ueno Station, the starting point for JR East's *Station Renaissance*. Major reinvention completed in February 2002.

Cooperating with the Local Community, Working to Develop Omiya

As station manager, what pleases me the most is that the station was reborn through the *Station Renaissance*, particularly that it became a barrier-free station and has become more convenient for customers to use. We are making an effort – not only on the physical infrastructure aspects, but also on the human aspects – to boost the level of service.

We told local businesses, "We want this station to attract customers. Let's work together to get customers leaving the station and visiting local shops too." For the 120th anniversary of the opening of Omiya Station, we worked with local shops to promote what we called "Hiking from the Station," and about 2,000 people participated. In the future, we aim to continue a mutually-beneficial coexistence between the station and local businesses.

Takeshi Yamaguchi
Omiya Stationmaster, JR East

Our Aim: Ultimate Safety

Public interest in railway safety has never being so high in Japan as major incidents grip the industry. In October 2004, a Joetsu Shinkansen train was derailed by the Niigata-Chuetsu Earthquake, and six months later in April 2005, another train derailment occurred, this time on the JR West Fukuchiyama Line. Preventing the loss of life and preventing the loss of customer and public confidence are the highest priorities of JR East management, and also constitute a large part of our responsibility to society.

The train derailment on the Joetsu Shinkansen was the first ever derailment of a Shinkansen train in operation, and as the main party involved, JR East is investigating the mechanisms behind the derailment. At the same time, we are working on seismic upgrades such as on pillars supporting elevated railway tracks as well as enhancing early detection systems for earthquakes.

We are learning from other companies' mishaps. We do not see the Fukuchiyama Line derailment simply as someone else's problem, and are taking the matter very seriously – this was an accident that could also happen to us. We await the findings of the Aircraft and Railway Accidents Investigation Commission as to the cause of the accident. Meanwhile, as it has been suggested that the train in question entered a curve at a speed far exceeding the speed limit, JR East has decided to expand its program of installing ATS-P and ATS-Ps equipment to prevent speeding at curves, points and crossings, and terminals, which was underway as a measure to prevent train collisions. In the future, when the cause of the accident is clear, we will take any further measures necessary.

At the same time, safety requires uncompromising commitment of employees to work in strict compliance with the rules. ATS-P and ATS-Ps devices are mere backups for human fallibility. Railway safety is ensured by the interaction of *humans* (employees), *equipment*, and *rules*. It is important to routinely confirm that this interaction is being properly respected and improved upon, and to ensure that each person properly understands the safety framework and is performing the basic procedures of the job appropriately.

JR East has formulated and implemented four five-year Safety Plans since the company was formed in April 1987. During the 18 years before fiscal 2004, besides investing about 1.6 trillion yen in safety measures, we have also run the organization, revised regulations and rules, investigated accidents, and set a corporate environment that supports safety awareness. As a result of our efforts to make a safe railway system, safety measures have steadily improved – to the point that railway accidents have dropped to about one-third the level of when JR East was established in 1987.

We are taking steps to further improve our safety record, with the launch in fiscal 2004 of *Safety Plan 2008*, our fourth such plan, which has the target of "zero customer and employee fatalities and injuries" (including employees of Group companies). We are working to improve safety from many related perspectives, including ATS-P devices and safety equipment at railway crossings and station platforms; prevention of major accidents by upgrading equipment to deal with large earthquakes; efforts to ensure smooth operations based on the fact that accidents are more prone to happen during train delays; and safety initiatives for management and for each employee.

Safety is the first precondition of all railway businesses. We aim for "ultimate safety" by ensuring that all employees consistently observe the basic principles, and endeavor to achieve even higher levels of safety.

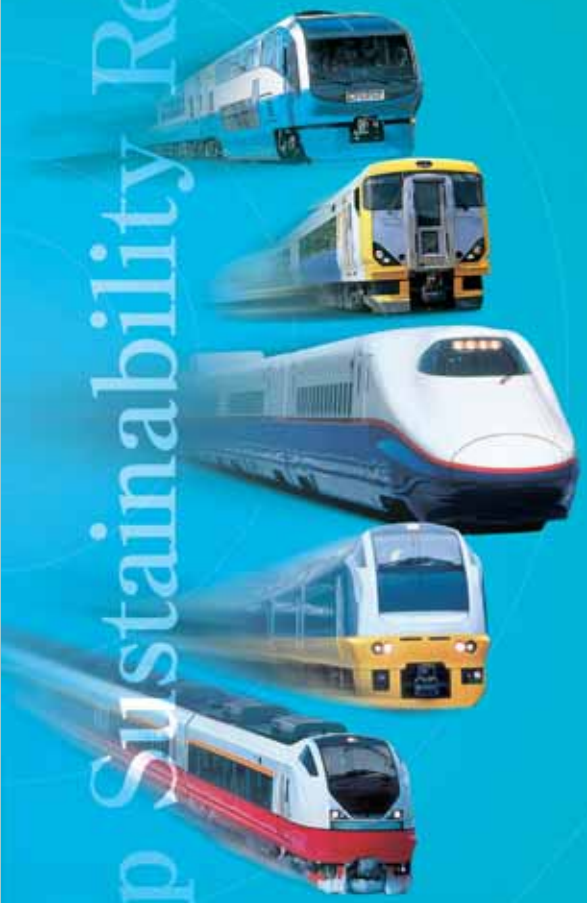
Safety Plan 2008: Back to Basics and Renewing Safety Strategies

Priority Improvement Plan for Safety Equipment	Priority improvements of safety equipment to prevent major accidents.	Investment of about 400 billion yen in safety measures in five years.
Safety enhancement	Create a railway system with high transportation quality that customers can use with confidence.	"Prompt train stopping to ensure safety" and "Prompt resumption of operations after confirming safety."
Safety management reforms	Responding appropriately to technological progress and to the diversification of customer values.	Developing an infrastructure to promote safety on a group-wide basis. Proper cultivation, education, and training of employees. Risk management system during earthquakes.
Creating a culture of safety	Practicing safe behavior by each individual.	Ensuring "Proper assessment of actual and potential accidents." Respecting basic procedures. "Actively searching for potential accidents."

JR East Group Sustainability Report 2005

Comprehensive Section

In this section, we answer a variety of questions customers often ask about the activities of the JR East Group relating to society and the environment.



Philosophy on CSR

What is the JR East Group's basic stance on CSR?

To fulfill its corporate social responsibilities (CSR),
the JR East Group is strengthening management structures in four areas: corporate governance, compliance, accountability, and risk management.

Basic Philosophy on CSR

The railways that form the core of the JR East Group were originally constructed with the goal of promoting the progress of society, and in this sense it is a business that is intimately linked with society and communities. Because of this relationship, the JR East Group has always had a corporate culture that recognizes the importance of contributing to society, and of fulfilling its responsibility to society through its business activities.

Our Group Policies state that "As a Trusted Lifestyle Service Creating Group, we go forward with our customers, balancing the execution of social responsibility with profit making, and aim for the sustainable growth of the Group." *New Frontier 2008*, the medium-term business plan that started in fiscal 2005, lists as one of the Basic Management Policies to "Fulfill corporate social responsibility, achieve sustainable growth" with the aim of "fulfilling social responsibility by playing a part in development of local communities, through providing reliable transportation services and creating new value, while growing sustainably as a corporate group."

By promoting the growth of business in the JR East Group consistent with our Group Policies and Action Guidelines, we intend to continue functioning as a corporate group that satisfies social expectations and maintains the trust of stakeholders.

Management Structure for Implementing CSR

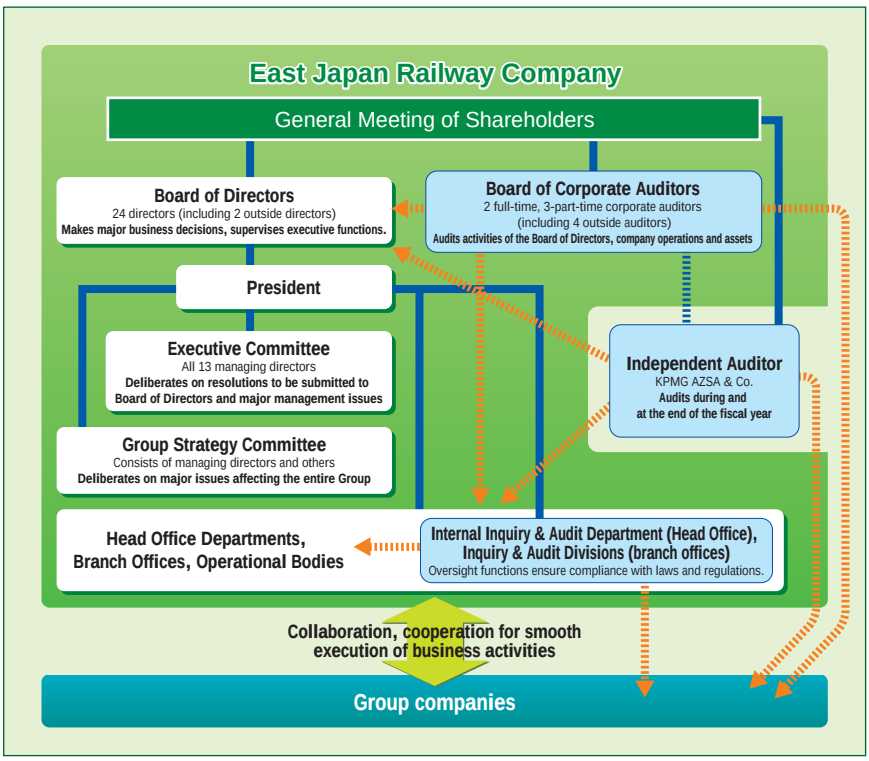
Corporate governance

In order to promote the more active discussion of issues by the Board of Directors, accelerate the decision-making process and increase flexibility, the number of directors of JR East was reduced from 31 (July 2002) to 24 (of whom two are from outside the company; July 2005). 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 the major issues which affect the entire Group.

In terms of internal control, we have established the required structures for ensuring legal compliance in executive functions, among other measures. In order to maintain transparency in management and to strengthen supervisory functions, we have appointed outside directors and auditors who have extensive experience and knowledge. The Board of Corporate Auditors comprises two full-time and three part-time auditors (four of whom are external auditors), and each auditor conducts job-performance audits of the directors in accordance with policies set by the board. Furthermore, regular liaison meetings are held with auditors of Group companies to exchange information.

As for financial auditing, the accounting firm KPMG AZSA & Co., with which JR East has an auditing agreement, conducts independent audits during and at the end of each fiscal year. For internal auditing, we maintain an Inquiry & Audit Department at the Head Office and Inquiry & Audit Divisions at all branch offices. The Inquiry

Corporate Governance System



& Audit Department also performs audits of Group companies.

Compliance

Recognizing that to exist as a corporation in society, corporate management must be conducted on the basis of compliance and high ethical standards, we built a structure centered on the Legal Department (which was separated from the Administration Department in June 2002) to ensure a rapid response to legal risks and internal legal issues. We strive to ensure compliance with applicable laws and regulations in all our business activities, while considering advice from legal counsel and other professionals.

The *New Frontier 2008* declares that a great effort will be made for our management's complete legal and regulatory compliance. To implement this, in May 2005 we adopted the Policy on Legal and Regulatory Compliance and Corporate Ethics and distributed a Compliance Action Plan to all employees of Group companies, giving a straightforward explanation of Standards of Conduct. In addition to this, we established whistleblower desks both inside and outside the company.

The JR East Group as a corporate group obtains a large amount of personal information in the course of doing business. With the aim of strictly protecting personal information, in March 2005 we established Regulations for the Management of Personal Information, and established the position of Chief Privacy Officer. We are also working to determine the status of personal information obtained by other corporate members of the JR East Group, and to enhance information security.

On an ongoing basis, we implement regular training at branch offices and Group companies, in order to enhance compliance and ethical standards. In fiscal 2004, we continued offering a variety of seminars for JR East and Group companies, including legal skills seminars, management seminars, basic legal trainings, and regular legal seminars.

Information disclosure for greater accountability

We actively provide information about the JR East Group through public relations and investor relations activities, in order to enhance stakeholders' understanding of the Group and to maintain their trust. We also use Internet websites to provide key corporate information in an appropriate and timely manner.

Risk management systems

The Crisis Management Headquarters was established in January 2001 to collect and centrally manage information and to implement initial responses in the event of a major crisis affecting the JR East Group's business operations. In addition, with the aim of controlling risk before crises occur, and to discover risks early, in July 2004 we established the Crisis Management Office. The office strives to minimize damage and loss by involving senior management at an early stage and accelerating decision-making, avoiding delayed responses, disclosing information in an appropriate manner, and considering issues relating to compliance.

Furthermore, in order to maintain a corporate culture that encourages the timely communication of risk-related information, we are enhancing our risk- and information-management structures, for example, by conducting training sessions for Group companies.

Compliance Training in FY 2004

Title	Number of Times	Participants	Contents, Objectives	Number of Participants
Management Seminar (Compliance Course)	2	Administrative managers (Group companies)	Compliance, risk management, fair hiring practices, human rights education	51
Legal Skills Seminar	1	Legal affairs managers (branches)	Deepening legal knowledge, legal reasoning, and decision-making abilities based on real issues	12
Basic Legal Training	2	Legal affairs personnel (Group companies)	Acquisition of basic legal knowledge	57
Regular Legal Seminar	1	Employees (JR East and Group companies)	Awareness-raising about compliance with laws and regulations	About 200

Compliance Action Plan, distributed as a handbook to all employees of the JR East Group.

In order to employ a systematic approach relating to the environment, JR East bases its actions on detailed quantitative targets. For the near future, we had set goals to be achieved by the end of fiscal 2005.

We achieved six of eleven targets by the end of fiscal 2003 and were making good progress with the others; we also felt it was important to enhance the environmental management of the entire JR East Group.

Thus, in January 2005, we set new goals to be achieved in fiscal 2008 (see page 21), including higher goals for JR East, and new goals for the entire JR East Group. Based on a detailed vision, we continue to endeavor to balance environmental protection with the pursuit of business.

Basic Vision for the Environment

What is the JR East Group's Basic Approach to the Environment?

In 1992, the JR East Group adopted the Basic Philosophy of balancing environmental protection with the pursuit of business activities. Based on this philosophy, we have established Activity Guidelines and quantitative targets, and are implementing environmental protection activities.

Two Approaches for the Promotion of Ecological Activities

Recognizing the special characteristics of its business, JR East uses the following two approaches to address environmental issues.

Creating a railway with low environmental impact

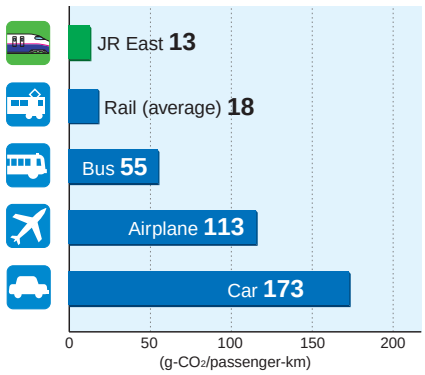
We take various initiatives to reduce the environmental impacts of our business activities, such as making railcars more energy efficient and recycling waste.

Electrical consumption by train series

Creating a user-friendly railway system

Recognizing that the environmental impacts of rail are lower (per unit of volume transported) than other means of transportation, we are promoting intermodal transportation – particularly the integration of rail and road – to reduce the impacts of transportation overall.

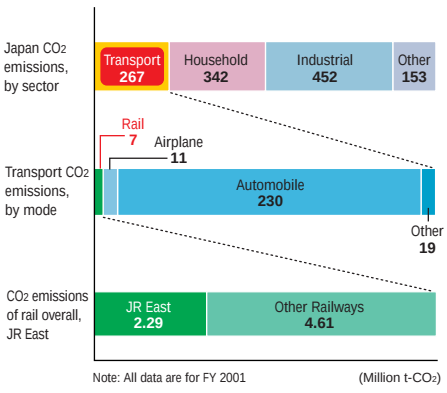
Comparison of CO_2 emissions



Source: "Transportation and Environment," Foundation for Promoting Personal Mobility and Ecological Transportation, 2005

Japan's CO_2 emissions: JR East's perspective

The Kyoto Protocol entered into force in February 2005, making CO_2 emissions reduction an ever more urgent issue for Japan. Although rail's environmental impact per unit of transport is low, JR East's share of total CO_2 emissions within the entire railway industry in Japan is large. In this context, JR East recognizes the importance of making further efforts to reduce its environmental impacts and is taking action to do so.



Basic Philosophy and Basic Policies for Promoting Ecological Activities

Basic Philosophy (established May 1992).

The entire JR East Group,
working together,
will diligently strive to balance environmental
protection with our business activities.

Basic Policies (established May 1992).

- 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 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 2008[*1]

(Established Mar. 1996; revised Nov. 2000, partially revised Sept. 2002, revised Jan. 2005)

East Japan Railway Company

	Target for FY 2008	Target for FY 2005 (for reference)
CO_2 emissions from business activities	22% reduction	20% reduction
CO_2 emissions per unit of electricity generation at JR East-operated thermal power plants	40% reduction	30% reduction
Ratio of energy-efficient railcars to total rolling stock	82%	80%
Energy consumption to operate trains per unit of transport volume	19% reduction	15% reduction
Number of large refrigerators using specified chlorofluorocarbons (CFCs)	100% reduction	85% reduction
Recycling rate for waste generated at stations and on trains	45%	40%
Recycling rate for waste generated at General Rolling Stock Centers, etc.	85% (average for 4 years of plan)	75%
Recycling rate for waste generated at construction projects	92% (average for 4 years of plan)	85%
Noise reduction on Shinkansen lines (to achieve before target date of 4th plan)	4th plan	75 dB in residential areas
NOx emissions at JR-East thermal power plant	63% reduction	60% reduction

JR East Group

	Target for FY 2008	Target for FY 2005 (for reference)
Recycling rate for general waste	43%	–
Percent of recycled paper used in offices	100%	100% at JR East
Annual environmental activities	Participate in tree planting, etc.	–

Note: Base year for target comparisons is FY 1990.

*1 **Goals to be Met by FY 2008:**
In January 2005, the original goals for fiscal 2005 were revised as the goals for fiscal 2008, based on progress to date. Goals were newly established for the entire JR East Group at this time.

Environmental Goals and Results

What Was Accomplished in Fiscal 2004 in Relation to the 2005 Environmental Goals?

JR East has established environmental goals to be met by fiscal 2005. Each year we review our performance, both qualitatively and quantitatively, and when necessary develop strategies to make improvements the next year.

