

Aiming for a Sustainable Society

JR East Group

Sustainability Report 2010



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Editorial Policy

We are publishing the JR East Group Sustainability Report 2010 with the aim of making public the latest information on our various sustainability initiatives in an accurate and easy-to-understand form.

The report is divided into two parts — the special topics section and the details section. The special topics section contains items that we particularly want to communicate to our stakeholders, from three aspects: the environment, safety, and society.

In this year's report, we will also cover the content of stakeholder dialogs with regional revitalization as their theme with the participation of experts, and with the specific objective of reflecting these opinions in our management.

With regard to information provision, in this year's report again we have focused on areas in which we believe we have made outstanding progress during the fiscal year that ended March 31, 2010. Year-on-year information and other details are available on our website.

References

Environmental Reporting Guidelines
(Fiscal Year 2007 Version)
[Japan Ministry of the Environment]
Environmental Accounting Guidelines 2005
[Japan Ministry of the Environment]

Reporting period

This report basically covers our activities in fiscal 2010 (from April 1, 2009 to March 31, 2010), although some events presented here happened earlier or in the period between the end of March 2010 and the publication of this report in September 2010.

Boundary of reporting

This report covers activities of East Japan Railway Company and 73 Group companies

Group Philosophy

JR East Group aims to function as a dynamic corporate group providing quality leading-edge services, with railway businesses at its core.

To that end, each person working for the group will reflect the viewpoints of customers by providing safe, reliable transportation and high-quality, convenient products and services. At the same time, group employees will continue raising the levels of services and technologies to earn the further trust and confidence of customers.

We will grow continuously and advance in harmony with customers by generating earnings while meeting social responsibilities as a *Trusted Life-Style Service Creating Group*.

Basic Principles

■ Putting the customer first

We will put our hearts into providing good service and living up to customers' expectations.

■ Ensuring safety and quality

We will take thorough measures to provide transportation services that are safe and reliable and products and services that are of high quality.

■ Developing the Group

We will make concerted efforts to grow the group by emphasizing autonomy, collaboration, and new initiatives.

Meeting the Challenge of Sustainable Growth

The JR East Group intends to steadily implement its plans as laid out in JR East 2020 Vision—*i do mu* and in line with its major management priority—safety—enhance customer satisfaction with the aim of becoming a corporate group in which customers can feel ease and peace of mind through a sense of assured safety. Concomitantly, we intend to continue to manage the business operations of all Group companies in such a way as to satisfy the expectations of all our stakeholders.

Toward sustainable growth

During the fiscal year beginning April 2010, the third year since we published JR East 2020 Vision—*i do mu* (*I do mu is Japanese for Challenge*), the business environment has remained uncertain due to the impact of the deep global recession that struck the year before last. Other factors, including the reduction of expressway charges and the opening of a new access route between Ueno, Nippori, and Narita Airport, have brought increased levels of competition among transport providers, and the severe market conditions are expected to continue for the foreseeable future.

Despite these factors, however, we actually regard the adverse conditions as opportunities, and through our policy of ensuring safety and enhancing customer satisfaction, fully intend to meet the challenges of increasing revenues while fundamentally reviewing our cost structure. We also intend to introduce certain measures that will bear fruit in the long term in order to enable us to realize our ideal form enable us to be where want to be in 10 years.



Extreme Safety Levels

Since its establishment, JR East has constantly regarded safety as its top management priority, and under the terms we published in 2020 Vision, we are continuing to work with an unwavering commitment to achieve what we regard as extreme safety levels. As a part of our fifth five-year Safety Plan, 2013 Safety Vision, we will invest approximately 750 billion yen on safety during the five years that start in fiscal year 2010. Through increased construction and enhancement of safety facilities we intend to become a Group which our customers regard with a feeling of ease and peace of mind based on assured safety.

If we are to successfully enhance safety levels, I strongly believe that we need to instill in each and every employee the ability to identify problems and work toward their solution on an individual basis; in other words, our employees must think and act for themselves. Furthermore, the *sangen* principle (three actualities—actual locations, actual objects, and actual people) will remain critically important. This means that in order to fully understand the reality of our operating situation all our employees must be prepared to experience front line conditions which will allow them to meet the people and understand the objects involved. As a truly professional organization, the JR East Group holds the *sangen* principle as our standard of action, which, through a policy of individual thought and action, will allow us to reach extreme safety levels, thereby guaranteeing our customers peace of mind.

Railway Technology: From Japan to the World

With the increase in the speed of global warming, railways are attracting worldwide recognition as a form of transport capable of delivering very low levels of CO₂ emissions per unit of transport.

During our more than a century-long history of railway operations (including the Japanese National Railways [JNR] period), we have nurtured and benefited from many top-notch engineers and accumulated a vast hoard of railway construction and operational capabilities as well as a superlative level of railway business management know-how. Our ability to comprehensively coordinate all of these assets in a manner capable of providing safe and stable transport is the most powerful weapon in our corporate arsenal.

In the past, admittedly, JR East has concentrated mainly on its transport, life-style, and Suica businesses in Japan, but I strongly believe that today our technologies and know-how can be utilized globally and contribute significantly to the solving of environmental problems.

There can be little doubt that for JR East, a group that has little experience of doing business overseas, the future will hold many challenges. We realize that we must overcome various hurdles, but, nevertheless, we are committed to the task of globally propagating the use of our Japan-generated railway technology and know-how and thereby contributing to the development of railways throughout the world.

Missions and Challenges of Global Environmental Issues

In its 2020 Vision, the JR East Group committed itself to a positive and continuing approach to global environmental problems by setting a unilateral target of reducing, by fiscal 2031, its total CO₂ emissions from railway operations by 50%, compared with fiscal 1991. We strongly believe that as a Group whose main business is railways, a form of transport that is highly public but which has a relatively low environmental impact, it is a natural part of our mission to work for the abatement of global environmental problems. As such, and as a truly international corporate citizen, we feel beholden to set such a high standard.

Although, as I have mentioned before, railways are a form of transportation with a relatively low level of environmental impact in terms of CO₂ emissions, our actual emissions are still significant. After all, we run an approximately 7,500 km rail network throughout eastern Japan, which actually makes us the world's largest railway company in terms of the number of passengers, so we need to remain constantly aware that we are still emitting considerable amounts of CO₂.

Since the promulgation of JR East 2020 Vision, despite the fact that we have worked continuously toward the solving of environmental issues, it is now even more important to make progress in many areas, including the domestic countermeasures to global warming and the solving of biodiversity problems. With these hurdles in mind, in July this year we established the Environmental Management Office within the Management Planning Department, with the aim of further promoting the enhancement of our environmental management. In other words, we are not merely resting on our laurels as a relatively low CO₂-emitting form of transportation, but are setting our own high environmental targets and taking a positive and long term approach to global problems.

Tohoku Shinkansen Completion and Regional Revitalization

This year on December 4, the Tohoku Shinkansen line will be completed with the start of operations on the Hachinohe-Shin-Aomori segment. This event will mark a milestone, not only for Aomori Prefecture but also for the entire Tohoku region. The Tohoku Shinkansen has been developed in stages, starting with the section between Omiya and Morioka in 1982, followed by the Ueno-Omiya and Tokyo-Ueno segments, and was further extended to Hachinohe in 2002. With the completion of the final section to Shin-Aomori, travel times between Tokyo and Aomori will be significantly reduced and convenience greatly enhanced. We believe that the completed line will not only make Aomori much more easily accessible from the Tokyo metropolitan area, but also will lead to a significant increase in inter-regional exchanges. Through its Rediscover Local Areas Project, the JR East Group is committing considerable resources to the unearthing and publicizing of previously ignored or little known tourist resources and local products, with the aim of promoting a significant increase in tourist activities in the newly-connected areas, thereby supporting a regional revitalization.

In conclusion, as I said before, railways are public transportation that support the movement and lives of many people. It is JR East's mission to strive for further improvements in safety and convenience and to continue to serve its passengers carefully in the future.

Satoshi Seino

President and CEO
East Japan Railway Company





Thoughts on the opening of the Shin-Aomori service

What Is Required for Regional Revitalization?

Today, when regional sovereignty is often mentioned and when we are deemed to be in the age of the local region, the revitalization of local communities has become an important element in improving the affluence of society. With the impending opening of the Shin-Aomori Shinkansen extension on December 4th this year, on May 19th in the Aomori Prefectural Building we held an opinion exchange session regarding the roles to be taken by both JR East and local communities. Those attending the meeting included Governor Shingo Mimura of Aomori Prefecture and Ms. Yasuko Shima of an Aomori area development group, who both regard the service extension as a great opportunity, and Professor Shigeru Hori of the University of Tokyo, whose specialties include landscape design and engineering, and community planning.

<p>[Participants]</p> <ul style="list-style-type: none"> • Mr. Shingo Mimura (Governor of Aomori Prefecture) • Mr. Shigeru Hori (Professor, Asian Natural Environmental Science Center, University of Tokyo) • Ms. Yasuko Shima (Aozora-gumi, Oma Town Revitalization Group) 	<ul style="list-style-type: none"> • Mr. Toshiro Ichinose (Director and General Manager, Management Planning Department, East Japan Railway Company) • Mr. Mitsuhiro Akasaka (Aomori Stationmaster, East Japan Railway Company) <p>[Facilitator]</p> <ul style="list-style-type: none"> • Mr. Mitsuo Ogawa (CEO, Craig Consulting)
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An Age of Self-sustainable Local Communities

ICHINOSE

Since its establishment, JR East has had the mission of advancing its business activities while contributing to local societies based on its railway network. When we look at eastern Japan today, however, we can see that there are, unfortunately, certain areas that appear to be losing their vitality.

In our 2020 Vision we committed ourselves to the active advancement of local revitalization, so during our discussions today, we would like all of you to voice your opinions, based as they no doubt are on your respective standpoints.

OGAWA

Today we will discuss the theme “Thoughts on the opening of the Shin-Aomori service: What Is Required for Regional Revitalization?” First, however, I would like to hear your thoughts on the issue of the necessity of regional revitalization.

MIMURA

I believe the commencement of the Shinkansen service to Shin-Aomori is a once-in-a-century chance for Aomori Prefecture. All four routes (air, road, sea, and rail) will be established, thereby turning Aomori into mainland Japan’s greatest transportation node. Travel times between Aomori and the Tokyo metropolitan area will be dramatically reduced, bringing, I hope, a significant increase in the exchange of people, goods, and information between the two areas.

Initially, economic revitalization through tourism and the attraction of new companies will be our primary aim, but we also hope to increase the potential for cultural and civilization-based exchanges. What will be vital is how each citizen of the prefecture personally uses this opportunity and how each citizen makes the most of this new age.



Mr. Toshiro Ichinose
Director and General Manager, Management Planning Department, East Japan Railway Company

Aomori Prefecture is striving to further increase the benefits that will be brought by the opening of the service through the efforts of 67 organizations and seven councils led by the Council for Strategic Utilization of the Completed Shinkansen Line. Furthermore, next year a Destination Campaign¹⁾ will be implemented in Aomori Prefecture, so at the moment we are busily identifying attractions, some of which have not previously had very high visibility. I feel that the opening of the Shinkansen service has already had an impact in many fields, having, for example, brought about a forward-looking air that is recognizable throughout the entire prefecture.



Mr. Shingo Mimura
Governor of Aomori Prefecture

HORI

The reason why regional revitalization is being talked about so much these days is because we are now in an age when local regions have to become self-sustaining. Some local areas, however, are not yet prepared to be so, and the majority of the people simply expect the government to take care of things, or only expect to participate in something if it sounds interesting to them on a personal basis. It is my hope that the people of Aomori take the opening of the Shin-Aomori Shinkansen service as an opportunity to think for themselves.



Mr. Shigeru Hori
Professor, Asian Natural Environmental Science Center, University of Tokyo

The question remains, however, about what should be done to enable regions to be self-sustaining. In my opinion, the first need is for local areas to have their own, unique products. Products, however, do not sell themselves, so it is necessary to make them appealing to potential customers and publicize them widely. These three points of: ① having products; ② adding appeal to them; and ③ publicizing them widely are all vital if local communities are to become self-sustaining.

SHIMA

Governor Mimura mentioned that the opening of the Shinkansen service is a “once-in-a-century chance,” so isn’t it vital for us to increase the number of people who have a desire to do things and a knowledge of when to do them — now! What we need is action. Furthermore, although the start of Shinkansen service will bring the region closer to other regions, we must not allow this fact to dilute our appeal; rather we should make it an opportunity to strengthen that appeal. The main questions are, however, how far can we pursue Aomori’s uniqueness and its differences from neighboring regions and urban areas, and how can we make that enhanced Aomori uniqueness into a form that can be marketed nationwide? We are still struggling in these areas.



Ms. Yasuko Shima
Aozora-gumi,
Oma Town Revitalization Group

MIMURA

Last year the centennial of the author Osamu Dazai, a former resident of Kanegi-mura, Kitatsugaru-gun, now Goshogawara City, was celebrated. To honor the writer, we organized various tourist activities and instigated what local citizens came up with—a Field Museum—by which, instead of simply constructing something, we turned the entire city into a Dazai museum by taking people to, for example, the place where Dazai often ate his boxed lunch, and another where he liked to drink sake. This approach proved extremely popular with tourists and is a clear example of a success in turning an area into a product with added appeal, which again has made people aware of the fact that they can achieve things if they use their ingenuity. At this time, it is important that we create our own content and add some value to it to make something fresh and interesting. I feel sure that Aomori people are willing, so the question is how to actually turn ideas into results.

SHIMA

I am currently working on the preparation of 1,000 overnight-stay-type tourist attractions within Aomori Prefecture, but I am constantly aware that forced, unnatural programs almost always fail. Although I myself started my activities simply because I found them interesting, I am now in a stage of evaluating whether or not my work can become firmly rooted in the tourism industry. With the coming opening of the Shin-Aomori Shinkansen service, an awareness has been building up that we must no-longer compete on a small and individual basis, but must cooperate as a single Aomori Prefecture. In fact, by having

everyone contribute something good from their individual communities and pooling our resources, we can ultimately make something with an even greater appeal.

HORI In the past when commercializing local products, there have been many cases where most of the work has been shouldered by volunteers. When this happens, it is obvious that production cannot last for a long time. Instead of relying purely on volunteers, therefore, when we produce something it is extremely important to approach the project from a viewpoint of cost consciousness. We need to logically determine whether each product can become firmly rooted in society and turn into a source of bread and butter for local residents. This is the role of local governments and residents, and, at the same time, something that should be considered by third parties such as JR East.

Perspective of Hospitality Development

OGAWA You mean that the motivation to refine things that already exist is increasing. I think this is also connected with the Hospitality Development that Professor Hori has been advocating.

HORI What actually is attraction? People within communities are often the least aware of this and often carry out regional and product development with feelings such as “we want people to come” and “we want people to buy,” but I think it is vital that we instill in the public in general a sense of “I want to go” instead. In this area, I think JR East’s know-how can be put to valuable use. JR East’s campaigns are planned to make people “want to go” rather than inviting people to come. “We want people to come to Aomori” and “We want to go to Aomori.” I think it is very important to understand the difference between these apparently similar but actually divergent approaches. The Hospitality Development I advocate is a key phrase if we are to create a hospitable society. In the latter part of the 1960s, visits to farmhouse inns became popular, but the fashion didn’t last. Why? It was simply because local communities didn’t understand what people wanted from such trips. Guests were willing to pay for what they wanted, but local people often offered them something different. Because the two sides saw things differently, it was inevitable that the boom petered out. In other words, it is important to remember that those who pay for services are in a stronger position than those who provide them. Local communities need to bear this in mind. It is often the case that things that are common and seem mundane to locals may be considered exotic and attractive to others who would be willing to pay to experience them. As a result, I think it is vital that we identify just what things that we readily accept as normal, are actually different.

MIMURA The ordinary local dishes we eat daily, for example, might be considered exotic by people visiting Aomori for the first time. In the past we haven’t always understood this and have defined “hospitality” as a demand for extravagant cuisine. We should probably change our mindset regarding this, and simply provide visitors with the things that we experience in our daily lives. This is the true meaning of “hospitality.”

AKASAKA As a station, we are also promoting the attractions of the region and regional goods in cooperation with community residents. Ms. Shima mentioned the creation of a single goal, and JR East, as a transport operator, will need to consider how to connect railway networks. I believe the role of local government is significant so I would like to proceed in cooperation with local public bodies.

ICHINOSE In reality, many local secondary transport systems have not been able to become part of the network. There will undoubtedly be excitement and enthusiasm when the service is launched, but it will not last long unless we finesse this enthusiasm into a business model. We are transport professionals, but I believe it is extremely important not just for us, but also for professionals in all fields to cooperate.


HORI Attractiveness becomes important when we form businesses and it is, therefore, vital to consider how to sustain that attractiveness. We must be aware that the attention span of the public is short. For example, if we simply make the same product over and over again,



Mr. Mitsuhiro Akasaka
Aomori Stationmaster,
East Japan Railway Company

will it remain attractive? I don't think so. We have to understand that if things never change, their appeal decreases day by day. In other words, unless JR East and other third parties provide input and advice, I don't think it will be easy for local regions to make sustainable products.

Time for Cooperation Between Local Regions and JR East

HORI	<p>JR East has a travel product called Tabi-Ichi² that treats local communities as products in a detailed and careful way. I think this is a very good approach. I strongly believe that JR East should continue this kind of effort and, thus, support the commercialization of local areas, with, for example, the introduction of an Aomori Tabi-Ichi.</p>	
ICHINOSE	<p>This kind of detailed and fine-tuned commercialization may not be very common.</p>	
HORI	<p>I believe Tabi-Ichi is a unique concept that attempts to commercialize local daily life rather than merely relying on traditional tourist resources such as objects of interest. All regions have the potential to turn themselves into products this way, and I evaluate this approach highly.</p>	<p>The Tabi-Ichi travel package brand is based on proposals from local communities</p>
AKASAKA	<p>JR East organizes "Hiking from station" packages. For example, there is a Doll's Festival called Kukuribina in a town called Mizusawa, and visitors from all over the country flock there to see the Kukuribina which for many years the local people had packed away out of sight. We organized a hiking course, starting from the station, that allows visitors and local residents to communicate with each other. This is just one example of many where JR East, in cooperation with local communities, is shining fresh lights on artifacts that may have been hidden from the public for generations, but which are of intrinsic interest.</p>	
SHIMA	<p>I take pride in having been able to maintain the momentum from our initial period even though our area development guerrilla activities have now continued for a decade. This is, I believe, because we have been doing new things one after the other. The next challenge and the energy needed to face it must, of course, come from the people who are taking on the challenges, but I think they need JR East and local public bodies to support them.</p> <p>In terms of information provision, the Shinkansen service will bring us to a turning point where Aomori Prefecture will open up to the outside. I believe we have at last reached a stage where we can connect with the outside world and create something new.</p>	
MIMURA	<p>I agree. Our spirits are being raised and our economy is picking up in various senses and I recognize this as an opportunity. By researching the many successful cases we have collected, we are exploring the possibilities of turning this opportunity into something concrete.</p>	

Expected Roles as a Transport and Tourism Professional

HORI	<p>What I sometimes wonder is whether or not there are forms and devices within the city that could be made sufficiently attractive to visitors even if the local people involved are only capable of exerting 70% of their energy. There are many regions that rely on events and other projects that depend on the efforts and hard work of local residents for their success, but I think this is dangerous. It is impossible for local residents to constantly give 100%. One way we can allow local people to relax a little is to build up a stock of attractions throughout a community which make visitors can feel good the moment they see them. If we can create an overall attractiveness, people won't have to work at full force all the time. These attractions don't necessarily have to be constructions; they could, for example, be flowers. In other words, combining tangible and intangible appeal is a good way for regions to become self-sustainable and allow us to create a framework that will attract tourists without residents having to dedicate all their strength to its maintenance.</p>
MIMURA	<p>On the opening day of Hachinohe Station, what struck me most was the first impressions of travelers as they arrived at the station. They said they were most impressed by the "hospitality at the entrance" where local people welcomed them with smiles. What</p>

do you think is needed to give visitors the first impressions that they are being treated hospitably?

- HORI I think that what the governor just said is perfectly correct. We all know that when our first impression is one of welcome and hospitality, we feel that the place we are visiting is a good place, and we want to return there again and again. Obviously, places you have never visited seem attractive, but it is often the case that once you have been there, the attraction weakens. Sometimes, furthermore, once we get used to the spirit of hospitality that so struck us when we first arrived, a place may seem to become less hospitable. That is why, for example, forms and features in front of stations are very important.
- SHIMA Indeed. The uniqueness of Aomori, that feeling of “Ah, it’s Aomori,” I think is quite significant. Whether or not we can produce that feeling the moment visitors get off the train at a station could be critical.
- MIMURA So, as a professional body in the transport industry, I would like JR East to share its knowledge with us and demonstrate how we can take on the role of researching local attractions and turning them into tourist draws.
- HORI I also would like JR East to work on the commercialization of unearthed regional attractions and provide their know-how.
- OGAWA Thank you. Today, we have discussed what is needed for the revitalization of regional economies. What has been highlighted includes the roles of local residents, local governments, and JR in their respective roles, and the importance of hospitality and attractiveness as a product. With the opening of the service to Shin-Aomori in December 2010, I hope each of you and the entities you represent will, from your own respective standpoints, shoulder part of the burden of revitalizing Aomori Prefecture. Once again, thank you very much.



Mr. Mitsuo Ogawa
CEO, Craig Consulting



Shin-Aomori Station scheduled to open on
December 4, 2010

*1 **Destination Campaign** Large-scale tourism campaign implemented by six JR Group companies, designated local governments, local tourism operators, etc.

*2 **Tabi-Ichi** Travel packages offering a menu of experiences and tourism through which travelers can fully enjoy the delights of the seasons alongside local residents.

Rediscover Local Areas Project



Echigo-Yuzawa Station Renaissance (2nd phase)

1. Regional revitalization

Against a backdrop of a decreasing population, a low birth rate and an aging society combined with an overconcentration of people and functions in cities, Japan's social environment is facing very difficult conditions, not only in terms of the economy but also in terms of the cultures, traditions, and techniques of individual regions.

With this in mind, we are aware that if the JR East Group is to continue to expand its railway network-based business, it will be necessary for us to create fluidity between local communities through the enhancement of each community's individual and specific appeals.

The JR East Group has actively implemented the unearthing of previously little known tourist resources, the development of secondary transport systems, and the provision of regional information in cooperation with local communities. We have done this through such initiatives as the Destination Campaigns, the setting up of priority sales areas, the sale of local specialties in stations, and various other events. Furthermore, in JR East 2020 Vision, we committed ourselves to a company-wide effort to further enhance the revitalization of local communities.

2. Rediscover Local Areas Project

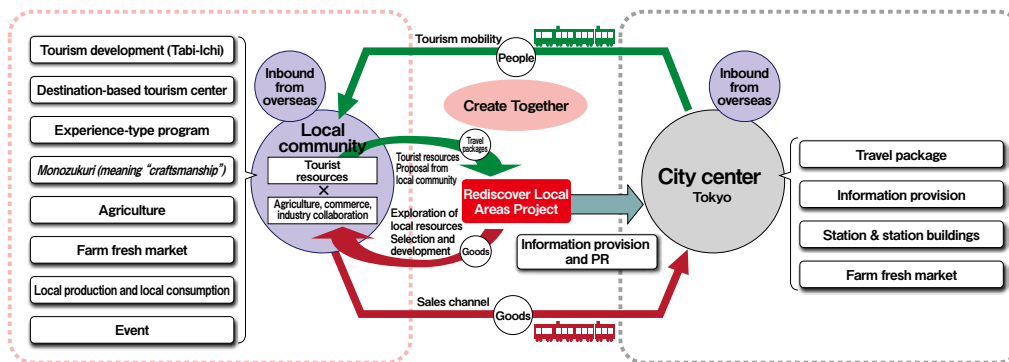
In September 2009, JR East launched the Rediscover Local Areas Project, an initiative that combines our transportation and life-style services businesses with the aim of accelerating cooperation with regional communities and, thereby, achieving steady results.

The basic concept of the Rediscover Local Areas Project is to support a form of continuous cooperation between the JR East Group and local communities regarding regional revitalization matters. The project stipulates a clear division of roles based on the “Create Together” strategy under which the Group strengthens its cooperation with regional communities and strives to develop new ideas and solutions.

In line with this concept, we have already started the provision of support for autonomous tourism development efforts in local communities. This support includes the creation of a new market of destination-based tourism using the travel package Tabi-Ichi. Tabi-Ichi includes the following concepts: climate and culture rooted in the region; local production and local consumption; and getting in touch with people, and features the involvement and ideas of local residents. Events such as the Iwate-Hanamaki Rediscovery Symposium have been held with the aim of providing residents with opportunities to look again at the tourist resources of their regions.

The JR East Group has railway networks that connect different regions, stations that serve as local centers, business know-how regarding ekinaka (inside station), buildings, and hotels, sales channels and advertising media radiating out from the Tokyo metropolitan area, and human resources that make contributions as members of local communities. The Rediscover Local Areas Project utilizes these strengths and exploits the traditional cultures, festivals, techniques, local produce, and other tangible and intangible tourist resources, expands sales channels, and promotes the exchange of interactive information between the Tokyo metropolitan area and regional communities.

