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: 59,237 (as of April 1, 2014)

Editorial Policy

The CSR Report sets forth various initiatives being taken in the JR East Japan Group. It is published for the purpose of providing an accurate and simple description of these initiatives as well as promoting communication with our diverse stakeholders. The 2014 edition presents feature articles and interviews in line with the JR East Group Management Vision V - Ever Onward, which was formulated in October 2012.

While our desire remains to offer as much information as possible related to the environment, safety, and society, the report itself focuses in particular on areas where there have been notable changes. For more information on the overall activities of the JR East Group, please go to our website.

References

- Environmental Reporting Guidelines 2012 [Japan Ministry of the Environment]
- Environmental Accounting Guidelines 2005 [Japan Ministry of the Environment]

Reporting period

This report basically covers our activities from April 1, 2013 to March 31, 2014, although some events presented here happened earlier or in the period between the end of March 2014 and the publication of this report in October 2014.

Boundary of reporting

This report covers activities of East Japan Railway Company and its 73 Group companies. Except for those described individually, actual performance data cover JR East alone.

Figures in this report

Totals may not match the sum of individual figures due to rounding.

Note: External Assurance on environmental performance and environmental accounting data

KPMG AZSA Sustainability Co., Ltd. has been engaged to provide external assurance on a set of selected environmental performance and environmental accounting indicators so that the reliability of the data is ensured. The particular indicators that are assured are marked with ☆ for clarity.

More detailed information is available on our website:
http://www.jreast.co.jp/e/environment/
**Group Philosophy**

The JR East Group aims to contribute to the growth and prosperity of the East Japan area by providing quality leading-edge services, with train station and railway businesses at its core, to customers and communities.

We will continue to embrace the challenge of pursuing “extreme safety levels” and service quality reforms. Through technological innovation and globalization, we will strive to attain goals such as nurturing personnel with an expansive perspective, spurring the advancement of railways, and making line-side areas more attractive and convenient. To this end, JR East will continue to rigorously pursue its unlimited potential.

We aim to grow continuously while meeting our social responsibilities as a *Trusted Life-Style Service Creating Group*.

**Basic Principles**

1. Together with customers and communities
   
   We will put our hearts into providing good service and living up to customers’ and communities’ expectations.

2. Enhancing safety and quality
   
   We will aim to enhance safe and reliable transportation services and service quality.

3. Pursuing unlimited potential
   
   With an expansive perspective and based on our calling, we will pursue the JR East Group’s unlimited potential.
Management Information

〈Operating revenue〉

(billion yen) Non-consolidated Consolidated

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〈Current profit〉

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〈Operating income〉

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〈Net income〉

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Revenues From Passenger Tickets

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Shinkansen lines Conventional lines

(Billions of yen)

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Number Of Passengers

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Shinkansen lines Conventional lines

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Operations are still suspended on some sections of the Yamada, Ofunato, Kesennuma, Ishinomaki, Senseki, and Joban Lines that were damaged as a result of the Great East Japan Earthquake. A section of the Tadami Line is currently suspended due to the damage from heavy rain in July 2011.

As of June 2014

Passenger line network
- Shinkansen lines: 1,134.7km
- Conventional lines: 6,339.5 km

Number of stations: 1,678
Total number of trains in operation per day: 12,773 (Timetable revised in March 2014)
Total number of passengers per day: 17.11 million
Business Outline

Businesses of the JR East Group (as of June 30, 2014)

- **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. / Yokohama Station Building Co., Ltd. / Shonan Station Building Co., Ltd. / JR Chuo Line Mall Co., Ltd. / JR East Department Store Co., Ltd. / JR Tokyo West 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. / 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.

- **Retail shop and restaurant businesses**
  JR East Retail Net Co., Ltd. / Nippon Restaurant Enterprise Co., Ltd. / JR East Food Business 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 Logistics Co., Ltd.

- **Travel agent and car rental services**
  JR East View Travel Service Co., Ltd. / JR East Rental & Lease 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**

- **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**
  JR East TESSEI Co., Ltd. / JR East Transportation Services Co., Ltd. / East Japan Eco Access Co., Ltd. / JR East Station Service 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. / Morioka Railway Servicing Co., Ltd. / JR Akita Railway Services Co., Ltd. / JR Niigata Railway Services Co., Ltd. / JR Nagano Railway Services Co., Ltd. / JR Higashihinode Linen Co., Ltd.

- **Construction consulting and maintenance services**

- **Rolling stock manufacturing and maintenance**
  Japan Transport Engineering Company / East Japan Transport Technology Co., Ltd. / Tohoku Rolling Stock Machinery Co., Ltd.

- **Overseas railway consulting**
  Japan International Consultants for Transportation Co., Ltd.

- **District Heating and Cooling**
  Shinjuku South Energy Service Co., Ltd.

- **Group companies of our branch offices**
  JR East Tohoku Sogo Service Co., Ltd. / Jaster Co., Ltd. / JR Atlas Co., Ltd. / Tokky Co., Ltd.
Top Message

Thriving with Communities, Growing Globally

In October 2012, we formulated our fifth medium-term management plan, “JR East Group Management Vision V – Ever Onward.” Under the slogan “Thriving With Communities, Growing Globally,” this plan renews our commitment to the twin pillars of our business: continuing to work to “fulfill our eternal missions” and striving to succeed in our “pursuit of unlimited potential.”

The experience of the Great East Japan Earthquake reminded all our employees of our ties to local communities and the great expectations that society places on our railway company. As a company responsible for maintaining social infrastructure, the disaster brought home to us how vital it is that we work with a sense of mission to meet the public’s expectations. Today, the JR East region and the entire country face a number of serious problems. Our motto, “Thriving With Communities, Growing Globally,” is also a pledge: We will come together with local communities to think about the kind of future we want, and will do everything we can to use our unique position to build vibrant communities and open a way to the future for our railway.

Continuing to Fulfill Our “Eternal Missions”

As a group dedicated to “thriving with communities,” our fundamental duty is to contribute to the development of those communities by providing safe and high-quality services. We must work to meet the expectations that local communities place in us and reinforce the trust that is the foundation of everything we do. We must never forget that a single accident is enough to destroy this trust. This is why safety has always been our number-one priority. Ever since the JR East group was formed, we have constantly worked to improve our safety standards. FY2015 marked the start of our new five-year safety plan: the JR East Group Safety Plan 2018, under which we will work to cultivate the highest levels of safety awareness among all our employees. By striving to improve safety through the actions we take on a daily basis, our aim is to achieve “ultimate safety levels” in which the individual efforts of every employee are solidified by teamwork. The importance of these efforts was brought home to us again in February 2014 when one of our trains derailed and caused an accident at Kawasaki station on the Keihin Tohoku line. We must ensure that there is no further repetition of this kind of event. In addition to redoubling our accident prevention efforts, we are determined to learn the lessons from past accidents. We will carry out a thorough investigation to locate any weaknesses in our safety procedures and find measures to resolve them.

We are also continuing to improve our preparedness for natural disasters. In addition to the 300 billion yen we have invested in seismic reinforcement to prepare for the eventuality of a major earthquake directly beneath the Tokyo metropolitan area, we are also taking steps to guard against natural disasters and extreme weather events including major snowfall, heavy rain, and strong winds, all of which have occurred with increasing frequency and caused substantial damage in recent years, as we work to build a railway that can withstand natural disasters of all types. We will also continue work to install automatic platform gates in our stations. As well as the ongoing work to install these gates in stations along the Yamanote line, we are considering expanding this measure to other lines.

Alongside safety, another of our major missions is service quality reform. In a context where a decline in the productive working-age population in the JR East area seems unavoidable, stimulating demand for our railway will be an important issue for the group in the future. One approach will be to expand our rail network. We will use the opportunities presented by major
Pursuing Unlimited Potential

The second pillar of “Group Management Vision V” is our determination to grow globally. Railway companies, because of their sheer scale, are at risk of becoming self-absorbed and inward-looking. A corporate culture that is satisfied with the status quo will not survive in an age of dramatic change. We must develop and harness the skills of every one of our employees and grow as a group, building a corporate culture that gives all of our employees belief in their “unlimited potential” and the confidence to pursue it.

Globalization will be key to this strategy. We are considering many railway projects in overseas markets, which we expect will be worth 22 trillion yen by 2020. Our aim is to harness our skills in manufacturing rolling stock, as well as our maintenance and operations knowhow, to develop our business in global markets. Although these efforts are in their infancy, the group is already responsible for providing rolling stock and maintenance services for the MRT Purple Line in Bangkok, Thailand, which is due to begin operations in 2016. We are also actively dispatching employees to a wide variety of countries to provide consulting and technical assistance in areas around the world.

Another key will be technological innovation. Our plans for this include several priorities: energy and environmental strategies, innovations using Information and Communication Technology (ICT), and further increases in Shinkansen operational speed. We encourage our employees to pursue open innovation. Rather than focusing exclusively on the technologies of JR East or the railway industry alone, we encourage them to seek out technologies from other companies and industries that can help the group to achieve breakthroughs that go beyond the values we have had in the past.

Pursuing Energy and Environmental Strategies

Responding to global environmental problems is a priority for our business. Our environmental efforts, which include introducing energy-saving railcars and LEDs for lighting, have produced substantial results, reducing the total amount of CO₂ emissions produced by our railway operations and lessening the burden on the environment. Rail travel enjoys a reputation as an environmentally friendly mode of transportation, but the automotive industry has achieved remarkable developments in energy-efficient and environmentally friendly technology in recent years, including hybrid vehicles, electric cars, and fuel cell vehicles.

For this reason, as mentioned above, we have made energy and environmental strategies one of the pillars of our plans for technological innovation. We are making concerted efforts to achieve a more evolved railway environmentally, concentrating on three aspects: energy creation, energy conservation, and the introduction of smart...
grid technologies.
In energy creation, we are actively introducing renewable energy including solar, wind, geothermal, and biomass energy. In particular, we have plans to develop northern Tohoku into a renewable energy base, making full use of its natural environment and also encouraging economic revitalization. Surveys have already begun in many areas. As part of our work to ensure a stable power supply, we opened a new No. 4 generator at the Kawasaki Thermal Power Station, and have begun renovations on the No. 1 generator at the same plant.
On energy conservation, we continue to develop facilities at our “ecoste” ecological model stations, which bring together a variety of environmental innovations, and we are moving ahead with plans to replace conventional lighting and electronic display devices with LEDs. In March 2014 “ACCLUM EV-E301,” a hybrid railcar train using an accumulator system, was introduced on the Karasuyama line. We have further plans to build on this technology to develop railcars through service between alternating current (AC) electrified railway lines and non-electrified segments. This will permit electric railcar operations without installing catenary (overhead power lines). We are also moving ahead with R&D on new railway cars equipped with ICT-driven “automatic power-saving operation functions.”
In terms of smart grid technologies, we have plans in place to introduce energy management systems (EMS) into stations. In FY2015 we started automated demand control of the power used at Kokubunji and Nishi-Funabashi stations. We are also continuing to research effective uses of regenerative power and aim to develop viable practical applications as soon as possible.
Through these measures, by FY2021 we aim to reduce energy usage in railway operations by 8% (compared to FY2011), and to improve the CO₂ emissions coefficient of JR East power stations by 30% (compared to FY1991). In April 2014, we established new three-year targets to be achieved in FY2017. We will implement these efforts with a plan and further continue to collect the result data.

Going forward, the entire JR East Group will continue to work together to fulfill our “eternal missions” of providing safe and high-quality services and contributing to local communities. At the same time we will continue our pursuit of “unlimited potential,” working together with the rest of the community to open up new possibilities for the future.

Tetsuro Tomita
President and CEO
East Japan Railway Company
JR East Group Management Vision V — Ever Onward

JR East was established as a result of the reform and privatization of Japanese National Railways (JNR) 25 years ago, and the Group is now at a crossroads of moving on into the next quarter century. With this as an impetus, and in light of major changes in our operating environment, for instance as a consequence of the Great East Japan Earthquake, JR East in October 2012 formulated a new management vision entitled “JR East Group Management Vision V - Ever Onward.” This fifth management vision since the Company was established aims to once again renew the courses of action for the Group going forward. Having set the continual fulfillment of "Eternal Mission" and of growth through "Pursuing Unlimited Potential" as two important pillars, the vision was drawn up to set forth management’s basic direction and the Group’s specific priorities for execution.

Our Calling  —Basic Courses of Action for Management

The JR East Group’s New Key Phrase
Thriving with Communities, Growing Globally

Thriving with communities
The Great East Japan Earthquake poignantly reminded us of the fact that companies cannot thrive without sound and vibrant communities. The East Japan area, our home ground, and Japan as a whole currently face a host of issues. As a corporate citizen, we are determined to fulfill our mission and execute businesses unique to the JR East Group in an effort to help solve those issues. The goal is to draw a blueprint for the future together with members of the community as we do our part to build vibrant communities.

Growing Globally
However, taking root in communities does not mean becoming complacent by turning inward. To continue to fulfill our mission, we must constantly transform ourselves and achieve growth. We must look outward and step out into the world, while actively seeking knowledge and technology externally. We believe that doing so will provide fertile ground for capturing new growth opportunities. To unlock our full potential, we must boldly step out into the world.

Eternal Mission and Pursuing Unlimited Potential
Under “JR East Group Management Vision V — Ever Onward,” JR East has set “Eternal Mission” and “Pursuing Unlimited Potential” as two important pillars and has established six basic courses of action for the Group.
The JR East Group’s fundamental mission is to provide safe and high-quality services that customers expect of the JR East Group and conduct railway and life-style businesses, with the aim of contributing to the growth and prosperity of communities. This fundamental mission will never change through the years. We have once again positioned this mission as a key tenet of management. At the same time, we will make relentless efforts to ensure that the content and quality of our services properly answer the expectations of society.

The JR East Group must achieve sustained growth in order to continue to fulfill its three-part eternal mission in the years ahead. In a fast-changing environment, maintaining the status quo will only mean falling behind. Unless we constantly take on the challenge of reaching new goals, we will be unable to achieve growth. The JR East Group and each and every Group employees will pursue the Group’s unlimited potential.

We have adopted “Ever Onward” as the subtheme of “JR East Group Management Vision V.” This subtheme carries forward the spirit of “Idomu” championed in JR East 2020 Vision — idomu —, our management vision formulated in March 2008. “Ever Onward” embodies our strong determination to drive the growth of our employees and the JR East Group as a whole by embracing new challenges such as technological innovation and globalization, as we pursue our unlimited potential.
Eternal Mission

KIWAMERU (Excel): Pursuing “extreme safety levels”

Building a railway capable of withstanding natural disasters

Based on experience derived from the Great East Japan Earthquake, we have worked to implement earthquake countermeasures in preparation for events that are conceivable such as an earthquake directly beneath the Tokyo metropolitan area, focusing on both tangible and intangible aspects, in an effort to build a railway capable of withstanding natural disasters.

We will strengthen countermeasures against train collision and derailment accidents and rail crossing accidents, along with installing automatic platform gates on station platforms. In these and other ways, we continue to promote the development of railways that passenger can utilize reliably.

We will continue to tirelessly work to improve safety by pursuing a goal of “zero accidents involving passenger injuries or fatalities and zero accidents involving employee fatalities (including employees of Group companies and partner companies).”

MIGAKU (Improve): Service quality reforms

Enhancing the rail transportation network and other measures

We aim to become No.1 in customer satisfaction in the railway industry by honing the quality of transportation services while rigorously pursuing passenger-friendly railway services.

We will generate new sources of demand, such as tourism, by steadily promoting several major projects. These include the forthcoming start of service on the Tohoku Through Line, as well as new operations of the Hokuriku Shinkansen to Kanazawa and the Hokkaido Shinkansen to Shin-Hakodate (provisional name).

Besides striving to create new demand by upgrading and enhancing services for seniors, we will promote measures to enhance the convenience of Suica. Through these sorts of measures, we aim to further popularize Suica in society as an essential social infrastructure in daily life.

TOMO NI IKIRU (Together): Strengthening collaboration with local communities

Supporting earthquake recovery, stimulating tourism and revitalizing communities

As a company responsible for railways, which are a crucial social infrastructure, and a member of communities, we will consider the future of communities together with local communities and take action accordingly.

We have positioned the next five years (from FY2013 through FY2017) as an intensive period in which reconstruction from the earthquake will remain an urgent priority. Therefore, we will diligently execute measures to revitalize communities and promote tourism in ways unique to JR East.

In the life-style business, we will promote three town development perspectives that will see us conduct development and business expansion initiatives integrated with towns surrounding stations. These measures will be centered on the development of large-scale terminal stations, the Tokyo metropolitan area railway network and core regional train stations.

[Our efforts]

1. Responding to major earthquakes
2. Responses to natural disasters and extreme weather events
3. Automatic platform gates
4. Promoting measures to prevent train collision and derailment accidents
5. Upgrading systems and structures to ensure safety

[Our efforts]

1. Improving transportation quality
2. Pursuing customer-friendly railway services
3. Improving the quality of the Tokyo metropolitan area railway network
4. Expanding the intercity transportation network
5. Growing Shinkansen, expanding tourism. Discovery of new travel routes—
6. Enhancing the convenience of Suica as social infrastructure
7. Enhancing services for seniors

[Our efforts]

1. Restoration of segments along the Pacific coast damaged by the tsunami caused by the Great East Japan Earthquake
2. Promoting Japan as a tourism-oriented nation
3. Driving further growth in the life-style business
4. Three town development perspectives —
5. Measures to fulfill our role as provider of regional transportation
6. Revitalizing local industries
7. Contributing to communities and society as a whole through medical services
Pursuing Unlimited Potential

HIRAKU (Pioneer): Technological innovation — Forging strategies for conserving energy and the environment, utilizing ICT (information and communication technology) and operating the Shinkansen at faster speeds

- We will embrace the approach of open innovation where we utilize external development capabilities and intellectual property and will vigorously promote technological innovation.
- We will emphasize measures to establish energy and environmental strategies in light of power shortage issues, develop new railway systems utilizing ICT that are unfettered by conventional notions, and embrace the challenge of operating Shinkansen at a maximum speed of 360 km/h.

[Our efforts]
① Establishing energy and environmental strategies
② Utilizing ICT
③ Operating the Shinkansen at faster speeds
④ Promoting an intellectual property strategy

NOBIRU (Grow): Tackling new business areas — Globalization

- The overseas railway market is projected to grow, and we will cooperate with companies worldwide to actively participate in overseas railway projects so that we will grow as a group.
- While continuing its challenges to enter into new business domains, we will hone JR East Group’s technologies and expertise and establish an open and transparent corporate culture.

[Our efforts]
① Participating in overseas railway projects
② Expanding railcar manufacturing operations
③ Fully leveraging external technologies and services
④ New business initiatives

HABATAKU (Empower): Developing employees and create a corporate culture that maximizes human potential

- To ensure that employees are able to experience personal growth and fulfillment through their work, we will strive to provide numerous opportunities where highly motivated employees can succeed and tackle new challenges. At the same time, we will create a culture of respect for embracing challenges, where people feel empowered to try new initiatives.
- Through technological innovation and participation in overseas railway projects, among other means, we aim to build an open and transparent corporate culture and nurture personnel with an expansive perspective, as we foster employees who are able to take a broad interest in other industries and the world at large.
- To address the tumultuous management environment and allocate business resources to growing sectors, we will create a lean, muscular and agile management structure that is able to continuously generate profit.

[Our efforts]
① Expanding opportunities for employees to succeed and tackle challenges
② Corporate culture reforms
— Work style reforms, raising the efficiency of organizational management —
③ Establishing a lean, muscular and agile management structure
Group Safety Plan 2018

Since its foundation, JR East has been formulating five 5-year Safety Plans which place safety as our most important management issue.

This year, JR East formulated its 6th and newest 5-year Safety Plan, Group Safety Plan 2018, which endeavors to encourage each one of us to expand our capabilities in order to realize safety through team work. Each one of us involved in the railway business endeavors to improve upon the current levels of safety and to continue our challenge to achieve “extreme safety levels” across the entire group.

In Group Safety Plan 2018, together with redefining the direction we are taking as a company, we outline specific measures aimed at preventing accidents resulting from internal factors. Additionally, through our ongoing efforts to pass on technologies and promote measures to comprehensively understand the severity of accidents, we aim to further enhance safety management through the fostering of safety-conscious personnel.

In its sixth 5-year Safety Plan, JR East plans to invest approximately 1 trillion yen over the five years for safety equipment.

Major features of Group Safety Plan 2018

A safety plan focusing strongly on the JR East Group

The safety of JR East’s railway business is firmly supported through the various coalitions and efforts of its railway employees and its Group and partner companies. Additionally, as more and more work continues to require the cooperation of the JR East Group as a whole, the sixth 5-year Safety Plan has focused more on our strength as a Group, and we have chosen the name for this plan to reinforce our unity as a group.

Reaffirming our directions

As its primary goal, Group Safety Plan 2018, which is the successor to the 2013 Safety Plan, endeavors to realize zero accidents involving passenger injuries or fatalities and zero accidents involving employee fatalities (including the employees of Group and partner companies). To achieve this goal, we will focus on specific measures while targeting three directions.

Preventing the occurrence of all accidents due to internal factors

Through improvements to our railway operations and maintenance, we aim to prevent all accidents due to preventable internal factors. These include such accidents as those resulting from failures within the JR East Group to confirm signals or errors in maintenance work procedures.

Reducing the risk of accidents resulting from predictable external factors

To minimize damage from accidents due to external factors such as natural disasters, we are working to reduce risk through the planned strengthening of our railway facilities.

Cooperating with the community to implement comprehensive measures against accidents that are closely related to society

Together with our customers and members of the local communities, we are taking comprehensive measures to counter accidents at level crossings and passengers falling onto platforms. Through the sharing of information on measures such as combining and eliminating level crossings and developing people’s awareness of the risks involved in railways, we aim to implement specific initiatives which will steadily eliminate these accidents.
A focus on passing technologies down to new generations

As the time is rapidly approaching for many skilled veteran employees to enter into retirement, we position the next five years to be their last chance to pass on their technological abilities to their successors. We aim to take specific measures in improving our safety management by actively and deliberately passing down these technologies, and through measures to thoroughly understand the gravity of accidents.

The four pillars of Group Safety Plan 2018

Pillar 1: Ingraining the cultures of safety
With the cultures of safety at the foundation of our safety measures, we aim to further ingrain this mentality in our employees.

Pillar 2: Improving safety management
We aim to foster safety-oriented personnel through the passing on of safety-related technologies and knowledge. Additionally, we will work on measures to comprehensively understand the gravity of accidents and the importance of minimizing human error.