Category	Main Activities	Target for FY 2005	Base value (FY 1990)
Environmental management	• Environmental management led by the Committee on Ecology at JR East Head Office and branch offices • Acquisition of ISO14001 certification at the Nagano General Rolling Stock Center		
Measures to prevent global warming	• Introduction of energy-efficient railcars • Promotion of intermodal transport (*Park & Ride, Rail & Rent-a-Car*) • Reduction of CO_2 emissions from power generation and supply	CO_2 emissions from business activities	2.76 million t-CO_2
		CO_2 emissions (per unit of electricity generation) at JR East-operated thermal power plant	726 g-CO_2/kWh
		Ratio of energy-efficient railcars in total rolling stock	–
		Energy consumption to operate trains per unit of transport volume	20.6 MJ/car-km
		Number of large refrigerators using specified chlorofluorocarbons (CFCs)	82 units
Measures for resource conservation	• Reduction and recycling of waste generated at stations and on trains (waste separation, recycling center improvements) • Recycling of train tickets • Recycling of waste generated at general rolling stock centers and during construction projects • Use of office paper made from recycled newspapers collected at stations	Recycling rate for waste from stations and trains	–
		Recycling rate for waste from general rolling stock centers (and railcar factories)	–
		Recycling rate for waste from construction projects	–
		Percent of recycled paper used in offices	–
Chemical management	• Reduction of pollution from Kawasaki Thermoelectric Power Plant • Appropriate management and treatment of organic solvents	NOx emissions at JR-East thermal power plant	994 tons
Environmental activities along railway lines	• Continued noise reduction and other measures along Shinkansen and conventional lines (soundproof walls, continuous welded rails) • Utilization of groundwater running into tunnels	Reduction of noise to 75dB or less in designated residential areas along Tohoku and Joetsu Shinkansen lines	–
Environmental communication	• Environmental protection activities in cooperation with local governments • Tree planting along railway lines • Tree planting under the Adatara Hometown Forestation Program • Publishing the *Sustainability Report*, conduct environmental advertising	Annual environmental protection activities	–
Research & development	• Development of hybrid NE Train • Development of noise reduction technology		

Accomplishments and performance toward the 2008 environmental goals set in January 2004 will be reported in the next publication and onward.

Target Value	FY 2003 Results Actual figures in parentheses	FY 2004 Results Actual figures in parentheses	Evaluation	Reference pages
				24-25
20% reduction (2.20 million t-CO_2)	20% reduction (2.20 million t-CO_2)	13% reduction (2.39 million t-CO_2)	–	30-33
30% reduction (508 g-CO_2/kWh)	31% reduction (504 g-CO_2/kWh)	30% reduction (510 g-CO_2/kWh)	3	
80%	72%	76%	2	
15% reduction (17.5 MJ/car-km)	11% reduction (18.3 MJ/car-km)	13% reduction (17.9 MJ/car-km)	2	
85% reduction (12 units)	83% reduction (14 units)	84% reduction (13 units)	2	
40%	39%	43%	3	34-36
75%	81%	82%	3	
85%	86%	91%	3	
100%	99%	98%	2	
60% reduction (402 tons)	66% reduction (341 tons)	58% reduction (417 tons)	–	37
100% (target for FY 2002)	100%	100%	3	38-39
–	15 locations 12,000 trees planted 2,400 participants	17 locations 25,000 trees planted 3,200 participants		40-41
				8-9, 31, etc.

Satoshi Seino, JR East Executive Vice President
Vice Chairman of Committee on Ecology

Working toward the goals for fiscal 2005, JR East newly achieved targets for the "recycling rate for waste from stations and trains." However, due to the stoppage of hydropower generation after the Niigata-Chuetsu Earthquake, we were forced to increase generation from our fossil-fuel-burning thermal power plant, which meant falling below our targets on two items we had achieved the previous year: "total CO_2 emissions from general business activities," and "NOx emissions at Kawasaki Thermal Plant." Repair work is currently underway, and we aim to restart the damaged hydropower plant in the spring of 2006.

We continue to make improvements in "energy consumption to operate trains per unit of transport volume," thanks to the introduction of energy-efficient railcars.

Without the impacts caused by the earthquake, we would have been on-track regarding our fiscal 2005 targets, and therefore starting in 2005 we have set higher targets, and we are working to achieve our goals for fiscal 2008 (see page 21) which include new targets for the entire JR East Group.

Progress toward FY 2005 goals

3 ····· Achieved
2 ····· Satisfactory
1 ····· Behind schedule

Note: This year we made no entry in the "Evaluation" column for two items (CO_2 and NOx emissions from business activities), as results were skewed by the impacts of the Niigata-Chuetsu Earthquake.

Environmental Management

How Does the JR East Group Promote Environmental Management?

The JR East Group is working to enhance its environmental management system in order to promote efforts to protect the environment. We also provide programs to raise the environmental awareness of employees.

Implementation of Environmental Management

Committee on Ecology

JR East established the Committee on Ecology with the mandate of ensuring that various environment-related initiatives proceed smoothly – these include studies about impacts of business activities; establishment of targets; implementation of activities; monitoring the achievement of targets; and support for the checking functions of the corporate management. The committee is an inter-departmental body consisting of general managers from every corporate department, and is chaired by the Chairman of JR East; the secretariat is hosted by the Management Planning Department.

As in the previous year, we held the JR East Group Environmental Management Advancement Conference, with participation from members of the entire corporate group; the conference discussed ways to strengthen the Group's overall environmental efforts, and worked to expand activities.

ISO14001 certification

JR East has continued with its efforts to acquire ISO14001 certification, an international standard for environmental management systems, particularly for locations with relatively high environmental impacts. Several sites acquired the certification since the Niitsu Rolling Stock Manufacturing Factory was the first to do so in fiscal 1998, with the most recent being the Nagano General Rolling Stock Center in fiscal 2004.

A maintenance facility for railcars in the Nagano area, the Nagano General Rolling Stock Center acquired ISO14001 certification in fiscal 2004.

ISO14001-Certified Sites

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
Nagano General Rolling Stock Center	February 2005

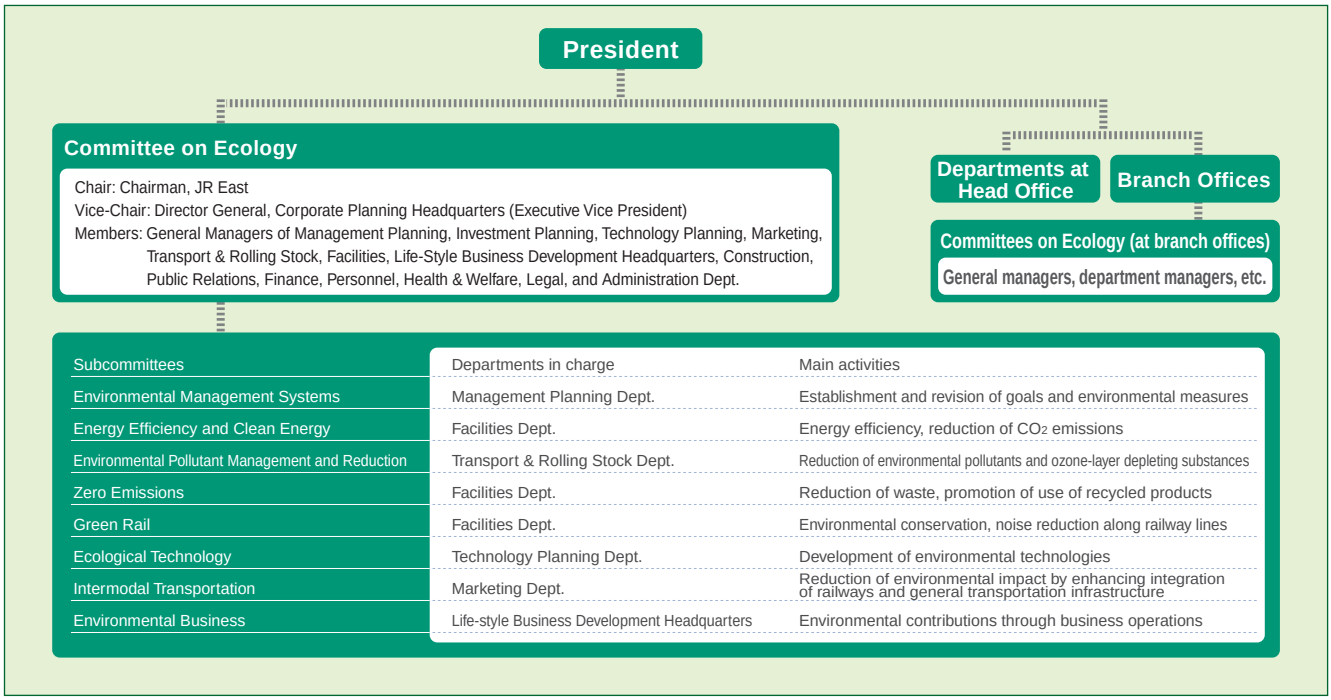
JR East Group companies that have acquired this certification include East Japan Eco Access Co., Ltd., LUMINE Co., Ltd. and Nippon Restaurant Enterprise Co. (Production Operation Division).

Internal environmental audits

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

At general rolling stock centers, for example, in an effort to evaluate environmental activities,

Organizational Structure to Promote Environmental Management



Subcommittees	Departments in charge	Main activities
Environmental Management Systems	Management Planning Dept.	Establishment and revision of goals and environmental measures
Energy Efficiency and Clean Energy	Facilities Dept.	Energy efficiency, reduction of CO_2 emissions
Environmental Pollutant Management and Reduction	Transport & Rolling Stock Dept.	Reduction of environmental pollutants and ozone-layer depleting substances
Zero Emissions	Facilities Dept.	Reduction of waste, promotion of use of recycled products
Green Rail	Facilities Dept.	Environmental conservation, noise reduction along railway lines
Ecological Technology	Technology Planning Dept.	Development of environmental technologies
Intermodal Transportation	Marketing Dept.	Reduction of environmental impact by enhancing integration of railways and general transportation infrastructure
Environmental Business	Life-style Business Development Headquarters	Environmental contributions through business operations

in-house auditors are trained through external training programs, and conduct routine audits at the centers. One internal environmental audit pointed out that revaluation of the environmental aspect had not been conducted after changes were made to certain wastewater treatment facilities, so action was later taken to rectify this situation.

Environmental risk management

By strengthening its management of chemical substances, JR East has set a structure to prevent environmental accidents.

We have compiled emergency response manuals for the handling of chemical and other hazardous substances at the thermoelectric power plant and general rolling stock centers. We make an effort to ensure proper handling on-site, including holding seminars and training on how to handle the substances, and efforts to ensure that essential information reaches all the relevant personnel.

Environment-related accidents

Agricultural crops near the rail lines were damaged due to improper application of herbicides to clear vegetation along the Banetsu East Line (June 2004) and the Suigun Line (July 2004) (see page 39).

Trial phase of "JR East Eco Activities"

JR East is implementing what it calls "JR East Eco Activities," which nurture a corporate culture that encourages employees to think about the environment, and promotes more dynamic and practical environmental activities at each workplace. In fiscal 2004, seven operational bodies were established as models for this purpose at the JR Hachioji Branch Office.

Environmental education

For environmental management to function properly, it is essential that all employees have a proper awareness about environmental issues. We therefore provide environmental education when employees are hired and promoted, as well as seminars and online trainings on environmental topics. A total of 2,700 employees received environmental education during fiscal 2004.

In fiscal 2004, we also launched a new training program for personnel responsible for environmental matters at all Group companies. In addition, we distributed a summary version of the *JR East Group Sustainability Report* to all employees.

Summary version of *JR East Group Sustainability Report* is given to all the employees. In-house magazine "JR Higashi" also carries environmental information.

Recognition and awards

JR East recognizes and rewards employee efforts for the environment.

One example is the "Hokushin Fighters" team of the Morioka Shinkansen Rolling Stock Center (Hachinohe Facilities), which received a commendation award in December 2004 at JR East's 18th Presentation Meeting for Small Group Activities.

This team found a way to save 583 tons of water per year. Conventionally, water was left running in the railcar-washing hose to prevent it from freezing but this team used compressed air to completely remove water from the hose, thereby reducing water consumption.

Held in collaboration with the Japan Environmental Education Forum, the "Environmental Management Strategy Game" served as training for environmental managers in the JR East Group.

Environmental education

Seminars and Lectures	No. Sessions	No. Participants
Training for environmental managers of the JR East Group	1	111
Training for new on-site supervisors	8	177
Training for work-implementation managers	1	198
Training for new recruits	1	1,398
Environmental seminars, etc.	5	644
Online training	–	180

Environmental Accounting and Environmental Management Indicator

How Does the JR East Group Utilize Environmental Accounting and Its Environmental Management Indicator?

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

Environmental Accounting for FY 2004

Category	Environmental conservation costs (billion yen)		Environmental Conservation Benefits in Terms of Environmental Goals			Economic Benefits of Environmental Conservation Activities (billion yen)
	Investment	Expenditures		FY 2003	FY 2004	
Environmental conservation (pollution prevention) along railway lines	4.85	4.66	Reduction of noise to 75dB or less in designated residential areas along Tohoku and Joetsu Shinkansen lines NOx emissions at JR-East thermal power plant	100% achieved 341t	100% achieved 417 t	–
Global environmental conservation	62.64	–	CO_2 emissions from business activities CO_2 emissions (per unit of electricity generation) at JR East-operated thermal power plant Ratio of energy-efficient railcars to total rolling stock Energy consumption to operate trains per unit of transport volume Number of large refrigerators using specified chlorofluorocarbons (CFCs)	2.20 million t-CO_2 504 g-CO_2/kWh 72% 18.3 MJ/car-km 14 units	2.39 million t-CO_2 510 g-CO_2/kWh 76% 17.9 MJ/car-km 13 units	28.86
Resource-recycling	–	5.40	Recycling rate for waste from stations and trains Recycling rate for waste from general rolling stock centers, etc. Recycling rate for waste from construction projects Percent of recycled paper used in offices	39% 81% 86% 99%	43% 82% 91% 98%	1.07
Environmental management	–	0.69	Railway Line Forestation Programs Tree Planting under the Adatara Hometown Forestation Program	15 locations 12,000 trees planted 2,400 participants	17 locations 25,000 trees planted 3,200 participants	–
Research & development (environment-related technologies)	–	1.46				–
Social activities	–	0.06				–
Total	67.49	12.27				29.93

Notes

Investment in facilities for the period:
241.4 billion yen
Total expenditures for research and development for the period:
15.3 billion yen*1

Correlation with the table of Goals and Results (pages 22 – 23) is as follows:

"Environmental conservation along railway lines" = "environmental activities along railway lines" and "chemical management"
"Global environmental conservation" activities = "Measures to prevent global warming" and "chemical management"
"Resource recycling" = "Measures for resource conservation"
"Environmental management" = "Environmental management" and "Environmental Communication"
"Research & development (environment-related technologies)" = "Research & development"
"Social activities" = "Environmental Communication"

*1 **Total R&D costs:**
This amount includes basic R&D (6.0 billion yen) that was commissioned to the Railway Technical Research Institute under a research agreement.

Environmental Accounting

Summary of FY 2004 results

In fiscal 2004, environmental conservation costs in the form of investments amounted to about 67.5 billion yen, while expenditures amounted to about 12.3 billion yen.

"Global environmental conservation" activities, which account for a major part of the investments, amounted about 62.6 billion yen, an increase of 3 billion yen over the previous fiscal year, due to the introduction of energy-efficient railcars on conventional lines, including the Yamanote and Tokaido lines. The introduction of those energy-efficient railcars and facilities will reduce CO_2 emissions over their total service life by 520,000 tons of CO_2.

Investment in environmental conservation along railway lines declined by 1.8 billion yen, bringing the total to about 4.9 billion yen, due to a decrease in work to convert to continuous welded rails.

JR East's Environmental Management Indicator

JR East has created its own Environmental Management Indicator as a management decision-making tool to assess the correlation between business activities and environmental impacts. It is calculated using *CO_2 emissions* (one of the top-priority items of our environmental initiatives) as an indicator of *environmental impacts*, and operating profits as the basis for calculating the company's *Economic Value Added (EVA)*.

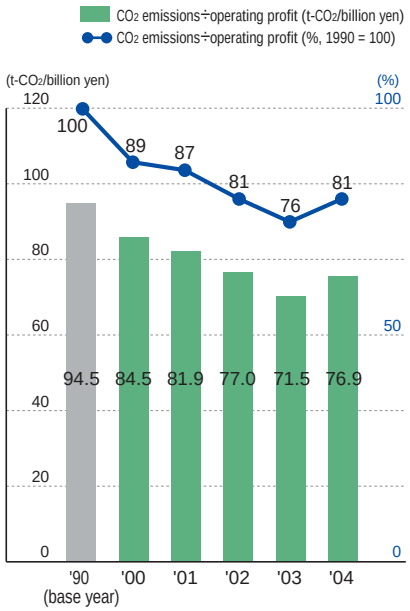
The number produced by the indicator reflects profit made in relation to environmental damage: a small number means more profit with less environmental impact. The indicator (in units of tons-CO_2/billion yen) was 94.5 in fiscal 1990, and 76.9 in fiscal 2004.

Note that the fact that the indicator rose from fiscal 2003 to fiscal 2004 was due to stoppage in operation of a JR East hydropower plant from the Niigata-Chuetsu Earthquake, resulting in an increase in CO_2 emissions from alternative electricity sources.

Environmental Management Indicator

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

JR East's Environmental Management Indicator



Notes on Calculation of Environmental Conservation Costs and Benefits

Environmental conservation costs

- ○ Data refer to East Japan Railway Company only (i.e., non-consolidated data).
- ○ Based on "Environmental Accounting Guidelines" (FY 2005 edition), Ministry of the Environment of Japan.
- ○ "Environmental conservation costs" cover those that are identifiable by the current management system.
- ○ For expenditures that have multiple objectives, the total amount is counted where the expenditure results in significant environmental benefits. ("Pollution prevention" costs include the total amount spent for enhancing performance, such as the cost of rails to install continuous welded rails, and "global environmental conservation" costs include the total amount invested in energy-efficient railcars.)
- ○ Expenditures shown here do not include depreciation.
- ○ "Resource-recycling" costs include the cost of handling waste from stations and trains, calculated based on a model case for the cleaning of an actual station and trains. The percentage of total cleaning costs spent on recycling and waste handling (in the model case) is then multiplied by total cleaning expenses for JR East stations and trains to obtain the relevant figure for JR East.
- ○ "Resource-recycling" costs also include the cost of processing waste from construction projects and rolling stock workshops, calculated for each facility by multiplying the amount of waste in fiscal 2004 by a standard per-unit cost (different for each type of waste and each region).