A main objective of the Rediscover Local Areas Project is to bring about an increased flow of people and goods and create new markets through a tightening of ties between the Tokyo metropolitan area and local regions. This, in turn, will no doubt lead to the reinvigoration of regional communities within the JR East service area and a concomitant strengthening of our management foundation leading to improved prospects for the Group.



Rediscover Local Areas Project



Tabi-Ichi



Iwate-Hanamaki Rediscovery Symposium

3. Specific initiatives

The Rediscover Local Areas Project started by deepening our specific undertakings from the following perspectives: social responsibility and contribution; cooperation with local communities; and the synergy of our railway network and life-style services business.

One specific case is our Folkloro and Familio long-stay hotels. We have promoted regional revitalization measures centered on the renewal of such facilities. In the Iwate area, for example, Folkloro Iwate Towa has undergone renewal and has been relaunched as an auberge with its own vegetable gardens. Furthermore, through a newly opened restaurant specializing in locally produced ingredients, visitors can try new local dishes using seasonal ingredients, as well as taking part in a variety of activities, organized in cooperation with local producers, such as actually harvesting produce. The facility has proved popular not only with tourists but also with local residents.

In the Tateyama area, Familio Tateyama has been renewed with sports as its core concept, including newly constructed sand and artificial grass courts. Furthermore, with the goal of meeting the expanding needs of visitors, Familio Tateyama has developed a wide variety of sporting activities including yoga, sea kayaking, and Nordic walking, and invited sports competitions to take advantage of the natural beauty of Minami Boso.

As a part of our regional revitalization program in the Echigo-Yuzawa area, the station has been positioned to serve as a gateway for regional tourism. Echigo-Yuzawa Station Renaissance (2nd phase) has already been implemented, and Gangidori, a commercial sales area for local foods and goods, has been opened inside the station. Furthermore, a destination-based Visitor Center outlet that integrates multiple functions, including tourist information covering a wide area, operated in cooperation with local tourist associations, and a car rental service, has been opened and has contributed to a significant increase in the number of foreign visitors. Both developments have been well received by customers.

In addition to strategically developing the Tabi-Ichi brand in these areas, we create and broadcast contents for JR East's digital signage in cooperation with local communities, and otherwise utilize the transport media and travel products owned by JR East to provide interactive information for city center and regional areas, thereby creating increased tourism flows.

In regard to the utilization of local products and the expansion of sales channels, our initiatives are continuing apace with tie-ups with Group companies. Our collaboration with local governments, organizations, and producers has been strengthened and efforts are constantly being made to contribute to the revitalization of local resources and industries through the exploitation of local products and traditional crafts, the development of processed agricultural products, and the holding of farm-fresh markets.



Folkloro Iwate Towa



Familio Tateyama

4. Future developments

The Rediscover Local Areas Project will continue to promote the local revitalization measures deemed appropriate for individual areas. We are, for example, planning the construction of a craft center and market specializing in the apples produced in Aomori Prefecture, Japan's largest producer, on the Aomori waterfront which will be easily accessible by the Tohoku Shinkansen service. Various other collaborative projects and tie-ups with Aomori City's urban planning organizations are also in the pipeline.

In order to continue these initiatives with further strength under the Create Together strategy, JR East will promote local revitalization as a new role to be taken on by all our employees in cooperation with local powers including regional governments, organizations, producers, schools, and companies. As part of the Rediscover Local Areas Project, we will create the systems and frameworks necessary for the promotion of these approaches by the end of the fiscal year ending March 2011 and, thereby, accelerate JR East Group's ability to meet new challenges.



Factory & Market (provisional name) in the Aomori waterfront area

Message to the next generation: Chroniclers of Safety (Narrators of Oral History)

Progressively passing on experiences from one generation to the next

The experience which taught me the most about the importance of safety was a man-vehicle accident which occurred at the Omiya Yard in 1969, in which I lost my best friend. He and I had joined the company the same year. I still clearly remember his parents' sorrow when I visited them to deliver his remains and the grieving of his supervisor and colleagues.

When I was Marketing Department Deputy Manager, I was given the assignment to formulate a "Prevention Manual for Man-Vehicle Accidents." I may have received the assignment partially because I had experienced such an accident in the past. I worked strenuously on the prevention manual through my reflections on that event. At the time, JR East had a prevention manual for ground facilities maintenance workers but there wasn't one for station staff. It was the first opportunity to formulate such a manual. However, the complicated part of creating a manual is that a manual will sometimes prevent field site employees from thinking beyond its contents and accidents usually do not occur as they are written. Therefore, it is necessary that we take it upon ourselves to "think, act and challenge for ourselves."

As a Chronicler of Safety, I am mainly in charge of "dispatchers" and "stations." Dispatchers give directions by watching monitors and are not able to see accident conditions directly. Then, experiences at field sites will be necessary. The time sensations of dispatchers who are just waiting for information at the control room and that of field site workers who are physically moving fast at the site are totally different. It is important to give consideration to the situation of field sites when providing directions. For safety, it is vital that we obtain as much information as possible from as many field sites as possible.

Accidents may be rare but they should never happen to begin with. This conviction leads me to believe that I am obliged to pass on the experience of losing my best friend in an accident to the next generation. I strongly hope that JR East will find a way to safety from experiences of Chroniclers of Safety like myself from the days of JNR and hope that JR East employees who shoulder the next generation will have a faith in "pursuing extreme safety levels."



Isao Matsumoto

Managing Director,
Director of General Affairs Department,
Nippon Hotel Co., Ltd.

Double checking from another perspective

Railway signaling facilities have two major roles: to provide safety for preventing accidents, and reliability for operating according to the schedule. Safety is of top priority, and by securing safety first, signaling facilities can contribute to reliable transport. For this reason, as a general rule, when signaling equipment fails, it is designed to stop trains. However, if we stop trains even with minor troubles, transport reliability will deteriorate, and the important balance will be lost.

From my experience, the major risk with signaling facilities is fire in the equipment room. In stations, there are equipment rooms which are the keystones of signaling. Though infrequent, a rapid increase in voltage sometimes causes an equipment room fire, and this stops all electric trains. When this happens, emergency recovery is needed. The recovery work involves the rewiring of more than 5,000 wires, a job which cannot be completed in just one or two hours. As facilities maintenance workers, we need to secure safety of operations, while being able to restore signaling functions as quickly as possible.

As a Chronicler of Safety, I would like to pass on two things: be wary of hardware, and always confirm by double checking from an alternative perspective. When it comes to signaling equipment, a single mistake in wiring could lead to an accident. Ideally, equipment at field sites should be in the same condition as planned on paper, but we should never ignore the possibility that the equipment may have undergone some modifications, or may be scheduled for repair at a later date. For these reasons, it is important to remain wary, and to not assume anything from the start, but to reconfirm that everything is as it is designed to be. For this, check everything twice and, if possible, ask someone to check it all again. In doing so, I believe that we can help reduce the risk of events which we might never expect to occur.



Naokazu Naiki
Technical Manager,
Director,
Total Electric Management Service Co., Ltd.

Learning from other people's experiences

On January 17th, 1995, at the time of the Great Hanshin-Awaji Earthquake, Shinkansen elevated bridge columns in the JR West service area were destroyed as if being bent at their knees. I have never in my experience seen these columns damaged to that extent. At the time, I was a manager in charge of civil engineering at our Track & Structures Maintenance and Electric Engineering Dept. Three days after the earthquake occurred, as a member of a technical support team from JR East, I joined an investigation team to study damage conditions. Utilizing the combined experience of the investigation team, we reinforced Shinkansen elevated bridges within a 3 km radius of all active faults in the JR East service area. Sometime later, in October 2004, the Niigata Chuetsu Earthquake occurred. At the time of the earthquake, *Toki No. 325* derailed, but fortunately the location of the Shinkansen derailment was exactly at a place we had reinforced after the Great Hanshin-Awaji Earthquake, so our elevated bridges stayed intact and there were no fatalities. As in an old saying, rock on another mountain (meaning "learning from others' mistakes"), this event made me realize again that it is vital that we thoroughly investigate events which occur in other places, predict whether there is a possibility of the same risk in our own service areas, and take appropriate countermeasures.

As a Chronicler of Safety, I am in charge of civil engineering and disaster prevention and, in many cases, we face forces in nature of which we will never be able to control. Accordingly I believe that it is JR East's responsibility as a railway operator to minimize the effects of such natural disasters as much as humanly possible so that even when there is a natural disaster, fatality can be avoided. In order to do so, we must carefully learn lessons from the past and keep learning as it is extremely difficult to make assumptions on areas in which we do not have experience. It is important to carefully and humbly analyze each and every event and to consider each time that we have learned again from nature, comprehensively and accurately search out the possible causes, contemplate what we can do to eliminate them in the future, and take action. A purposeful compilation of past and present experiences is indispensable in securing the safety of trains from natural disasters. I would like to pass this mindset on to the next generation.



Norio Katayose
Assistant to Director (Advisor),
Totetsu Kogyo Co., Ltd.

Prompt decision making is critical for safety

When JR was established upon the division and privatization of JNR, we made a major change in our safety consciousness. Our speed has increased in both decision making and response. Presently, at the time of an accident, we resolve the prevention of recurrence of the same accident. To this end, as an organization, JR East promptly determines countermeasures and takes action.

In 1988, shortly after the division and privatization of JNR and the establishment of JR East, an incident occurred in which a train at Ueno Station did not stop at the 3rd yard signal, which was showing a stop indication. At the time, another train was proceeding in the direction of that train, and if the train had not been stopped, a collision would have been unavoidable. Fortunately, in this case, the collision was avoided. However, the response of our newly born Railway Safety Promotion Committee at the time was striking. From the sense of crisis that this kind of event could happen again unless there were systematic prevention, in spite of the cost, JR East promptly decided to accelerate the introduction of the latest automatic train stop system, ATS-P, which is superior to regular ATS in safety. I think this speed in decision making as an organization has been a major characteristic since the establishment of JR East.

From my experience, major accidents and troubles tend to happen when there is something abnormal. For example, accidents or troubles tend to occur when a train stops because of a signal failure or a brake failure and resumes operation after recovery. At the time of such abnormality, we need to do unaccustomed things without a backup system, because the system is designed to employ backup systems in ordinary situations. As a result, many of the accidents that occur are happening in these situations. As a Chronicler of Safety for operational rules, to prevent these accidents, I would like to have field site employees to understand the reasons and grounds for each procedure for times of abnormality, as there are reasons why we need to handle each one of the procedures in a certain way. I would like to pass this understanding on based on my experiences.



Katsutoshi Nakaya
Technical Manager,
Japan Train Operation Association

Biological diversity and environmental technical development



Shinano River Hometown Forestation Program

In 2004, in order to protect biological diversity and to contribute to a sustainable society, JR East began the Hometown Forestation Programs. To revitalize existing forest, the programs plant various kinds of trees native to each region close together, in a state similar to what would exist naturally.

On June 26th, 2010, with the cooperation of Niigata Prefecture and Tsunan Town, we held the Shinano River Hometown Forestation Program to plant 16 different kinds and a total of 17,000 saplings in the region. Additionally, JR East is implementing tree planting programs based in each area and is committed to continuing the activity in the future.

Development of railway trees

Along the JR East railway lines, we have railway trees planted to shield the tracks from blowing snow and wind. The first railway forest was created in 1893 for disaster prevention. As living disaster prevention facilities, railway forests are playing their roles.

JR East now owns approximately six million railway trees on a total of about 4,200 hectares along our lines at 1,208 locations. The trees absorb 17 thousand tons of CO₂, equivalent to 0.7% of the CO₂ that JR East emits. In this way, they also contribute to preserving the environment.

In 2008, after fundamentally reviewing the role of railway trees from the viewpoints both of disaster prevention and environmental preservation, we launched a new project to plant trees to replace those that will require replacement over the coming 20 years.



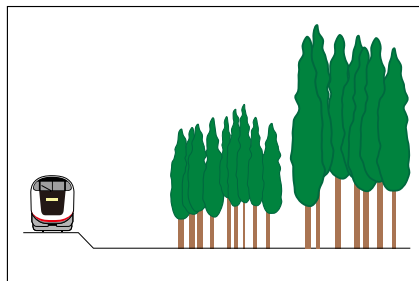
Jingujin No. 2 railway forest on the Ou Main Line
(forest to protect against blizzards)



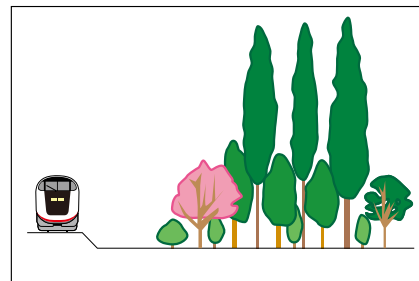
Tenoko No. 6 railway forest on the Yonesaka Line
(forest to protect against snow slides)

Railway trees – From single to multi-variety trees

Conventional railway trees were of a single variety, primarily cedar trees, because another function, in addition to protecting against natural disasters, was to generate profits through the production of timber. This has recently been less successful, however, in the face of declining demand for domestic timber. In future tree replacement, we will plant several varieties suitable for the local climate and develop them to be more sustainable and ecologically resilient.



Conventional railway trees
(single variety such as cedar trees)



New railway trees
(mixture of different varieties of trees)

Planting new railway trees

Ceremonies for the planting of new railway trees were held in the Kakizaki No. 1 railway forest between Kakizaki and Yoneyama on the Shin-etsu Main Line on September 27, 2008, in the Okitama No.2 forest on the Ou Main Line between Okitama and Takahata on July 26, 2009, and in the Jingujin No.2 railway forest on the Ou Main Line between Jingujin and Kariwano on May 22nd, 2010. With kind advice and guidance from ecologist and Professor Emeritus Akira Miyawaki of Yokohama National University, several varieties of native trees (potential natural vegetation) were selected and planted. Many local residents and participants from organized tours participated in the ceremonies, and discovered how the trees they planted would grow to become useful as living railway disaster prevention facilities.

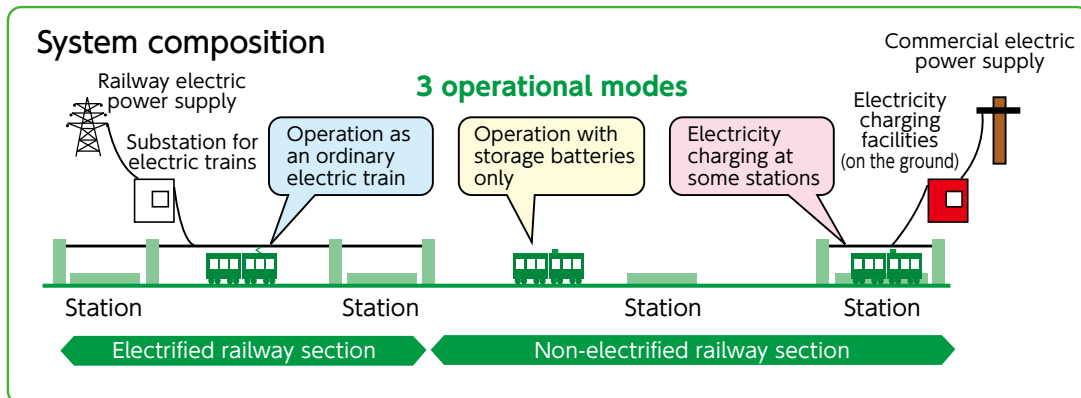
Progress in technological development

Research and development aimed at a reduction in environmental impact

Upholding our contributions to the global environment as one of the four pillars of our research and development, JR East is working on research and development to reduce its environmental impact by establishing new energy management. Our efforts include: the development of hybrid railcars with storage batteries, endeavors to realize environmentally harmonized stations, and a consideration for the utilization of energy saving technology and natural energy.

Development of a storage battery train system: NE Train (new energy train) *Smart Denchi-kun*

To reduce our environmental impact, JR East is considering the application of new motive energy to our railways through the testing of our test railcar, NE Train (New Energy Train). Currently, as a measure to reduce environmental impact in non-electrified railway sections, we are developing a storage battery train system, a hybrid system to utilize both electricity from overhead wires and that from storage batteries. The train operates in electrified railway sections while receiving its electrical supply from overhead wires and charging its storage batteries. In non-electrified railway sections, it operates on the electricity of the storage batteries. The system contributes to reductions in both CO₂ emissions and noise, when compared with traditional diesel cars. In September 2009, JR East completed construction of the NE Train, *Smart Denchi-kun*, with this system and has begun running tests for further verification.



NE Train, *Smart Denchi-kun*



Battery module



On-board monitor

Basic Concept on Environmental Protection and Targets



The JR East Group formalized its basic philosophy and basic policies in 1992 and established activity guidelines in 1996, and our specific environmental protection measures are based on these.

Basic philosophy and basic policies for promoting ecological activities (established May 1992)

【Basic philosophy】

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

【Basic policies】

- 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

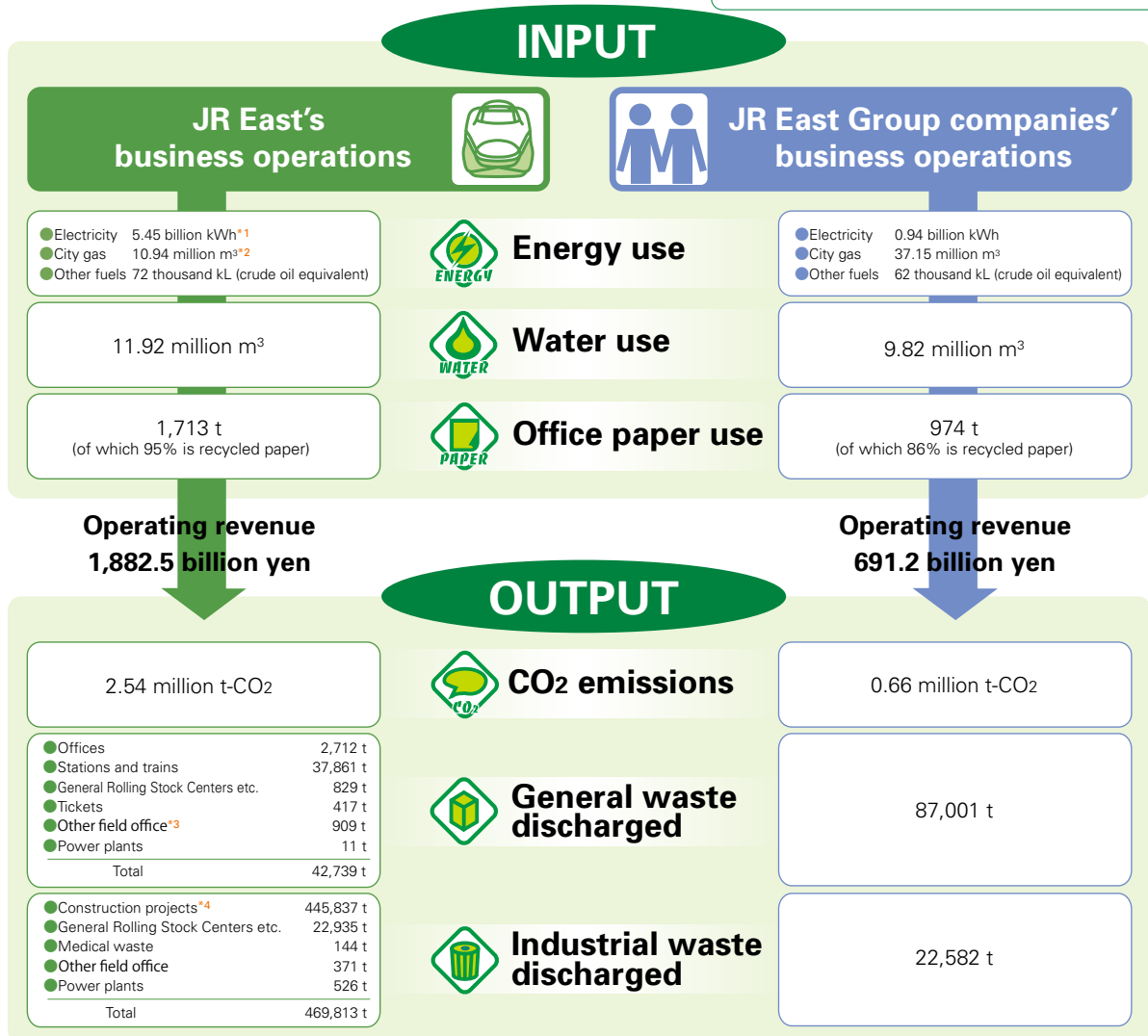
Activity guidelines for the promotion of ecological activities (established March 1996 and partially revised in February 1998)

1. We work to prevent the waste of precious energy resources and to reduce CO₂ 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 generation of such substances and 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 amount generated, and to use more recycled and resource-saving products to minimize our burden placed upon the environment.
4. We respect the natural environment, which nurtures diversified life, and endeavor to reduce noise and vibrations caused by train operations, thus achieving harmony with the environment along railway lines.
5. We work to make railways a more attractive and environmentally friendly form of transportation.

JR East Group's environmental impact

Waste disposal

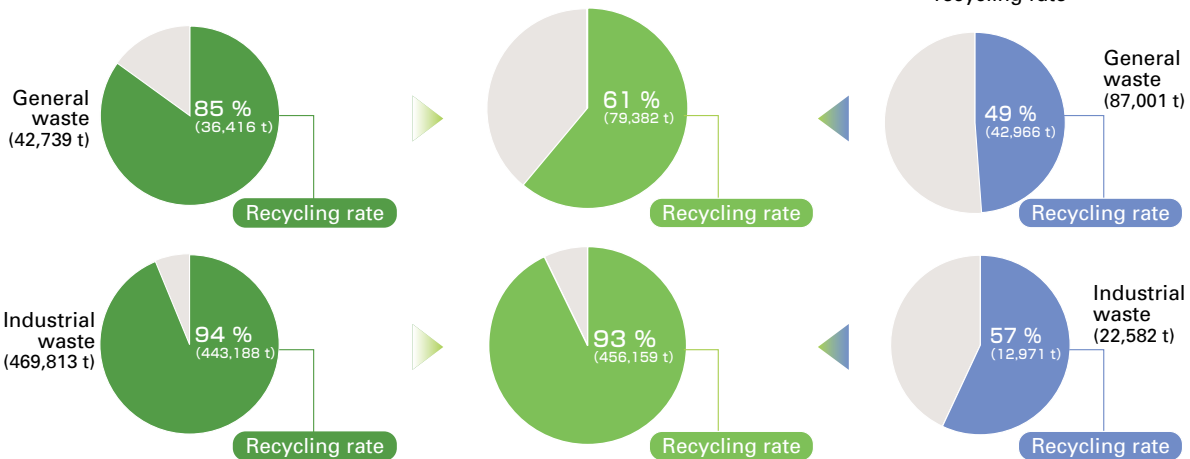
• Waste includes salable waste.
 • Normal waste and certain types of industrial waste are generally disposed of by incineration, which we regard as recycling when a thermal recycling* method is used.
 ***Thermal recycling** A recycling method in which the heat arising from the incineration of waste is used to create steam and warm water, which in turn are used to generate electricity and hot-water.



■ JR East's recycling rate

■ Whole JR East Group's recycling rate













■ Group companies' recycling rate



*1 **Electricity** Both electricity generated in JR East's power plants and used internally and electricity purchased from electric companies are included.
 *2 **City gas and other fuels** Fuel used for generating electricity in JR East's thermal power plants is not included.
 *3 **Other field office:** Technical center and conductor's depots, etc., engaged in the maintenance of equipment.
 *4 **Construction projects** Waste generated by our construction projects, but for which contractors legally become the waste-discharging entity, are included in industrial waste.

Targets and outcomes

■ Accomplishment of environmental targets for the fiscal year ended March 2010 and new targets to be met in the fiscal year ending March 2011

Category of environmental conservation activities	Main activities	Targets to be met by fiscal 2011	Results for fiscal 2010	Results*1
Measures to prevent global warming	Total CO ₂ emissions from railway business activities	50% reduction by fiscal 2031 (relative to fiscal 1991 level) 2.76 million t-CO ₂ → 1.38 million t-CO ₂ (reduction by 1.38 million t-CO ₂)	2.54 million t-CO ₂ (8% reduction)	
		32% reduction by fiscal 2018 (relative to fiscal 1991 level) 2.76 million t-CO ₂ → 1.88 million t-CO ₂ (reduction by 0.88 million t-CO ₂)		
	Energy-efficient railcar utilization rate	86%	88%	 Achieved 
	Electricity used for train operation	2% reduction (relative to fiscal 2007 level) 4.17 billion kWh → 4.09 billion kWh (reduction by 0.08 billion kWh)	4.02 billion kWh	 Achieved 
	Train electricity used per unit transport volume	2% reduction (relative to fiscal 2007 level) 1.85 kWh/car-km → 1.81 kWh/car-km (reduction by 0.04kWh/car-km)	1.77 kWh/car-km	 Achieved 
Measures for resource circulation	Energy saving at stations and offices	4.5% reduction (relative to fiscal 2007 level) 15.3 billion MJ → 14.6 billion MJ (reduction by 0.7 billion MJ)	15.4 billion MJ	
	Recycling rate for waste generated at stations and on trains	70%	86%	 Achieved 
	Recycling rate for waste generated at General Rolling Stock Centers, etc.	95%	93%	
	Recycling rate for waste generated in construction projects	92%	95%	 Achieved 
Environmental activities along railway lines	Recycled office paper utilization rate	100% (Fiscal 2010 targets have been achieved)	100%	 Achieved 
		Reduction of noise to 75dB or less along the Tohoku and Joetsu Shinkansen Lines*3 (in designated noise control area)	100%	100%
Environmental communication	Participation in specific environmental protection activities every year	Participation in tree planting, etc.	49 thousand trees planted at 19 locations	
Environmental management	[A new establishment] Setting of numeric targets by all group companies	All group companies set their own numerical targets	Established	

■ Targets for the JR East Group

*1 Results indicate achievements as at the fiscal year ended March 2010.