Pillar 3: Steadily reducing risk
We aim to greatly reduce risk from accidents resulting from internal factors. Additionally, we endeavor to reduce risk from accidents due to external factors such as large scale earthquakes and other natural disasters, such as those caused by atypical weather. Furthermore, for risks from accidents closely related to society and for safety measures for places like level crossings and platforms, we will cooperate with our customers and the people of local communities to implement comprehensive measures.

Pillar 4: Priority improvement plan for safety equipment
In Group Safety Plan 2018, JR East plans to invest approximately 1 trillion yen in safety equipment. Specifically, we will continue our countermeasures against large scale earthquakes and those against level crossing accidents, and to further improve our safety equipment. We will install platform doors at 23 stations on the Yamanote Line and have plans and priorities for introducing them at other stations on other lines.
Measures against earthquakes

Learning from the experiences of the Great Hanshin-Awaji Earthquake of January 1995, the Sanriku Minami Earthquake of May 2003, and the Mid Niigata Prefecture Earthquake of October 2004, JR East has introduced emergency train stop measures, seismic reinforcement measures to its elevated bridge columns, bridge piers, tunnels and station buildings, taken preventive measures against derailments, and increased the number of seismometer locations. Thanks to these and other measures, nobody on board our trains was killed or injured at the time of the Great East Japan Earthquake of March 11, 2011.

Since FY2010, JR East has expanded its countermeasures and initiated the 2nd phase of its seismic reinforcement measures, including further seismic reinforcement of elevated bridge columns. In addition, JR East has designated the five years from FY2013 as a priority improvement period and is striving to provide disaster-resilient railways through the introduction of the following measures:

① Seismic reinforcement measures for embankments, earth cuttings, brick arch elevated bridges and power poles, and measures to prevent the collapse of station platform ceilings and walls if an earthquake directly strikes the Tokyo metropolitan area. JR East will also accelerate the implementation of its plans for continuing the seismic reinforcement of its elevated bridge columns and bridge piers.

② Seismic reinforcement measures for station buildings where the number of boarding and alighting passengers exceeds 3,000 persons per day, and for Shinkansen power poles, many of which were damaged during the Great East Japan Earthquake.

③ Strengthening of anti-disaster telecommunication functions, including an increase in the transmission speed of seismometer measurement data, and the reinforcement of emergency power sources for our communication network.

Examples of reinforcement of embankments and methods for reinforcement

Examples of seismic reinforcement

Installation status of seismometers
Measures for protection against tsunami

Prior to the 2011 Great East Japan Earthquake, JR East had already designated tsunami hazard areas and set operational restrictions for each of its branch offices, formulated manuals and conducted drills in the guidance of passengers evacuating from trains. After the earthquake, JR East has further reviewed all of its tsunami-related rules, manuals and drills. Based on the reviewed rules and established policies, JR East carried out the following actions in FY2013:

- Establishment of tsunami warning zones in each of our branch offices after reexamination based on hazard maps of municipalities and tsunami flooded areas resulting from the Great East Japan Earthquake.
- Systemic improvement of displays showing evacuation route maps and signage at and between stations.
- Working together with local municipalities to install emergency stairs to evacuation shelters, and providing signs to indicate escape routes in places where evacuation is difficult.
- Establishment and review of tsunami response manuals in all workplaces that could be at risk.
- Implementation of regular education and training around March 11 in all workplaces that could suffer from a tsunami, based on Tsunami Evacuation Principles, the tsunami response manual, and other sources.

Drills and support provision for people facing difficulties getting home

When train services were interrupted during and after the 2011 Great East Japan Earthquake, stations were crowded with passengers. In the future, after confirming the safety of our facilities, JR East will strive to keep passenger restrooms open and public phones available at stations throughout the Tokyo metropolitan area, provide customers with as much information as possible, and offer temporary shelter in concourses and elsewhere at approximately 200 stations. These designated stations have been listed on the JR East website since March 5, 2013 and the information on temporary shelter spaces and requests to customers has been widely publicized as station initiatives that would follow large-scale earthquakes. At approximately 30 major terminal stations, including Tokyo and Shinjuku, JR East has been stockpiling supplies including drinking water, blankets, and first-aid kits for children and the elderly. By the end of FY2014 this project has been expanded to approximately 170 stations within a 30-km radius of Tokyo. JR East also has conducted joint drills with the local municipalities to increase our ability to support people who have difficulty returning to their homes in the event of a disaster affecting major terminal stations. Together with local municipalities, JR East is working to improve evacuation guidance methods in the event of disasters, and to be generally better prepared.
Measures to Support the Restoration of Disaster-damaged Areas in FY2014

The areas affected by the Great East Japan Earthquake are still in the process of reconstruction, and their revitalization with the power of tourism is an important mission of JR East. In fiscal 2014, we conducted the Sendai - Miyagi Destination Campaign (DC) over the months April - June and the Akita DC over the months October - December. Throughout the same year, we promoted the GO! TOHOKU Campaign, which we launched in fiscal 2013 as a symbol of our efforts to assist recovery, and publicized travel to the Tohoku region on a continuous basis. In addition, we commenced sales of bus tour plans to support recovery and emphasized transportation of visitors to coastal communities such as Minamisanriku and Kesennuma, which incurred tremendous damage from the tsunami. We also marketed a tour plan to support the affected areas that was linked with an aid project of the Tokyo Metropolitan Government under the banner “GO! FUKUSHIMA! Nice Price in Summer! Fukushima” and a bus tour for support of recovery in Iwate Prefecture, with a guided tour of disaster sites. The latter included financial aid for the affected areas. In these and other ways, we strove to assist recovery and revitalize communities in these areas.

During restoration support events in Sendai Station, Dila Nishifunabashi, and Dila Mitaka, JR East provided concrete assistance by offering sales channels for products from disaster-affected area where production has been resumed and sales outlets for residents of disaster-affected areas.

At Ueno and Akihabara stations in Tokyo, JR East continuously hosted events such as farmers’ markets and "NOMONO" local produce shops, which focused on eastern Japan including disaster-struck areas. We also launched a new event titled “Sanriku Marketplace,” which focused on communities in the Sanriku district. At this event, customers were able to buy seasonal foods and sake directly from Sanriku farmers and sake brewers.
Tsunami-damaged Railway Lines—Basic Policy & Restoration Status

JR East has been carrying out post-tsunami reconstruction with the goal of resuming train operations on line sections where safety can be guaranteed along the Pacific coast, which incurred tremendous damage from the tsunami. Services have now resumed along the entire Hachinohe Line and on most sections of the Joban, Senseki, and Ishinomaki lines.

On the Joban Line between Soma and Hamayoshida, the Senseki Line between Takagimachi and Rikuzenono, and the Ishinomaki Line between Urashuku and Onagawa, we are laying track for restoration of railway service in step with community reconstruction. We are aiming for resumption of service in the spring of 2017 on this section of the Joban Line, by June 2015 on the Senseki Line, and the spring of 2015 on the Ishinomaki Line.

There are many factors that we must consider regarding the resumption of operations on the Joban Line section between Hirono and Haranomachi, which runs partially within the 20-km radius exclusion zone around the Fukushima Daiichi Nuclear Power Station. Before making any decisions, we will consider all aspects of reconstruction, including reviews of line sections, decontamination activities implemented by the Ministry of the Environment, the condition of infrastructural redevelopment, the situation regarding the return of former residents, and requests from local governments. Track restoration on the section between Hirono and Tatsuta began early enough for us to restore service when the residents of communities along the line were permitted to return, and service was resumed on June 1, 2014.

On the Kesennuma and Ofunato lines, we started a Bus Rapid Transit (BRT) program so that we could provide safe, convenient service at an early date. This has been improved by measures such as lengthening the exclusive BRT roadways and introducing “odeca,” an IC boarding card system.

For the Yamada Line section, we made a proposal to local government organizations for integrating its operation with the North and South Rias Lines, which are operated by the locally based Sanriku Railway Company. This proposal, which is now under discussion, was raised from the perspective of encouraging service use through operation rooted in the area, which would be sustainable and responsive to local needs.

The suspension of train operations along line sections badly damaged by the earthquake and tsunami has now been reduced from the initial 400 km to approximately 240 km as of July 1, 2014. JR East will, of course, continue to cooperate with both national and local government authorities to bring about restoration of damaged railway lines, as well as in plans to rebuild the area as a whole and further develop towns, while at the same time ensuring the paramount safety of customers.
Basic Concept for Environmental Protection and Targets

Basic philosophy and basic policies for promoting ecological activities (established May 1992, partially revised in September 2012)

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

[Basic philosophy]
- The entire JR East Group, as a member of society, will diligently strive to balance global environmental protection with our business activities.

[Basic policies]
- To contribute to creating a global environment for the future through our business activities for our customers and local communities.
- To develop and provide the technology needed to protect the global environment.
- To maintain our concern for the global environment and raise the global environmental awareness of our employees.

Activity guidelines for the promotion of ecological activities (established March 1996 and partially revised in February 1998 and September 2012)

1. While working to reduce total energy consumption by enhancing energy efficiency and introducing cleaner forms of energy, we endeavor to reduce CO₂ emissions, a cause of global warming.
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 as much as possible.
3. We ensure the appropriate processing of various types of waste generated at our offices, establishments, stations, trains, and other locations. We strive to recycle waste and to use more recycled and resource-saving products to minimize the burden we place on 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 are looking carefully at the impact of railways on the environment once again, in order to enhance the environmental superiority of railways and to spread that awareness throughout the world.
Environment

JR East Group’s environmental impact

**INPUT**

**JR East’s business operations**

- Electricity: 5.06 billion kWh
- Fuels: 88 thousand kl (crude oil equivalent)

**11.48 million m³**

**1,733 t** (of which 95% is recycled paper)

Operating revenue: 1,932.5 billion yen

**OUTPUT**

**CO₂ emissions**

- **2.15 million t-CO₂**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offices</td>
<td>2,621 t</td>
</tr>
<tr>
<td>Stations and trains</td>
<td>34,281 t</td>
</tr>
<tr>
<td>General Rolling Stock Centers etc.</td>
<td>742 t</td>
</tr>
<tr>
<td>Tickets</td>
<td>345 t</td>
</tr>
<tr>
<td>Other field office</td>
<td>934 t</td>
</tr>
<tr>
<td>Power plants</td>
<td>248 t</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39,171 t</td>
</tr>
</tbody>
</table>

**General waste**

- 425,372 t
- 28,302 t
- 161 t
- 832 t
- 1,143 t
- **Total: 455,810 t**

**Industrial waste**

- 86,724 t
- **28,522 t**

**Energy use**

- **0.77 billion kWh**
- Fuels: 73 thousand kl (crude oil equivalent)

**Water use**

- **9.44 million m³**

**Office paper use**

- **1.124 t** (of which 82% is recycled paper)

**Operating revenue:** 770.3 billion yen

**Note:** External assurance on environmental performance and environmental accounting data: KPMG AZSA Sustainability Co., Ltd. has been engaged to provide external assurance on a set of selected environmental performance and environmental accounting indicators so that the reliability of the data is ensured. The particular indicators that are assured are marked with ☆ for clarity.

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**General waste**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>General waste</td>
<td>125,894 t</td>
</tr>
<tr>
<td>(36,048 t) Recycling rate</td>
<td>92%</td>
</tr>
</tbody>
</table>

**Industrial waste**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial waste</td>
<td>484,332 t</td>
</tr>
<tr>
<td>(434,398 t) Recycling rate</td>
<td>95%</td>
</tr>
</tbody>
</table>

**Entire JR East Group’s recycling rate:**

- General waste (125,894 t): 67% (84,578 t)
- Industrial waste (484,332 t): 94% (456,266 t)

**Group companies’ recycling rate:**

- General waste (86,724 t): 56% (48,531 t)
- Industrial waste (28,522 t): 77% (21,568 t)

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**Waste disposal**

-Waste includes salable waste.
-Recycling includes thermal recycling* where general and industrial wastes are incinerated with heat recovery.

*Thermal recycling is a recycling method in which the heat arising from the incineration of waste is used to create steam and hot water, which in turn are used to generate electricity and to produce heat.
Progress Report on Environmental Targets

FY2021 - FY2014 Targets and FY2014 Results

<table>
<thead>
<tr>
<th>Category of environmental conservation activities</th>
<th>Performance indicators</th>
<th>Targets to be met by FY2021</th>
<th>Results for FY2014</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures to prevent global warming</td>
<td>Energy consumption from railway business activities</td>
<td>8% reduction (MJ; relative to FY2011 level 52.7=48.5(billion MJ)</td>
<td>1.9% reduction 51.7(billion MJ)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO₂ emissions per unit of electricity generated at JR East’s own power plants</td>
<td>30% improvement (kg-CO₂/kWh; relative to FY1991 level 0.457=0.320(kg-CO₂/kWh)</td>
<td>33% improvement 0.304(kg-CO₂/kWh)</td>
<td></td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>Measures to prevent global warming</td>
<td>Electricity used for railway operations per unit of transport volume</td>
<td>6.8% reduction (kWh/car-km; relative to FY2007 level 1.85=1.72(kWh/car-km)</td>
<td>5.4% reduction 1.75(kWh/car-km)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energy consumption per unit of floor area at branch offices, etc.</td>
<td>3% reduction (kL-crude oil equivalent/m²; relative to FY2011 level 0.0467=0.0453 (kL-crude oil equivalent/m²)</td>
<td>13% reduction 0.0407 (kL-crude oil equivalent/m²)</td>
<td>Achievements</td>
</tr>
<tr>
<td>Measures for resource circulation</td>
<td>Recycling rate for waste generated at stations and on trains</td>
<td>90%</td>
<td>94%</td>
<td>Achievements</td>
</tr>
<tr>
<td></td>
<td>Recycling rate for waste generated at General Rolling Stock Centers, etc.</td>
<td>95%</td>
<td>95%</td>
<td>Achievements</td>
</tr>
<tr>
<td></td>
<td>Recycling rate for waste generated in construction projects</td>
<td>95%</td>
<td>96%</td>
<td>Achievements</td>
</tr>
<tr>
<td></td>
<td>Rate of green procurement*</td>
<td>100%</td>
<td>100%</td>
<td>Achievements</td>
</tr>
<tr>
<td>Environmental activities along railway lines</td>
<td>Measures to reduce noise to 75 dB or less along the Tohoku and Joetsu Shinkansen Lines** (for areas subject to noise limitation measures)</td>
<td>[Targets to be met by FY2016] 100%</td>
<td></td>
<td>Being implemented</td>
</tr>
<tr>
<td>Environmental management</td>
<td>Setting of numeric targets by all group companies</td>
<td>Targets to be revised continually</td>
<td>Established</td>
<td>Achievements</td>
</tr>
</tbody>
</table>

* Targets for the JR East Group
** The figure indicates the ratio of the group companies which purchase goods specified in the Basic Policy under Article 6 of the Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities are used.
*** Measures to reduce noise to 75 dB or less have been completed in the designated areas in accordance with government guidance. Currently, improvement work is being carried out step by step in other areas, to be completed by the fiscal year ending March 2016.

Evaluation of FY2014 Goals

Electricity used for railway operations per unit of transport volume

For reducing energy used for train operation, we have developed and introduced energy-efficient trains and electricity storage devices. When the Tohoku Shinkansen was extended from Hachinohe to Shin-Aomori in 2010, however, this increased the proportion of electricity consumption accounted for by the Shinkansen – which requires more electricity used for railway operations per unit of transport volume (kWh/car-km) than conventional lines. As part of our targets for FY2017, we will establish objectives for conventional lines as well as for the Shinkansen, as we prepare to begin operation of the Hokuriku Shinkansen.
Environmental Targets for FY2015 and Beyond

Since 1996, the JR East Group has undertaken environmental preservation activities based on concrete targets. With the implementation period of environmental targets set in FY2012 having come to an end in FY2014, and toward our targets for FY2021 (an 8% reduction in the volume of energy consumed through railway operations), continuous efforts are required, and for this we have established environmental targets with the aim of achieving them during FY2017.

<table>
<thead>
<tr>
<th>Category of environmental conservation activities</th>
<th>Performance Indicators</th>
<th>Targets to be met by FY2021</th>
<th>Newly Established Targets (to be met in FY2015 and Beyond)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures to Prevent global warming</td>
<td>Energy consumption from railway business activities</td>
<td>8% Reduction (MJ relative to FY2011 level 52.7 ⇒ 48.5 (billion MJ))</td>
<td>Continuous Implementation</td>
</tr>
<tr>
<td></td>
<td>CO₂ emission per unit of electricity generated at JR East’s own power plants</td>
<td>30% Improvement (kg-CO₂/kWh relative to FY1991 level 0.457 ⇒ 0.320 (kg-CO₂/kWh))</td>
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<td>6.8% Reduction (kWh/car-km: relative to FY2007 level 1.85 ⇒ 1.72 (kWh/car-km))</td>
<td>5.9% Reduction on Shinkansen and Conventional Lines (kWh/car-km relative to FY2011 level) Shinkansen: 2.71 ⇒ 2.55 (kWh/car-km) Conventional Lines: 1.65 ⇒ 1.55 (kWh/car-km)</td>
</tr>
<tr>
<td></td>
<td>Energy consumption per unit of floor area at branch offices, etc.</td>
<td>3% Reduction (k-crude oil equivalent/m²: relative to FY2011 level 0.0467 ⇒ 0.0453 (k-crude oil equivalent/m²))</td>
<td>15% Reduction (k-crude oil equivalent/m²: relative to FY2011 level 0.0467 ⇒ 0.0397 (k-crude oil equivalent/m²))</td>
</tr>
<tr>
<td>New: Implementation of more ecoste Model Stations</td>
<td>—</td>
<td>Total of 8 Stations</td>
<td></td>
</tr>
<tr>
<td>New: Change to LED for Platform Illumination (2015 - within FY2017)</td>
<td>—</td>
<td>More than 50% of the lighting equipment is switched to LED at 60 stations</td>
<td></td>
</tr>
<tr>
<td>New: Reduction Rate of Energy Consumption Intensity Established by Each JR East Group Company</td>
<td>—</td>
<td>Continuous reduction at an annual rate of 1% on average Groupwide</td>
<td></td>
</tr>
</tbody>
</table>

| Measures for resource circulation | Recycling Rate for waste generated at stations and on trains | 90% | 94% |
| | Recycling Rate for waste generated at General Rolling Stock Centers, etc. | 95% | 96% |
| | Recycling Rate for waste generated in construction projects | 95% | 96% |
| New: Implementation Rate of Recycling by Group Companies | — | 100% |

| Environmental Activities Along Railway lines | Measures to reduce noise to 75 dB or less along the Toboku and Joetsu Shinkansen Lines (for areas subject to noise limitation measures) | 100% (Targets to be met by FY2016) | Being implemented |

| Environmental Management | Setting of numeric targets by all group companies | Targets to be revised continually | Targets to be revised continually |

* Targets for the JR East Group

* Measures to reduce noise to 75 dB or less have been completed in the designated areas in accordance with government guidance. Currently, improvement work is being carried out step by step in other areas, to be completed by the fiscal year ending March 2016.
Concept for Establishing FY2017 Targets

Of “Environmental Targets for FY2015 and Beyond” (page 23), the targets that have been newly established as targets to be met by FY2017 are based on the following concept.

[FY2017 target] Electricity used for railway operations per unit of transport volume: 5.9% reduction on both Shinkansen and conventional lines (kWh/car-km: relative to FY2011 level)
Shinkansen: 2.71 → 2.55 (kWh/car-km) Conventional lines: 1.65 → 1.55 (kWh/car-km)

Approximately 80% of the energy consumed by JR East is accounted for by energy used in railway operations. A significant portion of that is electricity required to operate trains, and in order to achieve a reduction in energy consumption, we must steadily achieve a reduction in this area. In the case of FY2014 targets, Shinkansen and conventional lines were managed collectively; however, in anticipation of the opening of the Hokuriku Shinkansen at the end of FY2015, Shinkansen and conventional lines will be managed independently with respect to FY2017 targets. Based on the concept of the Energy Saving Act, we have set the target at 1% reduction for each consecutive year.

[FY2017 target] Energy consumption per unit of floor area at branch offices, etc.: 15% reduction (kL-crude oil equivalent/m²: relative to FY2011 level) 0.0467 → 0.0397 (kL-crude oil equivalent/m²)

While reducing energy consumed through railway operations, it is also necessary to work to reduce energy consumed at branch office buildings. As a result of the introduction of high-efficiency devices and electricity conservation following the earthquake, we succeeded in achieving a reduction of 12% in FY2013. The goal established this term, based on planning for energy-efficient facilities and continuation of existing electricity-conservation measures, is to continually reduce energy intensity at an annual rate of 1% in line with the idea of the Energy Saving Act.

[FY2017 target] Implementation of more ecoste Model Stations – Total of 8 Stations
As of March 2014, there are 3 ecoste model stations in our network (Yotsuya, Hiraizumi, Kaihinmakuhari). Going forward, through studies and design, we will aim to develop 5 more stations.

[FY2017 target] Change to LED for Platform Illumination (2015 – within FY2017); More than 50% of the lightning equipment is switched to LED at 60 Stations
Based on the assumption that the replacement schedules for platform illumination can differ based on direction, we will establish 50% or more as the standard. Going forward, through the steady implementation of replacement, we will aim to introduce LED lighting at more than 50% of an additional 60 stations.

As the energy-reduction effect of the optimization of large-scale air-conditioning systems is significant, we will aim to conduct studies and design, and to achieve optimization at 5 locations.

[FY2017 target] Reduction Rate of Energy Consumption Intensity Established by Each JR East Group Company; Continuous reduction at an annual rate of 1% on average Groupwide
In accordance with the Energy Saving Act, we have established a target of an average annual reduction of 1% (FY2015 – FY2017). Each JR East Group company is required to establish its own energy intensity indicator, which should be closely related to the indicator already established under the Energy Saving Act.
[FY2017 target] Recycling Rate for All Waste
With regard to the recycling rate for all waste, in accordance with the achievement of the desired recycling rate in FY2014, the numeric value will not be reduced – we have decided to set the numeric target increasingly higher and continue to conduct activities centered around the 3Rs toward the realization of a recyclable society.

[FY2017 target] Implementation Rate of Recycling by Group Companies-100%
For trash and industrial waste generated by all group companies, we intend to achieve this objective through various means of recycling. We aim to achieve a 100% recycling rate by FY2017.