Environmental Conservation Benefits

- ○ Environmental conservation benefits are calculated based on figures determined by the stated environmental goals.

Economic Benefits of Environmental Conservation Activities

- ○ For "global environmental conservation" activities, economic benefits are calculated by determining the annual reduction (including estimates in some cases) in electricity and maintenance costs through the introduction of energy-efficient railcars, cogeneration, etc., and then multiplying this amount by the number of years of service life under official depreciation schedules, to obtain the life-time economic benefits.
- ○ For "Resource-Recycling" activities, the figure for economic benefits indicates the revenues the resale of reusable resources from waste arising from rolling stock workshops and construction projects.

JR East Group's Environmental Impact

What Is the Total Environmental Impact of the JR East Group?

The JR East Group uses a large amount of resources through its operations and discharges a variety of materials into the environment. We keep track of the quantities of these inputs and outputs (i.e., the balance of resource flows, energy, etc.) in an effort to reduce our impact on the environment.

INPUTS

Energy

- Electricity 6.19 billion kWh (57% from company-run power plant)
- City gas 9.90 million m³
- Other fuels 80,000 kℓ (crude oil equivalent)

Water 11.17 million tons

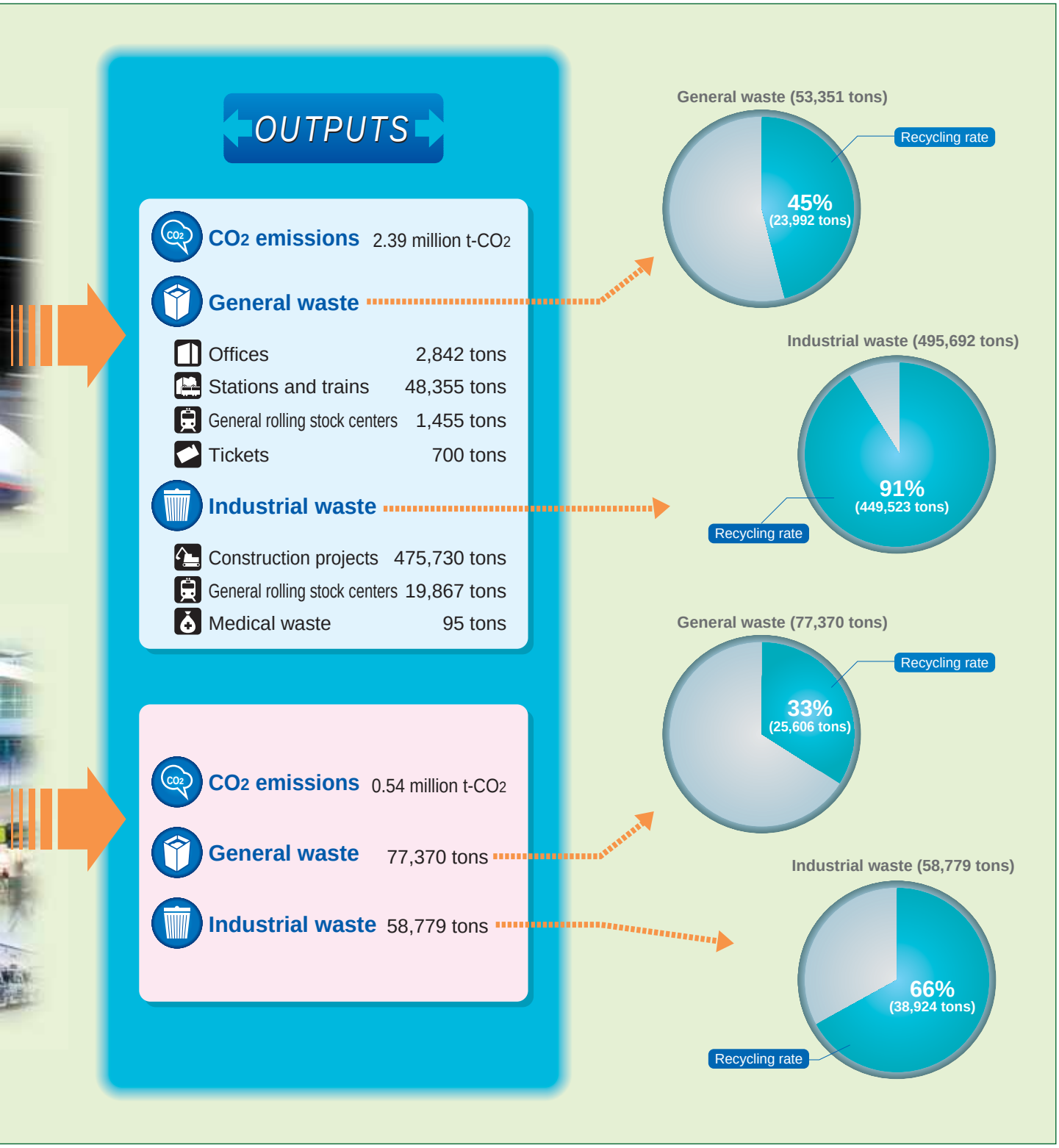
Office paper 1,867 tons (98% of which is recycled paper)

Energy

- Electricity 0.91 billion kWh
- City gas 35.10 million m³
- Other fuels 50,000 kℓ (crude oil equivalent)

Water 11.08 million tons

Office paper 790 tons (57% of which is recycled paper)


OUTPUTS
CO2 emissions 2.39 million t-CO2
General waste
Offices 2,842 tons
Stations and trains 48,355 tons
General rolling stock centers 1,455 tons
Tickets 700 tons
Industrial waste
Construction projects 475,730 tons
General rolling stock centers 19,867 tons
Medical waste 95 tons
CO2 emissions 0.54 million t-CO2
General waste 77,370 tons
Industrial waste 58,779 tons
General waste (53,351 tons)
Recycling rate
45%
(23,992 tons)
Industrial waste (495,692 tons)
91%
(449,523 tons)
Recycling rate
General waste (77,370 tons)
Recycling rate
33%
(25,606 tons)
Industrial waste (58,779 tons)
66%
(38,924 tons)
Recycling rate

Measures to Prevent Global Warming

What is the JR East Group Doing to Prevent Global Warming?

In an effort to reduce its CO_2 emission levels, the JR East Group promotes greater energy efficiency and the use of renewable energy. It also is promoting intermodal transportation, aimed at reducing CO_2 emissions of the country's entire transportation system.

Measures to Prevent Global Warming

Energy supply and consumption

The energy consumed by JR East consists of electrical and non-electrical power. Electrical power comes from electrical utility companies and JR East's own power plants, and is used to operate our trains, as well as powering light and air conditioning in stations, offices, and elsewhere. Non-electrical energy comes from diesel oil, kerosene, etc., and is used for diesel vehicles as well as air conditioning at stations and in offices.

In fiscal 2004, we continued efforts to increase efficiency and reduce energy consumption. The Niigata-Chuetsu Earthquake in October 2004 forced a shut-down of the Shinano River Hydraulic Power Plant, which supplies electricity to the Tokyo metropolitan area; the necessary replacement by generation from fossil fuels resulted in an increase in CO_2 emissions by 190,000 tons over the previous fiscal year.

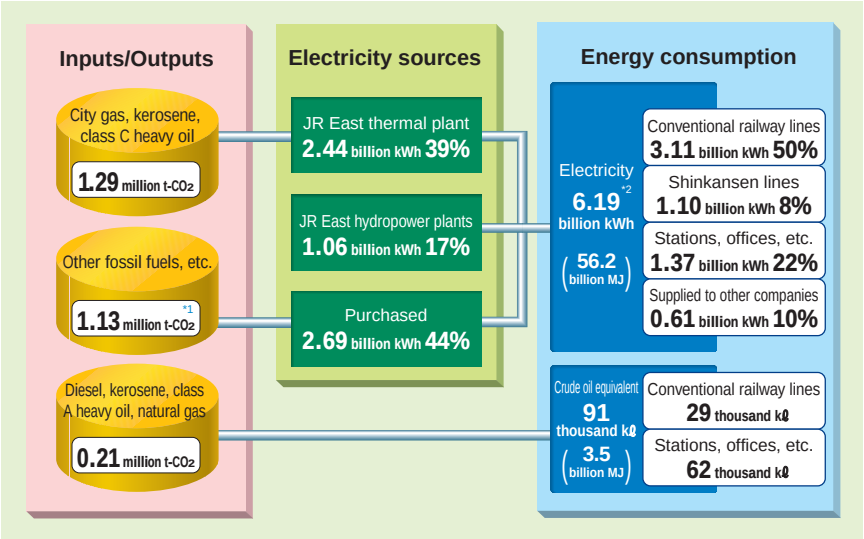
Efforts to Boost Energy Efficiency

Changes in energy consumption

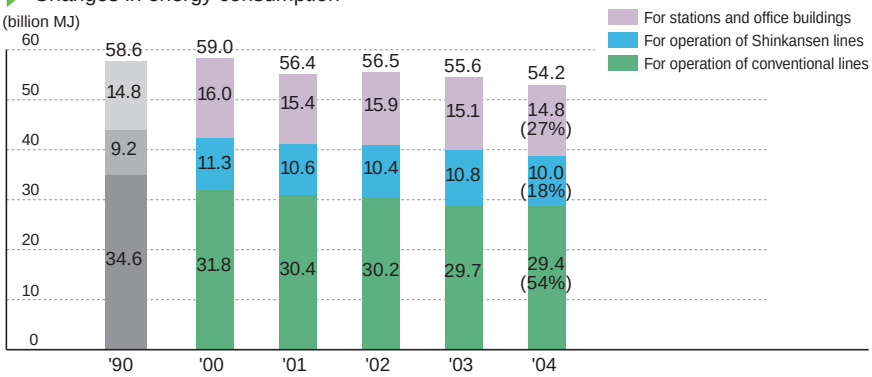
In fiscal 2004, JR East consumed 54.2 billion megajoules (MJ) of energy. Resulting CO_2 emissions amounted to 2.39 million tons-CO_2, an increase of 7 percentage points from the previous fiscal year.

In this context, we will be completing repairs on the earthquake-damaged hydropower plant by the spring of 2006; we will also continue to introduce energy-saving railcars in order to reduce the amount of energy used to operate our trains, which currently accounts for 73% of total energy consumption.

Energy flows of JR East

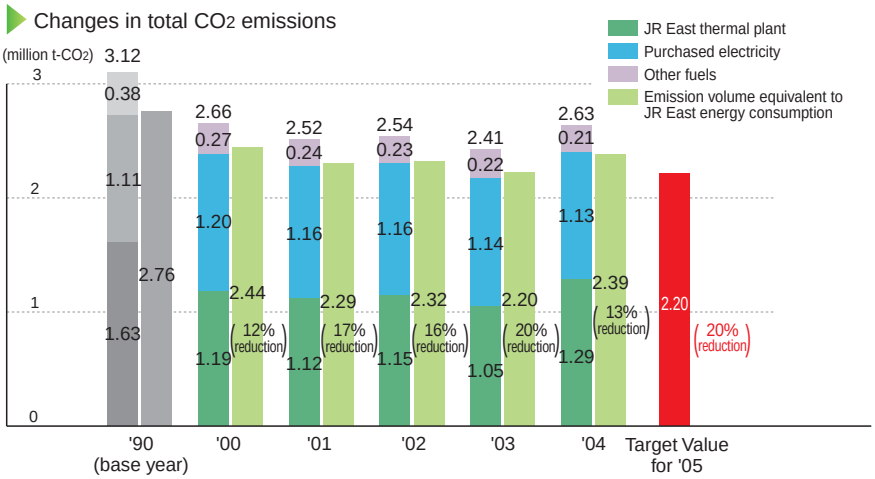


Changes in energy consumption



Note: Energy consumption for electricity purchased from outside and generated at JR-East hydropower plants was calculated from the constant 9.42 MJ/kWh. Energy consumption by JR East thermal power plant and "other fuels" was calculated from actual fuel consumption.

Changes in total CO_2 emissions



*CO_2 emission factors for fuels and purchased electricity are from the Japan Business Federation (in its "Voluntary Action Plan on the Environment"), and the Federation of Electric Power Companies of Japan.

***1 1.13 million t-CO_2:**
To facilitate comparisons over time, we use the CO_2 emission factors for fiscal 1990 from the Federation of Electric Power Companies of Japan to arrive at this figure. It is worth noting that even if the emissions factor for fiscal 2004 is used, the calculation produces the same outcome.

***2 6.19 billion kWh:**
Equivalent to the annual electrical consumption of 1.71 million households

Reducing energy consumption in train operations

By the end of fiscal 2004, JR East had 9,410 energy-saving railcars in operation. This amounts to 76% of the entire railcar fleet.

We are steadily replacing railcars on conventional lines with energy-saving railcars equipped with regenerative brakes and VVVF inverter controls.[*1] For Shinkansen lines, as well, besides making railcars that are lighter and more energy-efficient, we are working in other ways such as to reduce air resistance with more streamlined designs.

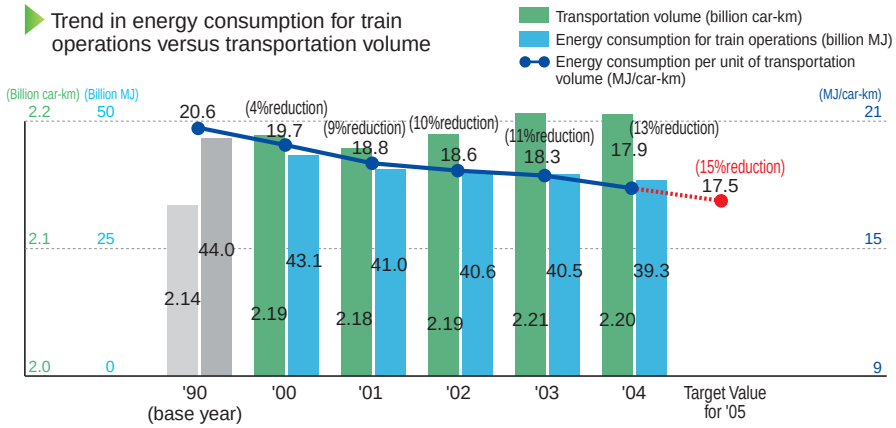
These energy-saving measures affecting the operation of railcars reduced energy consumption per unit of transport by 13% in fiscal 2004 compared to fiscal 1990.

Developing the NE Train

In the pursuit of further improvements in railcar energy efficiency, we have developed a prototype "New Energy (NE) Train," the world's first hybrid railcar system,[*2] and started test runs in May 2003. This new system is expected to reduce energy consumption by about 20% compared to conventional trains. Future development plans include the use of fuel cells for this system.

The NE Train, equipped with improved storage batteries for even better performance, being tested in winter conditions.

Trend in energy consumption for train operations versus transportation volume



E231 series: VVVF railcars that are the new standard cars for commuter and suburban train routes

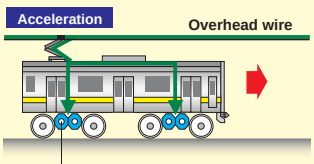
E2 series: VVVF railcars for *Asama* and *Hayate* Shinkansen trains.

E531 series: New trains also use VVVF system (e.g., newly operating on the Joban Line in July 2005).

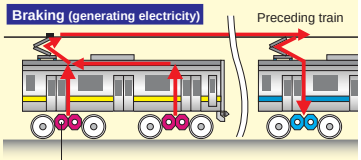
Regenerative brakes

Electricity is generated during braking

In energy-saving trains, this system makes motors function as electrical generators when brakes are applied. Electricity generated is returned to the overhead wires. (In conventional trains the energy generated during braking is simply dissipated as heat.)

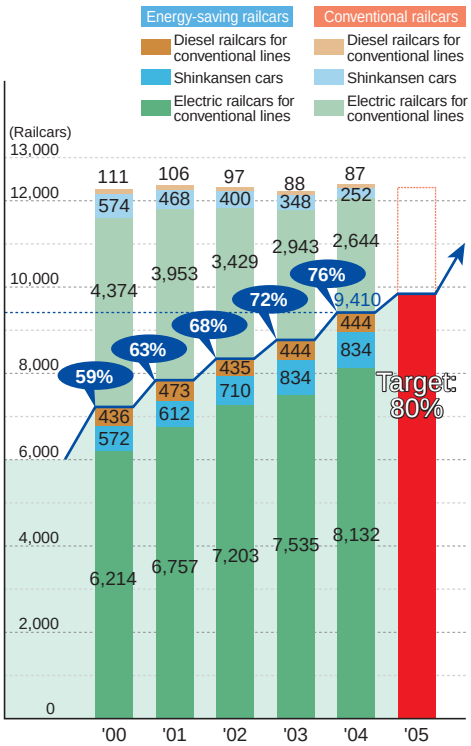


Motor
Overhead wires supply electricity to power the motors that drive the train.



Motor becomes generator
Motor functions as a generator, returns electricity to overhead wires for driving other trains, etc.

Energy-saving railcars: Growing in number



***1 VVVF inverter**
The variable voltage variable frequency design (VVVF) for inverters enables efficient control of motors without the use of electrical resistance.

***2 Hybrid railcar system**
During normal operation, the driving motor is powered by electricity generated by a diesel engine. During deceleration, electricity generated by regenerative brakes is stored in a battery, and then can be used during acceleration.

Reducing CO_2 Emissions of Japan's Entire Transportation System

Intermodal transportation

Rail transport is a highly energy-efficient mode of transportation with low environmental impacts, but rail alone cannot completely satisfy the transportation needs of customers. Thus, JR East is working to reduce the CO_2 emissions of the entire transportation system by promoting intermodal[*1] transportation – combining rail with other modes of transportation.

Park-and-ride schemes

We are promoting park-and-ride schemes, which provide parking space near train stations, so that users can drive their cars from home to the station and continue from there by train. By the end of March 2005, 118 JR East stations had a total of 11,000 parking spaces.[*2]

With this scheme, we are making an effort to enable users who until now were using only the car as their means of transport to shift from car-only to rail for a segment of their travel.

Rail and car rental

Since 1995, JR East has offered a product named "Train-ta-kun" with car rental charges about half the normal amount, as a means of transport from train station to the final destination. We are also selling a product named "Rail & Rent-a-Car," which offers discounts on both train fares and car rentals. We are engaging in other efforts to provide services that facilitate a shift from car-only travel to combinations of car and train, such as offering a class of compact cars, offering attractive rates, and installing car navigation systems as standard equipment in rentals.