*2 Recycled office paper utilization rate Papers sold as recycled paper by manufacturers are calculated as recycled paper.

*3 Measures to reduce noise along the Tohoku and Joetsu Shinkansen Lines We have completed measures to reduce noise to 75dB or less, guided by the national government. For other areas we have independently carried out improvement projects and completed them during fiscal 2010.

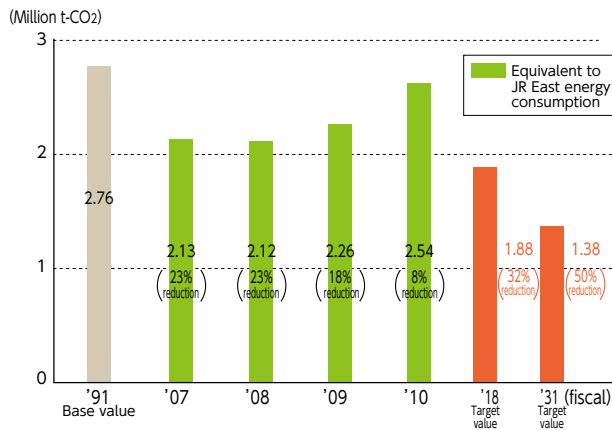
Measures to Prevent Global Warming

CO₂ emissions and reduction measures

Our CO₂ emissions in the fiscal year ending March 2010 totaled 2.54 million tons, an increase of 0.28 million tons over the previous fiscal year. The reasons for the increase include the operating rates of our own thermal plants which were designed to compensate for the suspension of operations at our hydroelectric power plants. We are determined to continue to reduce energy used for train operation, which accounts for 70% of the total energy we consume.

We will also undertake a range of measures to reduce CO₂ emissions, including energy conservation actions for which new targets are being set for stations and offices.

■ Trends in total JR East CO₂ emissions



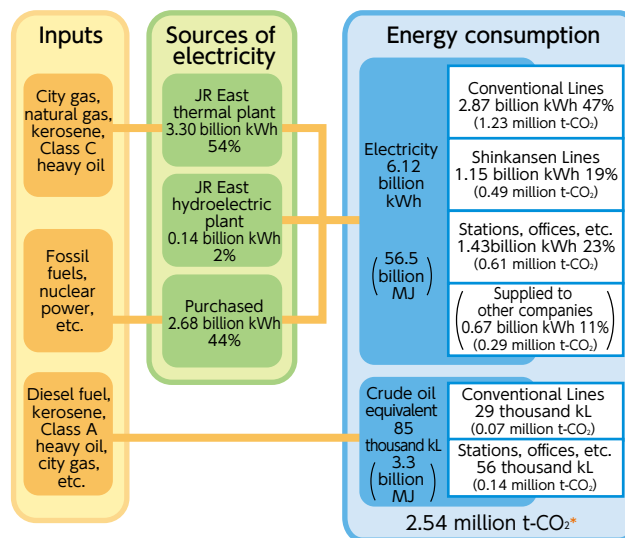
*Calculation methods

Beginning in the fiscal year ended March 2007, energy consumption and CO₂ emissions were calculated based on the Act on the Rational Use of Energy (Energy Conservation Law) and the Act on Promotion of Global Warming Countermeasures (Global Warming Measures Law), respectively. Since the end of the fiscal year ended March 2010, however, CO₂ emissions from electricity usage have been calculated based on post-adjustment emission coefficients by electricity providers, published by the Ministry of Environment in its official journal. These changes have been instigated because, under the Federation of Electric Power Companies of Japan's Environmental Action Plan promulgated by the Japanese Electric Utility Industry, the major management target values reflect the Kyoto mechanism credits in the way designated in the Global Warming Measures Law. Using the actual emissions coefficients, emissions for the fiscal year ending March 2010 stood at 2.82 million t-CO₂ (an increase of 0.56 million t-CO₂ compared to the fiscal year ending March 2009).

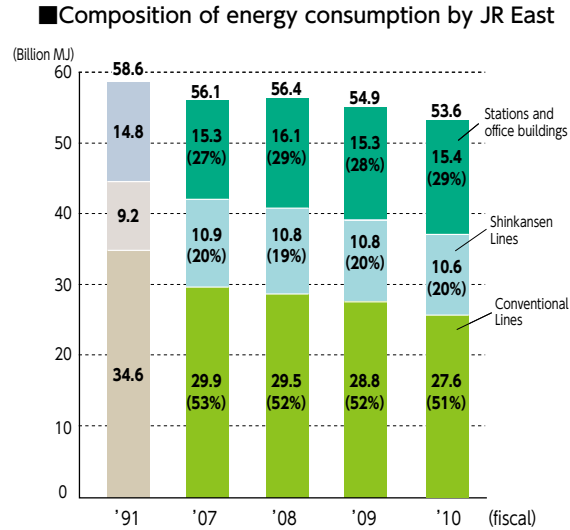
Energy conservation and CO₂ reduction

The electricity consumed by JR East for train operations as well as for lighting and air conditioning at stations and in offices is supplied by JR East's own power plants and by electric power companies. Besides electricity, we also use diesel fuel and kerosene for diesel train operation and air conditioning at stations and in offices. We will strive to save energy in various ways and reduce CO₂ emissions.

■ JR East Energy flow map



* 2.54 million t-CO₂ Excluding supply to other companies



Reducing energy consumed for train operations

As of the end of March 2010, JR East had 10,883 energy-efficient railcars in operation. This accounts for 88% of our railcar fleet.

We are putting into service more new-generation energy efficient railcars, with features such as regenerative brakes, which can convert kinetic energy during deceleration into electric energy, and variable voltage variable frequency (VVVF) inverters, which control motors without wasting electricity.



E233 series
State-of-the-art cars introduced on the Chuo Line in December 2006.



E2 series
VVVF inverter railcars used for Shinkansen "Asama" and "Hayate" trains.



E231 series
VVVF inverter cars for commuter and suburban transportation.

Diesel-powered, electric-motor-driven hybrid railcars and new resort trains

The Kiha E200 Type cars, which entered service on the Koumi Line in July 2007, are the world's first diesel-powered, electric-motor-driven hybrid railcars. A similar hybrid system will be employed on new resort trains that will enter service in the fall of 2010. This is expected to reduce fuel consumption rate by about 10% and nitrogen oxide (NOx) exhaust emissions by about 60%, in comparison with current trains. Also, the level of noise when idling at stations and when accelerating on departure is expected to be lower by 20-30dB.



A hybrid resort train

New electric railcars introduced on the Keiyo Line

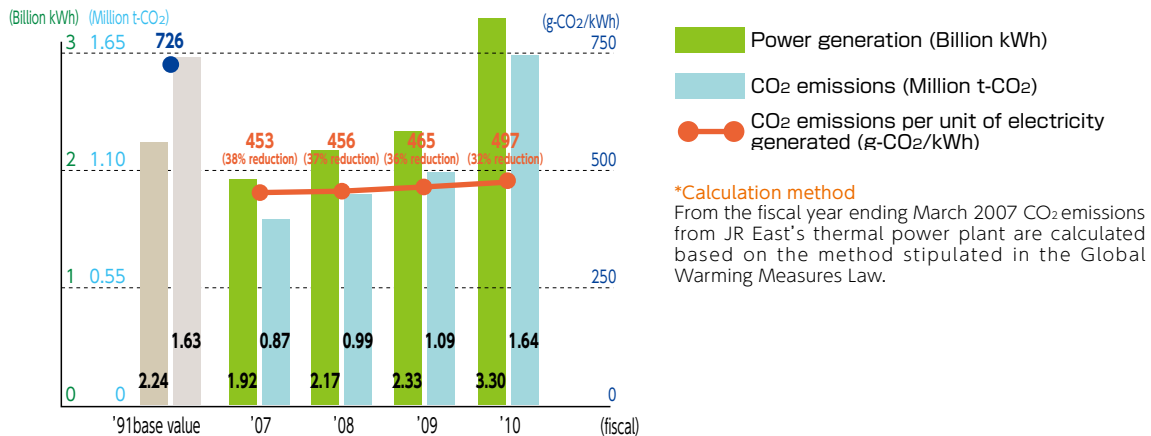
Following their successful introduction on the Chuo Rapid, Ome-Itsukaichi, Keihin Tohoku, Tokaido, and Joban Local Lines, the E233 series railcars were further developed and introduced on the Keiyo Line as replacements for the outmoded 201 and 205 series. In addition to the features of the E22 series introduced on the Chuo Rapid Line, the new Keiyo Line wine red banded cars facilitate the broadcasting of video advertisements, news and weather reports via WiMAX (high-speed wireless communication), and, furthermore, offer Keiyo Line-specific security devices.

JR's own power plants

JR East operates a thermal power plant in Kawasaki City, Kanagawa Prefecture, with a total output of 655 thousand kWh. At the plant, we replaced three of its four generating units with combined-cycle power generation units* with improved generating efficiency. In June 2006 we replaced kerosene with natural gas as fuel for the No.3 generation unit. In an effort to further reduce CO₂ emissions, we will replace the last steam-powered generation unit using heavy oil with a combined-cycle generation system using natural gas in 2013.

* A combined-cycle power generation unit is a power generation unit that combines gas turbines propelled by combustion of gas with steam turbines driven by steam from the exhaust heat.

■ Power generation and CO₂ emissions at JR East's thermal power plant



Utilization of natural energy

We also promote use of natural energies, including solar and wind power. Solar panels are installed at Tokyo Station, Takasaki Station, General Education Center, and R&D Center. Takasaki Station doubled its solar panels in March 2004.

In addition, solar panels will be installed at Tokyo Station above the platform serving Tokaido Line tracks No. 9 and 10, and are scheduled to be operational during the fiscal year beginning April 2010. Also, in preparation for employing wind-power generation, we will carry out research to determine whether there are effects when electricity generated by wind power (which fluctuates according to wind velocity) is routed to a transformer substation.



Solar panel installed atop platform roofs at Takasaki station.



Installation of solar panels is planned also at Tokyo station.

Greening rooftops

We have been promoting the planting of greenery on JR East-owned station and office building rooftops with the aim of reducing the heat island effect and decreasing the need for air-conditioning. As of the end of March 2010, we had “greened” a combined rooftop area of approximately 14,900 m² in 45 projects.



Rooftop greenery at Lumine Kitasenju

Ebisu Green Garden: The birth of a rooftop garden in JR Ebisu

We provided an oasis for local residents and office workers with the April 29, 2009 opening of Ebisu Green Garden, a spacious rooftop garden rich in greenery with many herbs and other plants. We also have supported the local community through the launch of Soradofarm, a rental vegetable garden (opened in September 2009) that allows local residents to experience agricultural and environmental education through the delights of vegetable planting and care. Both areas (a total of 2,100 m² of which 500 m² is occupied by the vegetable garden) have been highly appreciated by visitors.

Environmental management at large underground stations

When we began our equipment renewal work at Ueno Station and the underground Keiyo Line area in Tokyo Station to eliminate the use of CFCs, we reviewed the capacity of cooling equipment for air conditioning and employed inverter controls. We also endeavor to reduce energy by monitoring operations and exercising optimum operating control based on diagnosis using our Building Energy Management System (BEMS). As a result, in the fiscal year ending March 2010, energy consumption by air conditioning units was down by 50% (from the level of the fiscal year ending March 2005 and March 2008 for Ueno and Tokyo Stations, respectively).

Saving energy in office buildings

In response to revisions to laws and regulations, saving energy in office buildings has become increasingly important. We work hard on reducing energy consumption both in hardware, including the introduction of highly efficient equipment and facilities, and in software, including temperature management of air conditioning and diligently turning off lights.

Environmental Measures: A Case History

JR East's Sapia Tower has been awarded S Rank certification, the highest CASBEE (Comprehensive Assessment System for Built Environment Efficiency) assessment.

Sapia Tower, a part of Tokyo Station City, is the first JR East facility to obtain CASBEE's* highest assessment. The tower's following attributes were highly evaluated: Facility performance including the adoption of highly efficient equipment and measures for building longevity; consideration for street scenes and landscapes; re-use of rainwater and drainage and separated collection and reduction of garbage; and interior amenities.

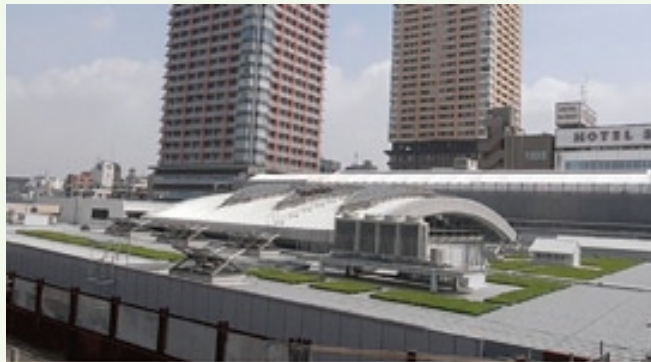
*CASBEE (Comprehensive Assessment System for Built Environment Efficiency)

The CASBEE evaluation system is based on levels of environmental efficiency advocated by the Ministry of Land, Infrastructure, Transport and Tourism, including the quality of the environment and performance improvements such as interior amenities and consideration for landscapes, in addition to environmental impact reductions including energy/resources conservation and recycling capabilities based on a comprehensive assessment of environmental efficiency.

Environmental Measures at ecute Nippori

Ecute Nippori is an example of how JR East is actively working toward the reduction of global environmental burdens through the following measures:

1. The greening of the station rooftop which is within view of Yanaka Reien cemetery, an area rich in greenery, was aimed at allowing the station to blend in with its surrounding neighborhood, as well as reducing heat emissions from the roof during hot summer days and bringing about a reduction in air conditioning demand, while, at the same time, providing a comfortable station space.
2. By equipping the building totally with LED lighting, the annual electricity consumption was lowered dramatically, the number of lights actually necessary was reduced, and due to lower heat emissions produced by the lights, the air conditioning burden was considerably lessened.
3. Thorough separation of waste food was implemented resulting in a food recycling ratio of 100% with biomass energy.



Greening of a station rooftop

Saving energy used by information systems

Energy consumption by information systems has increased dramatically over the past several years and has become a genuine social problem. In order to respond to this issue, JR East succeeded in reducing electricity usage by 6,400kWh by switching off the power consumption of certain information system equipment when not in necessary use. In the fiscal year ending in March 2011 we intend to make further reductions by expanding the scope of target equipment.

Intermodal Transportation = Reduction of CO₂ emissions by the entire transportation system

Promoting Park-and-Ride

We are adding parking spaces in front of stations in order to promote park-and-ride schemes so that our customers with tickets for the Shinkansen or limited express trains can drive their cars from home to nearby stations and use the train network from there. By the end of March 2010, 91 JR East stations had parking spaces for ten thousand cars*. Not only can people get to their destinations safely and surely, without getting bogged down in traffic congestion, but they can travel with less impact on the environment.

*Parking spaces for ten thousand cars. Parking spaces include those developed by JR East, and those managed by JR East Group companies or in cooperation with local municipalities.

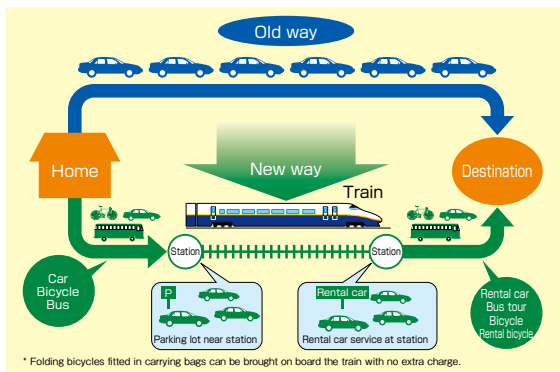


At 10 stations between Tomobe and Iwaki on the Joban Line, parking charges are free for express train customers going farther than a specified distance.

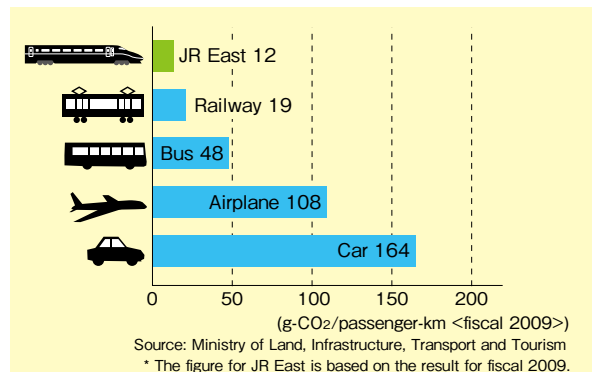
Promoting rail and car rental

To suggest to our customers travel plans that use a combination of railways and automobiles, JR East has been offering a car rental service called “Train-ta-kun” since 1995, with discounted rental charges. We are facilitating intermodal transportation* by introducing new classes of automobiles, such as light cars, offering attractive rates, and installing car navigation systems and ETC as standard equipment on rental cars.

■ Intermodal transportation



■ CO₂ emissions by mode of transportation



*Intermodal transportation refers to a transportation system which allows a person to get from an origin point to a final destination by connecting between different modes of transportation.

Environmental Measures: A Case Study

Toward the Achievement of Environment-friendly Stations

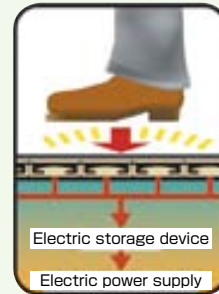
As part of our goal of dramatically reducing our energy needs in stations and offices, since January 2009 we have been actively introducing flat screen LED information displays which use 60% less energy than traditional products. To date we have installed 2,438 such displays at 175 stations, mainly in the Tokyo metropolitan area (as of April 1, 2010), and we intend to continue to decrease our energy consumption levels in stations.

Power-generating floor demonstration experiment

We have conducted three experiments at Tokyo Station ticket gate areas to confirm the generation capacity and durability of a form of flooring that generates electricity from the pressure of people walking on it. The system generates electricity from the vibrations caused by the deformation of piezoelectric elements under the floor as people walk on it. After its initial test success, we are continuing with research and development in cooperation with JR East Consultants Company, with the aim of its eventual widespread introduction to stations and office buildings.



Demonstration experiment at Tokyo Station



Mechanism of the power-generating floor system

Measures to create a sound material cycle

Reducing waste and recycling

JR East generates many kinds of waste through its railway operations, including daily trash removed from trains and stations and industrial waste from our General Rolling Stock Centers. In addition, restaurants and retail stores in our life-style businesses produce garbage and general waste. In order to reduce all these various forms of waste, JR East actively supports the approach known as “reduce, reuse, recycle.” For recycling in particular, goals are set for each type of waste.

Recycling waste collected from stations and trains

In the fiscal year ending March 2010, waste collected from our stations and trains amounted to 38 thousand tons. Since waste collected from our stations and trains includes recyclable materials, we endeavor to properly sort it and recycle it. JR East has installed separate refuse bins for different types of waste at stations, and has established its own recycling centers in the Tokyo metropolitan area to ensure thorough sorting of waste after it has been collected. Beginning with the fiscal year ended March 2008, thermal recycling was also taken into account and the definition of recycling was partly revised during the fiscal year ended March 2010.

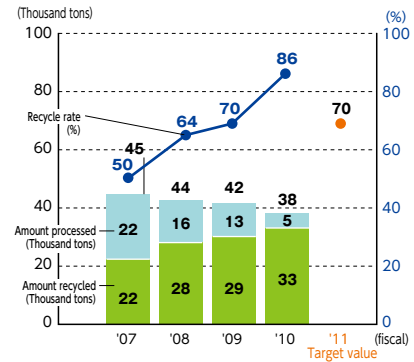
Recycling initiatives at General Rolling Stock Centers, etc.

JR East Group is recycling waste generated during the manufacture and maintenance of rolling stock. At the Niitsu Rolling Stock Manufacturing Factory, we promote waste reduction and recycling, taking into account the railcars’ entire life cycle starting at the time of designing. At our regional General Rolling Stock Centers, waste is sorted into 20 to 30 categories to reduce waste generation and promote recycling. Starting in the fiscal year ending March 2006, we have included our retired railcars that were sold to outside parties and later scrapped as part of the quantities recycled by the JR East Group when calculating our recycle rates.

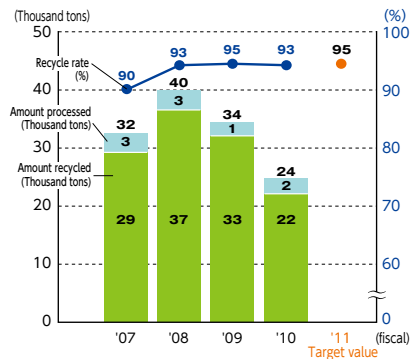


At Nagano General Rolling Stock Center, retired wheels are recycled into brake disk parts.

Waste from stations and trains



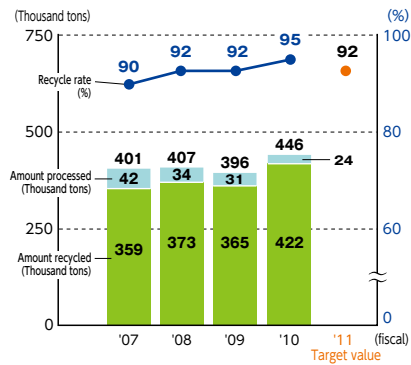
Waste from General Rolling Stock Centers



Reducing construction waste

JR East endeavors to reduce waste from construction by requiring subcontractors to use design and construction methods allowing them to properly dispose of construction byproducts and to minimize waste. In the fiscal year ending March 2010, JR East generated 446 thousand tons of waste through construction and maintenance projects at our stations and other structures, including 76 thousand tons of waste through work entrusted to JR East.*

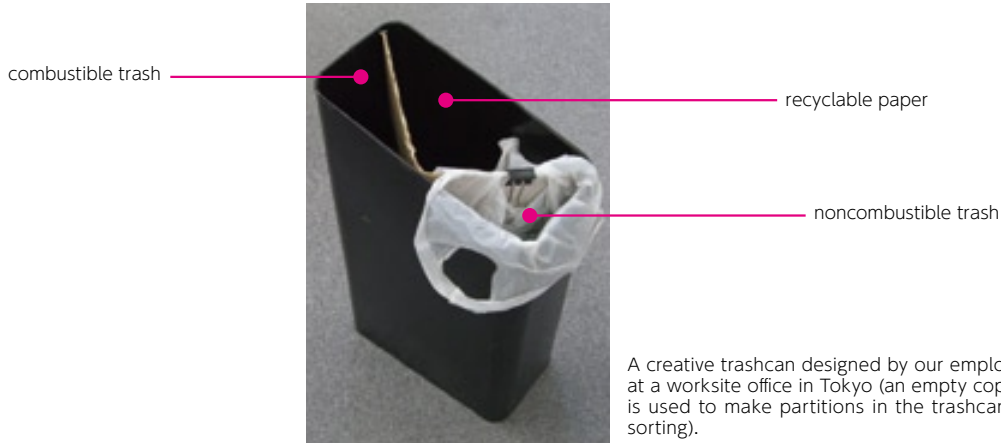
■ Waste from construction projects



*Work entrusted to JR East: Construction work contracted to JR East by local governments etc., to be done at non-JR East facilities, for such purposes as to ensure safe train operations.

Reducing waste at offices

In departments at the Head Office and branch offices, we strive to reduce waste by promoting elimination of paper and by recycling, including the use of creative, employee-designed trashcans. In the fiscal year ending March 2010, we recycled 2,297 out of a total of 2,712 tons of waste (85%).



A creative trashcan designed by our employees is seen at a worksite office in Tokyo (an empty copy-paper box is used to make partitions in the trashcan, facilitating sorting).

Efficient use of water resources

As a consumer of 11.92 million m³ of water annually, JR East actively promotes the use of recycled waste water*, using, for example, rainwater and water already used for washing hands to flush toilets. At the Head Office building, 23 thousand out of 41 thousand m³ of water was reused in the fiscal year ending March 2010.

*Recycled waste water: Defined as water of a quality level between clean water and sewage water. It is used for limited purposes as a recycled resource.

Reducing and recycling tickets, etc.

Collected used tickets are sent to a paper mill. After the iron powder has been separated from the backs of the tickets, the paper is recycled to make toilet paper and corrugated cardboard. In the fiscal year ended March 2010, all of the 417 tons of collected tickets, etc., was recycled. Collected magnetic season tickets were recycled into solid fuel.



Used tickets collected at stations are recycled into toilet paper that is used at major stations in the Greater Tokyo Metropolitan Area.