[FY2017 target] Setting of Numeric Targets by All Group Companies
All group companies, in accordance with the characteristics of their operations, will establish their own targets and conduct activities toward their achievement.
Environment

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 for air conditioning at stations and in offices. We will strive to save energy for train operation, which accounts for about 80% of our total energy consumption, and reduce CO2 emissions in various ways.

Measures to Prevent Global Warming

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 for air conditioning at stations and in offices. We will strive to save energy for train operation, which accounts for about 80% of our total energy consumption, and reduce CO2 emissions in various ways.

JR East Energy flow map

Composition of energy consumption by JR East

* Regarding Change in Method of Computation

Until FY2006, computation concerning CO2 emissions and energy consumption volume through the use of electricity and fuel was based on the Keidanren Voluntary Action Plan on the Environment. Beginning in FY2007, the computation method was revised based on the Energy Saving Act and the Act on Promotion of Global Warming Countermeasures.

* Energy consumption is converted to Joules according to the Energy Saving Act, except for the electricity generated by JR East’s own hydroelectric plant, which is converted to Joules using 9.76 MJ/kWh as the conversion factor. JR East uses 0 MJ/kWh as the conversion factor for our own hydroelectric power in our report submitted to the government, as required by the Act.
Trends in JR East’s total CO₂ emissions

Our CO₂ emissions in the fiscal year ending March 2014 totaled 2.15 million tons, a decrease of 0.18 million tons over the previous fiscal year. This is the result of a decrease in the CO₂ emission coefficient of electricity generated by JR East. Beginning this fiscal year, we also report CO₂ emissions in Scopes 1 and 2 in accordance with the definition of the GHG Protocol.

JR East operates a thermal power plant in Kawasaki City, Kanagawa Prefecture, with a total capacity of 655 MW. The plant uses combined-cycle power generation units with improved efficiency and switched fuel from oil to natural gas when the plant was renovated to reduce CO₂ emissions.

* 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.

JR East’s own thermal power plant

JR East operates a thermal power plant in Kawasaki City, Kanagawa Prefecture, with a total capacity of 655 MW. The plant uses combined-cycle power generation units with improved efficiency and switched fuel from oil to natural gas when the plant was renovated to reduce CO₂ emissions.

*Calculation method:
CO₂ emissions have been calculated based on the method specified in the Act on Promotion of Global Warming Countermeasures. However, the CO₂ emissions attributable to the purchased electricity are calculated, including those from the electricity used for rail transport, by using adjusted emission coefficients. The CO₂ emissions in the fiscal year ending March 2014 calculated by using actual emission coefficient is 2.34 million tons, the same as the previous fiscal year.

*Boundary:
Energy consumption and CO₂ emissions have been calculated for JR East alone, in principle. Beginning with FY 2011, however, the energy consumption by and associated CO₂ emissions from companies to whom JR East outsources its station operations and other services are calculated as JR East’s own energy consumption and CO₂ emissions. Meanwhile, the energy consumption by and associated CO₂ emissions from stores in station compounds operated by group companies are excluded from those of JR East. These changes have been made to calculate the energy consumption and CO₂ emissions associated with JR East’s business as a whole more accurately in line with the idea of setting organizational boundaries for transportation and factories in the Energy Saving Act. No revision was made to the past data on energy consumption and CO₂ emissions.

*Calculation Method:
CO₂ emissions have been calculated based on the method specified in the Act on Promotion of Global Warming Countermeasures.
Reducing energy consumed for train operations

As of the end of FY2014, JR East had 11,631 energy-efficient railcars in operation. This accounts for 91.3% 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.

Diesel-powered, electric-motor-driven hybrid railcars and the accumulator railcar train

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. Compared with the current trains, fuel consumption rate has been reduced by about 10% and the noise level of the trains idling at stations and accelerating on departure has been lowered by 20–30 dB. Also, starting from the October to December 2010, we began operating the HB-E300 Series, a new type of resort train equipped with a hybrid system similar to the Kiha E200 type, in the Nagano, Aomori and Akita areas. Additionally, as a new measure toward reduction of the environmental burden in non-electric zones, we are proceeding with the development of an accumulator system, which debuted in March 2014 with the EV-E301 ACCUM railcar train, put into service on the Karasuyama Line. The introduction of the EV-E301 has enabled an elimination of emissions, as well as a reduction in CO₂ and noise emissions associated with diesel engines.

Utilization of renewable energies

We also promote use of renewable energies, including solar and wind power. Solar panels have been installed at Tokyo Station, Takasaki Station, the General Education Center and R&D Center. In March 2004, the number of panels at Takasaki Station was doubled. Panels on the largest scale in JR East were installed at Tokyo Station in February 2011 above the platform for tracks 9 and 10, which serve Tokaido Line trains.

Starting full operations as the first eco-station –“eco-station” – Yotsuya Station on the JR Chuo Line began use of solar panels in March 2012. Hiraizumi Station on the JR East Tohoku Main Line, the second eco-station, began to use solar panels in June 2012, to “generate and use energy locally” and to achieve “zero emissions,” i.e., no CO₂ emissions on fine-weather days. Additionally, the largest solar panels employed anywhere at our company have been installed at the Keiyo Rolling Stock Center. These have been in use since February 2014.

We will continue to endeavor to introduce technology using renewable energies efficiently.
Greening rooftops

We have been promoting the planting of greenery on JR East 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 2014, we had completed 73 greening projects (including some cases of moss planting) encompassing a combined rooftop area of approximately 25,173 m².

Rooftop greening by JR Group companies

We have been promoting rooftop greening to make station buildings in the metropolitan area a place of relaxation for community residents as well as for office workers. The "Soradofarm", which is a vegetable farm rented to subscribers and built alongside the gardens, serves to create a local community, and provides education in farming and environment through people’s experience in cultivating vegetables. These are popular among many customers and have also been built in Ebisu, Ogikubo, Takasaki and Hachioji.
Saving energy in office buildings

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

In addition, given the concerns about energy supply and demand since the Great East Japan Earthquake, we have been actively introducing LED lighting apparatus, which is particularly effective as a physical measure.

Environmentally friendly and energy efficient office buildings

Construction was completed in FY2013 on the JR Minami Shinjuku Building, JR Kanda Manseibashi Building, and JP Tower, which are all environmentally friendly and energy efficient buildings. The JR Kanda Manseibashi Building and JP Tower have acquired a class S rating, the highest rating under the CASBEE environmental labeling system, an initiative of the Ministry of Land, Infrastructure, Transport and Tourism. Moreover, last fiscal year the JR Kanda Manseibashi Building earned both LEED-CS Gold and LEED-CI Gold certification, widely recognized building performance standards in the U.S. Six other buildings - Gran Tokyo South Tower, Gran Tokyo North Tower, JR Shinagawa East Building, Sapia Tower, JR Tokyu Meguro Building, and Tokyo Building - have received praise for proactive efforts for highly efficient equipment performance and operations management relating to energy conservation. They have also earned recognition as Offices Taking Excellent Specific Global Warming Countermeasures (top-level office building or quasi top-level office building) under the Tokyo Metropolitan Ordinance on Environmental Preservation.

List of top-level establishments

<table>
<thead>
<tr>
<th>Top-level establishments</th>
<th>Quasi-top-level establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapia Tower (certified FY2011)</td>
<td>Tokyo Building (certified FY2011)</td>
</tr>
<tr>
<td>GranTokyo North Tower (certified FY2012)</td>
<td>JR Tokyu Meguro Building (certified FY2011)</td>
</tr>
<tr>
<td>GranTokyo South Tower (certified FY2012 as quasi-top-level establishment, upgraded FY2013)</td>
<td></td>
</tr>
<tr>
<td>JR Shinagawa East Building (certified FY2011 as quasi-top-level establishment, upgraded FY2012)</td>
<td></td>
</tr>
</tbody>
</table>
Visualizing the power consumption in stations

JR East is introducing monitors that display the energy consumed in stations to encourage employees to be more conscious of energy saving. The visualization system measures the total electricity consumed in the station at the power-receiving location and displays it on a monitor every hour. It was introduced in about 30 stations by FY2013, and in 170 stations during FY2014.

### Mechanism of visualization

**Before introduction**
- Lighting
- Air conditioning
- Change to preset temperature
- Effects of energy-saving measures are not clearly known.

**After introduction**
- Energy saving by removing fluorescent tubes
- Display of electricity consumption
- Effects of energy saving is clearly visualized.

**System configuration diagram**

- Electric room, etc.
- Switchboard
- Monitoring of electricity consumption
- Data processing
- The total electricity consumption in the station is displayed simply and clearly on a monitor.

- Station building
- Flow of electricity
- Data accumulation for analysis purpose
- Electricity consumption, etc., is displayed.
- Real-time display of changes in electricity consumption

### Case Report: Environmental Measures

**LED lighting installed on all Yamanote Line trains**

In December 2010, LED lighting was installed on an 11-car Yamanote Line train on an experimental basis. As the collected data confirmed reductions in both energy usage and CO₂ emissions, in summer 2013, we began introducing LED car lighting to all Yamanote Line cars and completed the changeover (572 cars in 52 trainsets) by spring 2014. By doing this, JR East reduced Yamanote Line electricity consumption by approximately 40% compared to that of fluorescent lighting. We also expect to reduce CO₂ emissions by approximately 624 tons per year with these changes to all 52 Yamanote Line trainsets. Stickers are displayed on the windows of cars equipped with LED lighting.

From 2013, we also introduced LED lighting on the E233-series cars that were to be introduced on the Saikyo, Yokohama and Nambu lines, on the EV-E301 introduced into service on the Karasuyama Line, on the E129-series cars that were to be introduced in the Niigata area and on the HB-E210-series cars that were to be introduced on the Senseki and Tohoku lines. We plan to adopt LED lighting for all new cars serving in the conventional lines.

Furthermore, the E7 series trains introduced into service on the Hokuriku Shinkansen in March 2014 feature 100% internal LED illumination.
Measures to create a sound material cycle

Waste reduction 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 lifestyle 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 ended March 2014, 94% of the trash collected from stations and trains was recycled. Since trash from stations and trains contains recyclable materials, we first placed separation bins in stations. We then established recycling centers in Ueno, Omiya and Shin-Kiba for more rigorous separation. In October 2010, to further improve recycling rates, we consolidated the recycling centers in Ueno and Shin-Kiba and built the JR East Tokyo Materials Recycling Center (operated by East Japan Eco Access Co., Ltd.).
Recycling at General Rolling Stock Centers☆

JR East Group is recycling waste generated during the manufacture and maintenance of rolling stock. At our regional General Rolling Stock Centers, waste is sorted into 20 to 30 categories to reduce waste generation and promote recycling. Starting in FY2006, we have been collecting data on the volume of retired railcars that are sold as scrap to be recycled so as to monitor the progress.

■ Waste from General Rolling Stock Centers

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste Generated (Thousand tons)</th>
<th>Amount Processed (Thousand tons)</th>
<th>Amount Recycled (Thousand tons)</th>
<th>Recycle rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'09</td>
<td>34</td>
<td>33</td>
<td>33</td>
<td>100</td>
</tr>
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<td>100</td>
</tr>
<tr>
<td>'14</td>
<td>29</td>
<td>28</td>
<td>28</td>
<td>100</td>
</tr>
</tbody>
</table>

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

Reducing construction waste☆

JR East endeavors to reduce waste from construction by requiring subcontractors to use design and construction methods that allow them to properly dispose of construction byproducts and to minimize waste. In the fiscal year ending March 2014, JR East generated approximately 425 thousand tons of waste through construction and maintenance projects at our stations and other structures, including approximately 42 thousand tons of waste through work entrusted to JR East.*

■ Waste from construction projects

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste Generated (Thousand tons)</th>
<th>Amount Processed (Thousand tons)</th>
<th>Amount Recycled (Thousand tons)</th>
<th>Recycle rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>31</td>
<td>365</td>
<td>100</td>
</tr>
<tr>
<td>'10</td>
<td>446</td>
<td>24</td>
<td>422</td>
<td>100</td>
</tr>
<tr>
<td>'11</td>
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<tr>
<td>'13</td>
<td>425</td>
<td>21</td>
<td>339</td>
<td>100</td>
</tr>
<tr>
<td>'14</td>
<td>407</td>
<td>19</td>
<td>407</td>
<td>100</td>
</tr>
</tbody>
</table>

* 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 trash cans. In FY2014, we recycled 2,302 tons out of a total of 2,621 tons of waste (88%).

Efficient use of water resources

As a consumer of 11.48 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, 25 thousand m³ out of 36 thousand m³ of water was reused in FY2014.

* 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

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 FY2014, all of the 345 tons of collected tickets were recycled. Collected magnetic season tickets were recycled into solid fuel.
Promoting green procurement

JR East is developing ecological promotion activities compatible with both business activities and environmental preservation, and in promoting as part of those efforts the procurement of products with lower environmental impact, formulated the “JR East Green Procurement Guidelines” in 1999 – outlined within these guidelines is our philosophy with regard to materials, conservation of resources, and packaging. Additionally, when considering selection of a new material supplier, we investigate that company’s environmental and CSR activities, and this information is used to help evaluate potential suppliers.

Furthermore, toward promoting the procurement of environmentally friendly office supplies, the JR East Group has established the goal of “100% green procurement”, and successfully achieved this objective in FY2014. Through activities toward green procurement, JR East promotes the formulation of a recycling-oriented society.

Recycling trash within the company

JR East promotes in-company recycling of trash generated at stations. Magazines, newspapers and similar paper items collected from our segregated trash boxes at stations and trains are being recycled into coated paper and stationery and used in our offices.

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 and commercialized a weed-barrier sheet composed mainly of waste PET bottles after tests were successful.
Environment

Biodiversity

Hometown Forestation Program
In 2004, in order to protect biodiversity and contribute to a sustainable society, while cherishing our sense of gratitude to nature, we began the Hometown Forestation Programs to plant trees native to each region and revitalize the forests. We undertook these programs with the cooperation of Fukushima Prefecture from 2004 to 2009 and with the cooperation of Niigata Prefecture and the towns of Tsunanmachi and Tokamachi in 2010. In addition, in other areas served by JR East, we are planting trees that are native to the areas and we shall continue to do the same in the future.

Forest development along railway lines
Beginning in 1992, we have been organizing tree planting activities along JR East railway lines. By FY2014 a total of approximately 47 thousand people had participated in planting about 324 thousand trees. Today, planting has gone beyond the trackside and is done in cooperation with local communities.

Development of railway trees
Along some JR East railway lines, we have planted railway trees to shield the tracks from blowing snow and wind. The first railway trees were created in 1893 for disaster prevention. As living disaster prevention facilities, railway forests are playing their roles.
JR East now owns approximately 5.8 million railway trees on a total of about 4,000 hectares along our lines at approximately 1,200 locations. The trees absorb 16 thousand tons of CO₂, equivalent to 0.6% 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 of both 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.

Shinanogawa River Hometown Forestation Program in September 2013

Jingui No. 2 railway forest on the Ou 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 forests

Traditionally, 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, as the demand for domestic timber has declined. In future tree replacement, we will plant several varieties suitable for the local climate and develop them to be more sustainable and ecologically resilient.

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 Oitama No. 2 forest on the Ou Main Line between Oitama and Takahata on July 26, 2009, in the Jinguji No. 2 railway forest on the Ou Main Line between Jinguji and Kariwano on May 22, 2010, and in the Okama No. 1 railway forest on the Tazawako Line on September 29, 2012, and in the Sekine No. 1 railway forest on the Ou Main Line between Sekine and Yonezawa on September 28, 2013. With kind advice and guidance from ecologist and Professor Emeritus Akira Miyawaki of Yokohama National University, several varieties of native trees (potential natural vegetation, or PNV) were selected and planted. Many local residents and participants from organized tours took part in the ceremonies, and discovered how the trees they planted would grow to become useful as living railway disaster prevention facilities.
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 lineside environment.

Measures for the Shinkansen

In accordance with the Japanese government’s Environmental Quality Standards for Shinkansen Superexpress 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 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.

*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.

Measures for conventional lines

We have implemented voluntary measures for conventional lines to minimize noise, installing long rails and performing rail-grinding and wheel-truing. 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 that produces lower noise. Furthermore, by using track that is designed to resist deformation, JR East is reducing the volume of required maintenance work.
Improvement of the 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 to humans and animals, and from Category A, the safest of the five levels of toxicity 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
Given that construction of a large-scale railway facility or its remodeling greatly affects the local area and surrounding environment, JR East endeavors to harmonize its completed facilities with surrounding landscapes and natural environments. In the fiscal year ended in March 2012, Agatsumagawa Bridge No. 3 received the Tanaka Award (for excellent bridge work or bridge engineering) from the Japan Society of Civil Engineers, in recognition of a landscape in harmony with the surrounding environment and the national road parallel to the bridge. Our efforts are indeed well recognized outside of the company.

Agatsumagawa Bridge No. 3
Chemical substance management

Compliance with laws and regulations 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 standard values, but sets its own ambitious targets as well. As much as possible, we restrict the use of such substances and adopt substitutes that have less impact on the environment.

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 substitutes that have less impact on the environment.

- **Large heat exchangers (large cooling units)**—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 FY2008.

- **Rolling stock**—Except for some diesel railcars, all of our cars use CFC substitutes. As of the end of FY2014, we were using 1.2 tons of CFCs and 88 tons of CFC substitutes. 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 66 tons of halon gas was still in use as a fire-extinguishing agent as of the end of FY2014, 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 spills. We are a company that handles a certain amount of specified chemical substances, and 15 JR East facilities submitted the data regarding the release and transfer of these substances to relevant authorities in FY2014, pursuant to the PRTR System.* We have also been introducing stainless steel railcars that do not require painting. At the end of FY2014, as many as 83% of the 10,894 cars operated on our conventional lines were stainless steel railcars. Beside their use for railcars, we used 575 tons of organic solvents for painting railway facilities and stabilizing track beds in FY2014.

* PRTR system: A system where companies notify their releases and transfers of chemical substances as required by the PRTR Law. It encourages the monitoring and control of toxic chemical substances emitted into the environment and measures to prevent negative impact on the environment.

### Amount released and transferred from 15 reporting-required facilities (kg)

<table>
<thead>
<tr>
<th>Chemical substance</th>
<th>Handled (kg)</th>
<th>Released into air</th>
<th>Released into sewerage</th>
<th>Transferred to other facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>104569.7</td>
<td>2306.4</td>
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<td>2-Aminoethanol</td>
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<td>Ethylbenzene</td>
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</table>

<table>
<thead>
<tr>
<th>Chemical substance</th>
<th>Handled (kg)</th>
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<th>Released into sewerage</th>
<th>Transferred to other facilities</th>
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<td>Toluene</td>
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<tr>
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<tr>
<td>Methylbenzyl/isophorone/nitrate</td>
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<td>2249.0</td>
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<td>Molybdenum and its compounds</td>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>372574.5</td>
<td>46329.9</td>
<td>0.0</td>
<td>19626.6</td>
</tr>
</tbody>
</table>

Management of PCBs (polychlorinated biphenyls)

Equipment containing PCBs is securely stored in exclusive storage locations and reports on it are filed as required by laws and regulations. We render this equipment harmless to the extent that can be done by PCB waste treatment facilities. In the fiscal year ended March 2014, we had equipment such as transformers and capacitors treated at PCB waste treatment facilities.
Environmental Communication

Railway Museum Environment Seminar
We staged the "Seminar on Environmentally Friendly Railways" for elementary school children at the Railway Museum. Along with learning about global environmental problems, they were shown the importance of recycling by separating trash at a station and on the train.

Environmental Events in Cooperation with Other Companies
We cooperate with other firms to stage environmentally themed events, for the purpose of explaining JR East’s environmental preservation activities, and communicating directly with customers. In November 2013, in conjunction with Tokyo Gas, we held the 11th Gas and Railway Environmental Activities Exhibition – Ecohappy X Ecoste = One Step Closer to a New Life at the Chuo Line Yotsuya Station. In addition to introducing environmental aspects of gas and railways and our energy-saving activities, the event featured hands-on opportunities to learn and have fun at the same time.

Public Relations on Environmental and Societal Activities
To present JR East’s activities for the environment and society in an accurate, easy-to-understand manner, we published our first Annual Environmental Report in 1996. Its title was changed to "Sustainability Report" in 2002, and to "CSR Report" with the publication of last year’s report. We also communicate about our environmental activities through newspapers, magazines, TV, radio and other media, as well as JR East’s websites, posters and pamphlets.
Environmental Management Structure

Established in 1992 as a top management organization to promote environmental activities and chaired by the president and CEO of JR East, the Committee on Ecology Promotion 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. In July 2010, the “Environmental Management Promotion Office” was established in our Management Planning Dept., and oversees environmental management for the entire JR East Group.

- Organizational structure to promote environmental management (as of April 1, 2014)

![Diagram of Organizational Structure]

Creating an environment-conscious culture

JR East believes that it is important to promote environmental activities with clear goals established for the entire JR East Group, and to have every employee actively involved. To build a culture in which all employees participate 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 outstanding environmental efforts through the presentation of awards.
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 our employees in training 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 FY2007, 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**

<table>
<thead>
<tr>
<th>Environment management practical training</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Persons trained: those responsible for environment at local organizations, etc.</td>
<td></td>
</tr>
<tr>
<td>• Objective: improvement of ability in environment-related matters as trainers to field offices, etc.</td>
<td></td>
</tr>
<tr>
<td>• Number of participants: 15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment countermeasures (noise &amp; vibration) expert training</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Persons trained: those responsible for environment at each Branch Office</td>
<td></td>
</tr>
<tr>
<td>• Objectives: learning of basic knowledge about relevant rules and regulations for noise and vibration</td>
<td></td>
</tr>
<tr>
<td>• Number of participants: 21</td>
<td></td>
</tr>
</tbody>
</table>

Implementation of training and lectures in Branch Offices

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.