Smart transport options for travel and tours

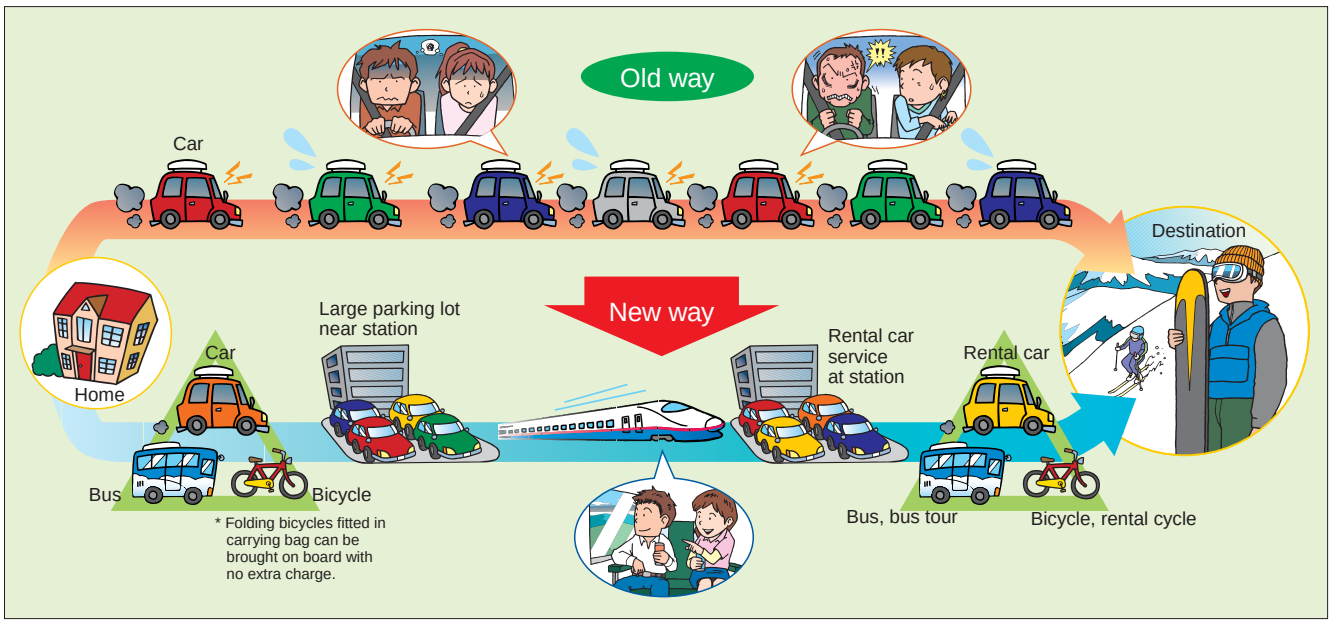
In collaboration with travel agencies, we have modified some bus tours so that they leave the Tokyo area by Shinkansen instead of bus – in an effort to avoid traffic congestion as well as to reduce environmental impacts.

Travel packages and rail

While emphasizing the rich natural and tourist resources of areas away from the big cities, JR East is making an effort to recommend trips that use the train, with its lower environmental impacts. We present travel options that do not depend completely on automobiles. Examples include car rental plans that combine the enjoyment of train travel with the convenience of a car at the destination, and the enhancement of tourist-taxi plans in cooperation with local businesses.

A park-and-ride parking lot near the Takasaki Station. Discount on parking fees is available upon displaying specified train ticket before riding the train.

Intermodal transportation



***1 Intermodal transportation**
The term refers to transportation systems that allow people to get from any given point to their destination by smooth linkages between different modes of transport. This differs from the term "multi-modal," which simply indicates that there are multiple options for means of transport.

***2 118 stations, 11,000 parking spaces:**
This figure represents the total number of parking space, including those owned by JR East, those operated by Group companies, and those operated in collaboration with local municipalities. If other parking lots near stations are counted, the total available is 61,000 parking spaces at 527 stations.

CO_2 Emissions Reductions in JR East Electrical Sources

A 'load dispatch command function'

JR East's electrical demand fluctuates throughout the day, reaching a peak during rush hours. To obtain electricity efficiently under varying conditions, we adjust to demand fluctuations by efficiently combining the electricity from our sources of supply[*1] (JR East's thermal and hydropower plants and purchased electricity) and controlling the amount of electricity we generate. Our 'load dispatch command function' plays a vital role by monitoring and controlling the supply of electricity in real time to optimize our use of energy.

Improving thermal electric power generation

JR East operates a thermal electric power plant with an output of 655,000 kW, located in Kawasaki, Kanagawa Prefecture. Since fiscal 1990, the plant has reduced its CO_2 emissions per kilowatt-hour by 30%, by gradually converting its four generating units to combined-cycle power generation units,[*2] and by optimizing plant operations.

In the summer of 2006, we are planning to convert Unit No. 3 from kerosene as fuel to natural gas, in the effort to further reduce environmental impacts and CO_2 emissions.

Hydroelectric power generation

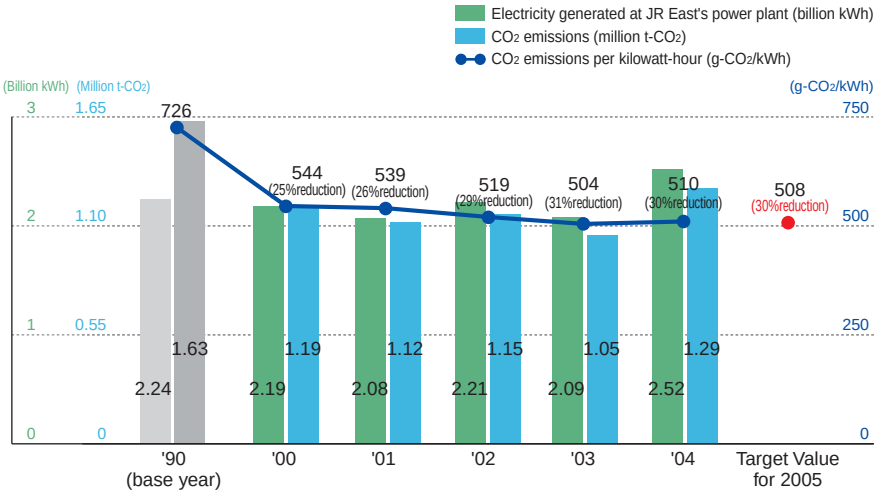
Hydropower is recognized as a clean energy source that does not emit greenhouse gases. JR East has a hydroelectric power plant on the Shinano River (Ojiya City, Niigata Prefecture) with total output of 450,000 kW, generating 1.4 to 1.8 billion kWh per year.

All units stopped generating as a result of major damage from the Niigata-Chuetsu Earthquake, but repair work has restored generation to 55% of capacity (as of 10 April 2005). Work will continue toward complete restoration.

Renewable energy

JR East is promoting the use of renewable energy such as solar and wind power. Photovoltaic (PV) panels have been installed at Tokyo station, Takasaki station, the JR East General Education Center, and the JR East Research and Development Center. In fiscal 2003, we doubled the area of PV panels at Takasaki station. Group companies have also made progress in this area; In fiscal 2003 the "Kokubunji L" Terminal Building (Kokubunji, Tokyo) installed a windpower and PV system to produce electricity for lighting.

Power generation and CO_2 emissions from JR East's thermal power plant



There are plans to convert Unit No. 3 at the Kawasaki power plant from kerosene as fuel to natural gas.

Shinanogawa Power Station, damaged by earthquake. Repairs are underway.

PV panels on roof of the Shinkansen platform at Takasaki station provide electricity for lighting and air conditioning.

Wind power generator on the roof of Kokubunji L Terminal Building. A display screen inside the building indicates how much power is being generated at any given time.

***1 Electricity sources for JR East in fiscal 2004**
JR East's thermal power plant: 39% (31%)
JR East's hydropower plants: 17% (25%)
Purchased electricity: 44% (44%)
(In parentheses: FY 2003)

***2 Combined-cycle power generation unit**
A power generation unit that combines *gas turbines* propelled by gas combustion with *steam turbines* propelled by steam from the exhaust heat of combustion.

Creating Sound Material Cycles

How is the JR East Group Working to Create Sound Material Cycles?

JR East is taking steps as early in the material cycle as possible, to help build a society with sound material cycles – by *reducing* the amount of resources that we consume, continuing to *reuse* them as long as possible and prevent them from becoming waste, and then *recycling* the resources.

Creating Sound Material Cycles

Waste recycling

The railway business generates various types of waste – from refuse discarded in stations and trains to industrial waste generated in general rolling stock centers, and many other kinds.

In fiscal 2004, JR East generated 550,000 tons of waste, 86% of which was reused or recycled. Construction projects are the largest single source of waste at JR East, but it is difficult to make valid annual comparisons as the content of such work changes from year to year. Nevertheless, we have set target recycling rates for each waste category, and are implementing various measures to achieve these targets.

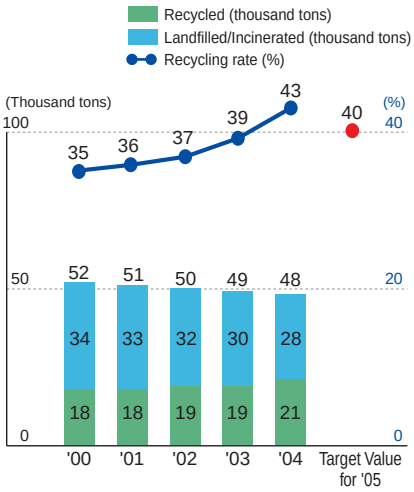
Recycling waste from stations and trains

Approximately 16 million passengers use JR East daily. In fiscal 2004, the waste generated from stations and trains amounted to 48,000 tons, equivalent to the average amount of household waste generated by 120,000 people per year in Japan. Since the waste includes newspapers, magazines, cans and other recyclable materials, it must be properly sorted and recycled. In its stations, JR East installs separate refuse bins for different types of waste, and has established recycling centers for waste separation after it has been collected. JR East had set a target of 40% as the recycling rate for the end of fiscal 2005, but achieved the target early, at the end of fiscal 2004, at 43%.

Operation of recycling centers

JR East has set up recycling centers in the Tokyo area, the operational area that generates the greatest amount of waste from stations. East Japan Eco Access Co., Ltd. operates these recycling centers in three locations (Ueno station, Omiya, and Shinkiba). In fiscal 2004, the recycling centers at Ueno station and Omiya collected 4,784 tons of cans, glass bottles and PET (polyethylene terephthalate) bottles from the Tokyo metropolitan area and Saitama Prefecture; the collected waste was then sorted, compressed, and sent to recycling contractors. In fiscal 2004, 6,532 tons of newspapers and magazines collected at the recycling center in Shinkiba were sent to paper factories and recycled into copy paper, etc.

Waste from stations and trains



Transparent refuse bins are used in stations for better safety and for ease of recycling.

The recycling centers in Ueno and Omiya separate and compress cans, glass bottles, and PET bottles.

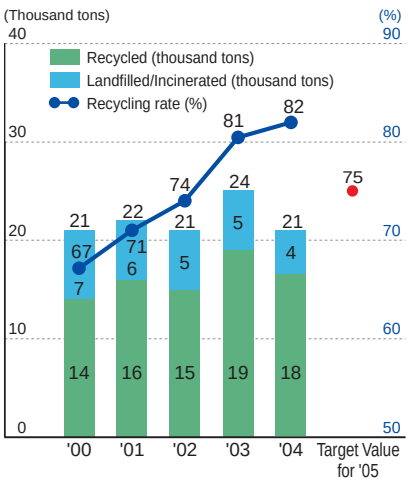
Recycling of train tickets and commuter passes

Regular train tickets that have a magnetic backing can now be recycled thanks to a new technology that can separate iron powder from paper. In fiscal 2004, 100% of the 700 tons of used train tickets collected by JR East were recycled at paper factories to produce toilet paper, corrugated fiberboard, and business cards. All magnetic-backed commuter passes collected after use were reused in the form of solid fuel. We are currently promoting the use of the *Suica* IC card, which reduces overall waste by eliminating paper tickets and commuter passes; over 13 million people were using these cards as of July 2005.

Recycling at general rolling stock centers, etc.

JR East manufactures commuter and suburban trains at the Niitsu Rolling Stock Manufacturing Factory, and repairs and maintains railcars at seven general rolling stock centers. To reduce the amount of waste generated and to promote recycling, we consider the railcars' entire life cycle from the designs, by for example using materials made of easily recyclable substances. At the general rolling stock centers, besides sorting the waste into 20 to 30 categories and sending it to specialized traders, we also conduct our own recycling – for example, we melt scrap metal to be reformed into brake parts and process used train wheels into connecting bases for brake disks.

Waste from rolling stock centers

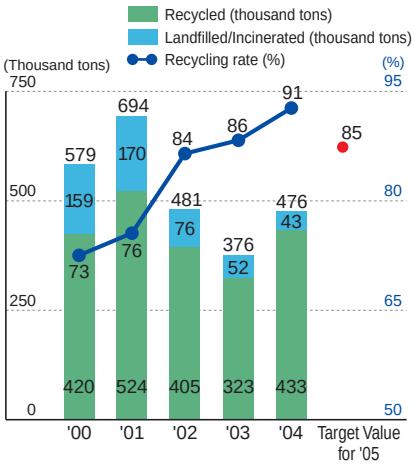


Niitsu Rolling Stock Manufacturing Factory – the first plant of any railway company in Japan to obtain ISO14001 certification in 1999.

Reducing construction waste

In fiscal 2004, JR East generated 476,000 tons of construction waste through projects at stations and other structures, including 140,000 tons from subcontracted work[*1] undertaken by JR East. Although Japan's Waste Disposal and Public Cleansing Law requires subcontractors to dispose of the waste they generate, when JR East is the principal party we also make an effort to reduce the amount of waste generated – such as by issuing standard civil engineering specifications that stipulate the proper disposal of construction byproducts, and specify designs and construction methods to minimize waste.

Waste from construction projects



Note: The results for fiscal 2003 were incorrectly stated in last year's report. The current report contains the correct figures.

Efforts at offices

At JR East, we are taking various steps to make "paperless" offices, and are working to recycle any waste that is generated. Thanks to meticulous efforts to separate waste into categories, in fiscal 2004 we recycled 1,760 tons out of 2,842 tons of waste.

Efforts by shops and restaurants

Within stations and station buildings, JR East Group companies offer retail and restaurant services in which we are encouraging both reduction of food waste and increased recycling.

For example, compost made from organic waste is sold at the Granduo station building (Tachikawa), while in fiscal 2004 lunch-box vendor Nippon Restaurant Enterprise Co., Ltd. recycled food waste into 1,053 tons of compost, which was used by JR East's own organic recycling farm and contracted farmers (see page 11).

This system has completed a cycle where vegetables grown with no pesticides and no chemical fertilizers are used as the food ingredients in restaurants.

Organic fertilizer being sold at Granduo is made of organic waste from restaurants.

Efficient use of water resources

JR East used 11.17 million tons of water in fiscal 2004. To reduce this amount, we are making an effort to use "recycled wastewater,"[*2] by recycling rainwater and water from washroom sinks for use in flush toilets. In fiscal 2004, 18,000 of the 43,000 tons of water used in the JR East Head Office building were recycled.

***1 Subcontracted work**
Construction work on non-JR East facilities that local governments have subcontracted to JR East in order to ensure safe train operations

***2 Recycled wastewater**
Rainwater or used water that is not suitable for drinking but still useful for specific applications.

Green procurement

In compliance with its Green Procurement Guidelines of 1999, JR East endeavors – encouraging suppliers to do likewise – to select materials with low environmental impact, and to reuse materials in order to reduce waste.

Since fiscal 2000, we have been using polyester fiber recycled from PET bottles and other sources to fabricate uniforms; in fiscal 2004 this material was used in newly-redesigned uniforms for technical personnel. In fiscal 2004, 56% of office supply items were covered under green procurement policies, and recycled paper accounted for 98% of copy paper used throughout the company.

Starting in fiscal 2004, JR East started to collect information about the environmental and corporate social responsibility efforts of the companies that supply its materials, and is now using this information as a factor in selecting suppliers.

Looking at the material cycle: waste from stations

Our management of refuse from stations does not constitute mere recycling – the resulting materials are reused within JR East, in an attempt to augment our participation in the cycle.

Paper from used tickets is manufactured into toilet paper for use in the toilets of larger JR East stations in the Tokyo metropolitan area; the paper is also manufactured into business cards for our employees. Used newspapers collected at stations are recycled into copy paper, which is then used at JR East offices. In addition, used magazines are recycled into coated paper, which we then use to produce *Tranvert*, a magazine for Shinkansen passengers.

Used tickets are recycled as the paper stock for JR East employees' business cards.

This recycled copy paper is made from used newspapers collected at stations.

Used tickets collected at train stations are recycled into toilet paper for use at larger stations in the Tokyo metropolitan area.

JR East's *Tranvert* magazine for Shinkansen passengers is made from recycled paper.

Suica: A reusable commuter pass

A feature of the *Suica* commuter pass is that it can be reused many times, as the information printed on it is updated when the validity period is extended. Thus, more widespread use of the *Suica* commuter pass saves resources. Note that to prevent customers from throwing the card away after use, they are required to pay a deposit with their original purchase of the card.

As evidence of this, the approximately 26.6 million (disposable) commuter passes (made of paper stock with magnetic backing) used in fiscal 2000 when *Suica* was introduced declined in number to about 15.0 million in fiscal 2004. This suggests that the reusable *Suica* cards are having an impact in reducing paper consumption.

Chemical Management

How Does the JR East Group Manage Chemical Substances?

When using chemical substances, it is important to consider closely their impacts on the human body and ecosystems. In addition to complying with all applicable laws and regulations, JR East has set its own voluntary targets to reduce the use and release of hazardous substances, and is making an effort to use lower-impact alternative substances.

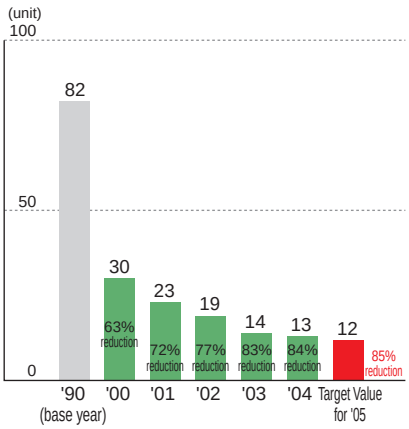
Reducing the Use and Releases of Chemical Substances

Tackling ozone-depleting substances

JR East is steadily replacing air conditioning equipment that uses specified chlorofluorocarbons (CFCs, which are known to deplete the Earth's ozone layer) with new equipment that uses non-CFC refrigerants. By the end of fiscal 2004, we succeeded in reducing to 13 the number of units still using specified CFCs (down from 82 in fiscal 1990).