Promoting green procurement

As part of ecological activities balancing environmental protection and business, JR East promotes the procurement of products with lower environmental impact, and in 1999 formulated the “JR East Green Procurement Guidelines.” 52% of office supplies are subject to green procurement. When we choose a supplier of materials, we investigate its environmental and CSR activities, and use what we find as a factor in our decision.

Recycling trash within the company

JR East promotes recycling within the company of trash generated at stations. Paper from recycled tickets is used as toilet paper at major stations in the greater Tokyo metropolitan area, while magazines collected in magazine trashcans on trains and at stations are recycled into coated paper and used to produce the information magazine “Train Vert,” which is distributed on the Shinkansen. Newspapers are also recycled and used internally as copy paper.



The information magazine “Train Vert” in the Shinkansen is made using paper recycled from magazines, etc., discarded in trashcans at stations or left on trains.

Recycling waste PET bottles into civil engineering materials

JR East has constructed a recycling system that produces resin weed barrier sheets (product name: Nakusa R-PET) by recycling the PET (Polyethylene terephthalate) bottles discarded in stations and trains. The main ingredient for resin weed barrier sheets used to be polyethylene but JR East has developed a weed barrier sheet composed mainly of waste PET bottles, and after testing has succeeded in producing and commercializing the product.

Chemical substance management

Compliance with laws and setting goals for reduction of chemical substances

When using chemical substances, the effects on human health and ecological systems must be fully considered. The JR East Group not only rigidly adheres to established base values, but sets its own ambitious targets as well. As much as possible, we restrict the use of such substances and adopt environmentally responsible substitutes.

Reducing and replacing ozone depleting substances

We endeavor to reduce the use of substances specified as controlled substances under the Ozone Layer Protection Law and adopt environmentally friendly substitutes.

- Large heat exchangers (Large refrigerators) - Having steadily replaced air conditioning units using specified chlorofluorocarbons (CFCs) with systems that do not use them, we completed the removal of such units from buildings by the end of March 2008.
- Rolling stock - Except for some diesel railcars, all of our cars use CFC substitutes. As of March 2010, we were using 88 tons of CFC substitutes and only 0.5 ton of CFCs. We routinely check for gas leaks, and collect the refrigerants when scrapping retired railcars in accordance with applicable laws and regulations.
- Fire-extinguishing agent - Although 65 tons of halon gas was still in use as a fire-extinguishing agent as of March 2010, we have it under proper control and are replacing it with non-halon agents (such as powder agents and CO₂) when building new facilities or renovating existing ones.

Chemical substance management

As JR East uses chemical substances primarily for painting and repairing our railcars, we take rigorous steps for their use and management in order to prevent their leakage. We are a company that handles a considerable amount of specified chemical substances, and 14 JR East facilities submitted the data regarding the release and transfer of these substances to relevant authorities in the fiscal year ended March 2010, pursuant to the PRTR Law.*

We are also promoting the introduction of stainless steel railcars that do not require painting. At the end of March 2010, as many as 79% of the 10,770 cars operated on our conventional lines were stainless steel railcars. Beside their use for railcars, we used 457 tons of organic solvents for painting railway facilities and stabilizing track beds in the fiscal year ended March 2010.

*PRTR stands for "pollutant release and transfer registers." The formal name of this law is Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof. The law encourages the assessment and control of toxic chemical substances emitted into the environment and measures to prevent negative impact on the environment.

■ Amount released and transferred from 14 reporting-required facilities

Chemical substance	(kg)			Chemical substance	(kg)		
	Released into air	Released into sewerage	Transferred to other facilities		Released into air	Released into sewerage	Transferred to other facilities
2-Aminoethanol	0	0	150	Xylene	26,990	0	4,067
Condensation polymer of 4,4'-isopropylidenediphenol and 1-chloro-2,3-epoxypropane (Bisphenol A Type Epoxy Resin) (liquid only)	0	0	2,900	Chromium and Chromium(III) compounds	0	0	46
4,4'-methylenedianiline	0	0	350	Dichloromethane (Methylene chloride)	4,200	0	2,500
o-toluidine	0	0	170	Styrene	1,200	0	0
Ethylbenzene	2,500	0	1,800	Toluene	13,690	0	14,564
Ethylene glycol	0	0	8,700	Nickel	0	0	0
				Molybdenum and its chemical compounds	0	0	0

* Note:

There was no release to soil, public water supply or disposal by landfills.

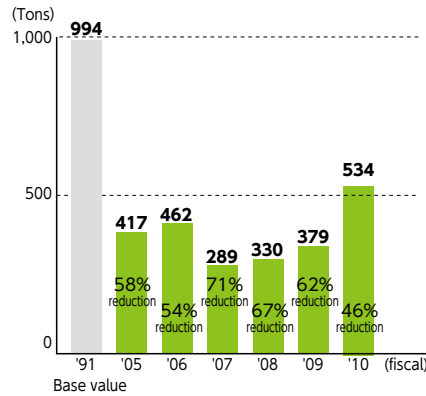
Among the substances for which reporting is required, those that were actually released or transferred are posted here.

Reducing emissions from JR East's thermal power plants

We use natural gas, kerosene and Bunker C (low-sulfur heavy oil) at JR East's thermal power plants. When these fuels burn, however, nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM) are emitted. In the fiscal year ending in March 2010, increases to the operating rates at our thermal power plants resulted in increased NOx emissions.

We endeavor both to control the generation of these substances and to reduce the total amount of emissions by installing denitrification equipment, low-NOx burners and dust collectors at the plants.

■ NOx emissions from JR East's thermal power plants



Management of PCBs

Equipment containing PCB's is securely stored at 82 locations and reports on it are filed as required by laws and regulations. We neutralize this equipment to the extent that can be done by PCB waste treatment facilities. In the fiscal year ended March 2010, we treated 409 units of equipment such as transformers and capacitors.

Basic thoughts on noise reduction

Improvement of the environment along railways: Basic thoughts on noise reduction

In the operation of trains, noise is created by the train cars moving through the air, by the wheels travelling on the rails, by the motors, and by other sources. In order to reduce noise, we are working in various ways to improve both the trains and our ground equipment.

JR East also endeavors to reduce noise during maintenance work on track and structures to further improve the environment along the lines.

Measures for the Shinkansen

In accordance with the Japanese government's Environmental Quality Standards for Shinkansen Railway Noise, JR East has taken many steps to reduce this noise, such as the installation of soundproof walls and sound-absorbent materials, rail grinding^{*1} and the modification of our railcars to operate more quietly. We have already completed the implementation of measures to reduce noise levels to 75 dB or lower in densely populated residential areas along our railway lines, and we plan to take further steps by expanding the scope of areas where noise levels need to be reduced to 75 dB or lower. Also, with the introduction of E5 Series railcars, which were developed based on the results of running tests using the Shinkansen "FASTECH" test train, JR East is working to improve the environment even as we increase train speed, including further reduction of noise and micro-pressure waves in tunnels^{*2}.

^{*1} **Rail grinding** A measure to smooth out uneven places in rails caused by wheels traveling over them. This reduces noise by controlling car vibration.

^{*2} **Micro-pressure waves in tunnels** An explosive sound caused by compressed air being forced out of a tunnel when a Shinkansen train enters it at a high speed. The sound is produced at the end of the tunnel.



The E5 Series employs low-noise pantographs.

Measures for conventional lines

We have implemented voluntary measures for conventional lines to minimize noise, installing long rails^{*1} and performing rail-grinding and wheel-truing^{*2}. We also comply with the Japanese government's Policy on Noise Measures for Construction of New Conventional Railways or Large-Scale Remodeling when we engage in this kind of construction or modification of our conventional lines.

^{*1} **Installing long rails** Rail joints are welded such that the length of a single rail becomes more than 200 meters. With fewer rail joints, these rails reduce noise produced at joints when trains pass.

^{*2} **Wheel truing** A measure to grind the unevenness of wheels caused by wear, to restore their circular shape.

Measures for maintenance work

As the maintenance work is usually done during night, we give advance notice about the schedule and details of the work to residents in surrounding areas. We also make utmost efforts to minimize noise by using modified equipment producing lower noise.

Furthermore, by using track that is designed to resist deformation, JR East is reducing the volume of required maintenance work.

Improvement of Environment along Railway Lines

Restricting use of herbicides

Safe train operations require regular removal of weeds along railway lines. While we generally remove them manually, we also use a certain amount of herbicide. We keep the usage of herbicides to a minimum in both volume and range of use. When selecting herbicides for use, we select those from the safest of the three levels of toxicity for those toxic to humans and animals, and from Category A, the safest of the five levels, for those toxic to fish. We continue to observe the rules in place in order to keep our impact on the surrounding environment to a minimum, as with our initiative to postpone the spraying of herbicides when conditions on the scheduled day are not satisfactory for spraying.

Harmony with the landscape

Constructing a large-scale railway facility or remodeling one can affect the immediate area and surrounding environment, and their design is increasingly important. From the stage of planning and designing, we consider harmony with the landscape along with function and economy, endeavoring to build facilities friendly to the regional environment. In the fiscal year ended March 2009, the Tenmagawa Bridge (between Kamikitamachi and Ottomo on the Tohoku Main Line) received the Civil Engineering Design Prize of the Japan Society of Civil Engineers - a recognition of our efforts by a distinguished outside party.



Using continuous concrete arches, the Tenmagawa Bridge, between Kamikitamachi and Ottomo on the Tohoku Main Line, sits in harmony with the mountains and pastoral landscape of Aomori Prefecture and received the 2008 Civil Engineering Design Prize of the Japan Society of Civil Engineers.

Use of groundwater in tunnels to purify rivers

Groundwater in underground tunnels is typically pumped out and drained away. JR East, in coordination with local municipalities, promotes draining clean spring groundwater in tunnels into surrounding rivers to purify water and improve the environment. In Tokyo, we started draining clean groundwater to the Nogawa River (via Sugatami Pond) in the fiscal year ending March 2002, to the Tachiai River in the fiscal year ending March 2003, and to Shinobazu Pond in the fiscal year ending March 2004; and, in Kanagawa Prefecture, to the Yahagi River in the fiscal year ending March 2008.



Routing tunnel groundwater to the Tachiai River

Forest development along railway lines

Since 1992, we have implemented tree plantings along railway lines to create railway forests. By March 2010, we had planted some 290 thousand trees with the involvement of about 42 thousand people. We are now working together with people in local communities on planting trees in other places as well as along railway lines.

Environmental Management System

Creating an environment-conscious climate

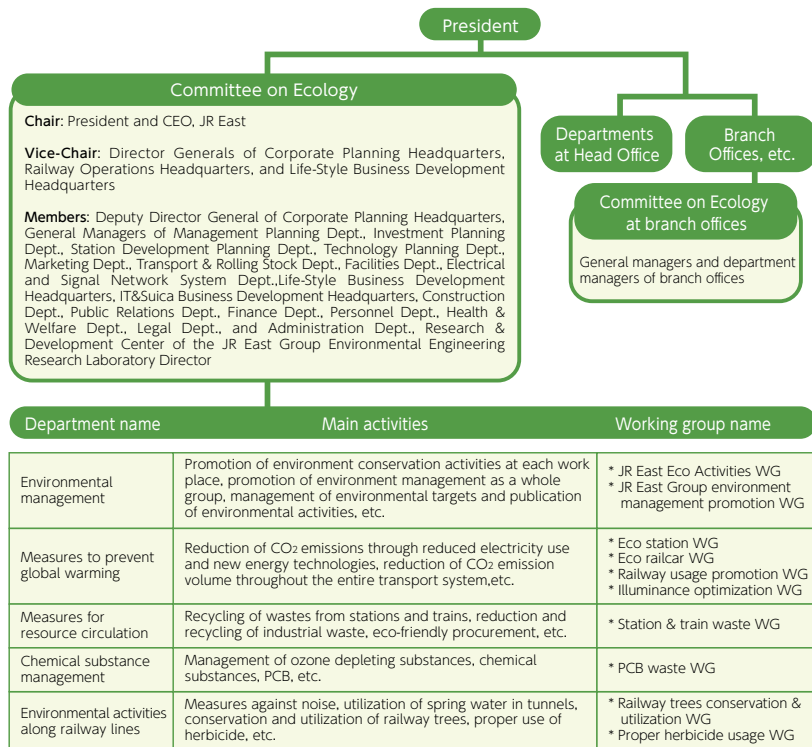
JR East believes that it is important to promote environmental activities with clear goals established for the entire JR East Group, and that every employee becomes actively involved. In order to build a climate in which all employees do so voluntarily, we are expanding the scale of our environmental activities by promoting “JR East Eco Activities” at each work place, developing leaders through environmental education, and sharing recognition of exceptional environmental efforts through the presentation of awards.

Established in 1992 and chaired by the president and CEO of JR East, the Committee on Ecology surveys the environmental impact of business activities, sets environment-related targets, implements environmental conservation activities and monitors progress toward target achievement, which is also examined by top management.

Establishment of the Environmental Management Office

To strengthen our organization to proactively address global environmental issues in the long term, JR East established the Environmental Management Office in its Management Planning Dept. on July 1st 2010. The Environmental Management Office will manage the various environmental laws, the education of each of our employees to improve environmental awareness, and the formulation of environmental strategies as a whole for the JR East Group.

■ Organizational structure to promote environmental management (as of July 1, 2010)



Implementation of in-house environmental education

In-house environmental education

For effective environmental management, it is essential that all employees have appropriate knowledge on environmental issues. We provide environmental education lectures to a large number of our employees, ranging from new employees to people who are promoted in order to develop environmental activities in JR East and group companies. Through these lectures, we aim to expand the scale of our environmental activities. In the fiscal year ending March 2007, to enhance environmental activities at each group company, we began an “Environmental management training” program for people in charge of environmental matters in those companies.

■ Environmental education & training system

Education of environmental-activity promoters at organizations of JR East and group companies
Environment management training (group companies)
<ul style="list-style-type: none"> ● Persons trained: those responsible for environment at group companies ● Objective: improvement of ability in environment management ● Number of participants: 72
Environment management practical training
<ul style="list-style-type: none"> ● Persons trained: those responsible for environment at local organizations, etc. ● Objective: improvement of ability in environment-related matters as trainers to field offices, etc. ● Number of participants: 33
Training for personnel responsible for environmental measures
<ul style="list-style-type: none"> ● Persons trained: those responsible at each branch office ● Objective: acquisition of basic knowledge such as environment-related laws ● Number of participants: 17
Environment education targeting a large number of participants
Training for new recruits: 1,769 Training for work-implementation managers: 237 Training for new on-site supervisors: 167 Implementation of training and lectures in branch offices

Environment-related commendation system

Formal recognition was first extended for contributions to environmental preservation during the fiscal year ending March 2006. The system is to encourage JR East bodies and JR East Group companies to be engaged in environmental preservation, as well as to share information on exceptional efforts. As for activities during the fiscal year ended March 2010, two bodies and two group companies were recognized for their responsible, independent approaches to environmental activities.



Official commendations from the Chair of the Committee on Ecology to organizations dedicated to environmental activities

Internal environmental audits

At our General Rolling Stock Centers, in-house auditors are trained through external training programs, and conduct routine audits at the centers in order to evaluate environmental activities. For the internal environmental audits in the fiscal year ending March 2010, following recommendations to include cafeterias in our environmental activities, we held meetings in the beginning of the fiscal year to make our environmental activities more integrated.

■ ISO14001-certified facilities

Certified facilities	Year and month of certification	Certified facilities	Year and month of certification
(JR East)		(Group companies)	
Niitsu Rolling Stock Manufacturing Factory	Feb-99	East Japan Eco Access Co., Ltd.	Nov-99
Kawasaki Thermal Power Plant	Mar-01	LUMINE Co., Ltd.	Dec-00
Tokyo General Rolling Stock Center	Mar-01	Nippon Restaurant Enterprise Co., Ltd. (manufacturing section)	Sep-02
Niigata Mechanical Technology Center	Mar-01	Nagano Railway Servicing Co., Ltd.	Jan-07
Omiya General Rolling Stock Center	Feb-02	JR East Mechatronics Co., Ltd.	Mar-08
Shinkansen General Rolling Stock Center	Nov-02	East Japan Marketing & Communications, Inc.	Aug-08
Koriyama General Rolling Stock Center	Dec-03		
Nagano General Rolling Stock Center	Feb-05		
Akita General Rolling Stock Center	Jul-05		

Thorough management of chemical substances

JR East is working to establish a system to prevent environmental accidents by more rigidly managing chemical substances. We prepared emergency response manuals for on-site locations such as our thermal power plants and General Rolling Stock Centers that handle chemical and hazardous substances. We are also preparing ourselves to properly respond to any contingencies by holding workshops and training sessions on how to handle such substances, and ensuring that related information reaches all related personnel.

Compliance with environmental laws and regulations

Other than those detailed in this Report, there were no major violations of environment-related laws and regulations resulting in penalties in the fiscal year ending March 2010.

Environmental education for the children to lead the next generation

Development of environmental education by delivering lectures on request

In the fiscal year ending March 2010, to contribute to the development of a sustainable society, JR East initiated environmental education programs for the children to lead the next generation so that they are able to understand environmental issues and their relationships with the society. The program aims to educate children on “Information and the Environment”, a program which we will continue to develop further.



Delivering an environmental education program at an elementary school in Tokyo

Environmental education for children through special events

In November 2009, at *Gastanani*, a gas science museum of Tokyo Gas Co., Ltd., JR East co-hosted the Gas and Railways Exhibition together with Tokyo Gas Co., Ltd. Under the theme of Eco-Wonders of Gas and Rail for Parents and Children, the event was full of ideas to help even small children learn about the environment. Approximately 4,000 visitors attended.



The 7th Gas and Railways Exhibition, co-hosted with Tokyo Gas Co., Ltd.

Environmental Communication

Partnership with society through media

We have published an environmental report each year since 1996 (in 2002, the name of the report was changed to JR East Group Sustainability Report) to provide stakeholders with accurate and easy-to-understand information about JR East activities for the environment and society. Additionally, we also provide information via the Internet, on-board posters and other media.

Development of J-AD Vision (Previous name: Digital Poster)

We have installed media, J-AD Vision, featuring large liquid-crystal screens at several major stations including Tokyo, Shinagawa, Yokohama, Omiya, and Sendai. The screens display a variety of programs depending on the time and the day of the week and, while regular paper advertisements require disposal after posting, the J-AD Vision advertising does not generate any waste material from its broadcasts. JR East is currently planning to increase the number installed.



J-AD Vision at Shinagawa Station



J-AD Vision at Sugamo Station

Eco-tourism

Eco-tourism develops deeper understanding and affection for Japan's natural environment and culture. This fiscal year, to educate people on the attractiveness of the Shirakami mountains area, a World Heritage Site, we held a Beech School lecture in the Tokyo metropolitan area which attracted more than 400 people. Similarly, at our Beech School lecture held in Shirakami, 75 people joined the program. Furthermore, we continue to promote Hiking from Stations in each region, and in the fiscal year ending March 2010, we held 536 hiking trips from stations with approximately 200,000 people in total participating in the events. This year, we also started Eco-hiking, which includes the beautification of Mount Fuji and beeches, with approximately 700 persons taking part in the programs.



Blue Pond, with its distinctly blue water, in a beech forest



Planting trees at Futatsumori



Visiting a natural beech forest

The efforts of each organization

In this section, we would like to introduce the activities of two organizations which actively conducted environmental activities in the fiscal year ending March 2010.

Efforts at the Morioka Branch Office

(1) Conversion of fuels for snow-melting equipment through the use of hot air

In helping to achieve a reduction in its impact on the environment, JR East converted its fuels for snow-melting equipment (such as hot-air snow melting equipment^{*1} and to hot water mats^{*2}) from kerosene to gas. Additionally, by switching to gas, the need for oil management and for user-inspection of oil leakages was eliminated, leading to a reduction in maintenance costs.

^{*1} **Snow-melting equipment using hot air** Utilizing a hot air generator, an air temperature between approximately 70°C and 80°C is created. With fans, the hot air is sent through ducts to heat rails and melt snow at points on and around the tracks.

^{*2} **Snow-melting equipment using hot water mats** With a boiler, water heated to between 40°C and 50°C is circulated inside rubber mats to melt snow on the tracks.



Snow-melting equipment using hot air with gas



Snow-melting equipment using hot water mats



Gas tank

(2) Development of Ecological Activities at JR East

From March 2007, all field organizations of the Morioka Branch Office have been conducting JR East eco-activities, with a total number of 308 themes at 94 offices. To further improve the ecological consciousness of all of its employees, persons in charge of the activities at the Branch Office participate in the eco-meetings held in each area, holding joint opinion exchange meetings and eco-activity debriefing sessions with numerous workplaces, while promoting activities in close coalition between the Branch Office and each area.

(3) Exhibiting at the *Iwate Kankyo Okoku Ten*, an exhibition about the environment, and participation in the council of Iwate prefectural residents for the prevention of global warming

In November 2009, JR East exhibited at the *Iwate Kankyo Okoku Ten* (held at the Iwate Prefecture Citizen's Cultural Exchange Center at the west exit of the Morioka Station and hosted by the Iwate Prefecture and other organizations). At the exhibit, we introduced our railway business and its reduced environmental impact, and a number of our active efforts in environmental conservation, including a power generation system by using differences in temperature, a DVD on the development of the world's first diesel hybrid railway car, and our tree planting activities in coalition with local communities.

Additionally, we are continuing our efforts to reduce CO₂ emissions through our participation in the council of Iwate prefectural residents for the prevention of global warming, hosted by Iwate Prefecture and other organizations, with the goal of working together to reduce the CO₂ emissions by 8%.



Iwate Kankyo Okoku Ten (exhibition of the environment)

Voice



Kazunari Sugawara
 Manager, General Affairs, Div.
 Morioka Branch Office
 (Current: JR East Urban Development Corporation)

Ryoichi Tsukuda
 Deputy Manager
 and **Kiyomi Oshika**

To have all employees thoroughly understand the importance of environmental conservation, Morioka Branch Office has set specific targets in its business plan as part of its efforts to prevent global warming. All 94 workplaces of the Branch Office are working on eco-activities under a total of 308 themes. Additional activities at the Branch Office include the creation of forest along our railway lines in coalition with each region, the introduction of energy-saving fluorescent lamps and guidance boards to reduce energy consumption at offices and stations, and improvements to the recycling of waste generated at stations, on-board and in construction work. Furthermore, the Morioka Branch Office was able to introduce the eco-activities of the Company by improving environment consciousness through lectures on the environment, debriefing sessions on our Sustainability Report, and exhibitions at the exhibition of the environment hosted by the Iwate Prefecture. In December 2010, the Tohoku Shinkansen will be extended to Shin-Aomori. By creating a new station with consideration for the environment, the Morioka Branch Office is committed to strengthen our efforts for eco-activities further with concerted efforts of the Branch Office.

Efforts at the Joshinetsu Construction Office

Making our energy consumption easily visible

The Joshinetsu Construction Office, a small organization of 140 employees, is working on environmental management with the cooperation of the office as a whole, both with corporate measures and with voluntary employee activities.

As an initial step, in order to steadily reduce energy consumption at offices, we established a visual display of our consumption of electricity, kerosene, gasoline, gas, and copy papers in the fiscal year ending March 2010. Based on the visible data, the Joshinetsu Construction Office plans to study its energy reduction potential and implement concrete measures.



Making energy consumption visible through the utilization of in-house intranet

Voice



Yoko Oikawa
 Administration
 Dept.,
 Joshinetsu
 Construction
 Office

In order for all of our office staff to have convenient and immediate access to our energy usage status, we started uploading our energy usage status on a portal site in fiscal 2009.

Through the visual display of our energy consumption, we help to heighten the awareness of employees to further reduce energy consumption at the office through the concerted effort of all employees.

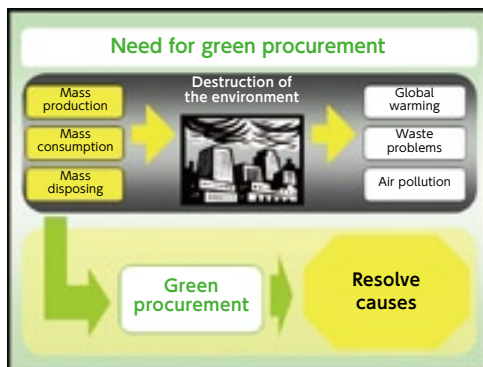
Reports on Ecological Activities at JR East Group Companies

East Japan Railway Trading Co., Ltd.: Promotion of green procurement and environmental management

In April 2008, as part of our environmental management, East Japan Railway Trading Co., Ltd. introduced green procurement to purchase products which cause less environmental impact.

Through environmental training and briefing sessions for those in charge of order placement, we have been able to sustain a high green procurement ratio since its introduction, promoting measures while obtaining employee understanding.

Furthermore, by holding briefing sessions on green procurement together with Group companies, the efforts at the company are not limited to the company itself but extended to the whole Group.



Voice



Ryo Nishiumi

Director-General,
Green Procurement Secretariat,
East Japan Railway Trading
Co., Ltd.

(Current: Life-style Business
Development Headquarters)

Since the Company had no previous experience with green procurement, we began at the beginning, with an understanding of the term itself. Until now, misunderstandings among us, such as opinions stating that green procurement may be good for the environment but leads to increases in costs, had led to confusion. However, through training to have employees understand its necessity, we feel that it is steadily being filtering through at the company.