**ISO14001-certified facilities**

<table>
<thead>
<tr>
<th>Certified facilities</th>
<th>Year and month of certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>(JR East)</td>
<td></td>
</tr>
<tr>
<td>Kawasaki Thermal Power Plant</td>
<td>Mar-01</td>
</tr>
<tr>
<td>Tokyo General Rolling Stock Center</td>
<td>Mar-01</td>
</tr>
<tr>
<td>Omiya General Rolling Stock Center</td>
<td>Feb-02</td>
</tr>
<tr>
<td>Shinkansen General Rolling Stock Center</td>
<td>Nov-02</td>
</tr>
<tr>
<td>Koriyama General Rolling Stock Center</td>
<td>Dec-03</td>
</tr>
<tr>
<td>Nagano General Rolling Stock Center</td>
<td>Feb-05</td>
</tr>
<tr>
<td>Akita General Rolling Stock Center</td>
<td>Jul-05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Certified facilities</th>
<th>Year and month of certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Group companies)</td>
<td></td>
</tr>
<tr>
<td>Niitsu Rolling Stock Manufacturing Factory (Current: J-TREC Niitsu Plant)</td>
<td>Feb-99</td>
</tr>
<tr>
<td>East Japan Eco Access Co., Ltd.</td>
<td>Nov-99</td>
</tr>
<tr>
<td>East Japan Transport Technology Co., Ltd. (Omiya Branch)</td>
<td>Feb-02</td>
</tr>
<tr>
<td>Nippon Restaurant Enterprise Co., Ltd. (manufacturing section)</td>
<td>Sep-02</td>
</tr>
<tr>
<td>Nagano Railway Servicing Co., Ltd. (Current: JR Nagano Railway Services Co., Ltd.)</td>
<td>Apr-06</td>
</tr>
<tr>
<td>JR East Mechatronics Co., Ltd.</td>
<td>Mar-08</td>
</tr>
<tr>
<td>East Japan Marketing &amp; Communications, Inc.</td>
<td>Aug-08</td>
</tr>
<tr>
<td>Tohoku Rolling Stock Machinery Co., Ltd.</td>
<td>Dec-10</td>
</tr>
</tbody>
</table>

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 respond properly to any contingencies by holding workshops and training sessions on how to handle these substances, and ensuring that related information reaches all concerned personnel.

Compliance with environmental laws and regulations

There were no major violations of environment-related laws and regulations resulting in penalties in FY2014.
Environmental accounting and management indicators

Using Environmental Management Indicators

In FY2014, our environmental conservation costs amounted to approximately 130 billion yen in investments and 12.7 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 249 thousand 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 our environmental impacts, by operating profits, which represent our economic value added.

A smaller value of the indicator means that we are making a smaller impact on the environment to create the same economic value added. For FY2014 the value of the indicator was 6.55t-CO2 /million yen, compared with 9.45t-CO2 /million yen for FY1991.

### JR East’s Environmental Management Indicator

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating profit (100% = Operating profit / Operating profit of FY1991)</th>
<th>CO2 emissions (CO2 emissions / Operating profit of FY1991)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'91</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>'92</td>
<td>95</td>
<td>81</td>
</tr>
<tr>
<td>'93</td>
<td>81</td>
<td>68</td>
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<td>'95</td>
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<td>69</td>
</tr>
<tr>
<td>'06</td>
<td>65</td>
<td>69</td>
</tr>
</tbody>
</table>

### Environmental accounting for fiscal year ended March 2014

<table>
<thead>
<tr>
<th>Category</th>
<th>Investment in FY2014 (million yen)</th>
<th>Expense in FY2014 (million yen)</th>
<th>Economic benefit of environmental conservation activities (million yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global environmental activities</td>
<td>125.33</td>
<td>—</td>
<td>20.89</td>
</tr>
<tr>
<td>Resource circulation activities</td>
<td>—</td>
<td>5.04</td>
<td>94%</td>
</tr>
<tr>
<td>Environmental research &amp; development</td>
<td>—</td>
<td>1.89</td>
<td>2.29</td>
</tr>
<tr>
<td>Social activities</td>
<td>—</td>
<td>0.03</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>130.04</td>
<td>12.69</td>
<td>23.18</td>
</tr>
</tbody>
</table>

Notes
- Capital investment for the period 410.8 billion yen
- Total R&D costs for the period 17.0 billion yen (Consolidated)
- The above table is related to the table for fiscal years and results are as follows.
- Environmental conservation activities along rail lines = "Environmental activities along rail lines" and "Chemical Substance Management" "Global environmental conservation activities" = "Measures to prevent global warming" and "Chemical Substance Management" "Resource circulation activities" = "Measures for resource circulation" "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 (ie. non-consolidated data)
- Environmental conservation costs are mainly based on data available in the current management system.
- The "Environmental research & development" costs include the total amount invested in energy efficient trains.
- Environmental benefit of environmental conservation activities = 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 by the expected useful lives of the projects.
- Economic benefit of rail cars is calculated by multiplying annual savings estimates by the expected useful lives of the projects.
- Economic benefit of environmental conservation activities is calculated by multiplying annual savings estimates by the expected useful lives of the projects.
Activities of Branch Offices

Yokohama Branch Office

In FY2014, the Yokohama Branch Office introduced LED lighting on platforms at stations along the Yokohama Line, encouraged environmental awareness by exhibiting eco-cap art (art made from used plastic bottle caps), and undertook other activities to enhance the environment and service quality, mainly at workplaces along the Yokohama Line. We are looking ahead for additional ways to draw attention to environmental protection and improvement, both internally and externally.

Overview of Key Activities

・ The ecological promotion committee of the Higashi Kanagawa operation section and conductor’s office led efforts to create a new Yokohama Line train design featuring eco-cap art, and to conduct ecological PR. (Art using pet bottle caps was created at a public event about the E233 series on the Yokohama Line).

・ The Yokohama Line became the model for introduction of LED platform illumination. (All platforms along the line are scheduled to receive LED illumination, a higher standard that will increase value along the line, and by the end of FY2014, 2,837 bulbs had been installed at 13 stations between Higashi Kanagawa and Hashimoto.)

・ At Higashi Kanagawa station, the introduction of LED illumination on the platform made it possible to create signs to ensure that passengers board the correct train. (The sign is in green on the Yokohama Line side of the platform, and in blue on the Keihin Tohoku Line side.)

Comments by employee in charge

Led by ecology promotion personnel from each division, the Yokohama Branch Office has been making visits to other companies to conduct environmental and other activities. Members from each of the divisions actively post information via message boards on our internal corporate website in attempts to share information with their peers. We are also developing value-added ecological activities – eco-cap projects have taken root in each division, featuring activities such as eco-cap art and donations to local schools.

Looking ahead, we intend to continue environmental preservation activities and efforts to improve service quality, with the goal of increasing value along our railway line.

Taichiro Mizushima
Planning Office, General Affairs Department
Yokohama Branch Office
Activities of Group Companies

Sendai Terminal Building
As a way to promote biodiversity, Sendai Terminal Building conducted a unique tree-planting activity over a five-day period together with many employees and their families in the town of Onagawa in Miyagi Prefecture. The activity contributed to recovery of local communities from the Great East Japan Earthquake and will be repeated in the future.

Overview of Key Activities
• With the aid of the Miyagi Satoyama forest joint revitalization support program promoted by Miyagi Prefecture, Sendai Terminal Building made an agreement to conduct a Miyagi forest development project* in Onagawa, Miyagi Prefecture until 2018. Under the agreement, the company will, as part of CSR activities in the region and in support of a quick recovery from the effects of the Great East Japan Earthquake, conduct forest development activities that promote biodiversity.

Tree-planting area and number of trees
Planted 2,120 wild cherry and konara oak trees over an area of 1.06ha

Period of implementation
October 23 – October 27, 2013 (5 days)

Number of participants
412 employees and family members

* Miyagi Satoyama forest joint revitalization support program: the prefectural government brings together land owners and corporations that wish to contribute to society through forest development activities.

Comments by employee in charge

As part of our CSR activities and in the interest of contributing to a quick recovery from the effects of the Great East Japan Earthquake, we conducted unique tree-planting activities in the town of Onagawa, with employees and their families taking part. Some of our employees have participated in other JR East-sponsored forest development tree-planting activities, and I have noticed a clear difference in the level of awareness with regard to environmental preservation among our employees. In connection with the recent tree-planting activities, we have since received numerous inquiries such as, "How are the saplings we planted doing?" and "When is the next tree-planting activity?", indicating that awareness of such issues is increasing. By continuing to conduct such activities – including maintenance of the trees to enable us to enjoy "hanami" cherry blossom viewing parties beneath them – we hope to be recognized as a company that is proactive in tackling environmental issues.

Kimio Koriyama
Business Administration Division, General Planning and Policy Headquarters
Sendai Terminal Building
Accumulator System (ACCUM)

As a new measure toward reduction of the environmental burden in non-electric zones, we developed an experimental train, NE Train Smart Denchi Kun, featuring a battery drive train system. The result of our efforts was the start of operation of the EV-E301 (ACCUM) train on the Karasuyama Line in March 2014. The EV-E301 series cars have an accumulator for the main circuit, enabling them to operate in non-electrified zones. On electrified sections, the train raises its pantograph to receive power for operation and for charging the accumulator. When the train enters a non-electrified zone, the pantograph is lowered and the train operates on accumulated power alone. When the brakes are applied, regenerated power is used to charge the accumulator, which can also be recharged at terminal stations where rapid-recharging facilities have been installed. The introduction of the EV-E301 series has made possible the elimination of exhaust emissions and reductions in CO₂ and noise emission levels from those generated by diesel engines.

Large-scale solar power generation facility

JR East launched operation of its first large-scale solar power generation facility – with an output capacity of 1,050kW – on the grounds of the Keiyo Rolling Stock Center on February 28, 2014. The electricity generated will be used at the Center, and will also help to operate trains by sending power to overhead lines, with the aim of reducing our CO₂ emissions. The mega-solar plant will generate about 1,000 MWh per year, and is expected to reduce CO₂ emissions by about 500 tons annually. We will begin operation of a 4MW-class large-scale solar power generation facility between Tomobe and Uchihara on the Joban Line within FY2015. Going forward, we will look at the establishment of additional solar power generation facilities on our own sites while contributing to the spread and promotion of renewable energy.
Promoting the introduction of renewable energy

Taking advantage of the beautiful natural environment of northern Tohoku, while endeavoring to reduce CO₂ emissions on a broad scale through the generation of environmentally friendly renewable energy such as solar, wind power, geothermal and biomass, we hope to contribute to regional areas through economic revitalization as well. We have been conducting a study of wind conditions since March 2014 between Michikawa and Shimohama Stations on the Uetsu Main Line in Akita Prefecture, and are currently investigating the viability of wind power generation.

Also, we are a member of the Hakkoda regional geothermal power study group, which comprises Hirosaki University, Aomori Prefecture, the city of Aomori and several private companies. The aim is to develop Aomori Prefecture’s first geothermal power plant, and to that end we are currently conducting a viability study in northwestern Hakkoda.
Pursuing “extreme safety levels”

Our concept of safety
Since the establishment of JR East, safety has been our top management priority, 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 future accidents with our continued developments both in physical and operational terms. Pursuit of safety measures can never end. We will continue to work tirelessly to improve safety by pursuing a goal of “zero accidents involving passenger injuries or fatalities and zero accidents involving employee fatalities (including employees of Group companies and partner companies).”

Safety initiatives in our medium term management plan
In the JR East Group Management Vision V - Ever Onward, JR East sets its eternal mission to pursue “extreme safety levels,” and build a railway capable of withstanding natural disasters. In order to achieve this, will continue our ceaseless efforts to increase the safety of our railways. When the Great East Japan Earthquake occurred, the earthquake countermeasures that JR East had already been steadily implementing proved effective to a great extent. However, the earthquake also revealed issues that we must address to ensure a higher level of safety. Based on this experience, we have worked to implement earthquake countermeasures in preparation for events that are conceivable such as an earthquake directly beneath the Tokyo metropolitan area, and are focusing on both tangible and intangible aspects. In these ways, we are working to build a railway capable of withstanding natural disasters.

We are also further promoting initiatives to prevent train collisions, derailments and rail crossing accidents. At the same time, we are installing automatic platform gates for the Yamanote Line and exploring the possibility of installation for other lines. In these and other ways, we continue to promote the development of railways that passengers can use reliably. From FY2015, we will also bolster activities aimed at achieving “extreme safety levels” based on our newly formulated Group Safety Plan 2018.

Group Safety Plan 2018: Our 6th 5-year safety plan
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. FY2015 begins our 6th 5-year Safety Plan, Group Safety Plan 2018, aimed at expanding the individual capabilities of each employee in order to realize top levels of safety through teamwork. Each of us involved in the railway business remains committed to improving safety and our group-wide challenge to achieve “extreme safety levels.” In Group Safety Plan 2018, together with redefining the direction we are taking as a company, we outline specific measures aimed at preventing accidents resulting from internal factors. Additionally, through our ongoing efforts to pass on technologies and promote measures to comprehensively understand the severity of accidents, we aim to further enhance safety management through the fostering of safety-conscious personnel.
General principles of Safety

JR East provides safety mission statements for the code of conduct for its safety-related employees.

<table>
<thead>
<tr>
<th>General principles of Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>① Safety is the most important mission in transportation.</td>
</tr>
<tr>
<td>② Ensuring safety is based on exact observance of rules and procedures, and is achieved through constant practice.</td>
</tr>
<tr>
<td>③ Enforcement of confirmation and complete contact is most important for ensuring safety.</td>
</tr>
<tr>
<td>④ For ensuring safety we should cooperate together and go beyond our official responsibility.</td>
</tr>
<tr>
<td>⑤ When we have questions or must choose among several options, we should remain calm, think by ourselves, and take the safest course after thorough consideration.</td>
</tr>
</tbody>
</table>

Trends in railway accidents

In FY2014, JR East recorded 171 railway accidents, including 36 accidents at level crossings involving people or automobiles being hit by trains, accounting for approximately 20 percent of the total accidents. Additionally, JR East recorded 131 accidents involving injury or fatality, including customers on platforms or trespassers on tracks coming into contact with trains, and customers falling onto the tracks from platforms, totaling approximately 70 percent of the total number of accidents. Approximately 70 percent of these injuries or fatalities occurred on platforms, and approximately 60 percent of these involved intoxicated customers.

Trends in railway accidents

- Physical damage to property: accidents causing more than 5 million yen damage to property by train operation
- Fatalities or injuries: people killed or injured by train operation
- Accidents at rail crossings: people or automobiles being hit by trains
- Train accidents: train collisions, derailments, and train fires
Current state of employee accidents

In FY2014, it is regrettable that one of our related-company employees was lost in a fatal accident. Accordingly, as set out in Group Safety Plan 2018, we will continue our efforts to ensure that safety systems and rules are clearly defined and complied with across the entire JR East Group in our aim to achieve zero passenger accidents involving injury or fatality, and zero employee fatalities* (for both Group and Partner companies).

■ Status of accident fatalities (including employees of both Group and Partner companies)

![Graph showing accident fatalities by cause]

■ Accidents with lost work time and fatality (JR East employees)

![Graph showing accidents with lost work time and fatality]

■ Accidents with lost work time and fatality (employees of both Group and Partner companies)

![Graph showing accidents with lost work time and fatality]
Ingraining the cultures of safety

JR East will further strengthen, deepen and broaden the cultures of safety we have been fostering as the foundation of our safety efforts.

Ingraining the JR East Group’s 5 cultures of safety

1. **A culture of proper reporting**
   - The prompt and proper reporting of accidents and incidents, and the prevention of the recurrence of accidents.

2. **A culture of noticing**
   - The recognition and sharing of information regarding the potential sources of accidents in order to prevent accidents and incidents.

3. **A culture of direct meeting and discussion**
   - The open and honest discussion and exchange of opinion in investigating the causes of accidents and incidents in order to identify the causes of accidents and to take truly effective countermeasures against their recurrence.

4. **A culture of learning**
   - The continuous awareness of others, learning from accidents and incidents which occur in all places of work, not just in one’s own workplace, and the implementation of appropriate countermeasures.

5. **A culture of action**
   - Safety can be ensured only by taking safe actions. Think and act by yourself. This is at the core of our safety.

Further promoting the "Sangen Principle: Three Actualities Principle"

Accidents and incidents always occur at the Genba.* This means that the sources of accident prevention can also be found at the Genba. JR East continues its search for answers which cannot be found from desktop theories, based on 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.

Promoting the Challenge Safety Campaign with the concerted effort of all

Since the company’s foundation, JR East has continued to shift from a passive stance of merely maintaining safety to one that actively takes on the challenge of bringing further improvements to safety levels through the development of our Challenge Safety Campaign. The campaign aims to encourage each one of our employees to actively endeavor to improve safety levels, think and discuss specific measures with each other and act upon them. Some of these measures include:

- Learning from accidents and from other companies in order to heighten risk awareness of dangers and to improve our sense of safety.
- Sharing awareness and findings such as individual experiences regarding nearly missed incidents.
- Visiting actual sites and image training in order to expose matters of concern.
Enhancing safety management

Fostering integral safety leaders and professionals

Through the fostering of key safety leaders and safety professionals, JR East aims to pass on its safety technologies and knowledge to the next generations of workers. Furthermore, we endeavor to pursue measures which allow us to deeply comprehend the gravity of accidents and to minimize human error.

■ Safety management

Fostering safety-oriented personnel with a strong mindset in cooperation between Key Safety Leaders, Safety Professionals and General Training Centers.

Railway Safety Promotion Committee

JR East has established the 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, 2014)
Head Office Safety Campaign

Every year, JR East operates a Head Office Safety Campaign. The campaign provides the President and executive officers from the Head Office with a chance to visit field offices and hold direct discussions with front-line employees, including those at partner and cooperating companies.

In FY2014, executive officers from the JR East Head Office inspected nighttime maintenance work as observers, and participated with front-line employees in impassioned discussions on the theme of protecting the lives of customers and employees through the strict management of every part of every job: referencing past measures in deciding upon what was necessary for the consistent implementation of each basic task. Through these activities, JR East was able to reconfirm issues and areas of concern with field staff in order to steadily conduct the basic work at field organizations.

Based on the outcomes of these activities, JR East was able to identify specific measures to protect the lives of its customers and employees, encouraging each employee to think and to act independently and flexibly.

Collaboration with group companies

The JR East Safety Network (JES-Net) was established in FY2005 as a safety promotion network among JR East Group and partner companies that are engaged in work directly affecting train operations. As of April 1st, 2014, the number of companies in this network had expanded to 36. Each year, through observation and inspection, JR East holds a Safety Review for the exchange of opinions and a confirmation of the safety measures at JES-Net member companies. In the Safety Reviews, JR East recognizes the positive measures of each of the companies, and introduces these successful measures to other companies so that they can also benefit from the success. JR East is committed to improving the levels of safety throughout the JR East Group.

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 branch offices. 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.

In FY2015, we will newly construct a train accident preservation center for the preservation of actual trains damaged in accidents or disasters in order to comprehensively understand the events.
Chroniclers of Safety (Narrators of oral history)

In FY2010, we organized a group of ex-employees of JR who possessed an abundance of knowledge and applied skills in railway safety to act as our “Chroniclers of Safety (narrators of oral history).” Currently, Chronicler of Safety Seminars are being conducted by a group of eight of these Chroniclers at Head Office and Branch Offices, in the hope that they will pass their accumulated experiences and skills down to future generations.

Railway Safety Symposium

The theme for the Railway Safety Symposium was based on the concept that “each one should expand our capabilities to create safety through teamwork.” The symposium was attended by approximately 430 people, and served as the venue to introduce JR East’s Group Safety Plan 2018. The company presented its road map for steadily executing its new safety plan and illustrated how the plan reflected its activities based on the 2013 Safety Vision.
Promoting the priority improvement plan for 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. JR East analyses and evaluates all potential areas of risk and takes appropriate measures to ensure that these risks do not become reality, placing priority on facility investments in order to avert any major damage in the case of a major earthquake in the Tokyo metropolitan area.

For improvements to safety equipment, under our five previous 5-year Safety Plans leading up to FY2014, JR East invested more than 3 trillion yen during those 27 years following the company’s establishment. In our Group Safety Plan 2018, JR East’s sixth 5-year Safety Plan which began in FY2015, JR East has planned to invest approximately 1 trillion yen on safety measures during the five years from FY2015 to FY2019.

■ Trends in safety investment

* Due to the effects of the Great East Japan Earthquake, there was a decrease in the FY2012 safety investment.
Installing safety equipment

To prevent collisions between trains, JR East has installed ATS (automatic train stop) and ATC (automatic train control) systems on all of its railway lines. To heighten the current safety level of train operations even further, we are installing ATS-P and ATS-Ps systems, which employ continuous speed monitoring functions. The number of installations is steadily increasing; most are in the Tokyo metropolitan area.

By the end of March 2014, the ATS-P system had been installed on 2,406.1 km of railway line. The ATS-Ps system is currently installed on 210.5 km of line in the Sendai and Niigata regions and at 64 stations. Additionally, JR East replaced the ATS-Ps on the section of the Senseki Line between Aoba-dori and Higashi-Shiogama with its Advanced Train Administration and Communications System (ATACS), a radio-controlled train operation control system, in October of 2011.

In response to revisions to the Ministry Ordinance for technological standards for railways in July 2006, we are working on measures to prevent excessive train speeds at curves, turnouts, and terminals, and on descending grades. Planned improvements at all curves that had been targeted for action were completed by the end of March 2010.

■ Railway lines and stations with ATC, ATS-P and ATS-Ps systems

![Map of railway lines and stations with ATC, ATS-P and ATS-Ps systems](map.png)

■ Measures to prevent excessive train speeds

<table>
<thead>
<tr>
<th></th>
<th>Target locations</th>
<th>Installations as of the end of FY2014</th>
<th>Planned completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curves</td>
<td>1,468 locations</td>
<td>1,468 locations</td>
<td>Completed in FY2010</td>
</tr>
<tr>
<td>Turnouts</td>
<td>816 stations</td>
<td>743 stations</td>
<td>FY2016</td>
</tr>
<tr>
<td>Line terminals</td>
<td>63 stations</td>
<td>62 stations</td>
<td>FY2016</td>
</tr>
<tr>
<td>Descending grades</td>
<td>1,528 locations</td>
<td>896 locations</td>
<td>FY2016</td>
</tr>
</tbody>
</table>

* Including locations which were improved prior to revisions to the ministry ordinance.
Introduction 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, permitting reductions in traditionally required facilities such as signals, connecting cables, and track circuits, which are currently used for the detection of trains. Eliminating these facilities is expected to reduce the number of facility failures and the number of subsequent transport disruptions.

JR East began using the ATACS system in October 2011 on the Senseki Line between Aoba-dori and Higashi-Shiogama. In December 2012, as one of our 2nd stage functions, JR East released a new function for setting provisional speed limits. From 2014 onwards, we plan to release another new function for controlling road traffic at level crossings.