At the end of fiscal 2004, we were using CFC-substitutes in all electric railcars, though not yet in some diesel trains and railcars; specified CFCs used in railcars amounted to 2 tons, while CFC-substitutes amounted to 94 tons. We routinely check for gas leaks, and when scrapping used railcars we recover the refrigerants, as required by laws and regulations. 62 tons of halon gas were still in use as a fire-extinguishing agent, but we are steadily replacing this with non-halon agents (i.e., powder, carbon dioxide, etc.) when building new facilities or renovating existing ones.

Number of large refrigerators using specified CFCs



State of chemical management

JR East uses chemical substances primarily when painting, maintaining and repairing railcars, and we take rigorous steps in their use and management in order to prevent leakages and other hazards. In compliance with Japan's PRTR Law,[*1] 19 JR East facilities have reported release and transfer data of the specified chemical substances to local authorities since fiscal 2001.

We are also introducing railcars with stainless steel bodies that do not require painting, and by the end of fiscal 2004 we had increased this type to 61% of the 10,776 railcars in operation on our conventional rail lines.

Besides being used in rolling stock, organic solvents are utilized for painting and so on in railway facilities, amounting to 168 tons in fiscal 2004.

Reported releases and transfers from 19 JR East facilities

Name	Releases to atmosphere	Releases to public waters	Releases to sewerage system	Transfers off-site
2-Aminoethanol (kg)	110	42	1,937	14
Bisphenol A type epoxy resin (kg)	0	0	0	1,756
Ethylbenzene (kg)	5,648	0	0	682
Ethylene glycol (kg)	0	0	0	16,068
Xylene (kg)	42,002	0	7	1,775
Chromium and chromium (III) compounds (kg)	0	0	0	125
1,1-dichloro-1-fluoroethane (kg)	2,277	0	0	0
Dichloromethane (kg)	8,665	0	0	2,981
Styrene (kg)	2,416	0	0	0
Dioxins (mg-TEQ)	10	0	0	15
o-toluidine (kg)	0	0	0	100
Toluene (kg)	30,942	0	7	15,134
m-tolylene diisocyanate (kg)	1,216	0	0	128
4,4'-methylenedianiline (kg)	0	0	0	217
Manganese (kg)	0	0	0	38

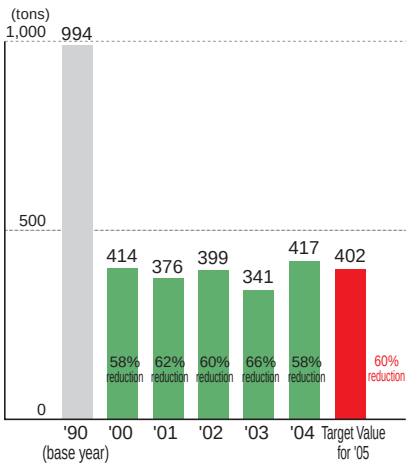
Note: There were no releases to soil and no disposals to landfill in the course of this fiscal year.

Efforts at the JR East thermal power plant

Fuels with a relatively low environmental impact – such as city gas, kerosene, and low-sulfur heavy oil – are used at the thermal power plant in Kawasaki, operated by JR East. Because the plant's emissions contain nitrogen oxides (NOx), sulfur oxides (SOx), and soot, however, we use NOx-removal equipment, dust separators, and other equipment to reduce emissions of these pollutants.

As a result of the Niigata-Chuetsu Earthquake in fiscal 2004, JR East's hydropower station was shut down. The resulting increase in operating hours at the thermal power plant resulted in an increase of 417 tons NOx emissions.

NOx emissions from JR-East's thermal power plant



Control of PCBs

JR East is using non-PCB substitutes to replace the polychlorinated biphenyls (PCBs) that were being used as insulating oil in railcar equipment, transformers and elsewhere. We are storing the used PCBs (contained in equipment and estimated at 2,200 tons in weight) under stringent conditions, reporting details to the authorities as stipulated by law. We are currently considering how to detoxify, and subsequently dispose of, the stored PCBs.

***1 PRTR Law**

PRTR stands for "pollutant release and transfer registers." The formal name for this law is Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in their Management. The law promotes the assessment and monitoring of harmful chemical substance emissions, and encourages preventive measures to avoid negative environmental impacts.

Environmental Activities Along Railway Lines

How Does the JR East Group Conserve the Environment Along Railway Lines?

As a railway company it is particularly important to take care of the environment along our railway lines. JR East undertakes a range of activities to reduce noise, protect the landscape, and minimize impacts on the living environment.

Reducing Environmental Impacts along Rail Lines

Noise from Shinkansen

Noise caused by the Shinkansen is strictly regulated by the Japanese government's "Environmental Quality Standards for Shinkansen Super-Express Railway Noise." JR East takes a variety of measures to reduce noise, including the installation of soundproof walls and sound-absorbent materials, rail grinding,[*1] and railcar modifications for quieter operation.

Measures to reduce noise levels to 75 dB or lower have already been completed in densely-populated residential areas. We will continue implementing a variety of measures to improve the living environment along rail lines, and will strive to eliminate or further reduce noise and continue meeting environmental standards.

Noise on conventional rail lines

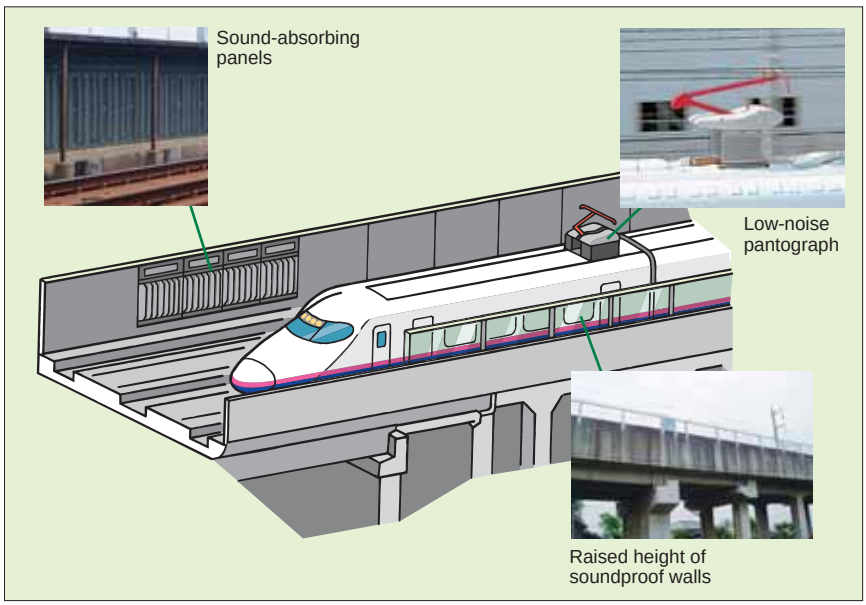
Although no specific government-mandated environmental standards apply to conventional rail lines, we are carrying out voluntary measures to reduce noise, such as making continuous welded rails,[*2] and performing wheel truing.[*3] For new construction of or large-scale modifications on rail lines, we comply with the national government's Policy on Noise Measures for Construction of New Conventional Railways or Large-Scale Remodeling.

Noise from maintenance work

Besides noise from trains in operation, noise is also generated during track and other maintenance work. Because maintenance work is typically done at night when the trains are not running, we give advance notice to residents along the rail lines, informing them of the hours and details of the work; we also make an effort to minimize noise by using equipment that has been improved to operate more quietly.

On double-track lines, we also carry out work on one track during daytime hours, while the other track is used for train traffic. To reduce the actual need for maintenance, we are currently increasing the number of low-maintenance rails that are lessaffected by warping.

Key strategies to reduce Shinkansen noise



Visual impacts

Large structures such as bridges, stations, and station buildings may affect the aesthetics of the urban or rural landscape. In the interest of attaining harmony between structures and the landscape, JR East sets up design committees in the construction offices responsible for planning and designing these structures. We also encourage efforts to consider the landscape and visual effects at the design stage through an award program that to recognize them.

The height of the front and back guiderails of Yanoguchi Bridge, serving the Nambu Line, corresponds to that of the main beams to give an appearance of continuity. This is Japan's first Langer truss bridge with three main beams for a double track railway.

Dioxins from incinerators

Waste incinerators are known to generate dioxins under certain internal conditions. In the past, JR East was disposing of a portion of its waste using its own incinerators, but in fiscal 2002 halted the used of all except one large incinerator; use of this final incinerator was ended in fiscal 2004. At present, we are in the process of having them dismantled and removed.

***1 Rail grinding**
The process of smoothing out the unevenness that has appeared in train tracks from trains running on them. Trains will run more quietly as a result, because the wheels are in better contact with the rails.

***2 Continuous welded rails**
Rails that become more than 200 meters long through welding of rail joints. This measure reduces the noise produced from trains as their wheels pass over joints.

***3 Wheel truing**
The refinishing process of grinding away the uneven wear on a train wheel to return it to a more circular shape.

Utilizing spring water from tunnels

In cooperation with local governments, we have been redirecting ground water and spring water from tunnels into nearby rivers in order to improve their water quality. In the Tokyo area, we started pumping water into the Nogawa River in fiscal 2001 and into the Tachiaigawa River in fiscal 2002, and began pumping springwater from around Ueno station into Shinobazu Pond in fiscal 2003.

We have been using spring water to melt snow along the Echigo-Yuzawa section of the Joetsu Shinkansen Line since the line was opened.

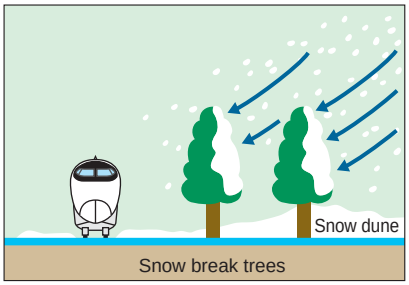
JR East has supplied water to the Shinobazu Pond (Ueno, Tokyo) since fiscal 2003.

Protecting railway trees

Railway trees are trees that have been planted to protect the railway tracks from damage, including from drifting snow, land slides, rock slides, and snow slides, etc. The planting of railway trees began during the Meiji Period (1868-1912) in Japan, and at one time the trees also made profit for forestry operations.

At present, besides their traditional role in preventing natural disasters, the trees are serving the protection of the natural environment along rail lines.

JR East owns about six million trees on a total of about 4,300 hectares of land along its railways. These trees play a role in preventing global warming, by absorbing 17,000 tons of CO_2 per year, equivalent to 0.7% of the annual CO_2 emissions of JR East. JR East continues to preserve the trees along its rail lines as a contribution to the environment and local communities.



Fallen snow may be blown by strong winds and bury rails in snowdrifts. These trees act as a windbreak to keep the tracks clear of snow.

Trees along the JR East Ou Line prevent snowdrift build-up. Shown here is the Yamagata Shinkansen.

Report: Misapplication of herbicide and countermeasures taken

In an unfortunate incident last year, the application of herbicide to remove vegetation along the Banetsu Higashi Line (June 2004) and the Suigun Line (July 2004) resulted in damage to agricultural crops. JR East sincerely regrets the inconvenience caused to residents along the tracks and to all persons affected.

JR East regularly clears vegetation along rail lines so that it does not become unmanageable and affect operations. In fiscal 2004 we used 258 tons of herbicide. During the application of herbicide, we make every effort to limit the amount used, and the area of exposure. We only use the herbicides that have the least possible toxicity, which are classified as "regular" if toxic to humans and livestock, and as Type A if toxic to fish.

After the two incidents mentioned, investigations identified the sources of the problem to be the method of application – including the fact that the spray was dispersed by the wind.

In August 2004 we reenacted the incidents on JR East property, and verified the circumstances relating to the scattering of the herbicide. As a result, we confirmed that if workers use a nozzle to spray from a vehicle, as during the above incidents, the herbicide is dispersed more widely than expected due to deflection, as is the case under a given wind speed.

Based on these findings, we have taken the following precautions:

* Prohibiting workers from using nozzles to spray herbicides from vehicles.
* Installing covers to prevent dispersal from vehicles.
* Strictly enforcing policies to halt work under poor weather conditions (wind, rain).
* Avoiding application of herbicides during growing periods of agricultural crops.
* Ensuring that when work is contracted out, the relevant companies submit a document for approval to JR East, recording the period in which the work takes place, the method, and what measures will be taken to prevent dispersal.

We will apply these measures rigorously, and do our utmost to prevent the occurrence of any similar incidents.

Environmental Communication

How Does the JR East Group Provide Environmental Information?

The JR East Group disseminates environmental information to the public through a variety of media, including the Internet, our *Sustainability Reports*, events, and so on. We are striving to promote more environmental efforts through two-way communication with our stakeholders.

Disclosure of Environmental Information

Provision of information through various media

JR East began the annual publication of an environmental report in 1996, and since 2002 we have worked towards greater information disclosure by publishing the *JR East Group Sustainability Report*. Starting in 2003, we have issued an "environmental digest" version of the report for wider distribution. In fiscal 2004, JR East Department Store Co., Ltd. became the first among Group companies to publish its own environmental report.

We also actively disclose information through a variety of media, including the Internet, newspapers, magazines and posters on trains.[*1]

We are happy to mention that the *JR East Group Sustainability Report 2004* was awarded the Environmental Report Grand Prize (Environment Minister's Prize) at the Eighth Environmental Communication Awards.[*2] Encouraged by this award, we will continue to enhance our efforts to disclose information and promote environmental communication.

JR East has been encouraged to redouble its efforts after receiving an award from Environment Minister Yuriko Koike at the Environmental Communication Awards ceremony, January 2005.

Environmental advertising in trains: the "Three-Minute Eco-Seminar."

Providing information at events

In 2004, we were again present at the Eco-Products Exhibition, a major annual environmental event in Japan, this time demonstrating JR East's recycling and intermodal initiatives, as well as the workings of the prototype AC Train and NE Train.

Besides these, in cooperation with companies and local governments, every year we co-sponsor events with the aim of spreading environmental information. In March 2005, we co-sponsored an exhibit at Tokyo station, entitled "Gas and Railways – A Second Exhibition of Environmental Initiatives by Tokyo Gas and JR East." At the exhibit, both companies introduced the various global warming, energy conservation, and recycling initiatives; in addition, with cooperation from the Ministry of the Environment's Japan Center for Climate Change Actions (JCCCA), we presented various interactive displays that allowed people to learn more about the issue of global warming.

At the Eco-Products Exhibition 2004, we displayed models to demonstrate the working of regenerative brakes, as well as new train wheels and motors now under development.

JR East co-sponsored the Gas & Railway exhibit at Tokyo Station, beginning in 2004.

Promoting eco-tourism

JR East offers a variety of eco-tours designed to allow people to experience the beauty of nature in different parts of the country.

In May 2004, JR East organized the "Second Shirakami Mountains Beech School, Tokyo Branch." It introduced participants to the wonders of the Shirakami Mountains, the first place in Japan to be designated as a UNESCO World Heritage site; and about 1,500 people participated in related tour packages, such as one called "Shirakami Mountains Trekking."

We have also continued our "Hiking from Stations" program, in which visitors take nature walks starting at JR East train stations. In fiscal 2004, we held about 400 hikes, with courses organized by JR East branch offices based on local themes in which about 240,000 people participated.

In the "Shirakami Mountains Trekking" tour package, local guides introduced visitors to the preciousness and splendor of beech tree forests.

In the "Hiking from Stations" program JR East branch offices have the chance to showcase local attractions.

***1 Internet website of JR East**
Ecology pages:
http://www.jreast.co.jp/eco/

***2 Environmental Communication Awards**
An award program to recognize excellence in corporate environmental communications, sponsored by the non-profit Global Environmental Forum and supported by the Ministry of the Environment. This is one of the most distinguished environmental awards in Japan.

Tree-Planting with Communities

Railway Line Forestation Programs

Since 1992, as part of the volunteer activities undertaken by employees of the Group, JR East branch offices organize tree-planting events in which local residents take part. By the end of fiscal 2004, a cumulative total of around 32,000 participants had planted about 240,000 trees.

Starting in fiscal 2002, tie-ups with local governments have increased, and we have expanded the scope of this program beyond the land immediately adjacent to our railway tracks.

Branch offices are now making new plans to further increase the number of participants by, for example, combining hiking and tree-planting events, as well as cooperating with local elementary schools and organizations to organize chestnut picking, and seedling-potting, and other events, etc.

Under the "Railway Line Forestation Programs," a total of about 240,000 trees had been planted by the end of fiscal 2004.

Tree-planting tie-ups with local governments (FY 2004)

JR East Branch	Host government
Tokyo	Kawasaki-ku (Kawasaki City), etc.
Yokohama	Kanagawa Pref., etc.
Hachioji	Kobuchizawa Town
Omiya	Toda City
Takasaki	Minakami Town, etc.
Mito	Ibaraki Pref., etc.
Chiba	Chiba City
Sendai	Sendai City, etc.
Morioka	Morioka City
Akita	Akita Pref.
Niigata	Niigata City
Nagano	Suwa City

Second Adatara Hometown Forestation Program

Feeling a sense of appreciation towards nature and wishing to contribute to the future, JR East began a program planting native trees to restore forests, starting on nationally-owned land in Otama Village (Adachi-gun, Fukushima Pref.) in 2004. In contrast to the Japanese cedar that is typically planted in Japan, for this project we selected 22 indigenous species to establish a "hometown forest," encouraging natural selection through the intensive planting of 45,000 seedlings over three years in a fashion resembling natural conditions.

700 people participated in tree planting, 100 more than the previous year. Participants enjoyed tree-planting and interaction with local residents.

In order to attract as many members of the public and employees of JR East Group companies, we offered a low-cost travel package, which includes lunch and transportation to the site, and as a result, participation rose to 700 persons, 100 more than the previous year. This event was a great opportunity for interaction between local residents and visitors; many locals also participated in the forestry work, and after the tree-planting the townspeople sold local foods and gifts, holding special events to make this a memorable trip for visitors.

Yoshio Fujita
Otama Village Office
Adachi-gun, Fukushima Prefecture

"This year, 120 local people participated, twice the number of last year. In the train returning home people sounded very happy with the day, saying they wanted to plant trees again next year and that we should continue this program. It was wonderful to see so many smiling faces!"

The primary responsibility of the JR East Group in CSR terms is to safely and reliably operate its railway system. Since its establishment, JR East has considered the implementation of safety measures its highest priority, and has consistently invested in equipment improvements, research and development.

In addition, in order to foster good relations with local communities as well as the customers who use the railways and services of Group companies, we are working to reflect customer feedback in a constantly improving service and by striving to build a society in which life is comfortable.