Nagano Railway Servicing Co., Ltd.: Our efforts in resource saving and improved recycling rates

A major business activity of the Nagano Railway Servicing Co., Ltd. is the cleaning of station buildings and rolling stock. In January 2007, the company obtained an ISO14001 certificate, and is setting specific targets and actively implementing its environmental activities.

(1) Efforts in creating a recycling society

Aiming to create a recycling society, the company is implementing its plan to thoroughly separate burnable trash generated from the cleaning of rolling stock and station buildings to be recycled as used paper, and to reuse trash bags by collecting, washing, and drying them, aiming to balance our business activities and environmental conservation.

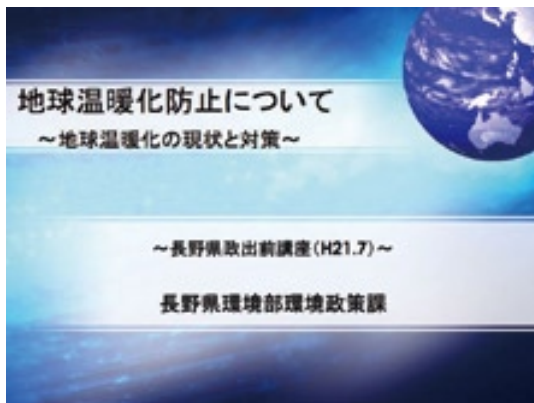


After checking for holes on collected used trash bags, the bags are washed, dried and reused

Used paper is collected and separated (an example is cardboard from lunch boxes)

(2) Increasing employee awareness

To maintain our environmental activities, it is important for us to increase the awareness of our employees with regard to protecting the environment. For this purpose, in utilizing Environmental Delivery Lectures by Nagano Prefecture and Nagano City, we provide education to our employees to deepen their understanding of environmental conservation. The results of these efforts are reflected in the proposals for improvements to environmental issues and in the achievements of QC activities to reduce environmental impact. Additionally, in annual papers produced by employees, their daily environmental activities are frequently discussed.



Voice



Katsuji Kobayashi
ISO Secretariat,
Nagano Railway Servicing
Co., Ltd.

For our environmental activities, we are mainly working on CO₂ reductions in recycling. As a new effort in the prevention of global warming, we will continue to establish a work climate in which each one of our employees actively works on environmental activities while increasing the level of our environmental management system through reducing energy used for our business activities and reducing our CO₂ emissions.

Environmental accounting and management indicators

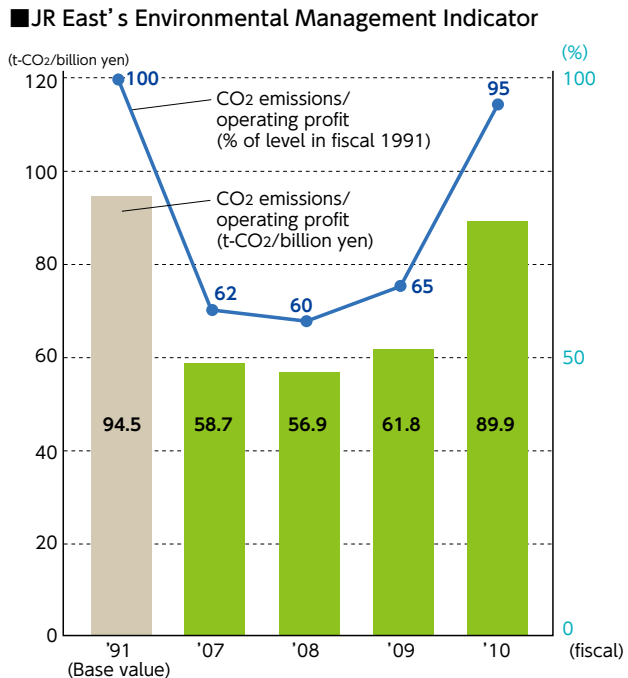
Using Environmental Management Indicators in business activities

In the fiscal year ended March 2010, our environmental conservation costs amounted to approximately 76.9 billion yen in investments and 31.4 billion yen in expenses. Of these investments, costs for global environmental conservation, which accounted for a large portion, were at the same level as the previous year because we continued acquiring new railcars.

By introducing these new cars, we estimate we will reduce CO₂ emissions by 0.18 million tons during their service lives.

JR East has its own Environmental Management Indicator to assess the relation between our business activities and environmental impacts. These are calculated by dividing CO₂ emissions, which are a major factor in environmental impacts, by operating profits, which represent our Economic Value Added (EVA). This means that the smaller the number calculated by this formula is, the more Economic Value Added we have created by giving smaller impacts on the environment. For the fiscal year ended March 2010 the value of the indicator was 89.9 t-CO₂/billion yen, compared with 94.5 t-CO₂/billion yen for the fiscal year ending March 1991.

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



■ Environmental accounting for fiscal year ended March 2010

Category	Environmental conservation costs (billion yen)		Environmental conservation benefits in relation to environmental targets	Fiscal 2008		Economic benefit of environmental conservation activities (billion yen)
	Investments	Expenses		Fiscal 2008	Fiscal 2009	
Environmental conservation (pollution prevention) activities along railway lines	10.48	24.6	Implementation of noise reduction measures along Shinkansen and conventional lines (soundproof walls, continuous welded rail, and other measures) NOx emissions from JR East's thermal power plant	81% 379 tons	100% 534 tons	—
Global environmental conservation activities	65.13	—	CO ₂ emissions through business activities CO ₂ emissions per unit of electricity generated at JR East's thermal power plant Energy-efficient train utilization rate Train energy consumption per unit of transportation volume	2.26 million t-CO ₂ 465g-CO ₂ /kWh 86% 17.5 MJ/car-km	2.54 million t-CO ₂ — 88% —	20.76
Resource circulation activities	1.29	4.98	Recycling rate for waste generated at stations and trains Recycling rate for waste generated at General Rolling Stock Centers, etc. Recycling rate for waste generated through construction projects Recycling rate for general waste Recycled paper utilization rate	70% 95% 92% 47% 92%	86% 93% 95% — 92%	2.51
Environmental management	—	0.37	Taking part in specific environmental protection activities every year (Railway Line Forestation Programs and Tree Planting under the Adatara Hometown Forestation Program)	54 thousand trees planted at 18 locations	49 thousand trees planted at 19 locations	—
Environmental research & development	—	1.37				—
Social activities	—	0.06				—
Total	76.9	31.38				23.27

Notes

Capital investment for the period:
363.7 billion yen

Total R&D costs for the period:
16.5 billion yen *

■ Targets for the JR East Group

* Total R&D costs

Total R&D costs include 5.7 billion yen of costs for basic research and development commissioned to the Railway Technical Research Institute under a research agreement.

The above table's relations with the table for Targets and Results are as follows:

"Environmental conservation activities along railway lines"="Environmental activities along railway lines" and "Chemical substance management"
"Global environmental conservation activities"="Measures to prevent global warming" and "Chemical substance management"
"Resource circulation activities"="Measures for resource recycling"
"Environmental management"="Environmental management" and "Environmental communication"
"Environmental research & development"="Research & development"
"Social activities"="Environmental communication"

(Notes on calculation of environmental conservation costs and benefits)

Environmental conservation costs

○Data are for East Japan Railway Company only (i.e., non-consolidated data).

○Environmental conservation costs are mainly based on data available in the current management system.

○The total costs are treated here as environmental costs where the costs have multiple objectives and result in large environmental benefits.

(e.g., Global environmental conservation costs include the total amount invested in energy-efficient trains).

○Expenses do not include depreciation charges.

○In the costs for resource circulation activities, expenses for treating waste generated at stations and trains are calculated by multiplying the allocations by the Expenses for cleaning stations and train cars, based on a model for cleaning stations and trains.

○In the costs for resource circulation activities, the expenses for treating waste generated through construction projects are calculated by multiplying waste volume for fiscal 2008 by standard unit prices for the type of waste in that region.

Environmental conservation benefit

○Environmental conservation benefits are calculated based on figures set as our environmental targets.

Economic benefit of environmental conservation activities

○Economic benefit of global environmental conservation activities is calculated by multiplying annual savings (estimates are used in some cases) in electricity and repair costs resulting from the introduction of energy-efficient trains by the expected useful life, to determine useful-life economic benefit.

○Income from the sales of waste generated at General Rolling Stock Centers and through construction projects is included in economic benefit of resource circulation activities.

Pursuing “extreme safety levels”



Our concept of safety

Since the establishment of the company, safety has been the top management priority at JR East, and we have worked relentlessly to heighten our levels of safety. Our earnest efforts to learn from unfortunate accidents in the past have enabled JR East to further the prevention of accidents in the future with our continued developments both in software and in hardware.

Safety initiatives in our medium term management plan

In the JR East 2020 Vision - *i do mu* -, we have set two goals to represent our unflinching commitment to “extreme safety levels”: we will continue implementing our priority improvement plan for safety equipment, reinforce safety weak points, and reduce risks; we will expand and improve education and training on safety and prevent accidents by correctly understanding and analyzing previous accidents and incidents.

Launch of our 5th 5-year Safety Plan, 2013 Safety Vision

Since our establishment, JR East has continued to create and implement medium term safety plans. With the installation and further development of our safety equipment, along with companywide advancements in safety awareness and skill, we have succeeded in reducing the frequency of railway accidents drastically from levels at the time of the company’s establishment.

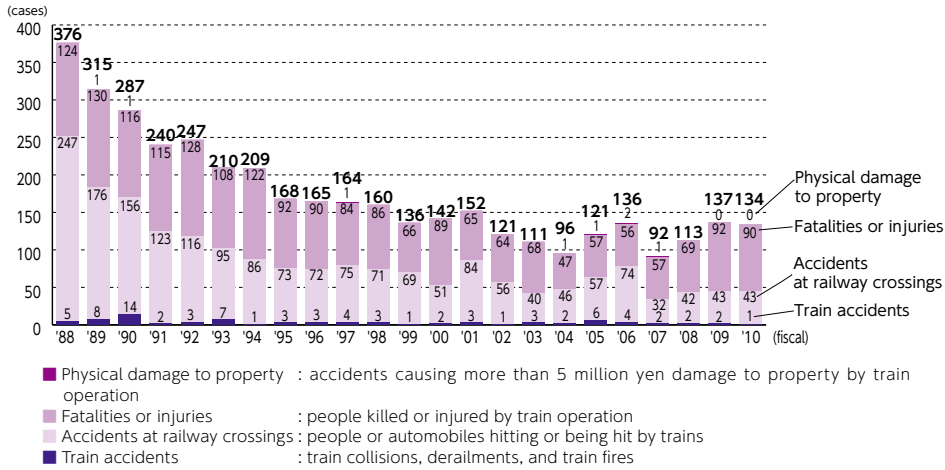
In the fiscal year ended March 2010, JR East formulated a new 5-year safety plan, 2013 Safety Vision. With this plan, we are undertaking a variety of measures. New to the 2013 Safety Vision are two approaches: safety-related human resource development and system improvements; and, the prevention of accidents before they occur through evaluation of possible risks. In addition, as with our previous Safety Plan, we will continue to target zero accidents involving passenger injuries or fatalities, and zero accidents involving employee fatalities (including employees of Group companies and Partner companies).

JR East will continue to remain steadfast in its efforts to achieve “extreme safety levels” through the concerted efforts of all of its employees.

Trends in railway accidents

In the fiscal year ending March 2010, JR East recorded 134 railway accidents. Most of these accidents were collisions with automobiles or people at level crossings, customers on platforms coming into contact with trains, and customers falling onto the tracks from platforms.

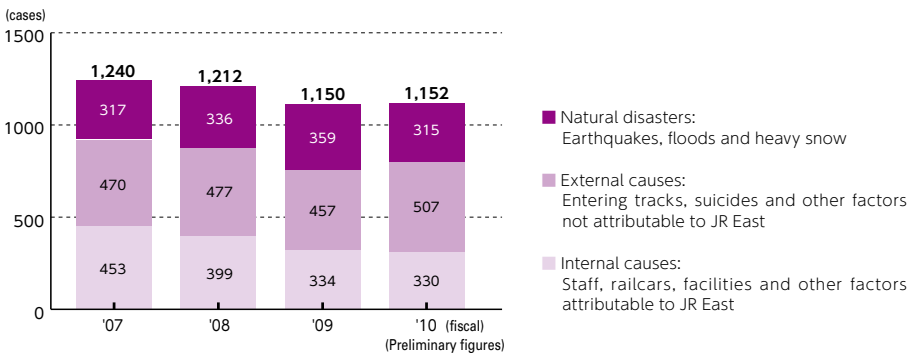
■ Trends in railway accidents



Occurrences of transport disruptions

Transport disruptions refer to suspensions in operations or to delays of 30 minutes or more. In the fiscal year ending March 2010, JR East recorded a total of 1,152 transport disruptions, 2 more than the previous year.

■ Trends in Transport Disruptions



Major transport disruptions occurring in the fiscal year ending March 2010

General descriptions and measures against transport disruptions similar to a railcar failure on the Yokosuka Line

At around 6:48 a.m. on May 7th, 2009, an electric train on the Yokosuka Line going from Kurihama to Tsudanuma came to a stop between Yokohama and Shin-Kawasaki Stations and was unable to start again for a long time. The cause was a broken wire behind a switch that conductors use to stop trains in case of an emergency. The wire had been pinched between the board and the carbody, resulting in the activation of the emergency brake, and the resulting short-circuit prevented the emergency brake from being released. In response to this event we further committed ourselves to ensuring proper wiring in railcar production and remodeling. Additionally, we reviewed our trouble shooting procedures for cases in which an emergency brake fails to be released after being accidentally applied. As a result of reviewing our quick-response capability for incidents of this kind in the Tokyo metropolitan area, JR East decided to install a new satellite inspection office in Yokohama.

General descriptions and measures against transport disruptions similar to the smoke and fumes at the Etchūjima Substation of the Keiyo Line

At around 13:51 on July 30th, 2009, electrical transmissions from the Etchūjima Substation failed and resulted in transport disruptions. The failure resulted from ground faulting which occurred inside a high voltage power distribution line box on an electric train running between Tokyo and Kasai Rinkai Koen Stations. At this time a breaker was activated at the Etchūjima Substation, and this created an arc to the metal screw of a handle inside the breaker box, burning part of the wiring and stopping electrical transmissions from the Etchūjima Substation. The electrical transmission system of the Etchūjima Substation was subsequently disconnected, and at 18:22 electrical transmissions resumed from a neighboring substation. This made it possible to locate the railcar failure, and operations resumed at 20:57.

As a countermeasure, we thoroughly checked for any erosion in the wiring inside high voltage power distribution line boxes for our electric trains, conducted emergency inspections of breakers of the kind that failed, and improved the breaker design so that an arc cannot jump to metallic parts.

Creation of a culture of safety

Our 5 cultures of safety

To heighten levels of railway safety, it is necessary to establish and support an unwavering culture of safety. The culture of safety we seek is based upon accident information from the past and we learn and act upon it in mutual trust.

- ① A culture of proper reporting
Preventing the occurrence and recurrence of accidents through prompt and proper reporting of all accidents and incidents.
- ② A culture of noticing
The prevention of accidents through an awareness of the origins of accidents and the sharing of information that would prevent these origins from leading to actual accidents.
- ③ A culture of direct meeting and discussion
Allowing for the open and honest exchange of opinions and public debate enables us to identify the causes of accidents and to take appropriate countermeasures against recurrence.
- ④ A culture of learning
Continuously learning about accidents and learning from accidents and incidents, which occur in all places of work, not just in one's own workplace.
- ⑤ A culture of action
Safety can only be secured by taking safe actions. Think and act for yourself. This is at the core of our safety.

“Sangen Principle; Three Actualities Principle” as a standard for action

Accidents and incidents always occur at the Genba.* This means that the sources of accident prevention can also be found at the Genba. In order to suitably understand and rectify each accident or incident, JR East approaches safety issues with the “three actualities principle” as its standard for action: actual locations, actual objects, and actual people.

*Genba “Genba” means a field or workplace, where employees actually do their physical work in construction, production, maintenance, operation, etc., as distinguished from management or office work, in industrial sectors, such as construction and manufacturing.

Nurturing personnel to carry safety forward

With rapid shifts between generations, the nurturing of employees who can assume major roles in ensuring safety is becoming a pressing need. JR East has assigned “key safety leaders” for its field organizations and other such institutions, and “safety professionals” for branch offices and other such establishments to increase levels of safety. In addition, through the organization of 7 OB, an organization of employees possessing a wealth of knowledge about safety and the ability to apply it as “Chroniclers of Safety <narrators of oral history>”, we are holding seminars to help pass on their knowledge and experience on safety to the next generation.



The 1st Chronicler of Safety Seminar



An accreditation ceremony for “safety professionals”



A start-up meeting for “key safety leaders”

The Challenge Safety Campaign

In 1988, we started the Challenge Safety Campaign with the aim of encouraging our employees to actively take on the challenge of further improving safety levels, rather than just passively maintaining safety. The Challenge Safety Campaign aims to increase our employee awareness and sense of safety. We intend to guide all employees to more safety-oriented behavior by having them think about and discuss safety, act upon it, and feel a sense of achievement through doing so.

Railway Safety Symposium

Since 1990, we have held the Railway Safety Symposium for the purpose of improving each employee’s awareness of safety. In the fiscal year ending March 2010, JR East held its 18th symposium, “Why accidents and incidences keep occurring; conquering the deceptive belief that ‘it won’t happen to me.’”



The 18th Railway Safety Symposium

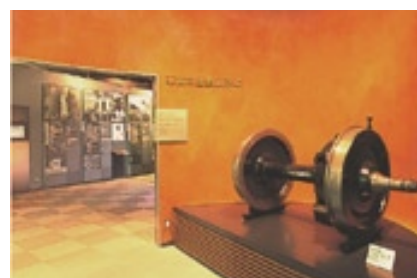
Safety education and training

To improve the skills of train crews, accident prevention simulator training is conducted regularly in the General Training Centers in each of our branches. At the JR East General Education Center in Shirakawa City, Fukushima Prefecture, we train both drivers and conductors, and provide human resource development in the form of knowledge and technical proficiency.

The Accident History Exhibition Hall was established in the Center to emphasize the importance of learning from past accidents.



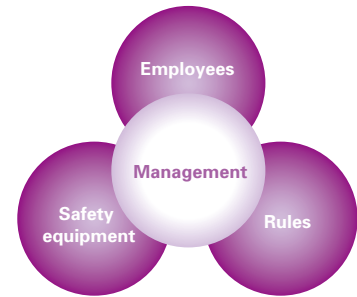
Driving cab simulator



Accident History Exhibition Hall

Safety management Eliminating the 'buds' of accidents

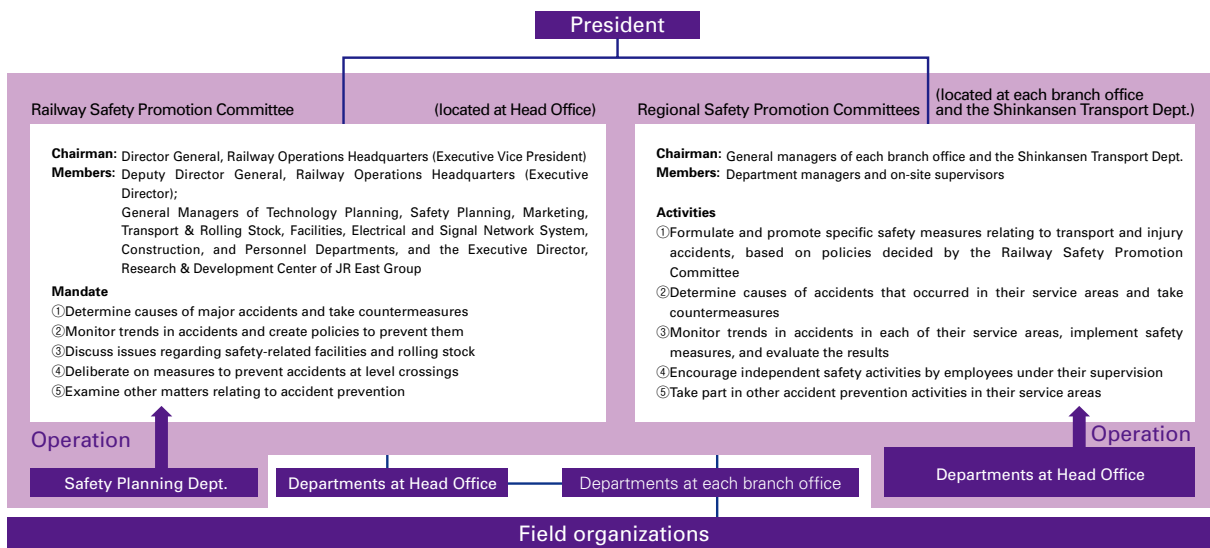
We believe that safety is ensured through management systems that synergistically link the three major factors, Employees, Rules, and Safety Equipment. JR East, together with our front-line employees, Head Office, and Group companies as a whole, is working to improve operational safety through the Railway Safety Promotion Committee, Head Office Safety Campaign, and JES-Net. The Railway Safety Promotion Committee is responsible for thorough cause investigation and taking prompt countermeasures at the occurrence of an accident. In our Head Office Safety Campaign, front-line employees and executive officers from the Head Office participate in direct discussion about safety matters. JES-Net functions to enhance our safety promotion network among Group and other related companies.



Railway Safety Promotion Committee

JR East has established a Railway Safety Promotion Committee at its Head Office, chaired by the Director General from Railway Operations Headquarters. The committee reviews the organization's basic policies to respond to and prevent accidents, and promotes safety measures within the railway business. There are also Regional Safety Promotion Committees at each branch office and the Shinkansen Transport Dept., chaired by the general managers of the branch offices and the department. These committees implement specific measures in cooperation with the Railway Safety Promotion Committee, and investigate the causes of accidents, implement concrete preventive measures, and promote activities to enhance safety in their service areas.

■ Safety promotion network (as of April 1, 2010)



Head Office Safety Campaign

JR East runs a Head Office Safety Campaign once a year. The campaign gives executive officers from the Head Office and front-line employees a chance to hold direct discussions. In the fiscal year ending March 2010, executive officers from the Head Office and front-line employees participated in heated discussions on the theme, "Are we reinforcing the implementation of the Sangen Principle (Three Actualities Principle) and culture of safety?: After the start of the 2013 Safety Vision and in response to the emergency declaration". The campaign included inspection of nighttime maintenance work and the confirmation of our efforts and remaining issues following the start of the 2013 Safety Vision, sharing of the understanding of the current situation between front-line employees and executive officers from the Head Office.

Collaboration with group companies

The JR East Safety Network (JES-Net) was established in the fiscal year ending March 2005 as a safety promotion network with 25 Group and other related companies engaged in work or construction which have a direct influence upon train operations. By April 1st, 2010 the number of companies in the network had expanded to 35. JR East is committed to improving the levels of safety throughout the JR East Group through the united effort of each company among the JES-Net members.

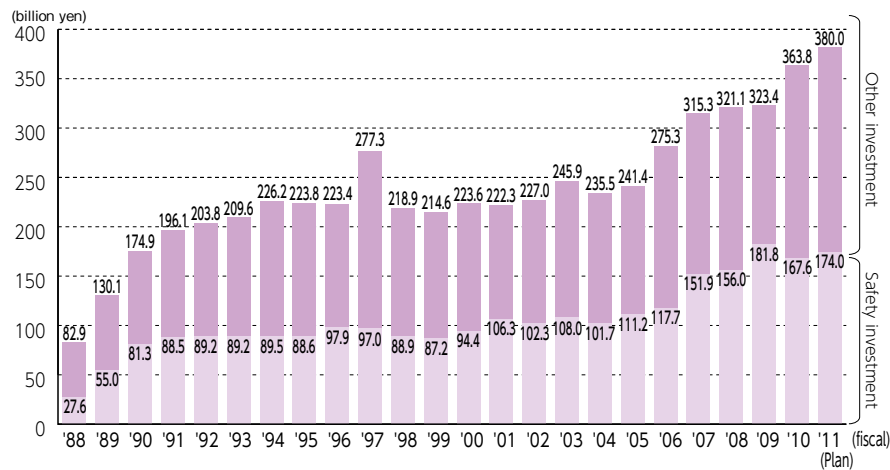
Improvement of safety equipment

Investment in safety equipment for “extreme safety levels”

To achieve a more assured level of safety in railway operations, weak points in the current systems must be identified and reviewed from a safety standpoint. Furthermore, safety equipment must undergo intensive and effective assessments in order to prevent the occurrence of accidents in the future. To date, our countermeasures have been primarily focused on preventing any reoccurrence of accidents that have happened in the past. However, additional risks also exist, such as the very realistic threat of a major earthquake in the Tokyo metropolitan area, which would result in major damage to our railways. As such, in addition to measures we have taken so far, JR East will implement concrete countermeasures through the analysis and evaluation of all potential risks before they actually evolve into accidents.

For improvements to safety equipment, based on our four previous 5-year Safety Plans, JR East has invested more than 2.4 trillion yen since its establishment. In our 2013 Safety Vision, JR East’s 5th 5-year Safety Plan, JR East plans to invest approximately 750 billion yen on safety measures for the 5-year period from April 2009 to March 2014.