Systemization of maintenance work

When starting maintenance work on railway tracks, JR East works to ensure the safety of its trains and maintenance workers by following procedures to set signals to red, so that trains do not enter sections of railway where maintenance work is being conducted. In the past, this was done mainly via telephone from maintenance workers to stations. However, in order to prevent any occurrence of error, including human error, JR East adopted a method for maintenance workers to operate handheld devices to change signals to red, and the devices have since been introduced to major railway sections in the Tokyo metropolitan area. In the future, JR East aims to continue its efforts to improve the safety of its operations through the systemization of its maintenance work in other railway sections as well.
Introduction of “effective rainfall” as a new indicator

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 rainfall and continuous precipitation as our indices. Since June 2008, we have been using “effective rainfall” as a new indicator 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 indicator, we can more precisely predict the occurrence of landslide disasters, improving the safety and reliability of our train operations.

*1: Hourly rainfall: the total rainfall over a one-hour period
*2: Continuous precipitation: the total continuous rainfall over a 12-hour period

Measures to prevent accidents at rail crossings

When the company was established in 1987, there were 247 accidents during the year at rail crossings with roads. In FY2014, the number had been drastically reduced to 36. Approximately 60% of all rail-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 increased the number of crossing warning devices in a higher position for better visibility. Larger crossing gates have been installed; the barrier arms are thicker than usual. These are expected to provide better visibility day and night. We are also promoting a wide range of public relations activities for the prevention of rail crossing accidents, appealing to drivers for their cooperation and understanding.

In addition, for countermeasures against secondary accidents resulting from derailments at level crossings with roads, derailment prevention guards have been installed at these crossings. The long-term solution is to decrease the number of rail crossings, and we are cooperating with local governments, neighboring residents, and the police to increase the number of overhead crossings. As examples of our most recent efforts, in 2005 JR East began working to improve safety at the Sojiji Temple rail crossing on the Tokaido Line near Tsurumi Station, where there had been more trouble than at other rail crossings in the Tokyo area, because it is on a curve with limited visibility. The overhead pedestrian crossing was rebuilt to be barrier-free and in FY2011 the rail crossing was closed during rush hours. Closed hours were extended to between 6:00 and 21:00 in FY2012, and, as a result of our agreements with concerned parties, from April 1, 2012, this rail crossing has been closed to road traffic at all times.

Learning lessons from an accident at a rail crossing on the Iiyama Line between Morimiyahonara and Ashidaki on February 1, 2011, JR East has introduced a rule to stop trains at stations when the warning signals at a crossing are being activated due to causes such as equipment failures, and when pedestrians and automobiles are allowed to use the crossing, to ensure that train operations do not endanger pedestrians or automobiles. JR East also formulated a procedure for field staff to prevent failures in safety confirmation.
Safety

In FY2014, there were 88 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-stop systems, on our platforms to ensure customer safety. Customer awareness and cooperation are also vital to safety on our platforms, and we are implementing our “Zero Platform Accident Campaign” through posters, as a measure to heighten this awareness.

As a major measure to prevent accidents involving customers on platforms, JR East is introducing automatic platform gates on the Yamanote Line. In FY2014, we started the use of these gates at Otsuka, Sugamo, Komagome, Shin-Okubo, Mejiro, Takadanobaba, and Tamachi stations. In FY2015, we plan to install these gates at Okachimachi, Uguisudani, Tabata, Yurakucho, Harajuku, Gotanda, and Nishi Nippori stations. With the exception of six stations, Shinagawa, Hamamatsucho, Shimbashi, Shibuya, Shinjuku, and Tokyo stations, which require large-scale improvement work, we plan to complete installations at all stations on the line by FY2016. For routes other than the Yamanote Line, we plan to install automatic platform gates mainly at stations used frequently by visually challenged customers, while discussing these matters with concerned organizations.

For stations where the daily number of passengers exceeds 100,000, JR East is currently working to install an increased number of dot-Braille blocks that indicate which direction is away from the edge of the platform.

![Automatic platform gates on the Yamanote Line](image)

**Station platform safety**

**Installation status for platform doors**

- Installed in FY2014
- To be installed in FY2015
- To be installed after FY2016
  - (4 stations requiring large-scale improvements: after FY2018)
Measures against earthquakes

Measures learned from past earthquakes
Learning from earthquakes in the past, JR East has employed the following three anti-earthquake measures:
① Stopping trains immediately (emergency train stop measures)
② Preventing structural damage (seismic reinforcement measures)
③ Minimizing secondary accidents following derailment (preventive measures against derailed trains leaving the track area)

① Stopping trains immediately (emergency train stop measures)
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. From August 2012, to be better prepared for possible earthquakes, JR East additionally installed and started using seismometers at 30 locations for earthquakes with epicenters directly beneath the Tokyo metropolitan area and those in inland sections of its service area. In October 2012, JR East began using Earthquake Early Warning from the Japan Meteorological Agency. 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 tracks 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.

② Preventing structural damage (seismic reinforcement measures)
In response to the 1995 Great Hanshin-Awaji Earthquake, JR East has been taking a number of seismic reinforcement measures. 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 in the Southern Kanto and Sendai areas except in places that required additional construction work. Currently, we are reinforcing elevated bridge columns susceptible to failure due to bending by strong earthquake motion, aiming to further improve our safety levels against earthquakes. Beginning in FY2013, to prepare for a possible earthquake directly beneath the Tokyo metropolitan area, we have been making seismic reinforcement of embankments, cuttings, brick arch viaducts, electrical poles and other infrastructure. Other initiatives include countermeasures against collapse of station ceilings and walls and platform roofs and preparing advanced plans for the seismic reinforcement of viaduct support columns and bridge columns. Based on experience derived from the Great East Japan Earthquake, we will proceed with the seismic reinforcement of railway station buildings serving more than 3,000 passengers per day, along with the seismic reinforcement of Shinkansen electrical poles.

③ Minimizing secondary accidents following derailment (preventive measures against derailed trains leaving the track area)
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 crew. Learning from the events surrounding this earthquake, JR East has taken several measures for 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. By August 2008, we had completed the installation of L-shaped car guides on all Shinkansen railcars. For ground facilities, we are currently improving the shape of joint bars to lessen the impact of wheels on rail joints in the case of derailment, and implementing countermeasures to prevent the overturning and lateral movement of rails if metal rail fasteners are damaged by a derailed train. We implemented all planned measures for all Shinkansen sections in FY2012.
 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)

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 when there are strong winds, we established multiple anemometers as our new standard and increased the number of anemometers in locations where windbreak fences were installed. By reconfirming the requirements for wind restrictions on sections of railway lines, 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. With this reinforcement, since the accident, JR East has installed a total of 622 anemometers for its conventional and Shinkansen lines, and as of March 31, 2014 we had 939 anemometers installed: 781 on conventional lines and 158 on Shinkansen lines.

<table>
<thead>
<tr>
<th>As of Dec. 25th, 2005: A</th>
<th>As of Mar. 31, 2014: B</th>
<th>Increase (B-A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional lines</td>
<td>228 units</td>
<td>781 units</td>
</tr>
<tr>
<td>Shinkansen lines</td>
<td>89 units</td>
<td>158 units</td>
</tr>
<tr>
<td>Total</td>
<td>317 units</td>
<td>939 units</td>
</tr>
</tbody>
</table>

Installation of windbreak fences

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

<table>
<thead>
<tr>
<th>Line Name</th>
<th>Section</th>
<th>Location of Installation</th>
<th>Time Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokaido Main Line</td>
<td>Bridge next to Nebukawa Station</td>
<td>Both sides of the line</td>
<td>Jul. 1991</td>
</tr>
<tr>
<td>Joban Line</td>
<td>Between Yonomori and Ono</td>
<td>West side only</td>
<td>Feb. 1996</td>
</tr>
<tr>
<td>Uetsu Main Line</td>
<td>Between Sagoshi and Kita-Amarume</td>
<td>West side only</td>
<td>Nov. 2006</td>
</tr>
<tr>
<td>Tohoku Main Line</td>
<td>Between Fujita and Kaida</td>
<td>West side only</td>
<td>Nov. 2006</td>
</tr>
<tr>
<td>Tohoku Main Line</td>
<td>Between Kurihashi and Koga</td>
<td>Both sides of the line</td>
<td>North side: Mar. 2007 South side: Jun. 2007</td>
</tr>
<tr>
<td>Joban Line</td>
<td>Between Fujishiro and Sanuki</td>
<td>Both sides of the line</td>
<td>Mar. 2007</td>
</tr>
<tr>
<td>Keiyo Line</td>
<td>Between Kasa Rinkai Koen and Matsumi</td>
<td>South side only</td>
<td>Mar. 2007</td>
</tr>
<tr>
<td>Keiyo Line</td>
<td>Between Ichikawa Shigama and Futamata</td>
<td>South side only</td>
<td>Mar. 2007</td>
</tr>
<tr>
<td>Keiyo Line</td>
<td>Between Kita-Makihara and Kashi-Urawa</td>
<td>South side only</td>
<td>Mar. 2007</td>
</tr>
<tr>
<td>Musashino Line</td>
<td>Between Minami-Koshigaya and Yoshikawa</td>
<td>Both sides on bridge sections North side</td>
<td>Both sides on bridge sections: Mar. 2009 North side: Feb. 2010</td>
</tr>
<tr>
<td>Uetsu Main Line</td>
<td>Between Atsumi-Onsen and Kobato</td>
<td>West side only</td>
<td>Dec. 2011</td>
</tr>
<tr>
<td>Uchibo Line</td>
<td>Between Saitama and Kazusa-Minato</td>
<td>West side only</td>
<td>Mar. 2012</td>
</tr>
<tr>
<td>Keiyo Line</td>
<td>Between Shin-Narashino and Kuki-Makihara</td>
<td>South side only</td>
<td>Dec. 2013</td>
</tr>
<tr>
<td>Sobu Main Line</td>
<td>Between Koiwa and Ichikawa</td>
<td>South side only</td>
<td>Mar. 2014</td>
</tr>
</tbody>
</table>
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. JR East has installed gale warning systems in all of the 299 locations on its conventional lines with gale operational restrictions.

Introduction of a method to properly assess the effect of wind force on railcars for operational restrictions

The effect of wind force on railcars is constantly changing. For this reason, JR East has been studying methods to properly assess the effects of wind on railcars and utilize the results to more accurately impose operational restrictions for increased safety in train operations. Together with consideration for the opinions of experts in the field, JR East has been studying the following:

2. Calculation methods for the yield strength of railcars against wind through consideration of track conditions and car body shape.

JR East introduced each of these new methods to some sections of the Uetsu Main Line, the Keiyo Line, and the Echigo Line, and the second measure to all sections of the Ominato Line.

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 FY2008, the system was tested during the winter on the Uetsu Main Line between Niitsu and Sakata and on the Hakusen Line between Niigata and Shibata. On February 17, 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. Additionally from FY2013, we have added the Japan Meteorological Agency’s Nowcast that supports detection of tornados as a condition for issuing alarms for our train operations. During this 7 year period of testing, though we initiated train operational restrictions for a total of 20 days, 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.

Since 2007, we have been conducting local gust observations using a Doppler radar installed at Amarume Station on the Uetsu Main Line. In 2010, we constructed a prototype of the local gust detection system and began real-time local gust detection experiments. We plan to continue our experimental monitoring with this system, conducting validations and improvements, and further advancing our research on the potential applicability of the system for train operation restrictions.
Relationship with Customers

Service quality reform

Service quality

JR East sets “Service Quality Reform” as one of the eternal missions in its “JR East Group Management Vision V,” and views the reform as an important pillar in business management. In order to become a group that is chosen by customers and local communities, JR East will strive to reform service quality with a cross-divisional and cross-sectional teamwork to attain the highest customer satisfaction unequalled in the railway industry. Specifically, we will further improve our “Transport Quality” by preventing transport disruptions, resuming train operation quickly after disruptions, minimizing the effects of disruptions and enhancing information communication. We will also improve the economic situation of every lineside area, will offer services which elderly customers can use comfortably, and ensure that we have a customer-friendly railway service through various measures to prevent injuries and crimes.

Quality services that reassure customers

Prevention of Transport Disruptions, Early Resumption of Operations after Transport Disruptions and Prevention of Disruptions to Connecting Lines

We are implementing various measures to improve transport quality by striving to prevent transport disruptions and by stepping up early resumption of operations after transport disruptions, as well as preventing disruptions impacting on connecting lines.

We continue to implement expanded introduction of railcars with dual systems* and installation of track switches of next-generation design making equipment failure less likely, measures to prevent lightning strike damage to electric facilities and other disruption countermeasures.

For early resumption of operations, we maintain efforts to enhance our post-disruption response abilities by such measures as drills to deal with accidents resulting in casualties and rescuing passengers. Notably, concerning accidents resulting in casualties, cooperation with police and fire services is important and we thus implement drills, etc. for employees jointly with police and fire services on a regular basis. In addition, we try to turn trains back before they enter the disrupted section or operate other routes wherever possible in an effort to minimize the impact on customers.

When a disruption has occurred, each worksite involved reflects on how it was dealt with, learns the lessons from this, and uses the knowledge to study and implement measures to prevent recurrences, which are then widely disseminated in-house to raise the level of each and every employee.

* Railcars with dual systems: Railcars with increased reliability through duplication of major equipment.
Information Enhancement

For better information provision in an emergency, JR East is taking steps to provide our customers with more accurate information by having the anticipated time at which operations should resume announced within ten minutes of a suspension of operations following an accident that caused casualties, and giving subsequent updates depending on the situation. In addition, as tools for providing transport information, we continued to install emergency information displays (installed at 186 stations as of March 2014), as well as enhancing display functions, such as displaying in four languages and showing information on turnback operations, disruptions on other lines and other events. We also provide information through various media, such as onboard LED and liquid crystal displays, the JR East and other websites, and the contents of cell phone carriers. In addition, on our website, we commenced distribution of information on service suspensions of conventional line limited express trains, etc. and extended the time that delay certificates can be issued on major lines in the Tokyo metropolitan area. Furthermore, for smartphones, we commenced “JR East Train Operation Information Push Notification,” a service for notifying information on train operations on our conventional and Shinkansen lines. For 12 lines in the Tohoku area, we started operating “Doko-Train,” a train operation information service that enables customers to confirm the operating status of individual trains by using their computers or smartphones.

Suicide Prevention Measures

Along with such measures as supporting NPOs in their efforts to prevent suicides, we handed out free pocket tissues, which contained a card with information about the “Inochi no Denwa” telephone counseling service, around major stations in the Tokyo metropolitan area on September 10, 2013 in conjunction with “Suicide Prevention Week” set by the Japanese government and “World Suicide Prevention Day.” In addition, we carried out a suicide prevention campaign named “JR East ♥ Life Assisting Month” in conjunction with the Japanese government’s “Suicide Prevention Enhancement Month” in March 2014. During this period, we informed people about consultation services, etc. through posters, operated “Support Life Trains,” introduced “Inochi no Hotline” (telephone counseling service in collaboration with the Federation of Inochi no Denwa Inc.) and conducted a “Personal Greeting” campaign, in which former JR East employees and consultants of Japanese Association of Mental Health Services, a non-profit organization, jointly patrol stations and talk to customers.
Pursuit of Customer-friendly Railway Services

Baby Stroller Safety Measures
To increase safety for customers with baby strollers who use our stations and trains, we have been working to improve the detection ability of railcar doors in the event that baby stroller frames, etc. get caught. In addition, supporting the Ministry of Land, Infrastructure, Transport and Tourism’s baby stroller campaign, we have been putting up posters, etc. from May 2014 to urge customers with baby strollers to be careful, as well as asking customers with baby strollers and other customers to give way to each other when boarding trains. We also collaborated with the Tokyo Metropolitan Government and railway companies in Kanto region in holding a “Safe Use of Baby Stroller Class in Teppaku” at The Railway Museum on May 20, 2014 in which about 1,000 visitors took part and enjoyed learning about safe railway use of baby strollers.

Escalator Safety Measures
To prevent injuries to customers when they use escalators, we are carrying out safety enhancements, including measures that will prevent sandals from getting caught, prevent falls during emergency stops, and prevent steps from descending when escalators stop. In addition, we are also working together with other railway companies, retailers and other facilities to carry out campaigns in an effort to draw the attention of customers through such means as posters and handing out free pocket tissues that call for the safe and proper use of escalators. Campaigns have been underway since July 2014, continuing an ongoing effort, to concentrate people’s attention upon the proper use of escalators and upon caring for those customers who, due to injury or various other reasons, are able to stand only on the right side of the escalator steps, which are normally used by people who are walking while on the escalator. We are trying to make the content easily understood by all ages from young to old. In addition to railway operators, this time those involved with office buildings, shopping centers and the JR East Group are collaborating in the production and use of these campaign posters, due to the area coverage of corporate partners being expanded nationwide in the campaigns.
**Personal Greetings Campaign**

We have a campaign in which our employees personally greet all customers in need, including those customers with disabilities, elderly customers and others who require particular attention, to make sure that they can use our stations and other facilities safely and with a sense of security. The purpose of this campaign is to inspire society as a whole to watch out for and support such people with special needs. Our employees are instructed to greet and support, to the extent possible, when they spot customers who may need special care. This campaign is being expanded to include employees of other JR East Group companies as well as our own employees.

![Personal Greetings campaign](image)

**Service Managers**

JR East staff at major stations includes service managers who make rounds of stations and are in position to assist elderly customers and those not used to traveling. They provide relevant and timely information and guidance and other fine-tuned services, using tablet computer terminals, in times of emergency as well as during regular operations. (As of April 1, 2014, we have 179 service managers, and they serve at 50 stations.)

**Hospitality**

We have also encouraged our employees to qualify themselves for Service Assistance certification, with the aim of instilling in them a spirit of hospitality. As of the end of March 2014, approximately 9,500 employees had received level two certification.

**Barrier-free Stations**

JR East has been working with local governments and other entities to install elevators at stations in accordance with the Barrier-Free Transportation Law. As of the end of March 2014 we had completed the installation of elevators in 517 stations.

![Chuo Line (Rapid Service) platform in Shinjuku Station](image)  ![Jujo Station up-direction train platform](image)
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 started being introduced sequentially to the Chuo Rapid, Keihin-Tohoku, Keiyo, Tokaido and Saikyo Lines. Spacious toilet rooms capable of accommodating advanced electric wheelchairs with handles were introduced on new Narita Express E259 series cars in October 2009; on the new high-speed Shinkansen E5 series “Hayabusa” in March 2011; on the new limited-express E657 series trains on the Joban Line in March 2012; on the new Akita Shinkansen E6 series railcars in March 2013; and on the Hokuriku Shinkansen E7 series railcar in March 2014.

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 placing AEDs near ticket gates at stations that have many customers, and, as of the end of March 2014, 375 stations have been equipped with one or more AEDs (528 AEDs in total). In addition, we started placing AEDs on Shinkansen trains in February 2009; on new Narita Express trains in October 2009; on Nikko Kinugawa trains in June 2011; and on new limited express trains of series E657 on the Joban Line in March 2012. There were 181 AED units installed on trains as of March 31, 2014.

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 been steadily upgrading its toilet facilities. Measures taken include a change to western-style toilets, improved ventilation and the use of larger floor tiles. The upgrading also includes water-saving type toilets and automatic faucets in the washbasins, to reduce water consumption. During this fiscal year ending March 2015, we will renovate the toilets in approximately 10 more stations, as a way to increase customer comfort and satisfaction.

Measures against Female Molestation
In addition to adding women-only cars during certain hours, and with the aim of enabling female passengers to travel stress-free, we have been installing SOS buttons on major Tokyo metropolitan area lines that women can use to alert train crews if they are improperly touched or otherwise molested. Furthermore, in cooperation with police and other railway operators we are actively conducting a campaign to eliminate on-train molestation and have significantly increased security surveillance on trains and in stations. As a further step in the discouragement of female molestation, we have installed on-board security cameras in the leading cars on all Saikyo Line trains.
Women-only Cars

In order to enhance the safety of female passengers we introduced women-only cars on the Saikyo Line during late night operations (from July 2001), and then extended their use to morning rush hours (from April 2005). Currently women-only cars are also in operation during morning rush hours on the Chuo Rapid Line (from September 2005), the Joban Local Line (from May 2006), the Sobu Local Line (from November 2006), and the Keihin-Tohoku and Negishi Lines (from April 2010).

Improvement of onboard service in the new limited express trains, E657 series, on the Joban Line and crime prevention measures

As part of improvement of onboard service, we are providing up-to-date information via WiMAX. Inside the new E657 series limited express trains that started commercial operation in March 2012, we have installed LED displays in full color showing newscasts through WiMAX as well as destinations and other transport information. Customers can also avail themselves of Internet connections on these trains through WiMAX and WiFi.

As part of our crime prevention measures, in addition to Car No.1 of each of the trains on the Saikyo Line, surveillance cameras are installed in Series E259 and E657 limited express trains on the conventional lines and in the two-level green cars on the Tokaido, Tohoku, Takasaki and Joban lines, and in new railcars of the E3 series in the 2000s and E5 and E6 series Shinkansen railcars.

Installation and Usage of WiMAX Base Stations

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 March 31, 2014, easy connections are now available at 162 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.

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. Fully-automatic air-conditioners are installed on E231, E233, E5, E6 and E7 series, etc. 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 adjustments, and by 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 and October 2009 we removed all smoking areas from platforms at major Tokyo metropolitan area stations, and went one step further by initiating a limited smoke-free station interior policy, which was widened in June 1, 2011, again in line with customer requests. 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. Also, with the revision of the timetable effective March 2012, smoking was banned in the dining cars on Cassiopeia and Hokutosei limited express trains, which are through services that operate on JR East and JR Hokkaido.

Transport Services Improvements

We are continuously striving to enhance the convenience of both Shinkansen and conventional lines and to reduce rush-hour congestion through increased frequency of operations and the introduction of wider-bodied cars.

In March 2014, we enhanced the speed of the Akita Shinkansen by having all trains replaced with the new E6 series and began operating at 320 km/h. We also enhanced convenience of the Nagano Shinkansen by introducing the new E7 series ahead of the introduction planned for the opening of the Hokuriku Shinkansen Line to Kanazawa, which is planned for spring 2015. On conventional lines, “Swallow Akagi,” which has introduced a new seating service for commuters called “Swallow Service” to limited express trains on the Takasaki Line, made its debut. We also increased the frequency of operations during the daytime for local trains on the Joban Line, increased the frequency of operations during the morning commuting hours and expanded sections of rapid express operations during the daytime on the Nambu Line in the Tokyo Mega Loop*, and implemented other measures to reduce congestion and enhance convenience.

In the fiscal year ended March 2014 the average level of in-train congestion during morning commuting hours was 177%, 61 percentage points below the rate in the fiscal year ended March 1988. We will continue our efforts for reliable transport by reducing transport disruptions and by other means, to meet customer needs.