We also undertake various initiatives to enhance the work environment so that employees can feel proud to work here.

The corporations of the JR East Group will continue to dedicate themselves to maintaining the trust that society places in them.

Measures to Ensure Safety

What Is the JR East Group Doing to Ensure Railway Safety?

JR East has made safety the top management priority since the company was established and has undertaken many initiatives for that purpose. Today, based on *Safety Plan 2008*, JR East is working to be the world's safest railway.

Dedication to Railway Safety

Safety Plan 2008

Since its foundation, JR East has adopted and implemented safety plans on a five-yearly basis. Under the five-year *Safety Plan 2008*,[*1] which began in fiscal 2004, we are shifting from an approach of preserving safety to a more proactive one of providing safety, and through this are taking various steps to provide an even safer railway. This includes not only raising the safety awareness of employees, but also investing about 400 billion yen in safety measures. Our target is to achieve "zero customer and employee fatalities and injuries."

Challenge Safety Campaign

One main pillar in JR East's endeavours to provide an even safer railway is our Challenge Safety Campaign (CS Campaign).

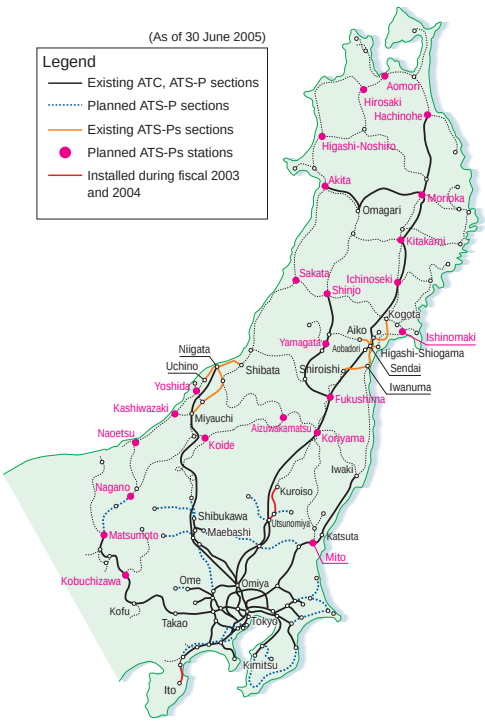
Its aim is to create an atmosphere whereby employees – those who are actually on-site and know their job best – always work with safety in mind and personally take on the challenge of reducing accidents to zero. In particular, we encourage them to gather any safety concerns or near-accidents that occur during the course of their working day and to discuss matters with their colleagues. Also, through training sessions we are developing leaders for the CS Campaign.

By conducting the campaign, we anticipate an increase in the number of employees routinely discussing accident prevention and a more open atmosphere to the discussion of safety, which will result in an even better record of accident prevention.

Ensuring safe train operations

In order to ensure the safety of train operations, JR East has been systematically installing automatic train control (ATC) systems that automatically check and control train speeds, and automatic train stop (ATS-P and ATS-Ps) systems that automatically stop trains as they approach a stop signal. In June 2005, we decided upon a plan to expand the area covered by ATS-P and ATS-Ps systems, and to carry out equipment upgrades to prevent excessive speed at curves and specific points along tracks. The implementation of these plans will drive us towards even higher safety levels.

Rail sections with ATC, ATS-s, ATS-Ps systems



*1 *Safety Plan 2008*
http://www.jreast.co.jp/safe/safe2008/index.html

Earthquake safety

By the end of fiscal 2004, JR East had completed the expansion of a system to simultaneously stop all trains in the event of a major earthquake (until recently, the system was in operation only in the Tokyo metropolitan area).

With this system, when vibrations above a certain threshold level are detected by two or more seismic sensors along the railway tracks, an emergency stop signal will be transmitted automatically to all trains operating in the vicinity (through wireless or other technology), causing them to stop immediately. This system will help to minimize the damage in the event of a major earthquake.

In addition, after the Hanshin-Awaji earthquake in 1995 we have been conducting seismic upgrades on the pillars of elevated tracks of the Shinkansen and conventional train lines. After the Niigata-Chuetsu Earthquake in 2004, we accelerated the seismic upgrade work.

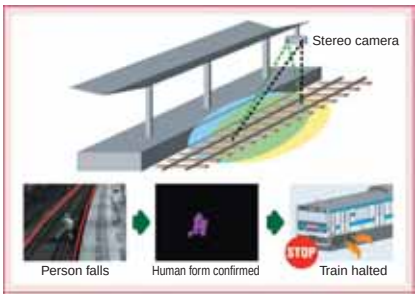
JR East Safety Network 25

In recent years the outsourcing of railway operation work has become more common. In the belief that to maintain a high level of safety and reliability it is essential that JR East work closely on safety measures with Group companies and other entities, JR East developed a safety promotion network we call JR East Safety Network 25 (abbreviated as JES-Net25). The network encourages the 25 companies involved in work and construction directly affecting train operations to share JR East's perspective on safety, and promotes collaborative measures while enhancing communications between all involved.

Safety on station platforms and at railway crossings

JR East is implementing various accident-prevention measures on station platforms, including the installation of covers to prevent people from falling into the spaces between train cars; emergency stop buttons on platforms; and mats to detect a person fallen to the tracks. Since fiscal 1999 we have also continued a "Platform Safety Campaign" to raise safety awareness. We began to develop and implement a device that uses stereo image processing technology to automatically detect when a person has fallen below the platform, and then stop the train.

In addition, to prevent accidents at railway crossings, we are scaling up the installation of detectors of obstructions, as well as larger barriers on railway crossings, and are appealing for greater caution through our "Railway Crossing Accident Prevention Campaign."



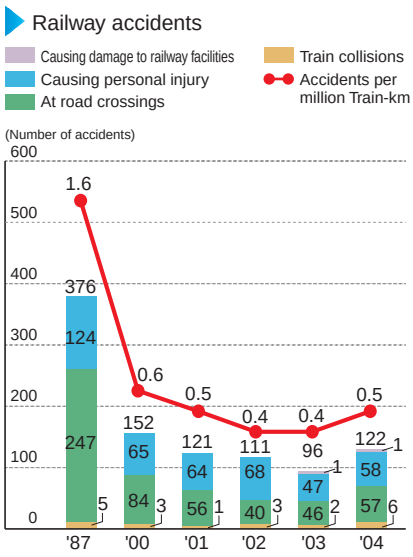
JR East has developed an image-processing device to detect fallen persons, now in use at Shinjuku Station.

JR East targets customers with a safety awareness program named the Platform Safety Campaign.

Disaster response training

In the interest of enhancing emergency response capabilities in the event of a major earthquake, every year on September 1 (National Disaster Prevention Day in Japan), JR East and its Group companies conduct comprehensive disaster prevention drills, in which about 15,000 employees participate. In fiscal 2004, we placed a priority on training for initial responses, making this a relatively practical exercise, and this included drills in guiding evacuations with one's own station layout and problem areas in mind. Also, we tested our coordination with other railway companies and station buildings, as well as with police and fire departments and other agencies.

Scenarios are used for emergency-response trainings.



Safety education

At JR East's General Education Center and the General Training Centers of our branch offices, we routinely conduct research and training sessions on the design of safety systems as well as policies and rules to ensure safety.

In November 2002, we established the "Accident History Exhibition Hall" to ensure that we learn the most lessons possible from past accidents.

Training conducted on site for emergency response to accidents at railway crossing.

Head Office Safety Campaign

We also regularly conduct a "Head Office Safety Campaign," in which Head Office personnel, including the company president and executives, visit actual operation on the front line and directly discuss safety issues with employees.

In fiscal 2004, under the theme of "discovering potential accidents," actual work conditions were inspected and members discussed individual safety concerns as well as accident prevention practices. The Head Office later considered supplementary measures to address the concerns raised, and is reflecting them in policies to further raise safety levels.

Top management visits actual operations to discuss safety.

Safety-related technological development

JR East is working on a range of research and development projects in order to raise safety levels. For example, we are developing devices that can detect large obstructions on tracks, utilizing image-processing technologies. Other equipment we have developed is already in practical use, including an inspection vehicle that uses radar to diagnose imperfections such as cracks and cavities inside the concrete walls of Shinkansen tunnels.

As maintenance vehicles become larger in size, we are developing technology that will allow us to shorten the time that maintenance vehicles are running on tracks, in order to avoid collisions with trains.

The Tunnel Wall Inspection Vehicle inspects Shinkansen tunnels with precision and efficiency.

'Learning from past accidents': The Accident History Exhibition Hall

Many of the facilities, frameworks and rules that ensure railway safety today have been developed from the lessons of past accidents and incidents. Memories of accidents fade with the passage of time, however, and there is a tendency for people to forget the original reasons why certain rules were established.

For this reason, in November 2002, we opened the Accident History Exhibition Hall inside the JR East General Education Center in Shin-Shirakawa, in order to ensure that past accidents are addressed in a systematic manner, and that people are able to learn about safety from past experience. This is important, as safety measures become embedded into automatic systems and generations of employees change over time. In this exhibition hall one can find displays giving descriptions of 25 past accidents and the resultant countermeasures, etc. Examples include an accident at Mikawashima (1962), which prompted improvements in railway rules and safety equipment such as ATS systems; and an accident at Higashi-Nakano (1988), which triggered improvements in institutional arrangements for safety and accelerated the installation of ATS-P systems. The exhibits also give each individual the opportunity to understand personally what might occur if equipment, systems, or rules break down.

We will continue to tackle the challenge to achieve 'ultimate safety,' by learning sincerely from past accidents, and by a commitment to day-to-day efforts for safety by each and every employee in the JR East Group.

Our Relationship with Customers

How Does the JR East Group Reflect Customer Input?

The basic stance of management in our medium-term business plan, *New Frontier 2008*, is "We will challenge ourselves to meet customer expectations." We make a great effort to identify customer needs and to provide a high level of service.

Meeting Customer Expectations

Customer Service Department

The basic stance of management in our medium-term business plan, *New Frontier 2008,* is "We will challenge ourselves to meet customer expectations." In order to meet the expectations of customers and people of the local communities, as well as to address complaints and provide services that anticipate future needs, JR East embraces the opportunity to maximize the total potential of the entire JR East Group.

In order to promote service improvement measures in a strategic and speedy manner, we established the new Customer Service Department in July 2005.

Basic approach to deal with customer input

JR East's basic approach to improve services is "to identify problems relating to customer contact, based on customer feedback, from the customer's perspective, and to continually make improvements in order to achieve total customer satisfaction." The input we receive is reflected in service improvements – whether it comes via front-line employees, customer help desks, customer feedback received via the Internet, or other sources.

Institutional arrangements to enhance service

JR East constantly uses customer input to improve services, through discussions at "service meetings" with front-line employees, and "customer service committees" at the Head Office and branch offices.

In addition, for issues that have been difficult to resolve, in January 2004 we established the "Customer Service Improvement Advisory Group," as an interdepartmental forum of discussion in an effort to further enhance improvement measures.

Customer feedback

In fiscal 2004, we received 177,993 comments from customers, an increase of 32% on the previous year. Of these, 136,628 (about 70%) were received by front-line employees. 23,723 comments were obtained via our Internet website, and another 17,642 came from customer help desks.

Besides this, we also conduct a customer satisfaction survey each year, in order to obtain a comprehensive evaluation on points that cannot be adequately determined simply from comments people send voluntarily, and to quantitatively measure the level of customer satisfaction.

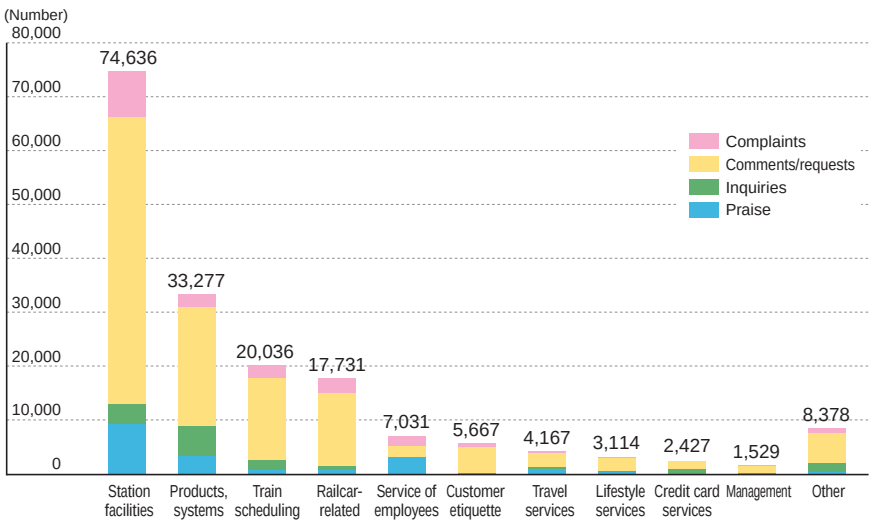
Example of Service Improvements

'Women-only' railcars

In April 2005, to positive reviews, JR East expanded the use of 'women-only' cars on morning rush-hour trains heading into Tokyo on the Saikyo and Rinkai lines. This service was previously offered only on outbound late-night trains. These cars at the front of the train are now 'women-only' from 7:30 to 9:40 a.m., in order to allow female passengers worry-free commuting. We advertise this new service by announcements in stations, as well as stickers on the actual women-only cars and at relevant locations on station platforms.

Women-only cars, originally introduced in 2001, are now also provided in the morning rush hour.

Customer comments received in fiscal 2004



Smoking and no-smoking areas

In consideration of trends in society as well as input from customers, JR East continues to make progress in designation of smoking and non-smoking zones in stations and trains, in the interest of providing comfort while using the railway system.

March 1997	Dedicated smoking areas established at all stations. Prohibited smoking in *Green Cars* (first class) that do not have separate compartments. Smoking banned on all local trains.
December 2000	No-smoking signs clearly posted on between-train decks that have no 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 train. smoking banned in all other cars. Smoking rooms installed on some Shinkansen platforms (Tokyo, Omiya, Sendai and Niigata Stations)

Air-purifier-equipped smoking rooms were installed on certain Shinkansen platforms.

Lost-and-found system

In order to respond quickly to inquiries, JR East is expanding what it calls its "Green Information System," a centralized database to register items lost or found in stations and on trains. By the end of fiscal 2004, JR East was able to provide speedy and accurate service through telephone centers and 487 stations throughout the Tokyo metropolitan area.

More service managers

The number of JR East stations covered by roving green-uniformed Service Managers who offer directions has been increased to 31 (as of April 2005). Their tasks include providing assistance to elderly travelers and persons unaccustomed to traveling, as well as providing information and guidance during emergencies.

Service Managers now provide friendly service in 31 stations.

"Barrier-free" access

In accordance with Japan's Barrier-Free Transportation Law, JR East is cooperating with local governments and other administrative bodies to eliminate steps in certain train stations (with 5,000 or more persons per day boarding or alighting from trains) and facilities, through the installation of elevators and escalators. At major stations, we distribute a "Guide to Barrier-Free Station Facilities," which summarizes information about stations with these features. In addition, to facilitate the smooth movement of people inside station facilities, we have produced a "Signage Manual" giving guidance to personnel on in-station signage, and are also making improvements such as enlarging the lettering on signs, and providing signs in more languages.

We are also making changes inside railcars. By the autumn of 2005 we plan, for example, to complete the installation of touch-readable signs and Braille stickers in Shinkansen cars providing information about the current location and facilities in the train.

In an effort from the human dimension to promote barrier-free access, we have been encouraging employees to obtain certification as "service care providers" since April 2005. Currently about 60 employees have obtained this certification; we aim to increase this number to about 600 by the end of fiscal 2005, and to have certified employees working at all major JR East stations in fiscal 2008.

JR East is installing more elevators for persons who have difficulty using stairs.

Easy-to-read signage with larger platform numbers

Features on the new E531-series railcars on the Joban Line include high-visibility coloring around doors, and toilets compatible with electric wheelchairs.

Measures at stations

Through our monthly in-house magazine we introduce examples of service improvements at the workplace, as a way of sharing ideas with all employees. We are constantly considering and working to make detailed improvements at stations.

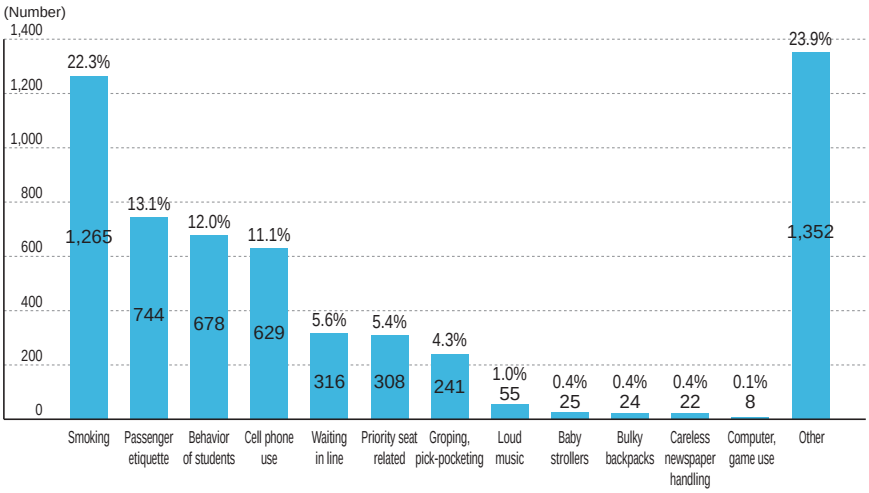
For example, at Yonezawa Station, customers made comments such as, "The transfer from the Ou Line to the Yonesaka Line is too complicated," and, "The station platform is so crowded in the morning I'm always afraid I'll miss my train." In response, we made an effort to reduce congestion in the station, such as by installing an LED-lit sign to indicate the distance from the ticket gate to the platform, moving the stopping location for trains on the Ou Line one car forward, and increasing the amount of signage.

Train etiquette

In fiscal 2004, JR East received 5,667 complaints from customers concerning the behavior of others. In fiscal 2003 we collaborated with other railway companies to standardize announcements in stations and on trains with the words "Please turn off your mobile phones near priority seats, and elsewhere please use silent mode." These efforts have proven effective, as complaints about cell-phone use declined in fiscal 2004. Meanwhile, complaints about cigarette smoking have risen to first place – complaints like, "Someone was smoking in the station during non-smoking hours."

LED sign at ticket gate shows distance to platform. Another sign shows additional train transfer information.