■ Trends in safety investment



Systemization of maintenance work

Safety during maintenance work has been improved with the use of TC-type wireless alarm systems. The systems warn employees working on railway tracks when a train is approaching. JR East has also introduced a safety system that enables workers performing maintenance to turn signals red from a handheld device, ensuring that trains are stopped whenever necessary. The system is already in use on all major lines in the Tokyo metropolitan area and is being introduced to other railway divisions.



Track closure procedure by a handheld device for maintenance work

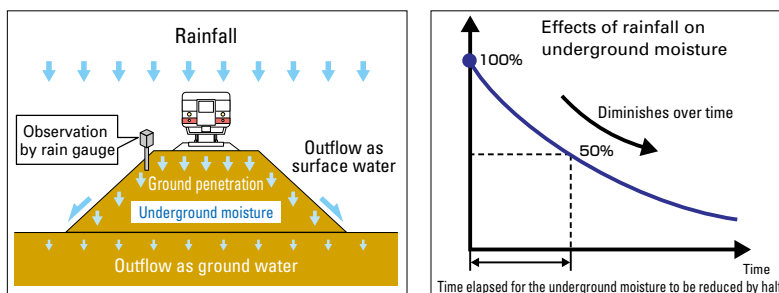
Practical application of the Advanced Train Administration and Communications System (ATACS): train control system with radio transmission

ATACS is a train control system utilizing radio transmissions. By using radio communications for the transmission of information between ground and on-board facilities, the system enables the trains to be mainly controlled by on-board equipment. This permits reductions in traditionally required ground facilities such as signals, track circuits, and connecting cables. Eliminating some of these facilities is expected to cause a reduction in the number of transport disruptions.

JR East is aiming to introduce this ATACS to the Senseki Line for practical operation in 2011.

Introduction of effective rainfall as a new index

When there is heavy rainfall, we ensure train safety through operational restrictions such as limits to train speed and, when necessary, by suspension of operations. For operational restrictions on conventional lines, we have been using hourly rainfall¹ and continuous precipitation² as our indices. Since June 2008, we have been using “effective rainfall” as a new index that is effective in prevention of landslide disasters due to rainfall. Effective rainfall is the amount of underground water remaining after changes over time in ground penetration and outflow. Using this index, we can more precisely predict the occurrence of landslide disasters, improving the safety and reliability of our train operations.



Use of effective rainfall as an index

*1 Hourly rainfall the total rainfall over a one-hour period

*2 Continuous precipitation the total continuous rainfall over a 12-hour period

Completion of reinforcement work for disaster prevention against heavy rainfall in the Tokyo metropolitan area

JR East has completed its planned reinforcement work to railway lines to protect against heavy rainfall. The measures are intended to reduce operational restrictions due to heavy rain and minimize any effect on train operations. JR East began reinforcement work for disaster prevention against rainfall in April 2004 on 12 routes, mainly in the Tokyo metropolitan area and with high levels of traffic, and this work was completed in June 2008.



Concrete lattice frame protection work

Seismic reinforcement of elevated bridges

In response to the 1995 Great Hanshin-Awaji Earthquake, JR East has been taking a number of seismic reinforcement measures on rigid-frame elevated bridge columns which were susceptible to shear failures. By the end of March 2008, we had reinforced all of our elevated Shinkansen viaduct support columns and Shinkansen bridge columns. On our conventional lines, by the end of March 2009 we had reinforced all other columns except in places that required additional construction work in the Southern Kanto and Sendai areas. Currently, we are reinforcing elevated bridge columns susceptible to failure due to bending due to strong earthquake motion, aiming to further improve our safety levels against earthquakes.

Early Earthquake Alert System for conventional lines

JR East has installed seismographs along coastal and Shinkansen railway lines for the detection of primary tremors (P-waves). Our present system allows us to stop trains as soon as primary tremors are detected. For conventional lines, our Early Earthquake Alert System was introduced for the Tokyo metropolitan area in December 2007 and in all other areas in April 2009.

The system enables trains in any section of track to be stopped in the case of a major earthquake, utilizing information obtained from our Shinkansen seismographs and from any advance announcements given by the Japan Meteorological Agency.

Prevention of secondary accidents after derailment

During the Niigata Chuetsu Earthquake in 2004, one of our Joetsu Shinkansen trains was derailed while running. Fortunately, this derailment did not lead to any injury to either our passengers or our train crews. Learning from the events surrounding this earthquake, JR East has taken numerous measures aimed to improve our Shinkansen trains and tracks.

For our railcars, we have installed an L-shaped car guide on the bogies to restrict lateral movement of the car body. For ground facilities, we are improving the shape of joint bars to lessen the impact of wheels on rail joints in the case of a derailment and implementing countermeasures to prevent the overturning of railcars and the lateral movement of rails in the case that metallic rail fasteners are damaged in derailment. Furthermore, early detection of earthquake occurrence by seismographs and of interruptions of electric transmission have enabled us to more promptly detect earthquakes and start emergency braking about one second earlier.

Measures to prevent railway crossing accidents

When the company was established in 1987, there were 247 accidents during the year at level crossings. In the fiscal year ending March 2010, the number had been drastically reduced to 43.

Approximately 80% of all level-crossing accidents involve automobiles. We have installed devices such as obstacle detectors, which are capable of detecting an obstacle such as an automobile stalled on a crossing and stopping trains, and we have put crossing warning devices in a higher position for better visibility. More large red and white crossing gates have been installed; the barrier arms are thicker than usual and have red and white reflective plates that cover the whole bar. These are expected to provide better visibility day and night. Studies are currently being carried out on the effectiveness of these bars. In addition, we are presently promoting a wide range of public relations activities for the prevention of level crossing accidents, appealing to drivers for their cooperation and understanding.

Furthermore, we are trying to increase the number of overhead crossings to eliminate level crossings with roads, and are doing this with the cooperation of local governments, neighboring residents, and the police. In addition, for countermeasures against secondary accidents caused by derailments at level crossings, we are installing derailment prevention guards at level crossings.

Station platform safety

In the fiscal year ending March 2010, there were 62 accidents in which customers fell from platforms onto tracks or came into contact with trains. JR East is installing protection-related devices, including emergency train-stopping systems, on our platforms to ensure the safety of its customers. In addition, since customer awareness and cooperation are also vital to safety on our platforms, we are implementing our “Platform safety Campaign” through posters, as a measure to heighten the safety awareness of our customers.

Furthermore, as an additional accident prevention measure for customers on platforms, JR East is introducing automatic platform gates on the Yamanote Line. The gates will initially be installed at Ebisu and Meguro Stations. We will install gates at the remaining stations applying the knowledge earned by analyzing any technical issues and impacts found at the first two stations. We are hoping to introduce the gates to the majority of stations on the line, with the exception of stations requiring large-scale improvement work, by March 2018.



Automatic platform gates on the Yamanote Line

Measures taken since the accident on the Uetsu Line

On December 25, 2005, the limited express train *Inaho No.14* derailed between Sagoshi and Kita-Amarume Stations near the No.2 Mogami-gawa Bridge. We would like to report on the measures we have taken since this accident.

Increased number of anemometers (wind meters)

To date, JR East has increased the number of anemometers at the accident site between Sagoshi and Kita-Amarume Stations. In addition, for sections with operational restrictions due to strong winds, we established multiple anemometers as our new standard and increased the number of anemometers in locations where windbreak fences were installed.

Additionally, by reconfirming the requirements for wind restrictions on sections of railway line, using information from front-line employees, topography, and wind conditions of the areas, and adding new operation restriction sections, we are working to improve our safety observation network to counter the effects of these strong winds. Furthermore, by the end of March 2010, we had completed our planned increase and installation of anemometers on the lines.

	As of Dec. 25th, 2005: A	As of Mar. 31st, 2010: B	Increase (B-A)
Conventional lines	228 units	705 units	+477 units
Shinkansen Lines	89 units	149 units	+60 units
Total	317 units	854 units	+537 units

Installation of windbreak fences

In order to reduce wind force on trains, we have installed windbreak fences at the following locations:

<As of Mar. 31, 2010>

	Line Name	Section	Location of Installation	Time Complete
1	Tokaido Line	Adjoining Nebukawa Station	Both sides of the line	Jul. 1991
2	Joban Line	Between Yonomori and Ono	West side only	Feb. 1996
3	Kawagoe Line	Between Sashiogi and Minami-Furuya	North side only	Apr. 1998 Jun. 2009 Extension
4	Uetsu Main Line	Between Sagoshi and Kita-Amarume	West side only	Nov. 2006
5	Tohoku Main Line	Between Fujita and Kaida	West side only	Nov. 2006
6	Tohoku Main Line	Between Kurihashi and Koga	Both sides of the line	North side: Mar. 2007 South side: Jun. 2007
7	Joban Line	Between Fujishiro and Sanuki	Both sides of the line	Mar. 2007
8	Keiyo Line	Between Kasai Rinkai Koen and Maihama	South side only	Mar. 2007
9	Keiyo Line	Between Ichikawa Shiohama and Futamata Shinmachi	South side only	Mar. 2007
10	Keiyo Line	Between Kaihin Makuhari and Kemigawa-hama	South side only	Mar. 2007
11	Musashino Line	Between Misato and Minami-Nagareyama	Both sides of the line	South side: Mar. 2007 North side: Jun. 2009
12	Keiyo Line	Between Shiomi and Shin-Kiba	Both sides of the line	Jun. 2007
13	Keiyo Line	Between Shin-Kiba and Kasai Rinkai Koen	South side only	Aug. 2007
14	Keiyo Line	Between Futamata Shinmachi and Minami-Funabashi	South side only	Aug. 2007
15	Musashino Line	Between Minami-Koshigaya and Yoshikawa	Both sides on bridge sections North side	Both sides: Mar. 2009 North side: Feb. 2010
16	Musashino Line	Between Kita-Asaka and Nishi-Urawa	South side only	Dec. 2009

Expanded introduction of a gale warning system

We have been adding to our gale warning system to raise the level of safety by restricting operations not only when the actual wind speed measured by anemometers exceeds restriction thresholds, but also when the projected maximum wind speed exceeds these limits.

	As of Dec. 25th, 2005: A	As of Mar. 31st, 2010: B	Increase (B-A)
Number of locations with gale warning systems	6 locations	288 locations	+282 locations

Utilizing meteorological information to test methods for operational restrictions

Local gusts are meteorological phenomena, and are difficult to observe with conventional observation equipment such as anemometers. Through meteorological information obtained from the Japan Meteorological Agency radar, and by detecting the passing of cold weather fronts and the accompanying development of cumulonimbus clouds, we have been investigating how to forecast the occurrence of local gusts and to apply that information to our operational restrictions.

From fiscal 2008, the system was tested during the winter on the Uetsu Main Line between Niitsu and Sakata and on the Hakushin Line between Niigata and Shibata. On February 17th, 2009, we added the system to sections of the Uetsu Main Line, Shin-etsu Main Line, Echigo Line, Yahiko Line, and Riku-u West Line for additional testing.

During this three year period of testing, though we initiated train operational restrictions a total of three times, we did not observe any actual occurrence of local gusts.

Research of a Doppler radar observation method

We are currently investigating the possible utilization of a Doppler radar observation method to help identify local gusts, as information to be used for operational restrictions. Doppler radars can determine wind conditions by detecting the movements of raindrops and rain clouds and are used at some airports for detecting local gusts.

From July 2007, in cooperation with a special research institution, we have been furthering our procedures of meteorological observation and analysis on coastlines along the Sea of Japan during the winter season. Together with information gathered on the characteristics of local gusts, we have been testing the radar's detection capabilities against local gusts.



Doppler radar installed on the roof of Amarume Station on the Uetsu Line Doppler radar body

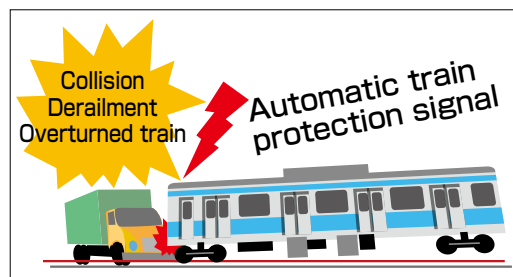
Safety Research and Development

Disaster risk evaluation system (EADaS) to prepare for natural disasters

We are currently developing a disaster risk evaluation system (EADaS: Environment, Agent, Disaster, and Structure), which will quantitatively evaluate the vulnerability to natural disasters of random locations across Japan by assessing relationships between natural environment features such as topography, geology, and climate and natural disasters due to topography, based on our experiences and experiments. We are now working on the systemization of the EADaS method, aiming for a system which will enable our staff on the front line of our field organizations to easily evaluate the vulnerability of locations to natural disasters.

An automatic train protection signal transmission system for enhanced safety levels

At JR East, we continue to improve our levels of safety through our research and development. In the case of an accident such as a derailment, we have introduced a train protection radio for the transmission of emergency signals to stop other trains. We have also developed a system to automatically transmit emergency stop signals with our train protection radio to further ensure prevention of the occurrence of a secondary accident. Even when train crews are unable to transmit signals manually or promptly, as can happen if there is a major accident such as a train collision, derailment, or overturned train, the system is able to transmit the emergency signals automatically. Since December 2008, the system has been in use on E233 Series Keihin Tohoku Line trains and we plan to introduce it sequentially to conventional lines in the Tokyo metropolitan area.



Operation image of the automatic train protection signal transmission system

Safety web portal site

To allow our employees to deepen their understanding of the human factors involved in accidents and share information and know-how on human error prevention, JR East developed and runs a web portal site on safety, which employees have had access to since April 2007. On this site, useful safety information is regularly provided and available to our employees. The information is stored on the site in a database so that employees can search for necessary information whenever needed. Major content areas of the site include: human factor news, the 4M4E analysis room, a calendar of past accidents with lessons to be learned, and the Challenge Safety blue signal.



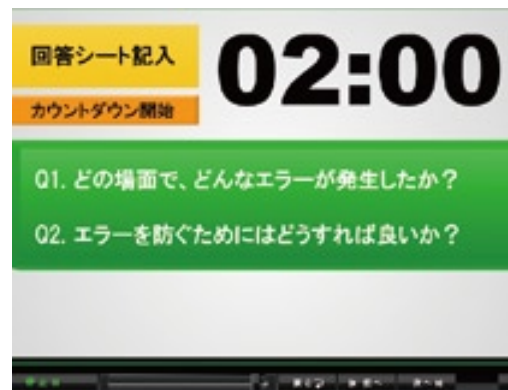
Safety web portal site

Training tools for workers handling maintenance vehicles

JR East has developed training tools for drivers and persons in charge of maintenance vehicles, and is utilizing the tools for training these people. Trainees can learn about frequently occurring human errors while conducting maintenance on trains through personal computers. The objective of the training is to assist trainees in learning the necessary skills for the prevention of human error. The tools encourage “thinking and speaking by themselves” trainee initiative and promote active learning through encouraging trainees to discover new things through mutual learning with other trainees and shared experience. By doing so, the tools aim for the training contents to be rooted and prevent operational accidents with maintenance vehicles.



A scene from a case example



A screen showing timed questions for trainees to answer

Relationship with Customers



Working to improve customer satisfaction

In JR East 2020 Vision-*i do mu*, we cited the rigorous pursuance of customer satisfaction as one of our basic management policies, and in line with this promise, we have worked continuously to improve customer services and provide both dependable and comfortable services. In order to further enhance customer satisfaction, in July this year we established the Customer Service Quality Reformation Department at Head Office and Customer Service Quality Reformation Offices in various branches. These departments will be responsible for overseeing overall quality improvement in railway services, as well as systemically and powerfully promoting measures designed to develop service infrastructures from medium and long-term perspectives, and managing a further upgrade in transport reliability. We pledge to constantly take heed of customer comments and thereby promote service improvements.

Learning from customer comments

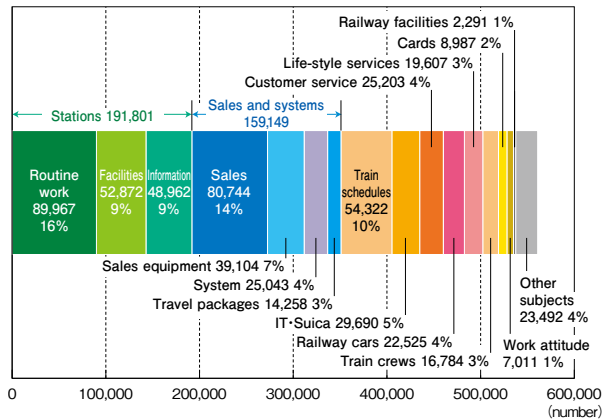
By achieving a level of service that only JR East can provide, we aim to meet the expectations of both local communities and our service users, thereby alleviating grievances and meeting future needs. To attain this goal, we understand that it is critically important for us to constantly pay attention to customer comments, to learn, for example, exactly what JR customers are interested in or what annoys them, and thus steadily make improvements.

We gather customer comments on a daily basis through a wide-ranging system that includes collection by front line employees, via the Internet and telephone calls, and from customer help desks. In June this year, we established the JR East Customer Comment Reception Center at the Head Office as a section dedicated to the receipt of customer calls, comments and requests. Comments gathered will be promptly identified, shared company-wide, and used with the aim of making service improvements. We gratefully accept customer comments and act from a customer viewpoint. We believe the origin of customer satisfaction is in each and every customer comment.

New Green Information System

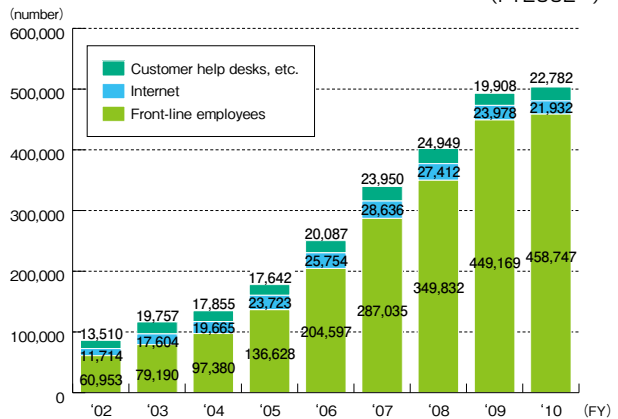
In order to more efficiently share and use customer feedback, JR East has constructed a new internal database named the New Green Information System. Comments collected by front line employees and from customer help desks in major stations as well as via the Internet are entered into this database, and the valuable information thus gathered is available at all times to employees at Head Office, branch offices and front line workplaces to help them implement service improvements.

■Subjects of customer comments (Total 560,862)



* The chart shows the number of comments on each subject. Some customers commented on more than one subject

■Trends in the number of customer comments by channel (FY2002~)



Customer Satisfaction Surveys

We conduct annual customer satisfaction surveys in order to garner a comprehensive understanding of user evaluation of our services that could not be adequately determined from customer feedback alone, and we quantitatively measure levels of customer satisfaction. We make full use of the results of these surveys in the measures we take.

Teamwork

In order to guarantee customer satisfaction, we have designated service promoters operating at many front line workplaces. Furthermore, with a clear awareness that all efforts eventually lead to improved customer satisfaction, we hold regular customer service training sessions and symposiums that involve all Group employees, from top management to front line employees. We are continually working to create a corporate culture where each employee aims to enhance customer satisfaction, by targeting not only front line employees, but also those in sections that do not have direct contact with customers.

Turning customer comments into improvements

In order to best increase customer satisfaction with our services, JR East discusses customer comments at workshops and at Head Office and branch office committee meetings, and directly links them to improvements. To enable us to make such improvements, all parts of the Group work as a single team that transcends the organizational borders of transport, facilities, and marketing, and thus work toward an overall improvement of customer satisfaction.

Responding to customer comments

Based on customer comments gathered and social conditions, we take measures to improve customer satisfaction.

Transport Services Improvements

We are continuously striving to reduce rush-hour congestion on major Tokyo metropolitan area lines by such measures as the addition of more cars to trains and the introduction of wider-bodied cars. Under the March 2009 timetable revision the number of trains in operation during morning rush hours on the Yokohama Line was increased and the number of trains on the Nambu and Shonan Shinjuku Lines was increased during the nighttime in an effort to improve service. During the fiscal year ended March 2010, for example, the average level of in-train congestion during morning commuting hours declined by 58 percentage points to 180% compared to the fiscal year ended March 1988.

We will continue our efforts to secure reliable transport through a reduction of transport disruptions and other means to meet perceived needs of customers.

More Comfortable On-board Air Conditioning

JR East is working on improvements to railcar air conditioning (cooling and heating) to make railway travel more comfortable. On new railcars (E231 and E233 series) fully-automatic air-conditioners are installed. On other cars, continuous efforts are being made to provide the most comfortable environments possible by having conductors carry out frequent temperature checks, thermostat changes and other detailed responses, as well as by taking other actions appropriate for the different conditions on individual railway lines.

Total Smoking Ban In Tokyo Metropolitan Area Stations and Trains

For several years in line with customer requests and an increasing general public aversion to smoking, JR East has worked to eliminate passive smoke. In April 2009, as well as removing all smoking areas from platforms at major Tokyo metropolitan area stations, we went one step further and initiated a limited smoke-free station interior policy, which was widened, again in line with customer requests, in October 2009. All smoking was banned on JR East's Shinkansen and limited express trains from March 2007 and on some trains providing through services with other companies from June 2009.



Total smoking ban covering most of the Tokyo metropolitan area

General Information Counters

We are shifting the focus of staffed ticket gates from the verification and settlement of tickets and fares to the provision of information, and are continuing to install general information counters where customers can get comprehensive guidance and information. As of April 1, 2010, these counters have been established at seven stations.

Service Managers

JR East is increasing the number of service managers who make rounds of stations and are in position to assist elderly customers and those not used to traveling. These service managers provide relevant and timely information and guidance and other fine-tuned services in times of emergency as well as during regular operations. As of April 1, 2010, service managers are located at 46 stations.

Enhancement of Information

To provide prompt and accurate information during transport disruptions, we are installing transport disruption information displays (in 130 stations as of FY2010), in addition to our current information provision via train monitors, the Internet, and mobile phones.



Information display during transport disruptions

Making safe and pleasant stations and trains

We are working on the creation of a travel environment which all customers, no matter what their age or physical condition, can use without worry or impediment.

Barrier-free and Hospitable Stations

JR East has been working with local governments and other entities to install elevators at approximately 490 stations in accordance with the Barrier-Free Transportation Law. As of the end of March 2010, we had completed installations in 360 stations. We have also encouraged our employees to qualify for Service Assistance certification, with the aim of instilling in them a spirit of hospitality. As of the end of March 2010, approximately 5,200 employees had received level two certification.



Elevators



Escalators

Barrier-free Railcars

To improve accessibility for persons with vision impairments, in the fiscal year ended March 2006 we installed Braille maps and stickers indicating the passenger's current location and the locations of various facilities on all Shinkansen trains. On conventional lines we also are placing Braille stickers identifying car numbers and door locations. In December 2006, the new universal design E233 series railcars were introduced to the Chuo Rapid, Ome, and Itsukaichi Lines, followed by the Keihin Tohoku Line. In October 2009, the E259 series railcar, in which electric wheelchairs with handles can be used, was introduced on new Narita Express trains.

Placement of Automated External Defibrillators (AEDs)

AEDs are medical electroshock devices for the treatment of ventricular fibrillation caused by cardiac arrest. The devices have been widely used in the United States and Europe since around 2000. JR East has been working on placing AEDs near ticket gates at stations with many customers, and as of the end of May 2010, 294 stations (447 AEDs) have been equipped with them. The placement of AEDs on Shinkansen and new Narita Express trains was instigated in February and October 2009, respectively, and as of March 31, 2010, 149 had been installed.

Improvements in Station Toilets

In order to dispel the image of station toilets as dark, dirty, and malodorous and to enable customers to be able to use them comfortably, since its establishment JR East has constantly upgraded its toilet facilities. Measures taken include a change to western-style toilets, improved ventilation and the use of larger floor tiles. Furthermore, to reduce the amount of water used, we are introducing water flow controllers that automatically distinguish the use and provide the optimum amount of water as well as washbasins equipped with automatic faucets. During this fiscal year ending March 2011, we will renovate the toilets in approximately 40 more stations and thereby increase customer comfort and satisfaction.



Water flow controllers have been introduced

Toilets in the Sobu Line underground concourse at Tokyo Station

New Narita Express Service Improvements

The new E259 type railcars are equipped with large LCD panels showing destinations, operational conditions, news, flight data, and other information in four languages (Japanese, English, Chinese, and Korean) and by introducing a WiMAX system, the latest information can be provided regardless of whether the train is in motion or halted. A high-speed Internet connection service is also available via a wireless LAN.

Setting and Usage of the WiMAX Base Station

Since February 2009, UQ Communications Inc. has been offering an Internet connection service using UQ WiMax. In conjunction with this service, we have been setting up WiMAX base stations that enable Internet connection in station concourses where connection had previously been difficult or impossible. As of June 30, 2010, easy connections are now available at 111 stations. Furthermore, taking full advantage of the system's broadband capabilities, WiMAX is now being used to provide transport disruption information to some station displays.