* Tokyo Mega Loop: the loop formed by the Musashino, Keiyo, Nambu and Yokohama lines in the Tokyo metropolitan area that have many connections with other JR lines and lines of other railway companies.
Customer Comments at the Core of Policy

Customer comments
The core of improved quality of service in JR East has been our constant attention to customer comments, and we will continue to monitor customer desires and quickly introduce service quality reforms in line with their expectations. To constantly improve our services it is vital for us to listen carefully to customer comments, including their interests and complaints, and then promptly respond to their requests through service improvements.

JR East has various methods of collecting large numbers of customer comments on a daily basis, including those passed directly to front-line employees, those posted on the Internet, and those given over the telephone. All of these comments are quickly shared and analyzed on a companywide basis, and form the core of our improvements. We believe that each and every individual customer comment contributes to the core of improved customer satisfaction.

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

Customer opinions (Total 565,426)

* The chart shows the number of comments on each subject. Some customers commented on more than one subject.
Prompt service quality improvements with customer comments at the core

Customer comments are considered at various levels within the company. Initially, a decision as to whether or not some action of improvement is possible is made at the level that initially received the original customer comments. The action will reflect this decision. If action is difficult to take at that level, then the comments are passed on to higher levels, where potential improvements can be discussed. At the very top level, we have also established the Customer Comments Committee, chaired by the president, which considers the possible implementation of improvement measures based on collected customer comments. Through this system, we are constantly striving for the attainment of improved customer services.

Systematic improvements based on customer comments

Customer Satisfaction Surveys

We conduct customer satisfaction surveys via our JR East Customer Questionnaires to enable us to gain an understanding of how customers evaluate our services that we cannot get simply through customer feedback and to quantitatively check levels of customer satisfaction. The survey results are used to decide which issues JR East should most urgently address as well as to confirm the efficacy of previous measures.

Railway Line Wayside Monitors

We instituted a Wayside Monitors System beginning in FY2012 to gain a more specific understanding of the needs of our customers and of the way they use our services on each of our railway lines. This is in addition to customers’ comments we receive daily and our JR East Customer Questionnaires. We have recruited the monitors from among our customers who live along our railway lines, and sought their views through questionnaires on the Internet and interviews to understand their needs from different perspectives, so that we can increase the attractiveness of living alongside or near our railway lines. (Surveyed sections: the Yokohama, Saikyo and Keiyo lines in the fiscal year ended March 2012, the Musashino Line in the fiscal year ended March 2013, the Joban Line in the fiscal year ended March 2014, and the Takasaki Line in the fiscal year ending March 2015)

Projects for Improving Service Quality

The “Service Quality Improvement Project,” designed to identify customer needs and to promptly improve service quality and transmit information, has begun on the Musashino Line and Saikyo Line in March 2013 and on the Yokohama Line in June. We will continue to work to improve service quality in light of the needs and characteristics of each area along our railway lines, and provide information about our service quality reforms via various media.
**Two-way Communications**

JR East considers it necessary not simply to wait for information from customers, but also to be active in ascertaining what they really need. We therefore strive to discover their potential opinions by making use of social media. The “JR East Official Facebook”, launched in May 2012, provides information about our various campaigns and proposals.

As the times and environment change, customers’ demands change constantly. To address such changing needs, we learn about customers’ demands from their comments and use this information to develop specific improvements. It is through such two-way communications with our customers that we endeavor to upgrade our service quality.

**SQ Network**

Due to prompt improvements in the quality of our services that reflect customer comments, with the entire Group working as a single team, our Company and group companies closely involved in transport service established the SQ (Service Quality) Network in October 2011. The SQ Network holds meetings of representatives of JR East and group companies at stations, branch offices and the head office, to share customers’ comments and devise solutions and improvements through teamwork, that goes beyond individual departments or group companies. In this way the JR East Group as a whole can dedicate itself to enhancing customers’ satisfaction.

**Service Quality Coordinator**

For overall improvement of railway service quality focused on team efforts for service improvement and for providing reliable railway transport, we stationed Service Quality Coordinators in district and branch offices beginning in October 2011. The coordinator’s job is to supervise the area-wide improvement of service quality, as well as to support and promote solution of cross-organizational problems. In this way efforts will be made to improve service quality rapidly from the front-line field operations.

**Service Quality Meetings**

To improve our service quality further with field operations, branch offices and the head office working as a team, we instituted Service Quality Meetings, in which senior executives from our head office visit field operations and exchange views with field supervisors. In the fiscal year ended March 2014, with improvement of satisfaction by each area along our railway lines set as the main theme, each branch office’s tasks were selected as sub-themes and discussions were underway on the sub-themes’ status quo and problems as well as goal setting. JR East identifies the problems faced by each railway section and area and strives to improve quality of service by means of teamwork, without being constrained by the organizational framework of the company.

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*FY2014 Service Quality Meeting*
Creation of a “Think-and-Act-by-Yourself” Culture

Human resources development to enhance service quality

With the goal of achieving even more service improvements, we hold regular service quality training sessions and symposiums, and are working to create a workplace environment in which employees think and act by themselves.

Utilization of ICT

JR EAST APP

With the widespread use of smartphones and to be able to give timely information to meet individual customer needs, we released the smartphone app “JR EAST APP” on March 10, 2014. “JR EAST APP” allows customers to view information on our train operations, all our stations and real-time information on the location of Keihin-Tohoku Line trains. The app also allows customers to easily and quickly access information on lines and stations they frequently use. In addition, customers using the Yamanote Line can view their boarding position (car number), information on stops for the section (transfer routes, platform map and station map), and the congestion status and temperature of each car of the Yamanote Line train they have boarded or that is in operation.

JR East’s Life-style Business

JR East’s Lifestyle Business

JR East operates a broad range of lifestyle businesses and provides services to support the everyday lives of our customers 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.
Appealing to Overseas Visitors

Products that Appeal to Overseas Visitors
We offer the “JR EAST PASS,” which allows unlimited travel within the JR East service area, and the “JR Kanto Area Pass,” which allows unlimited travel within the Kanto area. In January 2014, we began to offer “N’EX TOKYO Direct Ticket (One-way)” as a product providing access from Narita Airport to Tokyo. In addition, we offer the “Mt. Fuji Round Trip Ticket” to promote demand for trips to Mt. Fuji, and the “GALA Option Ticket” as an option that can be added to the “JR Kanto Area Pass” for customers to enjoy snow in winter. With these highly convenient seasonal travel products, we can give visitors suggestions and recommendations for different train trips in our service area.

Free Public Wireless LAN Service for Overseas Visitors
As overseas visitors feel that the free public wireless LAN environment in Japan is inconvenient, we provide and have installed free public wireless LAN services at 15 stations (mainly on the Yamanote Line) and at the “JR EAST Travel Service Centers” which are used by many overseas visitors. This service is provided in four languages: English, Chinese, Korean and Japanese.

Suica Business

As an IC Ticket
Ten IC cards used in public transport throughout the country were made interchangeable in March 2013. Suica was already interchangeable with several of these cards, and “manaca” (Nagoya Railroad Co., Ltd. and Nagoya City Transportation Bureau) and “PiTaPa” (Surutto KANSAI Council) were added to Suica’s list in March 2013. Suica also became usable in the service areas of RYUTO (Niigata Kotsu Co., Ltd.) in March and SAPICA (Sapporo City Transportation Bureau) in June 2013. In addition, some Suica services were made newly available at 33 stations on 12 lines in the Tokyo metropolitan, Sendai and Niigata areas in April 2014. The number of Suica cards issued reached approximately 47.65 million at the end of June 2014.
As Electronic Money

The number of places where Suica can be used as electronic money has been increased, to include shops not only inside but also outside stations. Examples of where Suica can be used include FamilyMart, Lawson, 7-Eleven and other convenience stores; Aeon, Ito-Yokado and other supermarkets; Skylark, Matsuya and other restaurant chains; and Tsuruha Drug and other drugstore chains. In addition to these, we have expanded use to vending machines outside stations, taxis in the Tokyo metropolitan area, Hasedera Temple in Kamakura and other touristic sites, as well as online shopping sites “Rakuten Ichiba” and “Amazon.”

As of the end of June 2014, Suica cards are usable in about 256,220 shops and the maximum number of uses per day had reached approximately 4.21 million.

Responding to Diverse Needs

In December 2012, there were more than 3 million users of “Mobile Suica,” which combines the functions of a Suica card and a smartphone or cell phone. As a result of our efforts to increase the membership shops and companies with which points can be exchanged, the membership of “Suica Point Club” reached around 1.87 million as of the end of June 2014. “View Suica,” combining the functions of Suica and View cards, was issued to enrich functions so as to meet a wide range of customer needs. We have also embarked on new, mainly in-house initiatives in which, based on Suica and View cards and other information, the consumption patterns by customer attribute and such are utilized as marketing data.

JR East will continue to develop Suica as an easy-to-use and convenient IC card.
In preparation for the opening of the Hokuriku Shinkansen Line, we set up “Hokuriku Sales Center,” our first domestic office outside of the JR East service area, in Kanazawa in April 2013. Here, we are mainly working on promoting development of community-based tourism and creating products for travel from the Tokyo metropolitan area to Hokuriku. Specifically, we are joining forces with local governments, JR West, other transportation business operators, business facilities along railway lines, to prepare secondary transportation services and to find and refine the region’s tourism aspects. We are also making efforts to promote the development of tourism routes covering a wide area, including Niigata, Nagano and Gifu Prefectures. By enhancing tourism and other attractive aspects of the region, we can generate more travel and exchange “from Tokyo to Hokuriku” and “from Hokuriku to Tokyo,” leading to the development of win-win relationships.

**Ueno-Tokyo Line (Tohoku Through Line)**

The Ueno-Tokyo Line is a project to add two tracks to the section from Ueno Station to Tokyo Station, which will allow trains from the Utsunomiya and Takasaki Lines and the Joban Line, which terminate at Ueno Station, to continue to Tokyo Station for direct service to the Tokaido Line. The level of in-train congestion between Ueno and Okachimachi on the Keihin-Tohoku and Yamanote Lines during morning commuting hours is about 200%, a level that leaves no room to move during rush hours, but the opening of the Ueno-Tokyo Line is expected to ease the congestion to 180% or lower. In addition, travel time will also be shortened because transfers at Ueno Station and Tokyo Station will no longer be necessary for many passengers. In terms of economics, enhancing the transport network connecting the Tokyo metropolitan area to the north and south will stimulate mutual exchange between the areas along the Utsunomiya, Takasaki and Joban Lines and the areas along the Tokaido Line, leading to regional revitalization. The opening of the Ueno-Tokyo Line is planned at March 2015.

**Development of the Tohoku Through Line**

![Diagram of Ueno-Tokyo Line development](image)
—Utilization of Tablet Computers—
Serving a Useful Purpose in Smooth Operations and Guiding Customers

Takashi Koyama  
Assistant Depot Chief  
Chiba Conductors Depot

Masato Yoshino  
Senior Chief Conductor (Conductor Coach)  
Chiba Conductors Depot

Yoshino  
Allowing train crew to carry tablet computers means regulations, emergency manuals, etc. can now all be managed on tablets, making updating and management very easy. This is a great advantage.

Koyama  
I think it’s also a great advantage that with regulations, etc. all available via tablets, the materials are now easily portable and we can retrieve, search, and browse them immediately when needed. However, from a manager’s perspective, we were very careful to take measures against possible loss of the tablets because some of the information in them is confidential. As we are now preparing for their use in field operations, we are thoroughly reviewing management methods so we can instantly identify to whom tablets have been lent out.

Yoshino  
Among us in charge of instruction, too, we sorted out the materials to install by discussing what kind of information should be input and what kind of apps would be effective.

Koyama  
I would like to see that train crew are thoroughly informed, and kept up to date through training, on what kind of information is in the tablets and what kind of impact may arise in the event of loss.

Yoshino  
Our use of tablets is viewed positively by many in that it broadens the scope in which we can serve our customers and allows us to provide increasingly enriched services. There have already been cases where problems experienced on-the-job have been documented in a manner that is easily understood by train crew and shared on tablets, and the tablets are proving useful in serving customers.

Furthermore, based on feedback from train crew on the front lines, transfer advice, disaster information, and translation are three kinds of applications that were introduced after hearing “having such apps would help.” Most staff probably feel the increasing potential of using tablet computers.

Koyama  
Indeed. Young employees in particular are continually asking, “Can this be done?” So our intentions are to increasingly incorporate ideas from the field.

Yoshino  
On the day that the Kanto region was hit by heavy snowfall, there was an incident where bamboo had fallen on and partially blocked the railway tracks. If we had just told this to customers, they would still be wondering about “When will operations resume?” We found that distributing on-site photos to the tablets of conductors on stalled trains so that conductors could then show customers, “This is what’s happened” gave those customers more assurance.

Koyama  
That is a good example of improving customer service quality in the field through quick thinking and utilizing tablets.

Yoshino  
I’ve heard there have been other cases using tablets, such as researching Tokyo Disney Resort admission restrictions and other information, alerting customers to things like this by in-train announcements, or using tablets to inform customers about connections to other railways and about the weather.

Koyama  
Looking ahead, our intentions are to keep improving the quality of information provided. For example, we are considering whether information can be transmitted via tablet email. On-site photos and messages, planned operations on days following major transport disruptions and rain and wind forecasts are some of the various kinds of information. We want to continue considering ways we can serve our customers more specifically by having such information mailed to tablets for viewing by the train crew in charge so that they can use the information to better serve customers.
Relationship with Society

With communities

As a member of the local community, JR East has a strong interest in the community’s future and works for its improvement by enhancing the areas along our railway lines, through developments such as our “Station Renaissance” program.

At Tokyo Station, on the Marunouchi side, the work to preserve and restore Tokyo Station’s Marunouchi station building was completed in October 2012. On the Yaesu side, in addition to GranTokyo North Tower and South Tower, the GranRoof pedestrian deck, with its large roof, opened in September 2013 and a square will be completed in front of the Yaesu Exit in fall 2014. Together with the in-station commercial zone, GranSta, these developments are called Tokyo Station City and form part of the concept of developing Tokyo Station into a complete city. Our goal is to create a station that will serve as a center that represents new cultures, while also serving as a spectacular gateway to Metropolitan Tokyo.

We are also cooperating with local governments in the creation of new stations, in line with their city planning, and the improvement of existing station buildings with free passages and other facilities, based on requests from local authorities. In the fiscal year ended March 2012 we opened a new station, Yoshikawa-Minami, on the Musashino Line, and we improved Fujisaki Station on the Gono Line by building a community space (local government facility) in the fiscal year ended March 2014. Since our establishment in 1987 we have introduced local government facilities into a total of 85 stations (as of March 31, 2014). Sashiougi Station on the Kawagoe Line, Nagaura Station on the Uchibo Line and Hakusan Station on the Echigo Line were also improved by construction of free passages in the fiscal year ended March 2014.

Participating in the program to support migration to regional cities

In the “JR East Group Management Vision V,” we are supporting programs that local community encourages people to move to regional cities from the Tokyo Metropolitan area, with the aims of contributing to the revitalization of those local communities and of encouraging such migration. In the first of these projects, we are cooperating in promoting migration and exchange with Nagano Prefecture and Saku City as well as with Aomori Prefecture, Hirosaki City and Towada City.

Seminar on migration & trial migration tour

This Tour gives people interested in moving away from the Tokyo area an opportunity to take part in seminars and visits in order to dispel their misgivings about migration. By combining local community activities (seminars on living conditions, agricultural experience) with information about Shinkansen trains, we can support local government migration policies through our sales channels and media activities (membership, homepage, and others).

Post-migration support

We are examining the possibility of offering support for relocation to Sakudaira from the Tokyo Metropolitan area by making it easier for travel to Tokyo.

List of support utilizing Group resources

People moving to regional cities or making short stays there sometimes need support, especially in the aspect of mobility. We offer support using Group resources, such as long-term car rental discount plans for members of the Otona no Kyujitsu Club.
Society

JR East continues to cooperate with local governments in projects for railway overpasses near Inagi-Naganuma Station on the Nambu Line and Niigata Station on the Shin-etsu Line. These projects aim to unify towns that are split by railway tracks, eliminate traffic congestion, and improve the safety of both road and rail transportation.

In the project to construct a series of railway overpasses near Inagi-Naganuma Station on the Nambu Line, all 15 level crossings in the section subject to the project were removed by placing the railway on a viaduct in December 2013, thereby eliminating traffic congestion, unifying towns and contributing to city planning and smoother traffic.

贡献 of Railway Overpasses to Unifying Towns and Eliminating Traffic Congestion

JR East continues to cooperate with local governments in projects for railway overpasses near Inagi-Naganuma Station on the Nambu Line and Niigata Station on the Shin-etsu Line. These projects aim to unify towns that are split by railway tracks, eliminate traffic congestion, and improve the safety of both road and rail transportation.

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Enhancing Convenience of Multi-mode Travel through Improving and Developing Transfer Nodes functions at Stations

Large numbers of people pass through stations where different transport services meet. To reduce urban area congestion and to make travel more convenient, we have been increasing the number of through services and improving our connections with other means of transport, in cooperation with national and local governments. We are also improving transfer nodes to other transport, such as to bus terminals and taxi loading areas. One example is constructing a bus terminal above the railway tracks at Shinjuku Station, in collaboration with the Ministry of Land, Infrastructure, Transport and Tourism, which contributes to the convenience of the entire multi-mode transportation system.
Rediscover Local Areas Project

Development of the Rediscover Local Areas Project

Under the "Create Together" strategy, which specifies enhanced cooperation between JR East and local communities, we are promoting the Rediscover Local Areas Project. The aim is to create new potential markets that bring increased circulation between the Tokyo metropolitan area and other regions and also attract overseas visitors to Japan. The JR East Group has railway networks that link Japan's various regions, stations that serve as centers of local communities, business know-how, sales channels and advertising power that all radiate out from the Tokyo metropolitan area, along with employees who continuously make social contributions as members of local communities. The strategy utilizes JR's unique abilities to make full use of traditional cultures, festivals, local produce, and other tangible and intangible tourist resources, expand sales channels, and promote the interactive exchange of information between the Tokyo metropolitan area and local communities.

In the Tokyo metropolitan area, in collaboration with Tabi-Ichi travel packages through which local residents both propose and guide tours of recommended tourist spots, destination campaigns, and other marketing tools, we are hosting a number of farm fresh markets for selling local produce and giving information on local tourism. We opened "NOMONO," a shop selling local products (mainly food) and designed to communicate local information, at Ueno Station in January 2012 and Akihabara Station in March 2014. NOMONO shops emphasize products that are typical of the season, region and traditions. Through these, we are working to communicate local information in cooperation with local people.

In regional areas, we opened A-FACTORY, a complex that consists of a craft center and market for processing Aomori-grown apples, in front of Aomori Station in the fiscal year ended March 2011. We are pursuing regional revitalization by deepening ties with the local people through various events and other means. In addition, in September 2013, we launched NOMONO 1-2-3, a manufacturing project for expansion of agriculture, forestry and fisheries to include food processing, logistics and marketing. Our pursuit of such expansion of industries to improve regional economies have included selling burgers made with Shinshu venison and opening a sweets shop specializing in Tokyo-grown ingredients in ecute Tokyo. We are working to revitalize the local food industry by holding farm fresh markets and through encouraging the expansion of agriculture, forestry and fisheries to include food processing, logistics and marketing.
The store name "NOMONO" is based on the concept of introducing and communicating local produce, mainly food that typify the season, region and traditions of each eastern Japan region. It is a store that was born from a desire to deliver new discoveries and surprises to everyone in the Tokyo metropolitan area by gathering specific regional products. Of areas in Tokyo, the Akihabara Station area is in particular a "place that communicates new culture" and was thus thought to be the most suitable location for "NOMONO."

At "NOMONO," we gather products that have been carefully selected by our staff in collaboration with regional manufacturers and producers of agricultural products, in the hope that food of each eastern Japan region will be integrated into everyone’s daily diet. In addition to a regular stock of about 500 types of products, a "featured prefecture" is set on a monthly basis and highly-attractive products that focus on the essence of that prefecture are offered for a limited time only.

Many people probably think of souvenirs when it comes to regional products, but at "NOMONO," we stick to delivering products that local people consume in their daily living. For that reason, it has become a common style of use for people to stop by after work to buy craft beer and snacks unique to the region or local specialty desserts that would otherwise only be available in regional areas.

In fact, comments from customers have included "I’m glad the products that I usually mail order can now be purchased just by stopping by after work," "I can get the items that I liked when traveling even in Tokyo" and "It’s nostalgic to find products that are a specialty of the prefecture where I was born."

The ultimate goal of this store is to communicate the attractiveness of eastern Japan through local food found at "NOMONO," have people in the Tokyo metropolitan area feel that they "want to visit the site firsthand" and then actually travel to that region.

As store manager, it is my desire to have staff themselves increase their knowledge of the products and become "concierges for eastern Japan" who can confidently suggest and introduce products to customers. In addition, I also think it is my role to mount efforts to nurture staff so that manufacturers and farmers can feel at ease in entrusting their products with us.

There are still many food and local delicacies in each eastern Japan region waiting to be found that we have yet to discover and introduce in the store. Intentions are to keep searching for products characteristic of regional areas that are yet to be found to form a unique selection of products so that we can communicate the attractiveness of eastern Japan more and more to everyone in the Tokyo metropolitan area.

Hiroko Mizuno
Store Manager
Childcare Support Services HAPPY CHILD PROJECT

JR East Group is striving to develop communities along its railway lines in which people can live in comfort and can benefit from adequate childcare support, as envisaged by the HAPPY CHILD PROJECT. More specifically, these communities will benefit from elements of social infrastructure such as nursery schools near stations for supporting childcare and community cafés for parents and children. It is hoped that these may contribute to the development of local communities and be used as venues for various events that both parents and children can enjoy.

We will respond actively to various needs associated with childcare, contribute to the local community and upgrade the value of areas adjacent to the railway lines.

Childcare Support Facilities — Support for working parents

JR East has opened childcare support facilities such as “nursery schools near stations” located in easily accessible areas that are usually within a five-minute walk from the station, to support the combination of childcare and commuting to work. A total of 79 childcare support facilities were opened from 1996 through April 2014, and JR East is continuing to increase the number of these facilities. These nursery schools near stations have the advantage that parents can drop and pick up their children on the way to and from work. As evidenced by the scene that children come to the nursery with fathers, our childcare support encourages fathers’ participation in childcare as well.