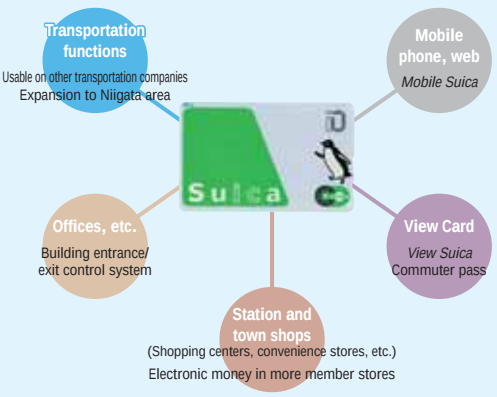
Complaints about train etiquette in fiscal 2004



Boosting lifestyle convenience with the *Suica* brand

The situations in which *Suica* can be used are increasing. Starting in the autumn of 2005, the *Suica* card will be usable in the Niigata area, and in fiscal 2006, card usage will be "seamless" on more modes of transportation in the Tokyo area, with commencement of interchangeable use with the *Passnet* and *Bus Card* of other transportation companies. The uses of the Suica card as "electronic money" are also multiplying.

Meanwhile, with more features, the card can be used in a growing number of situations in daily life. Take the *View Suica Commuter* Pass, for example. By combining the *Suica Commuter* Pass with the View credit card, it will become an even more convenient card. Starting in January 2006, cell phones carrying Suica functions will be available, as *Mobile Suica*. The new cell phone will not only operate fare-gates; users can also use new services that take advantage of communication functions of cell phones. JR East will continue to offer new lifestyle options with the Suica brand.



Our Relationship with Communities

How Does the JR East Group Promote Partnerships with Society?

As a responsible corporate member of society, the JR East Group promotes collaboration with local and international communities. JR East contributes to community development with a focus on the areas around train stations, as well as philanthropic, cultural, and international cooperation programs, in order to better fulfill its role as a good corporate citizen.

Enriching Local Communities

Station nursery schools and nursing care services

In response to the changing needs of Japanese society today, with the low birthrate and the aging population, the JR East Group is cooperating with local governments and others to promote "station nursery schools" and "nursing care" services that can provide convenient, safe and reliable services close to train stations.

As of April 2005, there were 16 station nursery schools and 3 nursing care facilities. Near the Yono-Hommachi Station on the Saikyo Line, we have opened a new type of multi-purpose social services facility, combining a nursery school and a daytime service center for seniors.

Our conceptual goal with the Saikyo Line is to work towards establishing an entirely child-friendly zone, based on the idea of establishing a line, rather than points along the rail line, by developing these nursery schools.

The Ohisama Nursery School near the Yono-Hommachi Station is adjacent to a facility with a daytime service center for seniors.

Stations and community vitalization

JR East sees stations not as facilities simply for boarding and alighting from trains. Rather, it believes that stations can contribute to local development as places of information and culture, and therefore encourages the location of public facilities adjacent to stations. In fiscal 2004, this type of joint construction was conducted at three stations. One example is the newly-opened Kanegasaki Station on the Tohoku Line, which was built jointly with other facilities, including a tourist information center and an agricultural cooperative. In addition, in coordination with the redevelopment plans of local governments, we are cooperating to mitigate traffic congestion, such as by installing overpasses to replace level crossings.

The Kanegasaki Station Building opened February 2005.

Tourism development

In recent years, there has been a growing demand for tourism development that balances various perspectives, including the protection of natural landscapes, and the support and improvement of the basis of livelihood for local communities. Seeing "tourism development" as the equivalent of "local development," JR East has been working on long-term initiatives for tourist destination development that is closely linked with local needs – whether it be the idea of working closely with local representatives, or publicizing information in the Tokyo metropolitan area. In addition, besides providing key transportation services for local communities, JR East's *Joyful Train* services on the Gono, Ominato and other lines provide enjoyable travel experiences for tourists.

Resort Shirakami train lets passengers enjoy the beautiful scenery along the Gono Line.

For the Next Generation

Support for the Children's Railway Association

The Children's Railway Association, run by the Traffic Manners Association, was established to raise children's awareness about proper etiquette on public transportation. Clean-ups at train stations and field trips to railway facilities are among the activities of approximately 450 members at 12 branches. JR East provides support, such as by providing office facilities at JR East branch offices, giving children the opportunity to try their hand at train simulators, etc.

Children hand out trash bags to customers and encourage them to help keep railcars clean.

Events at railway facilities

JR East regularly holds tours and fairs at facilities such as railcar factories and general rolling stock centers to give people of all ages the chance to pursue their interest in trains and railways – events like mini-steam locomotive rides, and stamp rallies. One recent example is the Sendai Shinkansen Depot Open Day, which is attended by about 15,000 persons.

Visitors can enjoy close-up views of the railcars, observe work demonstrations, etc. This event is very popular with locally.

International Contributions

JR East attracts a high level of interest from overseas, from parties concerned with railways – regarding its experience with privatization, and technological developments, etc. In the interest of contributing to the development of railways around the world, we hosted 723 overseas visitors in fiscal 2004, by offering lectures and accepting study tours. In addition, in response to requests from the Japan International Cooperation Agency (JICA) and others, we dispatch our own railway experts to developing-countries to provide on-site guidance, for example.

JR East has also concluded cooperative agreements with German, Italian, and French national railway companies for information exchanges on technological development and management issues. In addition, in the long-term interest of promoting mutual communication, besides exchanges of personnel we also conduct information exchanges with neighboring countries such as China and Korea.

International cooperation (FY 2004)

Dispatched	Long-term (1 year or more) Short-term (up to 1 year)	1 person to 1 country 24 persons to 6 countries
Accepted	JICA trainees	152 persons from 32 countries

East Japan Railway Culture Foundation

Activities, Objectives

JR East established the East Japan Railway Culture Foundation[*1] in 1992 in order to foster a people-friendly railway and transportation culture.

The Railway Museum

The Transportation Museum was originally opened in 1921 by the then-Railway Ministry as the Railway Museum, under the raised tracks on the north side of Tokyo Station. In 1936 it was moved to its present location in the Kanda area of Tokyo.

The museum today receives many visitors each year as one of the most respected corporate museums in Japan, but due to the aging of the facilities, and the shortage of display space, it was decided that we move the museum to Saitama City, and the new Railway Museum is scheduled to open in 2007.

Among the features of the new museum are a History Zone, which will show the evolution of the railway system, and an Education Zone, where visitors can gain interactive experience of the principles and equipment behind railways. The museum will also aim to preserve railway artifacts and archives from both Japan and overseas, and to serve as a center for research.

The Railway Museum, scheduled to open in 2007, will include interactive exhibits to experience railway work.

Railway archives, international exchange

Over the ten years leading up to 2001, the Foundation sponsored research on the basic theme of "Railway Culture and the Future Transportation Society," and now makes the reports of findings available from a database on its Internet website. It also issues railway-related publications and CD-ROMs. The Foundation also publishes the *Japan Railway & Transport Review* (JRTR) in English, as an international discussion forum for specialists.

The Foundation also invites young managers from railway companies in Asia to learn railway management and technology, etc., under the "JR East Fellowship Program," the "JR East International Course," and "Ministry of Railways of China Training."

Trainees accepted by the East Japan Railway Culture Foundation

Fiscal year	JR East Fellowship Program	JR East International Course	Ministry of Railways of China Training
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
2004	10 trainees from 5 countries	19 trainees from 10 countries	24 trainees

* Formerly named the "Training for Middle Management Executives"

Promoting local culture

The Foundation has held a variety of exhibitions at the Tokyo Station Gallery since it was opened in 1988. In addition, the Foundation has been sponsoring efforts to preserve and pass on the precious cultural assets and traditional arts from all over east Japan, in the interest of promoting local culture. In fiscal 2004, the Foundation provided 54.8 million yen to 14 projects.

Shittaka puppet performance, a traditional art form, from Takayama village in Gunma Prefecture.

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

Our Relationship with Employees

What Actions Does the JR East Group Take to Ensure the Career Satisfaction of its Employees?

We are taking various initiatives so that all employees – the driving force of the JR Group's growth – can work with pride, set themselves high standards of achievement, and feel highly motivated in their work.

Policies on Human Resources

Basic approach to personnel and employment

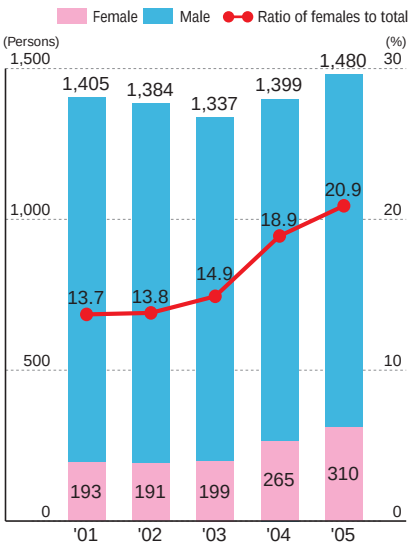
Guided by the *New Frontier 2008* medium-term business plan, JR East has made the principles of its hiring and personnel development "employees who work actively to achieve a high standard, without fear of change," and "employees who can think and act self-reliantly."

For the railway operations that are at the center of JR East's business, one core principle is that employees should have relatively long-term employment, considering the importance of linking work experience to the accumulation of ability, and to support the stable operation of the business.

Status of employment

Looking toward the future, in order to operate a stable railway business and avoid any imbalances in the age composition of its employees, JR East continues to hire about 1,400 persons per year, and conducts a fair and just hiring selection process that respects basic human rights.

Number of new recruits



Employing persons with disabilities

As a part of its responsibility to society JR East employs persons with disabilities, and as of June 2005, they accounted for 1.91% of our work force. Although there are some restrictions on the types of work available in the railway business for persons with disabilities (due to constraints such as government safety regulations), JR East does make an effort to secure them a place of employment, to aid their integration into society.

Human Rights Education

Raising employee awareness of human rights

JR East works to raise human rights awareness, having established human rights committees at its corporate Head Office and branch offices, and has adopted a *Basic Policy on Human Rights*. Awareness-raising is accomplished through seminars that are adapted to different work categories and functions, and through a newsletter for employees and their families.

Work environment-related data (FY 2004)

Disabled employees ratio	1.91%
Total annual working hours	1,837 hours
Overtime work	119 hours
Ratio of annual vacation time used	93%

* The percentage of disabled employees is as of June 2005

Developing Positive Work Environments

F Program

JR East has expanded the number of positions and range of work available to women since the amendment of the Labor Standards Law and Equal Opportunity Law in 1999. In April 2004, JR East launched the "F Program" to create a favorable working environment for female employees, and have been promoting measures on various fronts. Examples include expanding the opportunities for employment and active roles for female employees; improving programs to support women who want to balance work and child-raising; and improving the work environment.

The number of female employees has steadily increased; for fiscal 2005, JR East hired 310 women, or 20.9% of new recruits. JR East aims to keep this ratio at 20% or higher. The number of positions in which women work at JR East has increased to the point that, as of April 2005, there were about 30 female train drivers, about 220 female conductors, and a growing number of female employees at ticket gates.

JR East endorses further efforts, for example, offering seminars for managers to consolidate their understanding of the objectives of the F Program and holding meetings where female colleagues can share their views.

Women are working in a growing number of roles at JR East. About 30 women are now working on the front line as train drivers.

Reducing working hours

JR East is making an effort to reduce working hours in order to boost job satisfaction and increase productivity, by introducing new systems and automating operations. The average annual working time in fiscal 2004 was 1,837 hours. This is about 350 hours less than when JR East was established in 1987.

Acquiring certification for Occupational Health and Safety Management Systems

In March 2002, JR East's Tokyo General Rolling Stock Center became the first in Japanese railway industry to acquire OHSAS 18001 certification (OHSAS for Occupational Health and Safety Management System); in May 2003, the Omiya General Rolling Stock Center obtained the JISHA version of OSHMS certification (JISHA for Japan Industrial Safety and Health Association, OSHMS for Occupational Health and Safety Assessment Series); and in April 2004, the Koriyama General Rolling Stock Center obtained OHSAS 18001 certification. We aim to continue improving our heath and safety systems, and to raise standards to even higher levels.

Preventing occupational accidents and work-related illness

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." Despite our efforts, unfortunately, during fiscal 2004, six employees of Group companies lost their lives due to various accidents, including electrocution and traffic accidents. We will continue with our efforts to seek out potential risks and to improve safety at work.

Human Resources Development

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 themselves select. JR East is actively promoting personnel development, underpinned by principles of "a strong customer-orientation," "ensuring reliability and raising technology standards," and "training the next generation of employees."

Small group activities; proposal activities

JR East supports and encourages small group activities and proposal activities which will result in a more dynamic workplace environment, and improvements in work performance and capacity development.

In these small group activities, employees form their own groups voluntarily, and take action to resolve any issues that may be of concern to them in the course of their day-to-day work. In fiscal 2004, about 36,100 employees in about 5,900 groups participated in such activities.

Proposal activities are ones in which employees submit their valuable opinions on matters relating to work. In fiscal 2004, about 690,000 proposals were submitted, about 12.6 proposals per employee.

A variety of training programs

JR East has established a variety of training programs to help employees develop their skills.

Besides offering a range of group training programs relating to safety, service, and management at the JR East General Education Center and the training centers of the JR East branch offices, we also promote personal development through external correspondence courses on general topics and to obtain specific qualifications as well as JR East's own internal correspondence courses on topics relating to the railway business. To help employees broaden perspectives and develop abilities, JR East also strongly encourages employees to pursue outside training, including enrolling in business management school, attending public seminars and ship-board training, training overseas, or taking courses at domestic colleges or universities.

Training programs in FY 2004

Training participants	
Training for Human Resource Development	**34,900**
<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 the small group activities support office	
Training for Enhancing Knowledge and Technology Skills	**63,600**
<Major Programs>	
Training for train drivers and conductors	
Training at training centers and business training centers	
Training to improve business knowledge and technology skills	
External Training	**4,400**
<Major Programs>	
Training for management and exchanges between different industries	
Training for acquisition of various qualifications	
Training overseas and ship-board	
Total	102,900

The Economic Aspects

How is the Economic Performance of the JR East Group?

The JR East Group aims for sustained growth as a corporate group by continually developing and expanding businesses that answer the needs and expectations of customers and a wide range of other stakeholders, while actively contributing to society.

For any company to remain in business, it is essential that it continue to earn a reasonable profit.

The sole purpose of a corporation, however, is not just to seek profit.

Corporations also have an enormous impact on society and have a wide range of stakeholders to serve.

Thus, the JR East Group continually strives to recognize its economic relationships with all stakeholders who have an interest in our business.

The financial information in this *JR East Group Sustainability Report* is presented from a different perspective from the data presented in our financial Annual Report, as the former emphasizes our economic relationships with a diverse group of stakeholders.

Financial Results for FY 2004

Transportation, including railway operations, is the core business of the JR East Group. It accounted for about 70% of consolidated operating revenue in fiscal 2004. The remaining 30% was earned primarily from lifestyle-related businesses such as shopping centers, hotels, and retail shops in station buildings.

The consolidated results for fiscal 2004 were a decline in both consolidated operating revenue and net income for the period, with net income down 6.9% to 111.5 billion yen. Although income increased from "station space utilization," and "shopping centers and office buildings," the impact of losses from the Niigata-Chuetsu Earthquake, etc., led to this lower result on the bottom line.

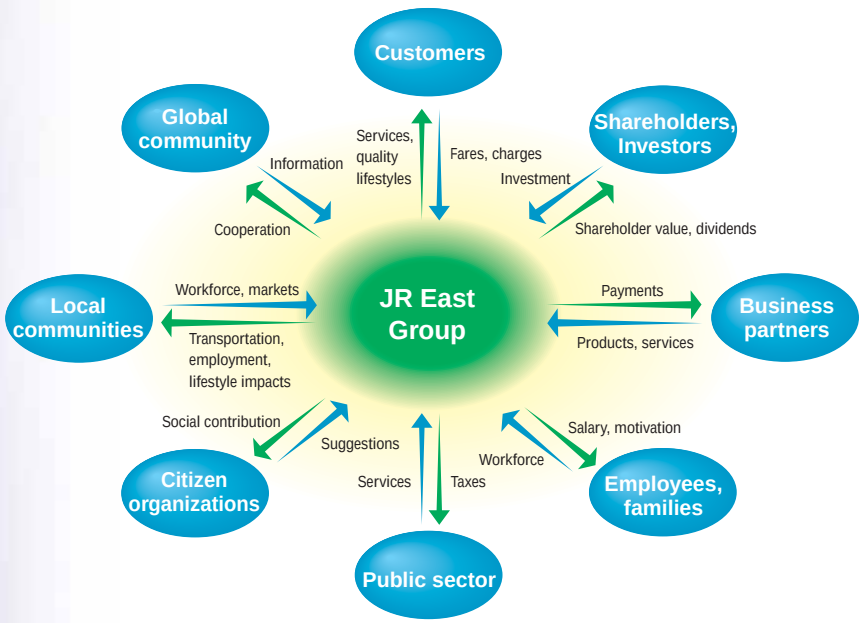
Economic Relationships with Stakeholders

The business activities of the JR East Group generate economic relationships with a variety of stakeholders. On these pages, expenses and other figures are classified according to stakeholder, in order to show, in a way which is easy to understand, the economic relationships between the JR East Group's business activities and stakeholders.

To maintain objectivity in the figures calculated, we use our consolidated financial statements as the source for these calculations.

Stakeholders covered here include shareholders, business partners, employees, creditors, and the public sector (government).

Relationships with stakeholders



Consolidated Financial Statements and Breakdown of Expenses by Stakeholder

Consolidated Statement of Income and Loss		100 million yen	
Operating revenues		25,374	
Transportation, other services and cost of sales		16,779	(1)
Selling, general, and administrative expenses	Personnel expenses	2,693	(2)
	Taxes	206	(3)
	Other	2,110	(4)
	Subtotal	5,010	
Operating income		**3,585**	
Other expenses	Interest expense	1,484	(5)
	Other expenses	99	(6)
	Subtotal	1,583	
Income (before tax)		**2,002**	
Income taxes-current		1,374	(7)
Income taxes-deferred		–510	(8)
Minority interests in net income of consolidated subsidiaries		22	(9)
Net income		**1,115**	(10)

* 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, by stakeholder	100 million yen	
Business partners	14,471	(1) – ★ + (4) + (6)
Employees	7,211	(2) + ★
Creditors	1,484	(5)
Shareholders	1,138	(9) + (10)
Public sector	1,069	(3) + (7) + (8)

★··· Non-consolidated Statement of Income and Loss – Transportation Operating Expenses: Personnel Expenses 4,517

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 offsetting the value derived from subtracting "personnel expenses" within transportation operating expenses in the nonconsolidated statement of income and loss from "transportation, other services and cost of sales" with "nonoperating revenue and extraordinary profit" and "nonoperating revenue and extraordinary profit excluding interest expense."