Women-only Cars

In order to enhance the sense of safety for our passengers, we introduced "Women-only" cars during late night operations on the Saikyo Line in July 2001. In April 2005 the service was expanded to include the morning rush hours. In September 2005, these cars were also introduced during the morning rush hours on the Chuo Rapid Line, followed by the Joban Local Line (the Tokyo Metro Chiyoda Line in central Tokyo) in May 2006, the Sobu Local Line in November 2006, and the Keihin Tohoku and Negishi Lines in April 2010.

Measures for Female Molestation

In addition to the adding of women-only cars during certain hours, and with the aim of enabling female passengers to travel stress free, we have been installing SOS buttons that women can use to alert train crews if they experience molestation. Furthermore, in cooperation with police and other railway operators we are actively conducting a campaign to eliminate train molestation and have significantly increased security surveillance on trains and in stations.

As a further step in the discouragement of female molestation, in December 2009 we implemented a test of on-board security cameras on the Saikyo Line, the results of which confirmed its effectiveness. As a result of this test, we are now installing on-board security cameras in the leading cars on all Saikyo Line trains, where the number of molestation occurrences has been greatest.

Baby Stroller Safety Measures

In a measure designed to enable passengers with baby strollers to safely use stations and railcars, we have been working to improve the ability of train and station staff to detect cases of baby stroller frames getting caught in doors. We are also carrying out a joint campaign with other railway companies, baby stroller manufacturers, local governments, and nonprofit organizations (NPOs), under the slogan “Let’s Protect Babies,” that urges passengers with baby strollers to be extra careful, as well as asking other passengers to pay attention to potential problems.

Increased Escalator Safety

To prevent injuries to customers when they use escalators, we are carrying out safety enhancements including measures that will prevent sandals getting caught, prevent falls during emergency stops, and prevent steps from descending when escalators stop. In a specific move JR East, in a united campaign with other railway companies and relevant organizations, has been stressing the necessity of improved safety by directly addressing customers with, for example, a poster campaign showing the importance of holding on to the handrails, and promoting escalator safety in general.



“Let’s hold on to the handrail” campaign

Suicide Prevention Measures

JR East has constantly supported NPOs in their efforts to prevent suicides and has, for example, installed blue lights (believed to discourage suicide attempts) at the edges of Yamanote Line platforms. In March 2010, in conjunction with the government’s “Suicide Prevention Enhancement Month” we carried out a campaign named “JR East ♥ Life Assisting Month” to aim at reducing the number of suicides by strengthening our efforts to provide life support. These measures included the provision of information regarding consultation services through posters, etc., the operation of Support Life Trains, and the introduction of telephone counseling in collaboration with the Federation of Inochi no Denwa Inc.

JR East's Life-style Business

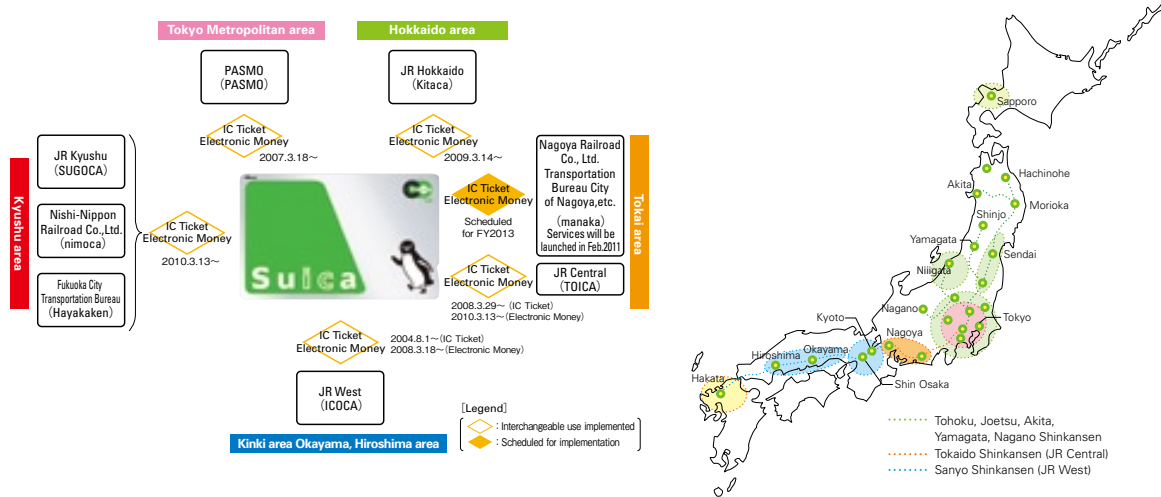
JR East operates a broad range of life-style businesses and provides services to support the everyday lives of our customers as well as in their various lifestyles and life stages. These services include retail stores within station buildings, hotels, office buildings and fitness clubs that benefit from their locations near stations, advertising in stations and on trains, childcare support in areas adjoining railway lines, and housing.



Suica improves customer convenience

IC Farecard – Expansion of Interchangeable Usage

The popularity of our Suica IC card with many customers has increased because of its convenience, which has led to an increase in the number of cardholders to more than 32.8 million as of the end of June 2010. Suica usage has recently been expanded in several ways. In addition to its use on our Tokyo metropolitan, Sendai and Niigata area lines, Suica is interchangeable with the PASMO IC card, so it now can be used on almost all train and bus services throughout the Tokyo metropolitan area. Interchangeable use has also expanded to include JR West's ICOCA, JR Central's TOICA, and JR Hokkaido's Kitaca, and in March 2010 interchangeable use with JR Kyushu's SUGOCA, Nishi-Nippon Railroad's nimoca, and Fukuoka City Transportation Bureau's Hayakaken began, thus making Suica now usable in all major cities.



Electronic Money

In addition to being convenient for the payment of fares, Suica is becoming increasingly useful as e-money. The card is now accepted at many stores in or near railway stations, and can also be used at Family Mart, Lawson, Circle K Sunkus, Aeon, and Takashimaya stores and other non-station outlets as well as for Coca-Cola vending machines. Suica is interchangeable with the IC cards listed above for shopping as well as for transportation. As of the end of June 2010, Suica could be used at 102,710 outlets nationwide, with daily transactions standing at an average of 2.1 million.



Suica electronic money

Responding to Diverse Needs

Suica functions are expanding in line with the diverse needs of today's customers. These functions include Mobile Suica which, in addition to ordinary services, allows passengers to purchase JR East Shinkansen reserved tickets and board trains without needing to get paper tickets, Suica Internet service where money deposits (Suica charges) and Internet shopping settlements can be made, and View Suica Card, a Suica and credit card combination operated in cooperation with airlines and financial institutions. JR East will continue to develop Suica as an easy-to-use and convenient IC card.



Mobile Suica



View Suica Card



Suica Internet service

Relationship with Society



With communities

JR East is continuing its commitment to regional communities through its Station Renaissance program which revitalizes stations that serve as the cores of their communities, and thereby contribute to the increased attraction of entire areas. One such initiative was the transformation of Tachikawa Station into a more user-friendly environment by increasing its barrier-free facilities, creating the ecute Tachikawa commercial space, and opening Hotel Mets Tachikawa.

On the Yaesu side of Tokyo Station, GranTokyo North Tower and South Tower and GranRoof are continuing to develop; North Tower II will be completed in 2012 and GranRoof in 2013. On the Marunouchi side of the station, work is now under way to totally restore the station building to its original form. An in-station commercial zone, GranSta, is also being developed. In combination, the developments will be called Tokyo Station City, under the concept of developing Tokyo Station into a complete city. Our goal is to create a station that will serve as a transmission base for new cultures, while also forming a spectacular gateway to the metropolis of Tokyo.

We are also cooperating with local governments in the creation of new stations in line with their urban planning, and continuing with the improvement of existing station buildings in order to create free passages, based on requests from local authorities. In the fiscal year ended March 2010, in coordination with redevelopment projects in surrounding areas, we opened Musashi-Kosugi Station on the Yokosuka Line, bringing to 40 the total of stations we have established based on requests from local authorities since our establishment in 1987. Station building renewal was also continued with the construction of free passages in Otsuka Station on the Yamanote Line and Ageo Station on the Takasaki Line.



Musashi-Kosugi Station



Otsuka Station

Childcare Support Facilities

JR East is continuing to open more childcare facilities such as nursery schools in locations within five minutes of stations, and thereby supporting those who have to balance child raising and work. The total number of childcare support facilities opened since 1996 had reached 34 in April 2010 and further expansion is being targeted. Nursery schools adjacent to stations have the advantage of enabling parents to drop off and pick up their children on their way to or from work. We have also noted an increase in the number of children being dropped off and picked up by their fathers, which demonstrates that our efforts in this field are leading to an increased level of male participation in childcare. We plan to continue to expand our childcare services that meet a broad variety of needs and thus actively contribute to local communities, thereby enhancing the values of communities located along our railway lines.



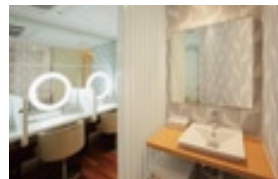
Shinkansen train and nursery school near station



Children playing in station rooftop garden

Refrista: Support for Mother-Baby Trips

Refrista provides integrated facilities consisting of baby resting areas, make-up lounges, and cafés. In the baby resting areas we provide changing tables, breast-feeding booths, and child toilets, with the aim of enhancing the opportunities and comfort of mothers who go out with their babies or small children.



East Japan Railway Culture Foundation

In order to continuously utilize its management resources for social contributions, in 1992 JR East established the East Japan Railway Culture Foundation, an organization that has successfully promoted local culture, studied and researched railways, and taken part in international cultural exchanges through our railway business. The Foundation's activities include operating the Railway Museum and the Old Shimbashi Station building, sponsoring local cultural activities, and accepting trainees from railway operators in Asian countries. The Foundation provides information on its website (<http://www.ejrcf.or.jp/english/index.html>). It became a public interest incorporated foundation in April 2010.

Railway Museum

In 2007, the Railway Museum was opened in Saitama City, and it is based on three major concepts. It was designed to be a museum that systematically conducts surveys and research using railway-related heritage and reference materials, a history museum that depicts the history of railways focusing on exhibits of locomotives and cars, and an educational museum where children can learn about railway principles, systems and technologies through hands-on experience. Since its opening, the Railway Museum has proved to be a great success, attracting 950,000 visitors in the fiscal year ended March 2010. From October 2009, a Zero series Shinkansen car was put on public display.



The Railway Museum opened on October 14, 2007. (Railway Day) (Omiya-ku, Saitama-shi)

With the Next Generation – Children's Railway Association

The Children's Railway Association is managed by the Traffic Manners Association, with the aim of raising children's awareness of proper manners on public transportation. In our service area, there are approximately 500 active members in 12 branches. JR East has established related facilities in each of our branch offices and actively supports the association so as to contribute to an improvement of manners on public transportation by the next generation, and provides opportunities for such activities as clean-up work in railway stations and field trips to railway facilities and branch offices.

International Cooperation on Technology and Know-how

JR East shares its technologies and the expertise it has nurtured with people and organizations throughout the world. In the fiscal year ended March 2010, for example, 478 people from 47 countries visited us. Information provision and on-site inspections and seminars covering a wide variety of subjects were provided, including an introduction of the issues and methods concerning privatization of a national railway, such cutting-edge technologies and know-how as Shinkansen trains and the Suica IC fare-card, conservation of the global environment, and our lifestyle services businesses. In addition, based on requests from such organizations as the Ministry of Land, Infrastructure and Transport, we are actively involved in international cooperation through the dispatch of our railway experts to Asian and other neighboring countries to provide on-site advice.



Inspection of the East-i multi-purpose (Shinkansen track and electrical facilities inspection train)



Inspection of ATACS on the Senseki Line

Global Contribution Through International Institutions

JR East is a member of the International Union of Railways (UIC), the International Association of Public Transport (UITP), the Association of American Railroads (AAR), and other international railway organizations and conducts exchanges with railway operators around the world. We have recently been endeavoring to contribute to the global promotion and development of railways by hosting conferences of these international organizations and conducting study tours that introduce Japanese railway technologies. In April 2009, JR East's vice chairman Yoshio Ishida was appointed chairman of the UIC, an appointment that has further expanded our Group's ability to contribute to global railway development and which has given us an opportunity to heighten the awareness of Japanese railways throughout the world.



Vice Chairman Yoshio Ishida making an address at the UIC general assembly (Tokyo, 2010)



UITP Regional and Suburban Railways Committee (Tokyo, 2010)

Relationship with Employees



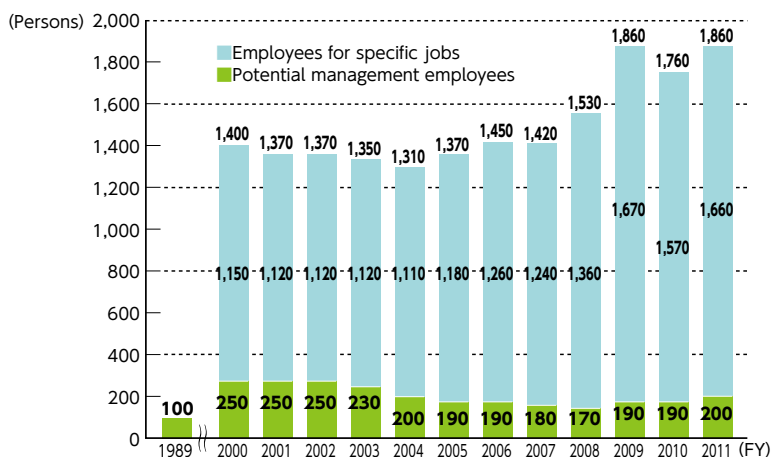
Demonstrating the power of human resources

In order to provide services that will satisfy customers, it is vitally important for us to create an environment where JR East’s personnel can fully exercise their abilities. Our success in enabling our people to be able to personally decide what they need to achieve and then act on their decisions will determine the future of our entire organization. We also have to face the fact that society is in a continual state of change, and this includes both the awareness of working people and their working environments. As a result of this, we believe that JR East, as a part of the nation’s infrastructure and as an organization that aims for extreme levels of safety, must constantly respond to the motivation of all our employees as they work to meet their responsibilities, and thereby bring about improved safety and increased customer satisfaction. JR East continues to work to provide an environment in which all employees can enjoy their jobs while constantly striving to attain even higher goals. To that end, we are determined to face the challenge of creating a company where people grow through their work from the perspectives of how to respond to the motivation of each employee to meet challenges, how to ensure a suitable work-life balance, and how to make full use of the diversity of our human resources. In JR East Vision 2020, JR East advocated the following goals: the fostering of motivated young employees, the upgrading of the skills of management-level employees, the encouraging of veteran employees to pass on their technical knowledge and their skills to the next generation of employees who will shoulder the burdens of the 21st century, the utilization and fostering of diverse human resources, and the instigation of a strategic reform of our human resources system.

Recruitment

JR East’s main supports are the capabilities of each and every employee. In regard to human resources, it is JR East’s basic philosophy to employ people based chiefly on their personalities and abilities and then to steadily nurture them until they reach the full flowering of their abilities. During the fiscal year ending March 2011, due to the large number of employees who reached retirement age and in consideration of the necessity of human resources development and the passing on of knowledge and technologies, we are recruiting 1,860 new employees.

■ Number of new employees by fiscal year



Employing Persons with Disabilities

As of June 2010, 2.47% of our workforce consisted of employees with disabilities. These members of staff work alongside other employees in a broad range of positions. We further increased our ability to employ people with disabilities in April 2008, when we established JR East Green Partners Co., Ltd. which was charged with the task of promoting their employment and helping us meet our social responsibility to improve the work environment for such employees. The company was certified as a special subsidiary in May 2009.

JR East Technical Academy

In order to motivate our young employees and encourage them develop into professionals capable of playing leading roles in all fields of railway technology, in March 2009 we established the JR East Technical Academy. The second year class consists of 29 employees from 10 technological fields who will spend the year on leave from their regular positions in order to concentrate on technological studies at the Head Office. The program has been designed to enable participants to thoroughly learn the theory and structure of their individual professional fields as well as to provide them with a comprehensive overview of railway technologies and systems in general. Through research at universities and from practical training sessions at manufacturers, furthermore, we hope to enable all participants to acquire a broad range of knowledge.

Skills Development

Through its General Education Center and network of branch office training facilities JR East provides a wide range of training programs relating to safety, service, technical upgrading, and management. As part of our effort to promote a willingness for self-education in our employees, we offer external correspondence courses designed to increase our staff members' general knowledge and to enable them to earn specific qualifications, as well as internal correspondence programs that assist them in the acquisition of specialized knowledge.

Small Groups and Proposal Activities

JR East encourages its employees to voluntarily raise issues, form small groups to find solutions, and make improvements by utilizing their abilities and by providing mutual help. Approximately 37,000 employees belonging to about 5,600 small groups currently participate in such activities. Proposal activities that solicit ideas and opinions on improvements concerning employee tasks are also very actively carried out. These voluntary activities are one of JR East's most significant driving forces.

Promotion of Workplace Gender Equality Plan

Promotion of Work-Life Program

Throughout the JR East Group we have been actively promoting the betterment of the working environment for women and striving for the achievement of a work-childcare balance. With the goal of further promoting workplace gender equality, in July 2009 we instigated the Work-Life Program as part of our effort to become a company in which all employees can fully demonstrate their abilities in a work atmosphere they regard as rewarding. In particular, we have been working on the provision of support for the achievement of balanced work-childcare and work-nursing care levels, as well as instigating forums aimed at the achievement of workplace gender equality, and the operation of the gender equality portal site on our intranet.



Second phase Gender Equality Working Group

Work-Life Program

Three pillars

- Support a balance between work and childcare-nursing responsibilities
- Enable employees to fully demonstrate their abilities
- Improve employee awareness and corporate culture

Basic concept

- Gender equality
- Diversity
- Work-life balance

Measures taken to support the achievement of balanced work and childcare/nursing

- Extended the availability of childcare leave for one year until the child reaches three years of age (April 2010)
- Introduced a system of reduced daily working hours and increased holiday entitlement (April 2010)
- Established workplace nursery schools (Shinjuku, Sendai*) and a hospital nursery school (JR Tokyo General Hospital)

*Sendai Scheduled to open in autumn 2010

General Business Owner Action Plan

JR East has formulated a 2nd phase action plan in line with the Law for Measures to Support the Development of the Next Generation (formulated in October 2008, revision notification submitted in March 2010).

■ Action Plan

Duration: October 25, 2008–March 31, 2012 (revision notification submitted in March 2010)

【Basic Policy】

JR East's goal is to become a company in which diverse human resources can fully demonstrate their abilities and achieve their work responsibilities while benefiting from satisfying and rewarding careers.

Target 1: Introduce a new program that remains one step ahead of regular positive action measures within the scheduled period, and implement measures and information provision aimed at the achievement of workplace gender equality.

Target 2: Further enhance the system that supports improved work-childcare and work-nursing care environments within the scheduled period.

Target 3: Establish and operate workplace nursery schools within the scheduled period.

Target 4: Actively expand and enhance nursery schools near stations and other childcare support facilities with the goal of increasing the social participation of women and engendering a diversification of lifestyles.



In November 2008 we were certified by the Minister of Health, Labour, and Welfare as a company actively taking measures to support the development of the next generation of employees.

Improved Work Environment

Mental Health Care

In order to maintain and improve the mental health of our employees, we believe it is vitally important for all our employees to recognize stress in their everyday lives and deal with it promptly. As a result, we are taking various support measures, such as the distribution to all employees of a pamphlet about self-care with the aim of increasing their awareness of this issue. We have also set up a counseling service in conjunction with a JR East medical facility and, through this, respond individually to our employees' needs. In order to promote front-line care in the workplace, beginning in the fiscal year ended March 2008, we also organized training programs for on-site supervisors.

Elder Employee System

During the fiscal year ended March 2009, JR East introduced the Elderly Employee System that encourages employees who have reached retirement age to continue working for Group companies that can benefit from their individual capabilities and skills. Through this plan we hope to enable retired employees to stabilize their lives until they reach their fully pensionable ages, as well as to encourage them to continue to contribute to our Group-wide accumulation of know-how.

Human Rights Enlightenment

In order to educate our employees and their families about the necessity of enhanced human rights, we have established, in both our Head Office and at regional offices, human rights enlightenment promotion committees that provide training programs and publish newsletters. We have also joined the Industrial Federation for Human Rights, Tokyo, and are conducting human rights enlightenment activities as well as information exchanges.

Employment of People with Disabilities –JR East Green Partners Co., Ltd.

JR East Green Partners, a special JR East subsidiary, was launched in April 2009 and charged with the task of overall management of uniforms used in JR East. It later undertook the Group's printing business and has constantly striven to improve workplace opportunities for people with disabilities. In addition to organizing the employment of people with disabilities, JR East Green Partners now cooperates with support organizations and special support schools and provides work training opportunities for disabled persons wishing to secure corporate positions. By carrying out a broad range of activities, the company supports the entire Group in the fulfillment of its social responsibilities.



JR East Green Partners Co., Ltd. headquarters



Typical work scene

CSR Management

Basic concept of CSR

The JR East Group is based on railway businesses that are involved in a broad range of our customers' lives and that are vital to society and local communities. With such a high public profile, we are committed to meeting our social responsibilities by carrying out our business activities in such a manner as to ensure railway safety and reliable transportation services.

In terms of our social mission, our Group Philosophy states: "We will grow continuously and advance in harmony with our customers by generating earnings while meeting our social responsibilities as a Trusted Life-style Service Creating Group." We are determined to remain a corporate group capable of meeting social expectations and maintaining stakeholders' trust by pursuing our business activities in line with that philosophy.

JR East's Basic Corporate Governance Philosophy

To continue to be a company trusted by its shareholders and all other groups of stakeholders, JR East has made the strengthening of its corporate governance a top-priority management task. Specifically, with a view to augmenting the soundness and transparency of management, JR East is creating appropriate systems for management decision making, operational execution and overseeing, Group management, information disclosure, and other important matters while also implementing the various measures required in connection with those systems.

Operation, Supervision and Overseeing System

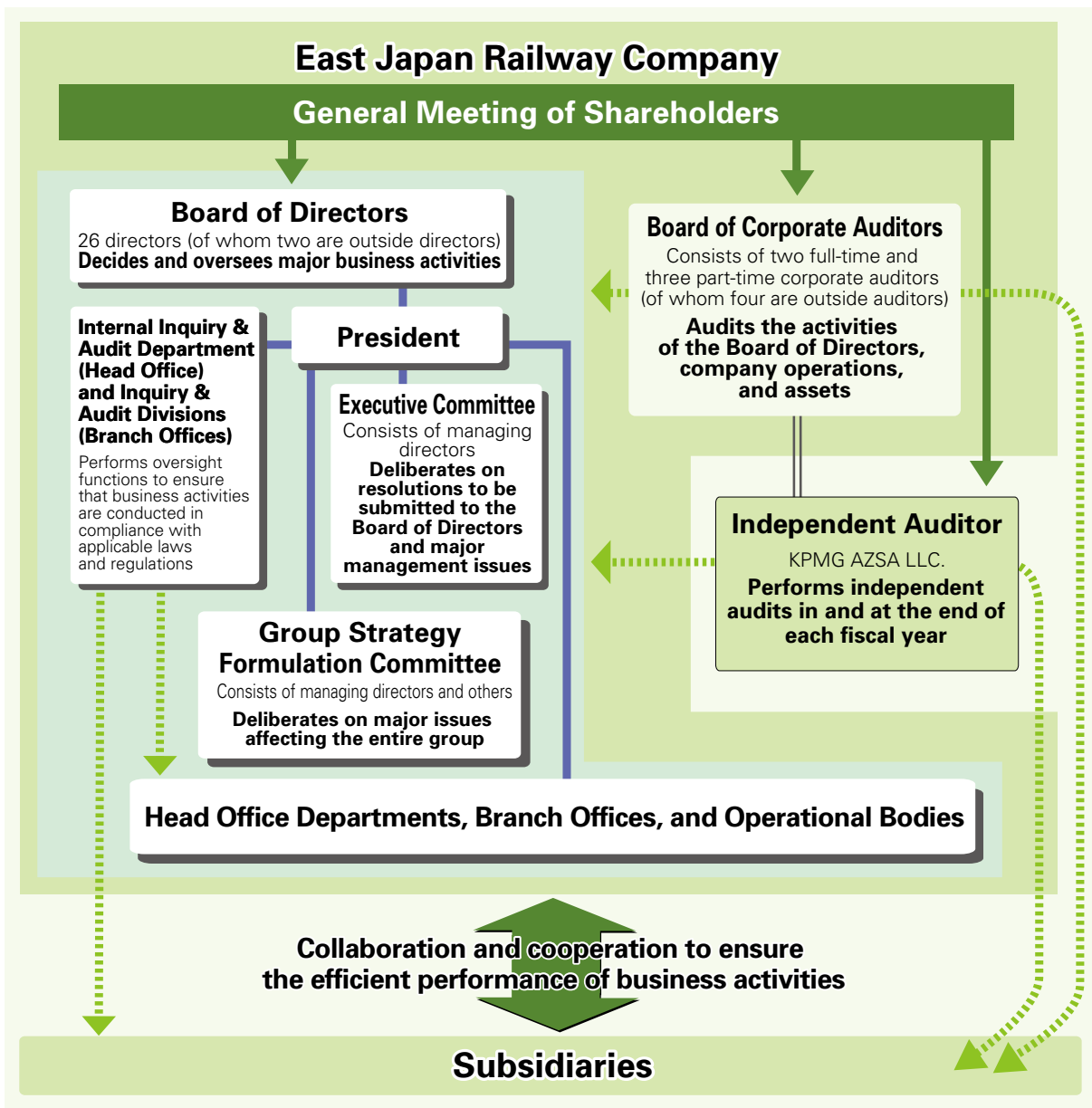
Our 26-member Board of Directors, including two external directors, normally meets monthly to decide key operational questions relating to statutory requirements and other matters, and supervise overall operations. Under the Board of Directors is the Executive Committee, which includes all directors with executive functions. Usually meeting every week, this committee deliberates on matters to be decided by the Board of Directors and other important management issues. In addition, meetings of the Group Strategy Formulation Committee, which consists of managing directors and others, are held as and when required to deliberate on major issues affecting the Group as a whole.