Parent-Child Community Cafés - Facility to encourage parents to go out

JR East is working to open parent-child community cafés that provide space where families can enjoy spending time together. The Parent-Child Community Cafés incorporate functions and services to help meet this goal, and are not only for families with children, but also for all members of the community and all generations.

For example, the “Kizuna 937” Parent-Child Community Café operated by JR East is on the second floor of E’site Kagohara, in front of Kagohara Station on the Takasaki Line.
Events for supporting Childcare

Children’s Train Craftwork Exhibition
This exhibition, displaying craftworks produced by children attending our nursery schools adjacent to stations, is held on a regular basis in the Railway Museum (Saitama City, Saitama Prefecture). With “trains” as its theme, original, creative and fantastic works created by children are enjoyed by many visitors. It also provides a space for displaying the activities of nursery schools and observing child development.

Paper-craft Class
Various events that parents and children can enjoy together, such as a Paper-craft Class showing how to make a 3-D Shinkansen mock-up from special paper, take place in a variety of locations.
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 children. They will lead the next generation and they need to understand environmental issues and their relationship to society. The program aims to help children understand the environment and life through materials related to railways. In FY2014, the program was implemented at 32 schools, primarily elementary schools, in the JR East area. We will continue it.

Delivering an environmental education program at an elementary school

Members List of Areas for Branch Office School Visits

The area names have been created for JR East internal use.
Chuo Line Mall

We are promoting the Chuo Line Mall Project for utilization of the space under elevated railway tracks between Mitaka and Tachikawa Stations on the Chuo Line. This is part of an overall aim to develop lineside area brands that will be chosen by customers, as part of a project constructing a series of railway overpasses that will unify towns. Looking at a railway line and the area alongside it as a unit rather than just as “points” (stations), we are promoting development that is based on the concept of “connecting greenery, people and towns”. By doing so, we aim to establish a lineside “brand” as an area where customers want to live, and this will enhance the value of areas along the railway line.

Suicle

The JR East Group operates “Suicle,” a bicycle sharing system using Suica, with goals such as increasing the flow of people in towns, regional revitalization and contributing to becoming a low carbon society. Bicycles are based at facilities under the elevated Chuo Line tracks adjacent to Musashi-Sakai Station and Higashi-Koganei Station, and ports have been installed outside the station area, where bicycles can be dropped off. In this manner, the bicycles have become community bicycles.

This system run by East Japan Marketing & Communications, Inc. began on November 3, 2013 and has already been expanded to serve three locations.

COTONIOR

“COTONIOR” is a facility providing both child and senior citizen care under one roof as recommended by the JR East Group. We hope that COTONIOR operations will nurture children to be considerate of and respect the elderly, while allowing senior citizens to enjoy interacting with children and feel comforted and rejuvenated by them. “COTONIOR Kichijoji,” which is the first of such facilities, serves both as a nursery school certified by the Tokyo Metropolitan Government and an outpatient day long-term care facility.
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 major activities include operating the Railway Museum, Tokyo Station Gallery, the Old Shimbashi Station building and Old Manselbashi Station, 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.

The Railway Museum

On October 14, 2007, the Railway Day, 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 visitors 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 about 800,000 visitors in the fiscal year ended March 2014. In November 2013, The Railway Museum held the “First World Railway Museum Meeting,” a gathering ten railway museums in seven countries, promoting mutual understanding, information sharing and cooperation among railway museums.

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 Japan, there are approximately 1,000 active members, with 400 of them in our service area. JR East has established related facilities in each of our branch offices and actively supports the association as a way to contribute to the 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

JR East is actively involved in international cooperation through dispatching railway experts to Asian countries in order to explain our technologies and provide the expertise we have nurtured over the years, taking in trainees from developing countries to provide tuition in professional fields, and meeting requests from agencies such as the Ministry of Land, Infrastructure, Transport and Tourism and the Japan International Cooperation Agency (JICA).

JR East also receives inspection visits by overseas visitors involved in railway operations. During the fiscal year ended March 2014, for example, we had 892 visitors from 54 countries. The visitors have included government officials from each country, people engaged in railway operation and researchers from universities and research institutes. These visits help to promote mutual understanding.

Global Contribution through International Institutions

JR East is a member of the International Union of Railways (UIC), the International Association of Public Transport (UITP), Community of European Railway and Infrastructure Companies (CER), the Association of American Railroads (AAR), the American Public Transportation Association (APTA), and other international railway organizations. In addition to collecting and providing information through international conferences and publications organized by these institutions, we strive to constantly work toward the resolution of railway-related issues around the world.

We are also working hard to host international conferences, when we can show overseas railway operators the features of Japanese railway systems. In April 2014, we co-hosted the UITP Asia-Pacific Assembly in Tokyo with Tokyo Metro Co., Ltd. In October, we will host the UIC Asia-Pacific Region Meeting in Tokyo. In addition, in July 2015, we will be holding the “UIC World Congress on High Speed Rail,” the world’s largest international conference and exhibition focusing on high-speed railway, in Tokyo in collaboration with UIC.

JR East executives have also served as chair of the Asia-Pacific regional assembly (APRA) since January 2013 and Vice President and Director of the UITP Policy Board since May 2013. Through the activities in such international organizations, we will contribute to the development of railways throughout the world.
Participation in Overseas Railway Projects

Amid an increasing awareness of global environmental issues and the economic growth of emerging economies, interest in railways as environmentally friendly public transportation systems is on the rise globally, and this has resulted in the current consideration of many railway projects around the world.

In November 2011, JR East established Japan International Consultants for Transportation Co., Ltd. (JIC), a company that provides consulting services to overseas railway companies. The company was formed jointly with West Japan Railway Company, Tokyo Metro Co., Ltd., and other domestic railway operators with good records of performance achievements and know-how regarding all kinds of rail transportation, including high-speed railways, urban railways, and freight railways.

With JIC at the head, we have several overseas railway consulting projects under way, including feasibility studies and design work. We will, furthermore, cooperate with both Japanese and foreign companies to participate in overseas railway projects, including both operational and maintenance aspects (planning, instructing, and supporting train operations and facility maintenance). Our first priority is Asia, where growth is remarkably strong, but we are involved in railway projects in all regions and are contributing to global railway development.

In addition to the previously established New York and Paris offices, we established the Brussels office, Belgium in November 2012, followed by the Singapore office (our first in Asia) in March 2013, for such purposes as gathering information on these overseas railway projects. These offices were followed by the establishment of the London office in an aim for further cooperation and collaboration between Japan and Europe.

Expansion of Railcar Manufacturing Operations and Overseas Business Expansion

As part of our plan to establish railcar manufacturing as the fourth pillar of business management, making full use of the synergic effects of the entire JR East Group, we transferred our JR East railcar manufacturing operations in Niitsu Rolling Stock Factory to our Japan Transport Engineering Company (J-TREC) subsidiary and our Niitsu Rolling Stock Factory became J-TREC’s Niitsu Plant in April 2014.

The JR East Group will continue to improve our comprehensive technological capabilities, which range from manufacturing to operations and maintenance, with an aim to expand the global market share of Japanese railcars. J-TREC in particular is pursuing a business strategy that demonstrates the advantages, such as high reliability and low lifecycle costs, of its stainless steel railcars, which are marketed under the brand name “sustina.”

Concrete achievements in overseas business expansion include the decision to take part in railcar and ground equipment maintenance projects for Bangkok’s Purple Line, which is currently under construction in Bangkok, and for J-TREC to manufacture and supply 21 three-car train sets for this service.
Aiming for the nurturing of human resources capable of playing a part in overseas business expansion, JR East is promoting its Global Human Resources Development Program—Ever Onward, which provides such options as overseas study, overseas dispatch to public institutions and companies, and overseas railway consulting work on-the-job training (OJT). Continuing from the previous year, in the fiscal year ended March 2014, 18 people selected through open application as overseas railway consulting work OJT trainees were dispatched to Delhi (India), Jakarta (Indonesia), Ho Chi Minh (Vietnam) and Yangon (Myanmar). We also added a new overseas experience program (short-term overseas study) designed to foster an open perspective and mind. In this overseas experience program, about 100 employees selected through open application were dispatched to 14 cities around the world to encourage them to acquire a broad perspective and the language skills required for future globalization through such means as lessons at language schools, home stays and problem solving programs.
In order to ensure safe and reliable rail transport and 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 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 Group Management Vision V- Ever Onward”, the company advocated reforms to its culture, including opening up our organization to young employees and giving increased opportunities for motivated people to apply for inclusion in training and other new projects, exchanging people with other companies, passing on technical knowledge and skills to the next generation, and participating in technological innovation and overseas railway projects.

Recruitment

JR East’s main supports are the capabilities of each and every employee. Our basic philosophy is 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. Because of the large number of employees reaching retirement age in the fiscal year ending March 2015 and the constant necessity for human resources development and the transfer of knowledge and technologies to the next generation, we have recruited about 1,800 new employees.

Employing Persons with Disabilities

As of June 2014, 2.4% of our workforce consisted of employees with disabilities. These members of our 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.
The development of human resources and the steady and continuous introduction of new technologies and skills are vital to the sustainable growth of the JR East Group. Based on a perspective of nurturing quality through work, we are striving to enhance the organizational power of the Group and to develop human resources capable of shouldering the burdens of the future.

With this in mind we constantly conduct training programs at our General Education Center and in branch offices and many kinds of seminars at our Head Office. And as part of our support for all employees to set their own challenges for self-education and to thereby heighten their abilities, we offer both internal and external correspondence courses. The internal courses are aimed at the acquisition of knowledge and skills directly connected to our employees’ duties, while the external courses are connected to indispensable business skills and knowledge, including management know-how, qualifications acquisition, languages, and office automation.

In order to encourage our employees to face the challenges of taking the next steps in their careers, in January 2011 we upgraded our small groups and proposal activities and initiated the My Project program. This program is comprised of three aspects: self-starting, freedom of method and importance of process, with the fruit being the employee’s personal growth. The project is based on the belief that working for personal improvement is an opportunity for the fostering of human resources, and, thereby, aims to nurture employees capable of thinking and acting independently.

In order to motivate our young employees and encourage them to develop into professionals capable of playing leading roles in all fields of railway technology, we established the JR East Technical Academy in March 2009. In the 6th year class that started in March 2014, we added lectures on safety systems in order to nurture engineers with comprehensive knowledge, skills and philosophy on railway safety. The present class includes 60 employees from 12 technological fields; 5 of them are from Group companies and partner companies, and 7 are participating only in some programs as listeners. They will be working together as a group for one year to improve their technical capability and strength. 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 Training Centers: Develop engineers for future railway transportation

Integral to our efforts to ensure that experienced employees pass on their technologies and skills to the next generation of technical staff, who will carry the responsibilities for railways in the future, is our establishment of skills training centers designed to support the continuity of railway-specific technologies and skills in individual workplaces. We have established 104 centers by also making use of existing training facilities. In our skills training center for rolling stock maintenance, for example, railway car component mockups (power collection equipment, door opening-closing devices, and braking equipment) have been set up, while in our facilities maintenance section, railway facilities (tracks, turnouts, platforms, overhead line equipment, signals, etc.) have been installed, so training sessions can take place in virtually real environments.

Training at skills training centers

Promotion of Diversity

JR East believes that employees who derive satisfaction from doing challenging work and who can maximize their skills are able to enhance the company’s competitiveness. We have initiated a “Work-Life Program” whose aim is to encourage all employees, both male and female, to participate independently.

We are encouraging employees to be well aware of the Work-Life Program and are using a program nickname, “Wara-Pro”, and a logo.

Concept of Work-Life Program

- Basic concept
  - Gender equality
  - Diversity
  - Work-life balance

- Three pillars of the program
  - Support the balance between work and childcare/nursing responsibilities
  - Enable employees to fully demonstrate their abilities
  - Improve employee culture to create a new culture
Specifically, individual organizations hold seminars and forums and operate a diversity portal. They also participate in the various activities of a Work-Life network, upon which the Work-Life program in the workplace is based, with the aims of encouraging employees to revise their way of thinking and of creating a new corporate culture. For enhancing the employees’ awareness of Work-Life balance, the company invites its employees’ families to come to its Family Day event.

We are also dedicating efforts to the establishment of welfare and other various programs, including annual paid leave, in order to support employees so that they may work with enthusiasm, feel challenged and have job satisfaction, and thereby demonstrating their fullest potential.

### 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 (two in Tokyo and one in Sendai) and a hospital nursery school (JR Tokyo General Hospital)
- Implementing a seminar to support the achievement of the balance between work and home life (childcare/nursing)

### Welfare and Other Programs

We are also dedicating efforts to the establishment of welfare and other various programs, including annual paid leave, in order to support employees so that they may work with enthusiasm, feel challenged and have job satisfaction, and thereby demonstrating their fullest potential.

<table>
<thead>
<tr>
<th>Average number of days of annual paid leave taken</th>
<th>Average rate of annual paid leave taken</th>
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</thead>
<tbody>
<tr>
<td>17.7 days</td>
<td>Approx. 90.8% of allowed annual paid leave was actually taken</td>
</tr>
</tbody>
</table>

(for the fiscal year ended March 2014)
Support the balance between work and childcare/nursing responsibilities

Based on the concept of increasing the options for achieving the balance between work and childcare/nursing, regardless of occupation, JR East introduced “Working with Childcare/Nursing A” in FY2011. In this program, all employees are eligible for shorter working days (six daytime hours) until their child reaches three years of age.

In addition, with the desire to continue to provide support thereafter as much as possible, we also introduced “Working with Childcare/Nursing B.” In this program, employees with children who have not reached the third elementary school grade are entitled to four days a month as days off for childcare/nursing. Furthermore, Working with Childcare/Nursing A and B both also apply to “nursing” (care of other family members). We also revised programs, such as extending the availability of childcare leave to the time when the child reaches three years of age and expanding the scope of coverage of “parental leave” (entitled to take up to five days off a month for taking care of a child) and “sick/injured child care leave” (entitled to take up to five days off a year for looking after a child in the event of the child’s sickness or injury; ten days permitted for those with two or more children), which also applies until the child reaches the third grade of elementary school. In this manner, there is a growing range of options for ways of working during childcare/nursing periods.

### Changes in Employees Taking Childcare Leave

![Changes in Employees Taking Childcare Leave](image)

### Changes in Employees Opting to Work Shorter Hours or Fewer Days

<table>
<thead>
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<td>107</td>
<td>98</td>
<td>205</td>
<td>108</td>
<td>257</td>
</tr>
</tbody>
</table>

### Expansion of workplace opportunities for female employees

The workplaces, both field and office, in which female employees can work are growing in numbers every year. For example, about 40% of the train crew members on the Yamanote Line are female employees. The number of female managers is also increasing every year, with female employees taking important positions such as Head Office and Branch Office managers, chiefs of field offices (stationmasters) and Board members of group companies.

### Changes in the number of female managers

![Changes in the number of female managers](image)

Including deputy managers in clerical work, assistant chiefs in field work, chief nurses in medical workers.
Health, Labor and Welfare (HLW) Minister’s Excellent Performance Award, in Family Friendly Company Section of the “2012 Equality & Work-Childcare Balance Promotion Company Commendation”

In recognition of our support in the achievement of work-childcare/nursing balance, JR East was given the HLW Minister’s Excellent Performance Award in the Family Friendly Company Section of the “2012 Equality & Work-Childcare Balance Promotion Company Commendation”. For our efforts in encouraging the employment of female employees’ capabilities, we were also given the Tokyo Labor Department Award in the Equality Promotion Company Section of the said commendation. We are the first company in the transport industry to receive the HLW Minister’s awards in both Sections.

General Business Operator Action Plan

JR East has formulated a 3rd phase action plan in line with the Law for Measures to Support the Development of the Next Generation.

Duration: April 1, 2012‒March 31, 2017

In November 2008 and in August 2012 we were certified by the Minister of Health, Labor and Welfare as a company supporting the raising of the next-generation of children.

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 to increase their awareness of this problem. 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. This is done by 90% of the eligible employees. 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 in the necessity for enhanced human rights, we have established a human rights enlightenment promotion committee in the Head Office. Specifically, the activities of this committee include human rights seminars for officers and employees of JR East Group and for those in charge of human rights enlightenment in organizations and Group companies. To propagate human rights awareness, it also conduct lectures on human rights enlightenment in training sessions attended by new recruits, new train crews, work-implementation managers, and new managers. Furthermore, human rights education both for our employees and for their families has been promoted through articles, spotlighting human rights problems that could occur in our environment, that appear in our newsletter “JR Higashi.” We have also joined the Industrial Federation for Human Rights, Tokyo, and are conducting human rights enlightenment activities externally along with information exchanges and mutual enlightenment discussions with member companies of the Federation.
I was employed after having worked at a household appliance manufacturer where I was in charge of design work. Since joining JR East, I have been involved in mainly railcar inspection and track maintenance work. The age composition of the workplace included only the baby boomer generation and young employees, with no employees in between to act as intermediaries, and this made me feel slightly concerned as an engineer. Notably, the technical management department I belonged to was made up of mostly veteran employees, increasingly raising doubts about whether younger employees could manage to acquire the same skills within the short period that remained.

It was at that point that a “Maintenance Master Nurturing Academy” poster at the workplace had caught my eye. The Nurturing Academy was a program for nurturing human resources capable of playing a central role in the maintenance department. Taking a close look, I saw that railcar management skills, management techniques and standard/quality assurance could be studied intensively over two years. It was a great opportunity to address the issues that were concerning me, and I was eager to apply for the program. Now that I managed to pass the screening, my present thoughts are on acquiring every skill and know-how possible in the given two years to become a person that can contribute to society, even if just a little, as one engineer protecting the safety of customers.

At the Nurturing Academy, the required skills are basically learned through OJT, but there are also many programs that one would not be able to experience other than with the Nurturing Academy. These included group training at the head office and visiting the plants of non-railway companies. Through such experience, I sense that I can now see things from various angles. Even in the daily OJT at the General Rolling Stock Center, by going through each work division in a short period of time, I can now objectively look at my own work and workplace from the perspective of a different department. I can now understand better the movements of those people around me that I had been watching vaguely and see things I could not recognize before. Another advantage is that many participants of the Nurturing Academy have clear, high goals, which is extremely inspiring and I, too, am kept highly motivated.

Japan’s railways, especially JR East, constantly place safety first, have extremely low delays in train operations and such a high level of punctuality is well recognized around the world. This would be impossible without excellent railcar management and maintenance. In fact, once I have gone through acquiring railcar management and maintenance skills at the Nurturing Academy, I dream of participating in overseas projects and put such skills to good use. I see the way JR East takes a comprehensive approach in overseas projects to encompass not only railcar manufacturing but also maintenance and other aspects, too, as a strength. Therefore, I hope to be able to make at least a slight contribution to infrastructure development in emerging countries, based on the know-how acquired at the Nurturing Academy.

Takayuki Onodera
Education Group Planning Division
Koriyama General Rolling Stock Center
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 public responsibility, we are committed to meeting our social responsibilities by carrying out our business activities in a way that will ensure railway safety and reliable transportation services.

In terms of our social mission, our Group Philosophy states: “We aim to grow continuously 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 all of our stakeholders, JR East has made the strengthening of its corporate governance a top-priority management task. Specifically, for improving management soundness, efficiency and transparency, JR East is augmenting its systems for management decision-making, operational execution and overseeing, Group management, information disclosure, and other important matters.

Execution of Duties, Supervision and Audit System

Our 18-member Board of Directors, including two outside directors (as of June 30, 2014), normally meets monthly to decide key operational matters relating to statutory requirements and other matters, and to 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 all directors with executive functions and others, are held as required to discuss major issues affecting the Group as a whole, including management strategy for each business field.

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 audit by corporate auditors is supported by approximately 10 specialized staff. They oversee executive actions carried out by directors, with a focus on full-time directors, in accordance with the rules established by the Board of Corporate Auditors by investigating their attendance at the Board of Directors, the Executive Committee and other important in-house meetings, their financial situations, and other items.

JR East financial statements 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 June 30, 2014)

**East Japan Railway Company**

**General Meeting of Shareholders**

**Board of Directors**
18 directors (of whom two are outside directors)
Decides and oversees major business activities

**Inquiry & Audit Department (Head Office)**
and **Inquiry & Audit Divisions (Branch Offices)**
Performs oversight functions to ensure that business activities are conducted in compliance with applicable laws and regulations

**President**

**Executive Committee**
Consists of all directors with executive functions
Deliberates on resolutions to be submitted to the Board of Directors and major management issues

**Group Strategy Formulation Committee**
Consists of all directors with executive functions and others
Deliberates on major issues affecting the entire group

**Head Office Departments, Branch Offices, and Field Organizations**
Collaboration and cooperation to ensure the efficient performance of business activities

**Subsidiaries**

**Board of Corporate Auditors**
Consists of two full-time and three part-time corporate auditors (of whom four are outside auditors)
Audits the activities of the Board of Directors, company operations, and assets

**Independent Auditor**
KPMG AZSA LLC.
Performs independent audits in and at the end of each fiscal year
Compliance

Basic Concept of Compliance

JR East adopted our 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 addition, we continue to implement a program of education for all Group employees every year and strive to raise their awareness of the need for compliance. Other approaches to further promotion of compliance-minded management throughout the Group may be exemplified by our confirmation of the proper execution of our business through general checks of legal and regulatory requirements concerning all aspects of it and activities using a “Basic Matter Confirmation Support Sheet” that should be periodically checked in each location.

Formulation and Revision of the Compliance Action Plan

In 2005, JR East adopted our Policy on Legal and Regulatory Compliance and Corporate Ethics as the Group’s activity guidelines. To heighten the efficacy of these guidelines, we also prepared the Compliance Action Plan, which sets forth advisable modes of conduct for all employees of the JR East Japan Group. We are distributing the Plan to all employees, in the form of the Compliance Action Plan Handbook. In 2013, with the formulation of JR East Group Management Vision V, we revised the 2005 policy together with the Compliance Action Plan Handbook, taking into consideration the social changes surrounding the Company. We will continue to ensure that all employees of the JR East Group completely understand and follow the Compliance Action Plan and review it according to ongoing environmental and societal changes.

Strengthening Mechanism for Proper Business Conduct

We conducted full inspections of our compliance for all our operations, including Group companies. Starting with the inspections, JR East Group is promoting continuous reviews of all its operations based on laws and regulations, internal rules, and social norms. In 2011, JR East created the “Basic Matter Confirmation Support Sheet” listing matters subject to regular checking and requiring heads of departments to personally ensure that business is carried out properly. We endeavor to achieve thorough implementation at each workplace.