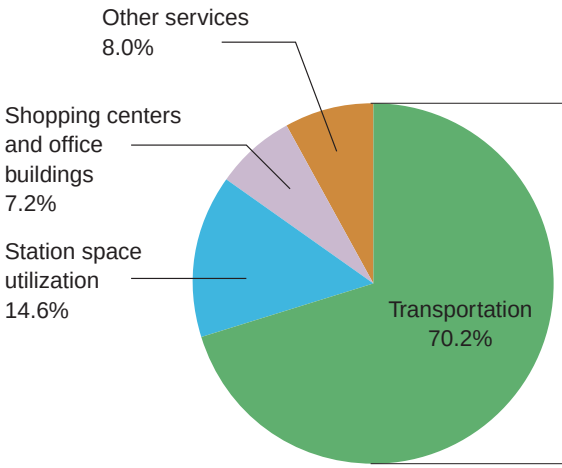
Employees:
The amount determined by adding “personnel expenses” within selling, general, and administrative expenses and “personnel expenses” within transportation operating expenses in the nonconsolidated statement of income and loss.

Creditors: “Interest expense” within non-operating expenses.

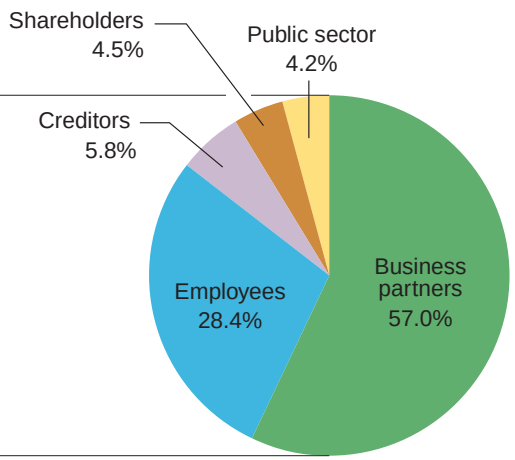
Shareholders: The total of “net income” and “minority interests in net income of consolidated subsidiaries.”

Public sector:
The total of “taxes” within selling, general, and administrative expenses, “income taxes-current,” and “income taxes-deferred.”

Breakdown of JR East Group revenues



Breakdown of expenses, etc., by stakeholder



Our Relationship with Stakeholders

Dialogue with Stakeholders:
Railways and Sustainable Society

On April 26th, 2005, JR East invited experts from a range of fields to our second Stakeholders' Dialogue, this time on the theme of "Intermodal Transportation Strategies for a Sustainable Society."

Railways: Transforming communities

Dr. Nakamura: While corporations are expected to succeed in their core businesses, they are also expected to contribute to the realization of sustainable society. Today, I would like to focus our discussion on issues such as: What is the potential for a railway to move society toward "sustainable mobility"? And how should a railway be involved in issues that concern local communities?

Making stations user-friendly for all

Ms. Murakami: I think that Japan's urban planning these days prioritises automobile use. But, as the aging of Japanese society continues, there will be a growing number of people who are unable to drive. A concern of mine is that if we fail to keep this in mind, and take preemptive action in terms of urban design, road-building, and transportation policies, we may well end up with a country where people can't get around without cars.

Considering train station users from the same perspective, about half of all train stations have so many stairs as to make things difficult for a lot of people. It's not an easy feat climbing stairs with, for example, an infant in one arm and big packages in the other.

In that sense, I think it's a positive thing that elevators are being installed in more stations. Still, it remains quite difficult to find out which stations have elevators and where they are located. It would be helpful if anyone who wants to know could check on the Internet for this information before leaving home – particularly wheelchair users, or parents with small children.

This is just one example, but I think it's essential to consider ways in which more and more people can enjoy traveling and getting around without hindrance. For that purpose, it's important that people from all walks of life are able to share their opinions and participate in planning. If citizens participate in the planning process, I think that more people would also support the systems after they've been implemented.

Dr. Makimura: In the course of my involvement in work related to research and policy proposals for road transport, something have heard more and more about in recent years is the shift in emphasis from *quantity* to *quality*. I am keen on the thought of 'quality' as a keyword in the functioning of transportation nodes and 'waiting' areas. It is also important to make improvements facilitating smooth transfers between different modes of transportation.

Some well-known examples from overseas include Hannover, Germany, where people can transfer from train to bus by walking just five paces across a platform. Or Perth, Australia, where the

Participants

Fumihiko Nakamura (Chair)
Professor, Department of Civil Engineering
Yokohama National University

Specialist in urban transportation planning. While involved in many public activities, including serving on the Planning Subcommittee of the Transportation Policy Advisory Council of the Ministry of Land, Infrastructure and Transport, Dr. Nakamura is also on an editorial committee to review research papers for the Japan Society of Civil Engineers. A prolific author, his books include "Urban Transportation Planning," and "Bringing Back the Buses" (in Japanese).

Hiroshige Ohana
Section Chief, Department of Public Works, Urban Planning Bureau, Urban Policy Division, Niigata Prefectural Government

After joining the Niigata Prefectural government as a public servant in 1988, Mr Ohana has focused mainly on road transport policy. In 1997 was assigned to the Snow Research Center, and from 2002 to 2004 was in charge of the third survey on person-trip movement in Great Niigata Region.

Harumi Suda
Officer, The Coalition of Local Governments for Environmental Initiative, Japan

Active in citizen's movement for many years with a special focus on local democracy and local government reforms, Mr. Suda also co-founded the Citizen's Action Center in 1980, and since 1982 has been the primary representative of the organization. Other roles includs heading both the secretariat of the Coalition of Local Government for Environmental Initiative (1992–present) and the Japan Center for Climate Change Actions (1999–2003).

Kazuhiko Makimura
Director, Transport Research Division,
The Institute of Behavioral Sciences

A specialist in transportation planning, transportation engineering and intelligent transportation systems, Dr Makimura has been active in various roles including serving as a member of the Research Society on Transportation Engineering, Transportation and Urban Design, and has been involved with the Japan Subcommittee of the ISO Public Transportation Expert Committee. He has published many books, including "Park-and-Ride Successes and Failures: A View from the Marketing Perspective," which he co-authored (in Japanese).

Chisato Murakami
Member, Environment Committee Nippon Association of Consumer Specialists (NACS)

Ms. Murakami aided the establishment of the Japan Ecology Center (an environmental information center for corporations and citizens with a new interest in environmental issues), and the Global Environment Information Centre (an environmental information center under the auspices of the Ministry of the Environment), and has been a member of the NACS Environmental Committee since 2002.

trains are on level one, and buses are on level two in a station. These spaces are extremely important, and I believe that railways could be the ones to take the lead to move in this direction. There are information booths in many other countries called an "i Center," similar to JR East's "Midori no Madoguchi" (ticket sales counters). But the "i Center" not only issues train tickets, but also provides information – about public transportation and its environmental merits, for example. I think this type of information dissemination is also an important task. In addition, I think that there will be a more pressing need in the future for route maps of entire metropolitan areas that cover *all* modes of public transportation, including trains, buses, and so on.

I can give you another example from overseas. In the European Union some cities are conducting publicity campaigns that appeal to the emotions of public transport users. The campaigns use television commercials, station posters, and other media, to point out to people that "public transportation is a great thing, and it's user-friendly and comfortable." I think that there are still so many approaches that haven't been tried yet in Japan.

Railways: A public good, sustained by the people

Mr. Suda: The time has now come for railways to play a bigger role. But I suspect that they have already lost the structures and assets that could facilitate such an undertaking, as a result of past public policies promoting deregulation and divestiture. In other words, I sense that they have already lost the capacity to deal with new strategies or policies. This is because we have witnessed a steady process of separating off the railways, which as far as we were concerned were once a valuable backyard asset.

We're now at the point where we as a society need to consider what must be done in order to give back to the railways resources that are today concentrated in roads and highways. Ultimately, I think that railway lands and tracks must be adequately supported by public tax money. I think these are issues that should be tackled as a part of public policy. I think that JR East, as a corporation in the midst of all these issues, should be taking a stance on these things and clearly expressing its opinions. From now on, railways are something that must be cared for by its users – in other words, by the citizens of this country. Therefore, in the process of devising new schemes, it would be best if citizens' groups and JR East could work together, to create a society that really makes the most of its railways.

The role of railways in addressing urban issues

Mr. Ohana: I came here from Niigata, so I'd like to highlight some instances from the perspective of a provincial city. I was involved in a person trip survey in fiscal 2002 in Great Niigata Region, to which 62,000 persons responded. One finding was that, associated with an increasing amount of free time that people now have, there has also been an increase in trips made for personal purposes, such as shopping, pastimes, and recreation. In terms of modes of transportation, automobile use has been steadily growing, to the point that about 70% of respondents now use their cars to get around. Users of public

transportation were only a small fraction, at 2.8% for trains, and 2.6% for buses.

Among those who go out for personal purposes, those who move around by car had risen from 39% in 1988 to 65% in 2002. As for the mode of transportation to get to the train station, again, car use has increased similarly – notably, for high school students and older commuting to school, those who have their parents drive them to the station have increased from 1.8% to 20.2%. When we asked for input about the railways, we uncovered considerable dissatisfaction with parking facilities around train stations.

This is perhaps a point that governments should contemplate more deeply, but we have in the past decades been putting government institutions, hospitals and so on out in the suburbs, away from the city center. The data from our survey reveal the outcomes of those policies. Learning from this, these days we have taken a novel approach. Based on the concept of the "compact city," we are promoting land-use models that create areas where people can live with everything within walking distance, situated compactly in the midst of green countryside and then networked by public transportation.

Mr. Yamazaki: What is happening in Niigata will also eventually happen in Tokyo. In Tokyo, until now, railways have continued to grow by building housing in the suburbs and then carrying people back and forth. But starting in 2015, the city will begin to shrink due to the declining population. Baby boomers are retiring, youngsters for the most part are starting to live in the city center, and the suburbs are starting to turn into ghost towns. As that happens, the number of customers using rail transport for commuting to work will decline. Among other things, this could create a huge problem with the deterioration of suburban towns, and we at the railway companies perceive the dangers of this process.

This is why it is so important now to think about urban planning so that people, including seniors, have all that they need within walking distance, or can take advantage of light rail transit (LRT) and bus transport. In other words, we need to rebuild our cities. I think that we must also think about ways to facilitate the use of railways themselves by for example ensuring better networking with other modes of transportation, providing more services from the station to the local town, or making the public squares and open spaces more attractive. If these initiatives succeed, I think we can provide a model of how to solve a problem that a lot of regional cities are facing – that is, the hollowing-out of their central shopping districts.

Using the train station to recreate the community

Mr. Suda: As I move around the country quite a lot giving lectures and so on, I sometimes find myself at smaller stations that have perhaps only ten trains a day passing through. These are no longer places where people gather, and the area around the stations is very quiet due to local depopulation. I see many such places. When things reach this stage, some good judgment is required to attract people to the stations for a different function other than just to carry them off somewhere.

Ms. Murakami: I think a good place to start would be to look to train stations to provide a space for community development, or town development in regional communities. I think you would find a lot of promising ideas coming out of those who might assemble there.

For example, how about something like "station day-care" for children? Grandparents gathering at the station's cultural center could accept children for day care. This would mean that parents would feel more comfortable leaving

their children there in the grandparents' care because it's someone they know, and could then go out for their own shopping or whatever. I think stations are perfectly suited to be places to answer the particular needs of the people who live in that particular community.

Mr. Soga: Since it's connected with this idea of attracting people to stations, I would like to introduce a tourism development initiative we are conducting together with local communities. We looked at this by asking a question: Is it possible to create a scheme to get a lot of people to go out and interact with others in a way that would stimulate the local economy, and as a result make the local community more sustainable? There are three basic tourism development approaches behind this: "balanced," "culturally-oriented," and "spontaneous."

I think that today's touristic resources are the very *lifestyles* of people in local communities. I think that it's important to discover the charming – but perhaps, undiscovered – local attractions, and to convey these to customers using new modes of presentation. Protection of the natural environment; creation of an atmosphere that can sustain the spirit of hospitality among local people; operation of the railway network as a lifestyle infrastructure of the local people – such concepts are being combined as we work to develop tourism and aim for schemes that will ultimately provide economic benefits for the local community.

In the development of new products and services, we at JR East play a pivotal supporting role for those local people wishing to attract tourists, and work together with them to create a driving force for development.

Educating children about public transportation

Dr. Makimura: As we heard in the example of Niigata, there is an increasing number of children who have never taken a ride on public transportation. We must think about what will happen when they become adults. Recently I was asked to teach elementary school children how to use public transportation. Through opportunities such as this, I would like to win children over to railways, by getting across the message that railways are good for the environment and good for people. Children who have never been on a train would not understand such things otherwise.

Mr. Ohana: JR East has its Niitsu Rolling Stock Manufacturing Factory in Niigata. The facility is open to the public once a year on National Railway Day, and people have said they found it very enjoyable. I think it would be a very good idea to organize programs specially for children at events like this.

Dr. Nakamura: In our discussion today, you have all raised many key issues and offered a variety of suggestions on the theme of railways. Through the discussion, some of the points that emerged include issues about usability: adding value to the time people spend in stations; conducting urban development using the train station as a key concept; educating children; and various potential opportunities for railways in the future.

Mr. Kogure: Thank you to everyone today for sharing your views with us. We at JR East would like to keep these views in mind for future planning. We welcome any comments or thoughts you might have, not only today, but at any time.

Participants from JR East

Kazuyuki Kogure
Executive Director
(Former Director and General Manager, Management Administration Dept.)

Takashi Yamazaki
General Manager,
Investment Planning Department

Haruo Soga
Manager,
Marketing Department

Independent Review Report, Future Prospects

KPMG

Independent Review Report on "JR East Group Sustainability Report 2005"

To the Board of Directors of East Japan Railway Company

1. Purpose and Scope of our Review
We have reviewed "JR East Group Sustainability Report 2005" ("the Report") of East Japan Railway Company ("the Company") for the year ended March 31, 2005. Our engagement was designed to report to the Company, based on the results of our review, whether the environmental performance indicators and the environmental accounting indicators ("the Indicators") for the period from April 1, 2004 to March 31, 2005 included in the Report have been collected, compiled and reported, in all material respects, rationally and in conformance with the Company's policies and procedures.
The report, including the identification of material issues is the responsibility of the Company's management. Our responsibility is to independently report the results of our procedures performed on the Indicators.

2. Procedures Performed
We have performed the following review procedures;
1) With respect to the Company's policies for compilation of the Report, interviewed the Company's responsible personnel.
2) Assessed the Company's procedures used for the collecting, compiling and reporting the Indicators.
3) With respect to the way of collecting the Indicators and the process flow of calculating them, interviewed the Company's responsible personnel and reviewed the systems and processes used to generate the values of the Indicators.
4) Compared the Indicators on a sample basis with the supporting evidences to test the conformity in collection, compilation and reporting of the Indicators to the Company's policies and procedures.
5) Made on-site inspections of Company's domestic facilities.
6) Evaluated the overall statement in which the Indicators are expressed.

3. Results of the Procedures Performed
As a result of the procedures performed, we are not aware of any material modifications that should be made to the Indicators in the Report in order for them to comply with the Company's policies and procedures for the rational collecting and compiling such information.

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

Tokyo, Japan
July 22, 2005

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

In this *Sustainability Report 2005*, after the Interview with the President, readers can see *New Frontier 2008*, JR East's new medium-term business plan, which contains the fiscal 2008 targets for the Group Policies. This is commendable in that it includes the social dimension in the medium-term targets.

In addition, the Highlights Section under "Our Aim: Ultimate Safety," explains JR East's approach to safety and also mentions the medium-term plan.

Regarding environmental conservation activities, the plan aims for further improvements and sets new targets for 2008 for the *entire* JR East Group. This shows that the JR East Group is working together as one cohesive group.

These aspects mean that readers can sense the forward-looking perspective of *Sustainability Report 2005*, and that this is not a report merely on the past.

Regarding environmental accounting in the context of environmental initiatives, it would be worthwhile to add more information about safety, another important pillar – including how much is being spent on what kind of activities, in order to achieve which targets.

Future Prospects

Among the 11 environmental goals to be achieved by the end of fiscal 2005, six were achieved at the end of fiscal 2003. When it later became clear that we were likely to achieve the remaining targets by the end of fiscal 2005, we established new environmental goals for fiscal 2008, this time incorporating the entire JR East Group. Working together as one corporate group, we will move forward to promote environmental management and aim to achieve these goals.

When humanity seeks harmony with the global environment, I believe the role of railways is important – due to their relatively low environmental impacts. But it is also important for the JR East Group to fulfill its corporate social responsibility, by providing safe and reliable transportation services, and playing a part in the prosperity of local communities by creating new value. The JR East Group will continue to promote its social and environmental activities to help realize a sustainable society.

Toru Owada
Director and
General Manager
Management Planning
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. "Ladies' 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 begins at Sugamo Station on the *Yamanote* Line.
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 "Women 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.
	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.
	April	"F Program" launched, with the aim of creating a positive work environment for female employees.
	May	First Native Forest Regeneration Project in Fukushima held.
2005	January	*JR East Group Sustainability Report 2004* receives the Environment Minister's Award (environmental report category) at the Eighth Environmental Communication Awards.
	February	Nagano General Rolling Stock Center acquires ISO14001 certification.

Editorial Note

As we wished to show that the social and environmental activities of the JR East Group aim for the realization of sustainable society, we decided to use "Aiming for a Sustainable Society" as the subtitle of this year's report. To kick off our report preparation work this year, we first held a study group session on sustainability and corporate social responsibility, joined by about 30 environmental coordinators from various departments at the JR East Head Office. After arriving at a common awareness of issues, we launched into our work.

Meanwhile, due to the recent increase in public concern about railway safety, we decided to add a section on "Our Aim: Ultimate Safety" in the Highlights Section, and to increase the coverage on safety issues in the Comprehensive Section.

We hope that this report will serve to deepen our communication with stakeholders. We welcome your frank comments and suggestions.

Sustainability Report 2005

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チーム・マイナス6%
JR東日本も参加しています

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<Cover Message>

The grand tree on the front cover represents the gentleness and abundance of nature.
It puts a sparkle in the children's eyes and inspires their play.
We at the JR East Group wish to be a vehicle that, like the beauty of nature, enlivens the dreams of children, and we want to pass on a beautiful planet to the children.
For both the present and future generations, the JR East Group strives to fulfill its responsibility to contribute to the development of a sustainable society – a world in which people can lead meaningful and happy lives.

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