To ensure the veracity of internal audits, JR East has established an internal auditing system involving approximately 100 full-time employees in the Inquiry & Audit Department at the Head Office and inquiry & audit divisions in branch offices, and these units work to ensure that corporate operations are executed appropriately and efficiently. The Inquiry & Audit Department also undertakes the auditing of Group companies.

Our Board of Corporate Auditors usually meets every month and the audits of corporate auditors are supported by approximately 10 specialized staff. The system for the oversight of directors' implementation of operations, carried out in accordance with rules established by the Board of Corporate Auditors, centers on full-time corporate auditors who attend meetings of the Board of Directors, the Executive Committee, and other important in-house meetings and also investigate financial situations and other items.

Regarding financial audits, the financial statements of JR East are audited under contract by an independent auditor (accounting auditor), KPMG AZSA LLC., in and at the end of each fiscal year.

■ Corporate Governance system (as of August 1, 2010)



Compliance

The Basic Concept of Compliance

In 2005, JR East adopted the Policy on Legal and Regulatory Compliance and Corporate Ethics as the Group's corporate activity guidelines. Concomitantly, we established Compliance Hotlines, both inside and outside the Company for internal reporting, and have promoted efforts on compliance. In 2009, in order to enhance a sense of awareness of compliance, we provided educational opportunities to all Group employees and implemented full inspection of all matters relating to legal compliance in all aspects of overall duties. We are, furthermore, currently running a compliance management scheme on a group-wide basis.

Formulation and Revision of the Compliance Action Plan

In order to enhance the effectiveness of the policy originally formulated in 2005, we developed and distributed the first version of our Compliance Action Plan document that summarized what we consider to be desirable levels of conduct for all Group employees. After the series of Shinanogawa power plant incidents, however, a revised edition was published in 2009 which incorporate such aspects as the necessity of constant awareness of potential problems, adherence to laws and regulations as basis for actions, and confirmation of the contents of reports.

Full Inspection of Legal Matters and a Continuous Review of Overall Work

We conducted full inspections of our compliance in regard to all our operations including Group companies. Starting with this series of full inspections, JR East is promoting continuous reviews of all its operations based on laws and regulations, internal rules, and social norms. We will continue to implement inspections and review all our operations while constantly revising the items to be inspected.

Strengthening Compliance Education

JR East conducts regular compliance education sessions and intends to further reinforce the system. In order to specifically raise employee awareness in terms of compliance, in 2009 we made available to all Group employees an education program based on our revised Compliance Action Plan. We intend to continue to offer education in line with the actual conditions in individual workplaces.

In 2010, we delivered a compliance questionnaire to all JR East employees in an effort to raise their awareness of compliance issues.

■ Compliance Training

Title	Number of sessions	Participants	Contents and objectives	Number of participants
Management School (Compliance Course)	1	Administrative managers of Group companies	Compliance	32
Legal Skills Training	1	Legal affairs managers of branch offices	Enhancement of practical legal knowledge, legal reasoning, and decision-making/problem-solving skills	16
Basic Legal Training	2	Legal affairs personnel of Group companies	Acquisition of basic legal knowledge	52
Regular Legal Seminar	4	Employees of JR East and Group companies	Explanation of new and revised laws, and awareness-raising about compliance	520

Personal Data Protection

In 2005, we published our Regulations for the Management of Personal Information, and appointed Chief Privacy Officers who bear the responsibility of strictly protecting personal data. We are also working to ensure that each and every employee is aware of the necessity of the strict handling and management of personal data through pamphlets covering the subject exclusively and articles in our internal magazines. In order to even further enhance our levels of information security we regularly conduct internal workplace audits.

Risk Management

The Crisis Management Headquarters was established in 2002 to centrally collect and manage information, and to make prompt initial responses in the event of major crises affecting the business operations of Group companies. In 2004, we added the Crisis Management Office, a full-time section that has taken responsibility for Headquarters' secretarial work. We have, furthermore, recently established a system that enables us to respond to various emergencies including terrorist threats and pandemics such as influenza, and are constantly striving to prepare effective responses to all potential risks faced by Group companies.

Information Disclosure

JR East has a wide range of relationships with many stakeholders, including the 16.68 million customers using our railway services each day, as well as our shareholders and investors, business partners, employees and their families, and local communities. We actively disseminate information about Group initiatives through public and investor relations activities to these stakeholders. We also strive to disclose key corporate information on our website in a swift and appropriate manner. Furthermore, JR East is working to create wide-ranging opportunities to listen to and learn from the views and requests of our stakeholders.

Shinanogawa Power Station Incident

On March 10, 2009, JR East received an administrative penalty from the director of the Hokuriku Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism. The penalty was consistent with that of the River Act and included the revocation of a permit to draw water from the Shinano River because the company's water intake had exceeded the maximum allowed quantity at our hydroelectric plant, Shinanogawa Power Station (the collective name for the Senju, Ojiya and Shin-Ojiya power Station in Ojiya and Tokamachi cities, Niigata Prefecture). We would like to express our deepest apologies for causing a serious diminishment in the trust of local residents and all others involved in this case for us, and for the great inconvenience and concern.

This incident was a result of our lack of awareness of the increasing importance of improving and conserving the river environment. Additionally, we failed to fully appreciate our use of the precious water of the Shinano River and to suitably face the voices of local residents for the environmental improvements to the Shinano River. With these as backgrounds, we fully acknowledge our improper water intake from the Shinano River.

In order to prevent a recurrence of such incidents, JR East has been working on awareness measures which include compliance, improvement to organizations and systems, and the creation of a highly transparent workplace environment.

The specific content of each measure is detailed below.

【Awareness measures】

- Implementation of employee awareness training on River Act compliance, and the creation of check functions by reviewing our long-term personnel assignment policy

【Improvements to organizations and systems】

(Company-wide measures)

- Compliance education for all employees in the Group, and general inspections of compliance status for all departments of the company

(Measures for the power generation department)

- As part of the enforcement of our compliance promotion system, the establishment of the Outside Experts Committee on Hydroelectric Plant Operations, and the Project on Operational Improvement and Reinforcement in Power Plants
- Aiming to actively promote our work improvements at the Shinanogawa Power Station, the establishment of the Shinanogawa Power Station Improvement Department at the Head Office. Additionally, to clarify work implementation organization related to power generation and feeding, the establishment of the Energy Management Center as a Head Office-affiliated organization
- Revision of regulation systems related to water facility usage at power plants, including the clarification of rules associated with the River Act at the Shinanogawa Power Station
- Refurbishment of facilities and systems for proper water intake
- To improve upon the soundness and transparency of work related to water facility usage at the Shinanogawa Power Station, the implementation of measures to acquire ISO9001 certification, the international standard for quality management systems

【The creation of a highly transparent workplace environment】

- Advance consultation with river administrators
- To increase the transparency of power station operations, implementation of measures to reinforce coalitions with local municipalities, and to coexist with and contribute to local communities
- Regular opinion exchange meetings within the Head Office, the Energy Management Center and the Shinanogawa Power Station

With the aforementioned as countermeasures for recurrence, and with the approval of associated parties, on April 2, 2010, JR East applied to the Hokuriku Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism for exclusive river water use at the Shinanogawa Power Station. On June 9, 2010, JR East received authorization from the Bureau for special-purpose river water rights for the Shinanogawa Power Station, and resumed water intake and power generation at the Station.

Hereafter, JR East will remain committed to comply with all related laws and regulations, and to strictly manage river flow rates and water intake volumes. Additionally, for the harmonization of the water environment of the Shinano River and water use, we will conduct test water releases for a period of five years, verifying and evaluating the results at the Shinano River Middle Basin Water Environment Improvement Review Council. Furthermore, we will steadily improve structures of the fish chute of the Miyanaka Dam. JR East will wholeheartedly pursue the execution of these measures in order to better contribute to the local communities, and to be acknowledged by all concerned individuals as a partner with which to coexist into the future.

Independent Assurance Report



Independent Assurance Report

To the Board of Directors of East Japan Railway Company,

Purpose and Scope

We were engaged by East Japan Railway Company (the "Company") to provide limited assurance on its Sustainability Report 2010 (the "Report") for the fiscal year ended March 31, 2010. The purpose of our assurance engagement was to express our conclusion, based on our assurance procedures, on whether:

- 1) the environmental performance indicators and environmental accounting indicators (the "Indicators") for the period from April 1, 2009 to March 31, 2010 included in the Report are prepared, in all material respects, in accordance with the Company's reporting criteria; and
- 2) all the material environmental information defined by the Japanese Association of Assurance Organizations for Sustainability Information ("J-SUS") is included in the Report.

The content of the Report is the responsibility of the Company's management. Our responsibility is to carry out a limited assurance engagement and to express our conclusion based on the work performed.

Criteria

The Company applies its own reporting criteria as described in the Report. These are derived, among others, from the Environmental Reporting Guidelines of Japan's Ministry of the Environment. We used these criteria to evaluate the Indicators. For the completeness of material environmental information, we used the 'Criteria for Granting a Sustainability Report Assurance and Registration Symbol' of J-SUS.

Procedures Performed

We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines of Sustainability Information Assurance' of J-SUS.

The limited assurance engagement on the Report consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviews with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report and reviews of the Company's reporting criteria.
- Obtaining an understanding of the systems used to generate, aggregate and report the Indicators, and of the internal controls at corporate and site level.
- Analytical reviews of the Indicators aggregated at corporate level.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also a recalculation of the Indicators.
- A visit to Kawasaki Power Station.
- Assessment of whether or not all the material environmental information defined by J-SUS is included in the Report.
- Evaluating the overall statement in which the Indicators are expressed.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that:

- 1) the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report; and
- 2) all the material environmental information defined by J-SUS is not included in the Report.

We have no conflict of interest relationships with the Company that are specified in the Code of Ethics of J-SUS.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
October 14, 2010

Since the fiscal year ending March 2002, JR East has been continuously disclosing not only environmental issues but also safety and social issues in its Sustainability Reports.

Environmental performance data disclosed in the Sustainability Reports is a compilation of the annual environmental performance reports by the Head Office of each individual office. With respect to the part detailing environmental indicators, in some cases, the Head Office's definitions for the environmental indicators were not fully understood by some persons in charge at some offices and re-calculations of the data were required. Due to revisions to some of the related laws and regulations, including revisions to the Act on the Rational Use of Energy and the commencement of emissions trading by the Tokyo metropolitan government, companies are being required to manage their environmental performance data more accurately and promptly. For this reason, JR East is required to consider the formulation of a system to cope with these requirements.

Furthermore, with respect to information disclosure, from the viewpoint of what information is important for the JR East Group and for society, I think that it is necessary for JR East Group to rearrange the contents of the Report, clarify definitions for each disclosed indicator, collect necessary information promptly and suitably, and disclose the collected information.



Naomi Sugo
KPMG
AZSA Sustainability Co., Ltd.

[Summary from the General Manager of the Management Planning Department]

Internationally in the fiscal year ending March 2010, COP15 (the Fifteenth Session of the Conference of Parties to the United Nations Framework Convention on Climate Change) was held in Copenhagen to discuss frameworks for the so-called post Kyoto Protocol after 2013. On the domestic front, the Japanese Government announced its medium-term target to reduce greenhouse gas emissions by 25 percent by fiscal 2021 from fiscal 1991 levels. Additionally, in the fiscal year ending March 2010, revisions to the Act on the Rational Use of Energy were enforced, further helping to define the fiscal year, in my opinion, as a year of great change.

Currently, JR East is working strenuously to implement various measures in order to achieve the goals upheld in our spring 2008 medium-term management plan, JR East 2020 Vision *-i do mu-*. To further promote management with an emphasis on environment, in July 2010 we established the Environmental Management Office, further strengthening our organizational system to tackle environmental issues together as a group.

Global environmental issues have already passed the discussion stage and are now at the stage for action. Together, the JR East Group is committed to steadfastly implement measures to achieve the challenging goals we have upheld.

Furthermore, since the opening of a new Shin-Aomori station for the Tohoku Shinkansen is set for December 2010, we have asked people who are linked to Aomori, including the Governor of Aomori Prefecture, to hold discussions on the theme of “What Is Required for Regional Revitalization?” with the contents of the discussions included in this Report. In the discussion, we were able to hear opinions directly and from various perspectives, renewing our awareness through both a rediscovery of the expectations of the local people for us, and our responsibility to respond to those expectations.

With the concerted efforts of the entire JR East Group, we are committed to our continued contributions toward the regional development of each region.



Toshiro Ichinose
Director and General Manager
Management Planning Department

[JR East Group: History of Awards]

Year	Month	Environmental and social activities
1987	Apr.	Japanese National Railways divided, and East Japan Railway Company established. First Railway Safety Promotion Committee meeting held.
	Jun.	Green Campaign began. Green Counter (now renamed customer help desks) opened for receiving customer feedback.
1988	Sep.	Company-wide "Challenge Safety Campaign" launched.
	Dec.	ATS-P, an improved safety train-control system, installed on the Keiyo Line.
1989	Apr.	Safety Research Laboratory and General Training Center established.
1990	Sep.	"First Railway Safety Symposium" held.
	Oct.	"Future 21," a management plan for the twenty-first century, announced. "Ladies' Cars," cars exclusively reserved for female passengers, introduced on sleeping-car limited express trains.
1992	Mar.	East Japan Railway Culture Foundation established.
	Apr.	Committee on Ecology established.
	May	Trees planted to commemorate the 5th anniversary of JR East's founding (later, an annual event called "Railway Lines Forestation Program" began).
	Aug.	Waste collection sorted into three categories began on a trial basis at Sugamo Station on the Yamanote Line.
1993	Mar.	All-day smoking ban extended to major stations in the Tokyo suburban areas.
1994	Feb.	Ueno Station Recycling Center started operation (with automatic system for separating used cans from bottles).Waste collection sorted into three categories started at 36 stations on the Yamanote and other lines.
	Mar.	"Basic Safety Plan" announced.
1995	Feb.	Recycling of used train tickets began in the Tokyo metropolitan area.
	Mar.	First measure to reduce Shinkansen noise completed
	Apr.	Ecology education for all new recruits initiated. "Train-ta-kun," a discount car rental service for train passengers, launched.
1996	Mar.	JR East website set up. Quantitative environmental targets set for CO ₂ emissions and others. First annual Environmental Report published.
	Dec.	Autonomous Decentralized Transport Operation Control System (ATOS) became operational.
1997	Mar.	Recycling facility at Minami-Akita Operations Center started operation. Separate smoking zones established at all stations.Smoking banned on all local trains.
	Oct.	Recycling facilities at Nagano Shinkansen Rolling Stock Center and Tokyo Station started operation.
	Dec.	Participated in COP3 with the UIC (International Union of Railways).
1998	Mar.	Second set of measures to reduce Shinkansen noise completed.
	Nov.	Shinkiba Recycling Center started operation (for separating used newspapers from magazines). JR East ranked as 27th on the list of world's most respected enterprises by Financial Times.
1999	Feb.	Safety Plan 21 announced.
	Mar.	Omiya Recycling Center started operation (with automatic system for separating used cans from bottles).
	Apr.	Service managers deployed at some stations.
1999	May	Started utilizing copier paper recycled from newspapers collected at stations.
	Sep.	Information service on train operations made available by cell-phone.
2000	Apr.	JR East General Education Center established. Uniforms made from recycled PET bottles introduced
	Sep.	Environmental accounting included in annual Environmental Report.
2001	Nov.	Environmental targets revised with the announcement of New Frontier 21,the Group's medium-term management plan.
	Mar.	Oi Workshop, Kawasaki Thermal Power Plant, and Niigata Mechanical Technology Center acquired ISO14001 certification.
2001	Jul.	"Women-Only" cars for female passengers introduced on the Saikyo Line on a trial basis.
	Dec.	JR East Research & Development Center established.
2002	Feb.	Test runs of the AC Train, a next-generation commuter train, began.
	Mar.	Omiya Workshop acquired ISO14001 certification.
	Sep.	Sustainability Report including social and economic aspects published.
2002	Nov.	Sendai General Rolling Stock Workshop acquired ISO14001 certification.
	Mar.	Third set of measures to reduce Shinkansen noise completed. "Guide to Barrier-Free Station Facilities" pamphlet distributed.
2003	May	Test runs of the NE Train, world's first hybrid railcar, began.
	Sep.	First JR East Group Environmental Management Promotion Conference held.
2003	Dec.	Koriyama Workshop acquired ISO14001 certification.
	Mar.	"Safety Plan 2008" announced.
2004	Apr.	"F Program" launched, with the aim of creating a better working environment for female employees.
	May	Adatara Hometown Forestation Program held.
2005	Jan.	Environmental targets revised with the announcement of "New Frontier 2008",the Group's medium-term management plan.
	Feb.	Nagano General Rolling Stock Center acquired ISO14001 certification.
	Jul.	Akita General Rolling Stock Center acquired ISO14001 certification. Customer Service Department established.
2005	Dec.	Office-wide JR East Eco Activities started at JR Hachioji Branch Office.
	Feb.	Disaster Prevention Research Laboratory established.
2006	Mar.	Smoking banned in all cars of Shinkansen and limited express trains.
	Jul.	World's first diesel hybrid railcars in commercial service, the Kiha E200 type, commenced operation
2007	Oct.	Railway Museum opened
	Mar.	"JR East Vision 2020 - i do mu -" announced
2008	Jun.	Environmental targets revised
	Mar.	2013 Safety Vision Announced
2009	Apr.	Environmental Engineering Research Laboratory Established Total ban on smoking in specified locations in the Tokyo metropolitan area

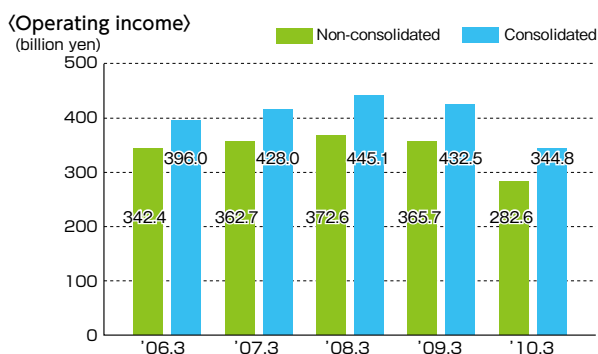
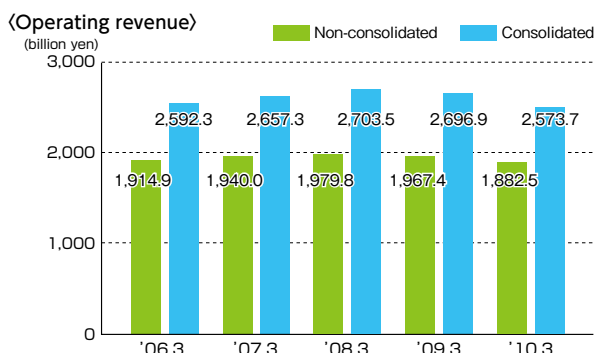
Former names are used for some facilities

[History of Awards]

Year	Month	JR East Group: History of Awards
1995	Oct.	Poster category at the 5th Awards for Environmental Advertisements and the Director of Environmental Agency's Awards (Organized by Japan Eco-Life Center)
1997	Apr.	6th Global Environment Award (Organized by Nihon Kogyo Shimbun in special cooperation with WWF Japan)
	Jun.	1st Environmental Action Plan Award and the Director of Environmental Agency's Awards (Organized by the National Association of Environmental Conservation and sponsored by the Environmental Agency)
1997	Nov.	Poster category at the 7th Awards for Environmental Advertisements and the Director of Environmental Agency's Awards (Organized by Japan Eco-Life Center)
	Apr.	1st Green Reporting Award Third Prize (Co-organized by Toyo Keizai Inc. and Green Reporting Forum)
2001	May	4th Green Reporting Award Third Prize (Co-organized by Toyo Keizai Inc. and Green Reporting Forum)
2005	Jan.	Grand Prize for Environmental Report in Environmental Report Category at Environmental Communication Awards 2004 (Organized by the Global Environmental Forum and sponsored by the Ministry of the Environment)
2006	Dec.	2006 Environment Minister's Award for Global Warming Prevention Activity in two categories: countermeasure technology introduction and dissemination, and implementation of countermeasures (organized by the Ministry of the Environment)
	Apr.	16th Global Environment Award Education, Culture, Sports, Science and Technology Minister's Award (Organized by Fuji Sankei Group in special cooperation with WWF Japan)
2007		Environment Minister's Award for Global Warming Prevention Activities in the category of technological development and commercialization (organized by the Ministry of the Environment)
	Dec.	Eco Products Category Minister of Environment Prize in the 4th Eco Products Award (organized by the Eco-Products Awards Promotion Council; sponsored by the Ministry of Finance, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment)
2010	Mar.	Environmental Management Award, Japan Creation Award 2009 (Japan Fashion Association)

Corporate profile

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	60,190 (as of April 1, 2010)
Passenger line network	Shinkansen lines: 1,052.9 km Conventional lines: 6,473.9 km
Number of stations	1,705
Total number of trains in operation per day	12,761 (timetable revised in March 2010)
Total number of passengers per day	16.68million
Business areas	Transportation, station space operation, shopping center and office building operation, and other services



Businesses of the JR East Group (as of July , 2010)

■ Transportation services

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

■ Shopping center operations

Tetsudo Kaikan Co., Ltd. / atre Co., Ltd. / LUMINE Co., Ltd. / Tsurumi Station Building Co., Ltd. / Yokohama Station Building Co., Ltd. / Shonan Station Building Co., Ltd. / JR East Department Store Co., Ltd. / JR Tokyo-West EKIBIRU Development Co., Ltd. / Utsunomiya Station Development Co., Ltd. / Takasaki Terminal Building Co., Ltd. / Mito Station Development Co., Ltd. / Kinshicho Station Building Co., Ltd. / Chiba Station Building Co., Ltd. / JR East Aomori Business Development Company Co., Ltd. / Hirosaki Station Building Co., Ltd. / Station Building MIDORI Co., Ltd.

■ Office operations

JR East Building Co., Ltd.

■ Hotel operations

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

■ Retail shop and restaurant businesses

JR East Retail Net Co., Ltd. / Nippon Restaurant Enterprise Co., Ltd. / JR East Food Business Co., Ltd. / Delicious Link Co., Ltd. / JR East Station Retailing Co., Ltd. / JR East Water Business Co., Ltd. / KINOKUNIYA Co., Ltd.

■ Trading and logistics businesses

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

■ Travel agent and car rental services

JR East View Travel Service Co., Ltd. / JR East Rental Co., Ltd.

■ Sports and leisure businesses

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

■ Real estate management

JR East Urban Development Corporation

■ Information, financial, and personnel services

JR East Japan Information Systems Company / JR East Net Station Co., Ltd. / JR East Management Service Co., Ltd. / JR East Personnel Service Co., Ltd. / JR East Green Partners Co., Ltd.

■ Credit card business

Viewcard Co., Ltd.

■ Advertising and publishing

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

■ Cleaning and linen supply services

Shinkansen Cleaning Service Co., Ltd. / JR East Transportation Services Co., Ltd. / East Japan Eco Access Co., Ltd. / JR Takasaki Railway Services Co., Ltd. / JR Mito Railway Services Co., Ltd. / JR Chiba Railway Services 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. / Shinnihon Linen Co., Ltd.

■ Construction consulting and maintenance services

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.

■ District Heating and Cooling

Shinjyuku South Energy Service Co., Ltd.

■ Group companies of our branch offices

Tohoku Sogo Service Co., Ltd. / Juster Co., Ltd. / JR Atlis Co., Ltd. / Tokky Co., Ltd. / Shinano Enterprise Co., Ltd.

[Editorial Postscript]

In publishing the JR East Group Sustainability Report 2010, our primary aim has been to provide information concerning our Group's latest initiatives and the measures we have been taking in an easy-to-understand manner. Through this publication we hope to identify the challenges we face, and we would appreciate your frank opinions which would help us to continue to evolve as a Trusted Life-style Service Creating Group. In conclusion, we thank everyone involved in the publication of this report and all those who have supported it.

Secretariat, Committee on Ecology, East Japan Railway Company



The J-SUS mark indicates that the reliability of the environmental information contained in the JR East Group Sustainability Report 2010 meets the standard for environmental report screening and logo use defined by the Japanese Association of Assurance www.j-sus.org Organizations for Sustainability.



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Sustainability Report 2010

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