Ensuring Information Security

With the advancement of the information society, ensuring the security of our information systems has become an important issue. JR East has designed and introduced an information security management system and carries out necessary measures to ensure safe and secure information system operations. We have also established a contact system in the event a problem should occur and we conduct problem response drills. All employees are kept aware of the importance of information security and the strict handling of information through our Group rule book and internal magazine. All employees also receive information security education with the aim of raising awareness about how they should guarantee workplace information security.
We began providing compliance education for all employees in 2009, in order to heighten awareness of the need for compliance among each and every one of them. In fiscal 2014, we carried out a program of education including a case study, which prompted employees to consider cases that could occur in their workplace, for the purpose of tightening adherence to guidelines for conduct based on the revised Compliance Action Plan Handbook. We will follow this in fiscal 2015 with continued education to enhance compliance awareness that centered around cases and topics based on the recent social situation and actual conditions in workplaces.

In addition, in fiscal 2014, besides conducting a questionnaire in conjunction with our compliance education for all employees, we surveyed employee awareness of compliance by means of the Group Company Compliance Questionnaire, which was conducted mainly with employees of the management and planning divisions at the member firms of our Group.

We are committed to continued compliance education based on the social responsibility our company must discharge and the changes in the mindset of our employees.

### Results of Compliance Training

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<thead>
<tr>
<th>Title</th>
<th>Number of sessions</th>
<th>Participants</th>
<th>Contents and objectives</th>
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<tbody>
<tr>
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<td>1</td>
<td>JR East and Group company employees</td>
<td>Compliance awareness</td>
<td>All Employees</td>
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<tr>
<td>New Recruit Training</td>
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<td>JR East new recruits</td>
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<td>Acquisition of basic legal knowledge</td>
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<td></td>
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<td>legal reasoning, and decision-making/problem-solving</td>
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<td>Compliance Meetings</td>
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<td>Ensuring awareness of a compliance management system</td>
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<td>Regular Legal Seminar</td>
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<td>Explanation of new and revised laws,</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>and awareness-raising about compliance</td>
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Shinanogawa Power Station Incident
In March 2009 JR East received an administrative sanction 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 Ojiya Daini power plants in Ojiya and Tokamachi Cities, Niigata Prefecture). The sanction was issued in accordance with the River Act and included the revocation of a permit to draw water from the Shinano River. Subsequent to receipt of this sanction, we have taken corrective actions in accordance with the directions in the sanction and have endeavored to implement measures to prevent recurrence and to cultivate close cooperation with the local communities.
In June 2010, having obtained a permit from the Director of the Hokuriku Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism to again take water from the Shinano River, we resumed operation of the Shinanogawa Power Station.
We are redoubling our efforts at compliance management to prevent occurrence of similar incidents and we are sincerely committed to fostering harmony with the river environment and enhancing co-prosperity with communities.

Personal Data Protection
In 2005, the JR East Group published the Regulations for the Management of Personal Information and appointed Chief Privacy Officers who have the responsibility of strictly protecting personal data. Through pamphlets covering the subject exclusively, articles in our internal magazines and compliance education, we are also working to ensure that all employees remain fully aware of the necessity of the strict handling and management of personal data. In order to ensure proper usage and strict control of personal data, the Group conducts regular 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 the JR East Group. In 2004, we added the Crisis Management Office, a full-time section that has taken responsibility for Headquarters' secretarial work. We are striving to be prepared for any potential risks JR East Group may face. We have established a system enabling us to respond to various emergencies—terrorist threats, pandemics such as influenza, and other possibilities.

Information Disclosure
JR East has a wide range of relationships with many stakeholders, including the 17 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. JR East also is working to create wide-ranging opportunities to listen to and learn from the views and requests of our stakeholders.
The complex process of calculating energy use and CO₂ emissions on a non-consolidated basis has been reorganized over the past few years. Starting from this year, CO₂ emissions are disclosed by categorizing emissions into Scope 1 and Scope 2 emissions, and other improvements are being made toward aligning with global trends in the disclosure of information on CO₂ emissions. In addition, we believe working on the data survey sheet format and clarifying data definitions are also improving the accuracy of data collection year by year. We believe that introducing an information system for data collection with such initiatives at the core will not only reduce human error but also improve the efficiency of calculation work.

With JR East businesses other than the railway business growing in presence, we also believe it is becoming difficult to convey the environmental and social aspects of the JR East Group as a whole when disclosure is only being made for the railway business on a non-consolidated basis. We suggest future consideration of the volume of information and how detailed disclosure should be made on the environmental and social aspects of the non-railway businesses. In addition, we also believe that preparing CSR reports in accordance with the GRI Guidelines has become a global trend that the JR East Group, which is accelerating overseas business expansion, cannot ignore. The GRI G4 Guidelines released last year require that information disclosure be focused on material information with clarification of ‘materiality’ for the corporate group. We suggest JR East proceed systematically toward preparing reports in accordance with the GRI Guidelines.
Summary from the General Manager of the Management Planning Department

Circumstances surrounding energy and environmental issues are drastically changing daily both domestically and abroad. In response, at the global level, all countries participating in the 19th session of the Conference of the Parties (COP 19) held in November 2013, including the US and China, agreed to voluntarily set targets and to take measures toward the reduction of greenhouse gases from 2020. Domestically, the Government of Japan indicated in April 2014 the fundamental direction of its mid- and long-term energy policy with the formulation of its 4th Strategic Energy Plan which specified its policy for energy sources such as coal, petroleum, nuclear power, and renewable energies.

In accord with these developments, the JR East Group is continuing to exercise various countermeasures against issues surrounding global warming from a long-term perspective. These proactive efforts include such measures as the introduction of renewable energies like solar power, improvements to “Ecoste” model stations based on a diversity of environmental conservation technologies, and the introduction of Energy Management Systems (EMS) to its stations. Moreover, in offering safe and high quality services, the JR East Group remains steadfast in its commitment to help realize a sustainable society for the future through the fulfillment of its corporate social responsibility.

The JR East Group CSR Report 2014 details the various measures the Group is taking from the fundamental perspectives of Environment, Safety, and Society. This year’s report, as evident in the abundance of quantitative data, photos, and figures included to help illustrate the Group’s environmental performance data, has also been formulated for ease of understanding.

We have prepared the report so that readers can appreciate the specific measures of the JR East Group. To help realize this goal, we have featured six major issues related to the JR East Group Management Vision V – Ever Onward as special topics, and included interviews of our forefront field staff in the VOICE sections of the report. Moreover, in line with recent global trends regarding the disclosure of information, in this year’s report we have newly included Scope 1 and Scope 2 emissions to indicate the Group’s CO₂ emissions.

Based on the JR East Group Management Vision V — Ever Onward, the JR East Group remains committed in its ongoing efforts to address the expectations of society and to the trust of our stakeholders while remaining fully conscious of global trends.
History of JR East Group’s environmental and social activities

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Environmental and social activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>Apr</td>
<td>Japanese National Railways divided, and East Japan Railway Company established. First Railway Safety Promotion Committee meeting held.</td>
</tr>
<tr>
<td>1992</td>
<td>May</td>
<td>Trees planted to commemorate the 5th anniversary of JR East’s founding water, an annual event called “Railway Lines Forestation Program” begun.</td>
</tr>
<tr>
<td>1993</td>
<td>Aug</td>
<td>Waste collection sorted into three categories began on a trial basis at Sugamo Station on the Yamanote Line.</td>
</tr>
<tr>
<td>1994</td>
<td>Feb</td>
<td>Demo 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.</td>
</tr>
<tr>
<td>1995</td>
<td>Feb</td>
<td>Recycling of used train tickets began in the Tokyo metropolitan area. First measure to reduce Shinkansen noise completed.</td>
</tr>
<tr>
<td>1996</td>
<td>Apr</td>
<td>JR East website set up. Quantitative environmental targets set for CO₂ emissions and others. First annual Environmental Report published.</td>
</tr>
<tr>
<td>1997</td>
<td>Dec</td>
<td>Automatic-Decontaminated Transport Operation Control System (ADTOS) became operational. Recycling Activity at Haneda-Tohoku Line Operation Center started operation. Separate smoking zones established at all stations. Smoking banned on all local trains.</td>
</tr>
<tr>
<td>1998</td>
<td>Oct</td>
<td>Recycling facilities at Nagoya Shinkansen Rolling Stock Center and Tokyo Station started operation. Second set of measures to reduce Shinkansen noise completed.</td>
</tr>
<tr>
<td>2000</td>
<td>Apr</td>
<td>Environmental targets revised with the announcement of New Frontier 21, the Group’s medium-term management plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JR East General Education Center established. Uniforms made from recycled PET bottles, introduced.</td>
</tr>
<tr>
<td>2001</td>
<td>Nov</td>
<td>Environmental targets revised with the announcement of New Frontier 21, the Group’s medium-term management plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JR East Research &amp; Development Center established.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DI Workshop, Kawasaki “Thermal Power Plant, and Nigata Mechanical Technology Center acquired ISO14001 certification.</td>
</tr>
<tr>
<td></td>
<td>Jun</td>
<td>“Women-Only” cars for female passengers introduced on the Sanyo Line on a trial basis.</td>
</tr>
<tr>
<td></td>
<td>Nov</td>
<td>Ecoistle introduced.</td>
</tr>
</tbody>
</table>

History of Awards

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>JR East Group: History of Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Oct</td>
<td>Poster category at the 5th Awards for Environmental Advertisements and the Director of Environmental Agency’s Award (Organized by Japan Eco-Life Center).</td>
</tr>
<tr>
<td>1997</td>
<td>Jun</td>
<td>1st Environmental Action Plan Award and the Director of Environmental Agency’s Award (Organized by the National Association of Environmental Conservation and sponsored by the Environmental Agency).</td>
</tr>
<tr>
<td>1998</td>
<td>Nov</td>
<td>Poster category at the 7th Awards for Environmental Advertisements and the Director of Environmental Agency’s Award (Organized by Japan Eco-Life Center).</td>
</tr>
<tr>
<td>2001</td>
<td>Mar</td>
<td>4th Green Reporting Award Third Prize (Co-organized by Toyo Keizai Inc. and Green Reporting Forum).</td>
</tr>
<tr>
<td>2006</td>
<td>Dec</td>
<td>2006 Environment Minister’s Award for Global Warning Prevention Activity in Deco category (measure) technology introduction and dissemination, and implementation of countermeasures (organized by the Ministry of Environment).</td>
</tr>
<tr>
<td>2007</td>
<td>Dec</td>
<td>16th Global Environment Award, Education, Culture, Science and Technology Minister’s Award (Organized by Fuji Television Network Group in special cooperation with WWF-Japan).</td>
</tr>
<tr>
<td>2010</td>
<td>Mar</td>
<td>Environmental Management Award, Japan Creation Award 2009 (Japan Fashion Association).</td>
</tr>
</tbody>
</table>
## Consolidated Financial Statements for Fiscal 2014 (Year Ended March 31, 2014)

### Consolidated Balance Sheets

#### (Millions of Yen)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td><strong>Current Liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Cash and time deposits</td>
<td>804,888</td>
<td>1,325,964</td>
<td></td>
</tr>
<tr>
<td>Notes and accounts receivable</td>
<td>87,248</td>
<td>Notes and accounts payable trade</td>
<td>49,548</td>
</tr>
<tr>
<td>Fares receivable</td>
<td>401,129</td>
<td>Short-term loans and current portion of long-term loans</td>
<td>125,233</td>
</tr>
<tr>
<td>Short-term loans receivable</td>
<td>44,523</td>
<td>Current portion of bonds</td>
<td>75,000</td>
</tr>
<tr>
<td>Securities</td>
<td>16,515</td>
<td>Current portion of long-term liabilities incurred for purchase of railway facilities</td>
<td>120,998</td>
</tr>
<tr>
<td>Real estate for sale</td>
<td>91,149</td>
<td>Payables</td>
<td>400,586</td>
</tr>
<tr>
<td>Inventories</td>
<td>1,199</td>
<td>Accrued consumption taxes</td>
<td>5,798</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>67,392</td>
<td>Accrued income taxes</td>
<td>57,548</td>
</tr>
<tr>
<td>Other</td>
<td>48,404</td>
<td>Sales proceeds received with regard to railway facilities</td>
<td>28,620</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prepaid railway fares received</td>
<td>135,879</td>
</tr>
<tr>
<td>Allowance for doubtful accounts</td>
<td>(2,169)</td>
<td>Allowance for bonuses to employees</td>
<td>71,809</td>
</tr>
<tr>
<td>Fixed Assets</td>
<td>6,623,378</td>
<td>Allowance for earthquake-damage losses</td>
<td>2,122</td>
</tr>
<tr>
<td>Property, plant, and equipment, net of accumulated depreciation</td>
<td>6,025,838</td>
<td>Other</td>
<td>252,686</td>
</tr>
<tr>
<td>Buildings and fixtures (net)</td>
<td>2,997,304</td>
<td><strong>Long-Term Liabilities</strong></td>
<td>3,902,981</td>
</tr>
<tr>
<td>Machinery, rolling stock and vehicles (net)</td>
<td>765,942</td>
<td>Bonds</td>
<td>1,644,783</td>
</tr>
<tr>
<td>Land</td>
<td>1,987,541</td>
<td>Long-term loans</td>
<td>810,727</td>
</tr>
<tr>
<td>Construction in progress</td>
<td>279,626</td>
<td>Long-term liabilities incurred for purchase of railway facilities</td>
<td>545,417</td>
</tr>
<tr>
<td>Other (net)</td>
<td>55,424</td>
<td>Long-term deferred tax liabilities</td>
<td>4,068</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>109,850</td>
<td>Allowance for earthquake-damage losses</td>
<td>35,810</td>
</tr>
<tr>
<td>Investments and other assets</td>
<td>487,690</td>
<td>Net defined benefit liability</td>
<td>644,809</td>
</tr>
<tr>
<td>Investments in securities</td>
<td>199,096</td>
<td>Other</td>
<td>250,128</td>
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<tr>
<td>Long-term loans receivable</td>
<td>3,493</td>
<td><strong>Total Liabilities</strong></td>
<td>5,228,946</td>
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<tr>
<td>Long-term deferred income taxes</td>
<td>222,415</td>
<td><strong>NET ASSETS</strong></td>
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</tr>
<tr>
<td>Net defined benefit asset</td>
<td>382</td>
<td>Shareholders’ Equity</td>
<td>2,150,471</td>
</tr>
<tr>
<td>Other</td>
<td>63,078</td>
<td>Common stock</td>
<td>200,000</td>
</tr>
<tr>
<td>Allowance for doubtful accounts</td>
<td>(1,776)</td>
<td>Capital surplus</td>
<td>61,790</td>
</tr>
<tr>
<td>Deferred Assets</td>
<td>37</td>
<td>Retained earnings</td>
<td>1,858,007</td>
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<tr>
<td>Deferred business commencement expenses</td>
<td>30</td>
<td>Treasury stock, at cost</td>
<td>(4,327)</td>
</tr>
<tr>
<td>Deferred development expenses</td>
<td>6</td>
<td><strong>Accumulated Other Comprehensive Income</strong></td>
<td>30,161</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net unrealized holding gains (losses) on securities</td>
<td>36,856</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net deferred gains (losses) on derivatives under hedge accounting</td>
<td>1,650</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Revaluation reserve for land</td>
<td>(503)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remeasurements of defined benefit plans</td>
<td>(78,411)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minority Interests</td>
<td>18,725</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Net Assets</strong></td>
<td>2,199,357</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>7,428,303</td>
<td><strong>Total Liabilities and Net Assets</strong></td>
<td>7,428,303</td>
</tr>
</tbody>
</table>

### Consolidated Statements of Income

#### (Millions of Yen)

<table>
<thead>
<tr>
<th>[Consolidated Statements of Income]</th>
<th>Fiscal 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenues</td>
<td>2,702,916</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>2,296,123</td>
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<tr>
<td>Transportation, other services and cost of sales</td>
<td>1,794,501</td>
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<tr>
<td>Selling, general and administrative expenses</td>
<td>501,622</td>
</tr>
<tr>
<td>Operating Income</td>
<td>406,793</td>
</tr>
<tr>
<td>Non-Operating Income</td>
<td>18,995</td>
</tr>
<tr>
<td>Interest income</td>
<td>163</td>
</tr>
<tr>
<td>Dividend income</td>
<td>2,802</td>
</tr>
<tr>
<td>Gains on sales of equipment</td>
<td>2,154</td>
</tr>
<tr>
<td>Insurance proceeds and dividends</td>
<td>8,678</td>
</tr>
<tr>
<td>Equity in net income of affiliated companies</td>
<td>1,211</td>
</tr>
<tr>
<td>Other</td>
<td>3,985</td>
</tr>
<tr>
<td>Non-Operating Expenses</td>
<td>93,270</td>
</tr>
<tr>
<td>Interest expense</td>
<td>88,279</td>
</tr>
<tr>
<td>Losses on sales of equipment</td>
<td>526</td>
</tr>
<tr>
<td>Other</td>
<td>4,465</td>
</tr>
<tr>
<td>Ordinary Income</td>
<td>332,518</td>
</tr>
<tr>
<td>Extraordinary Gains</td>
<td>34,857</td>
</tr>
<tr>
<td>Gains on sales of fixed assets</td>
<td>2,246</td>
</tr>
<tr>
<td>Construction grants received</td>
<td>41,788</td>
</tr>
<tr>
<td>Insurance proceeds related to earthquake</td>
<td>9,624</td>
</tr>
<tr>
<td>Other</td>
<td>1,196</td>
</tr>
<tr>
<td>Extraordinary Losses</td>
<td>62,774</td>
</tr>
<tr>
<td>Losses on sales of fixed assets</td>
<td>473</td>
</tr>
<tr>
<td>Losses from disposition of fixed assets</td>
<td>4,969</td>
</tr>
<tr>
<td>Losses on reduction entry for construction grants</td>
<td>38,489</td>
</tr>
<tr>
<td>Impairment losses on fixed assets</td>
<td>6,467</td>
</tr>
<tr>
<td>Other</td>
<td>12,374</td>
</tr>
<tr>
<td>Income before Income Taxes</td>
<td>324,601</td>
</tr>
<tr>
<td>Income Taxes</td>
<td>119,621</td>
</tr>
<tr>
<td>Current</td>
<td>3,956</td>
</tr>
<tr>
<td>Deferred</td>
<td>123,580</td>
</tr>
<tr>
<td>Income before Minority Interests</td>
<td>201,021</td>
</tr>
<tr>
<td>Minority Interests in net income of consolidated subsidiaries</td>
<td>1,081</td>
</tr>
<tr>
<td>Net Income</td>
<td>199,939</td>
</tr>
<tr>
<td>Comprehensive Income</td>
<td>214,632</td>
</tr>
</tbody>
</table>

### Consolidated Statements of Cash Flows

#### (Millions of Yen)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flows from Operating Activities</td>
<td>562,763</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>324,601</td>
</tr>
<tr>
<td>Depreciation</td>
<td>348,042</td>
</tr>
<tr>
<td>Impairment losses on fixed assets</td>
<td>6,467</td>
</tr>
<tr>
<td>Amortization of long-term prepaid expense</td>
<td>7,542</td>
</tr>
<tr>
<td>Net change in net defined benefit liability</td>
<td>(6,951)</td>
</tr>
<tr>
<td>Interest and dividend income</td>
<td>(2,966)</td>
</tr>
<tr>
<td>Interest expense</td>
<td>88,279</td>
</tr>
<tr>
<td>Construction grants received</td>
<td>(41,788)</td>
</tr>
<tr>
<td>Insurance proceeds related to earthquake</td>
<td>(9,624)</td>
</tr>
<tr>
<td>Losses from disposition of fixed assets</td>
<td>33,322</td>
</tr>
<tr>
<td>Losses from provision for cost reduction of fixed assets</td>
<td>38,489</td>
</tr>
<tr>
<td>Net change in major receivables</td>
<td>(66,582)</td>
</tr>
<tr>
<td>Net change in major payables</td>
<td>86,730</td>
</tr>
<tr>
<td>Other</td>
<td>(12,508)</td>
</tr>
<tr>
<td>Sub-total</td>
<td>793,053</td>
</tr>
<tr>
<td>Proceeds from interest and dividends</td>
<td>3,348</td>
</tr>
<tr>
<td>Payments of interest</td>
<td>(88,698)</td>
</tr>
<tr>
<td>Insurance proceeds related to earthquake</td>
<td>9,624</td>
</tr>
<tr>
<td>Payments of earthquake-damage losses</td>
<td>(6,026)</td>
</tr>
<tr>
<td>Payments of income taxes</td>
<td>(148,537)</td>
</tr>
<tr>
<td>Cash Flows from Investing Activities</td>
<td>(474,697)</td>
</tr>
<tr>
<td>Payments for purchases of fixed assets</td>
<td>(515,428)</td>
</tr>
<tr>
<td>Proceeds from sales of fixed assets</td>
<td>5,534</td>
</tr>
<tr>
<td>Proceeds from construction grants</td>
<td>47,327</td>
</tr>
<tr>
<td>Payments for purchases of investments in securities</td>
<td>(2,537)</td>
</tr>
<tr>
<td>Other</td>
<td>(10,493)</td>
</tr>
<tr>
<td>Cash Flows from Financing Activities</td>
<td>(91,367)</td>
</tr>
<tr>
<td>Proceeds from long-term loans</td>
<td>186,000</td>
</tr>
<tr>
<td>Payments of long-term loans</td>
<td>(145,943)</td>
</tr>
<tr>
<td>Proceeds from issuance of bonds</td>
<td>140,000</td>
</tr>
<tr>
<td>Payments for redemption of bonds</td>
<td>(80,000)</td>
</tr>
<tr>
<td>Payments of liabilities incurred for purchase of railway facilities</td>
<td>(126,814)</td>
</tr>
<tr>
<td>Payments for acquisition of treasury stock</td>
<td>(8,444)</td>
</tr>
<tr>
<td>Cash dividends paid</td>
<td>(47,421)</td>
</tr>
<tr>
<td>Other</td>
<td>(8,742)</td>
</tr>
<tr>
<td>Net Change in Cash and Cash Equivalents</td>
<td>(3,301)</td>
</tr>
<tr>
<td>Cash and Cash Equivalents at Beginning of the Year</td>
<td>189,262</td>
</tr>
<tr>
<td>Increase in Cash and Cash Equivalents due to Merger</td>
<td>96</td>
</tr>
<tr>
<td>Cash and Cash Equivalents at End of the Year</td>
<td>186,057</td>
</tr>
</tbody>
</table>