

## JR East Group Report 2020

Published August 2020

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JR East Group INTEGRATED REPORT 2020



JR East Group Report

# INTEGRATED REPORT 2020



## Value Creation by the JR East Group

## The JR East Group's Strengths

Our strengths lie in a multilayered “real” network, which supports social infrastructure, and in our stations (mainly in the Tokyo metropolitan area), which act as hubs for interaction and the exchange and gathering of people, products, money, and information. By leveraging these unique strengths, we will continue to create new value through technological innovation and the integration of data for transportation, shopping, and payment.



- Tokyo branch office
- Yokohama branch office
- Hachioji branch office
- Omiya branch office
- Takasaki branch office
- Mito branch office
- Chiba branch office
- Sendai branch office
- Morioka branch office
- Akita branch office
- Niigata branch office
- Nagano branch office
- Shinkansen lines
- Conventional lines converted for through Shinkansen service
- Conventional lines
- BRT
- Lines of other JR companies



## Transportation Services

We provide the safe and high-quality services our customers require and contribute to community development.

## Transportation Services, by the Numbers

Fiscal 2019 conventional revenues from passenger tickets

1,792.8 billion yen

Number of Passengers Served Daily

About 18 million

Number of Rolling Stock

12,846

Number of Stations

1,676

\* Including BRT stations

Passenger Line Network

7,401.7 kilometers

Shinkansen

1,194.2 kilometers

Conventional lines

6,207.5 kilometers

\* Including BRT sections



## Life-style Services

We create appealing lifestyle services that add color to our customers' lives.

## Life-style Services, by the Numbers

JR East's shopping centers

169

Office buildings—Leased floor space

420,000 m<sup>2</sup>

Hotels—Total guest rooms

7,974



## IT &amp; Suica Services

Suica serves as the standard for combining physical and digital networks, providing new value to customers.

## IT &amp; Suica Services, by the Numbers

Suica cards issued

82.73 million

Mobile Suica Members

9.34 million people

JRE POINT Members

12.05 million people

Public transportation electronic money, record daily transactions

9.58 million (Highest ever)

(as of December 20, 2019)

Public transportation electronic money, compatible stores

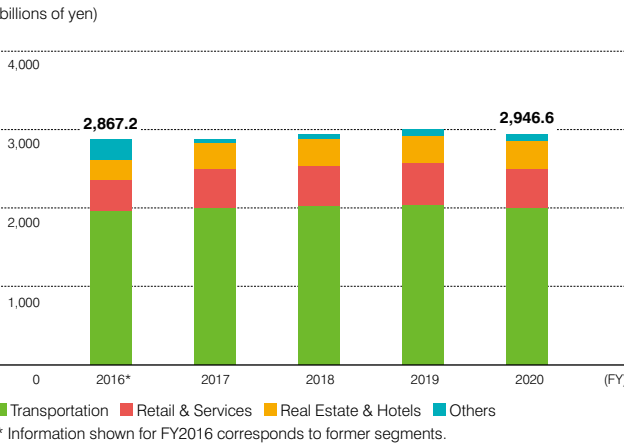
940,290



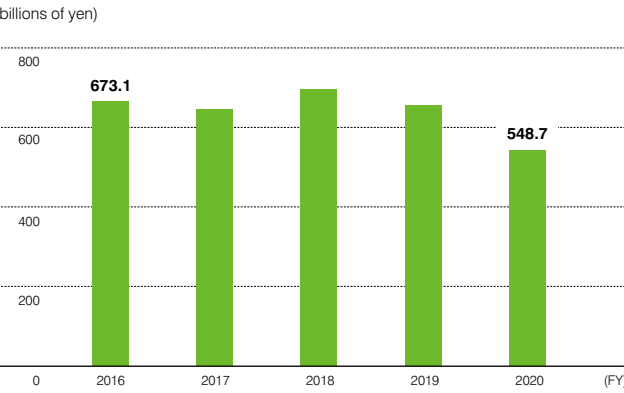
Performance Highlights

Financial Highlights (Consolidated)

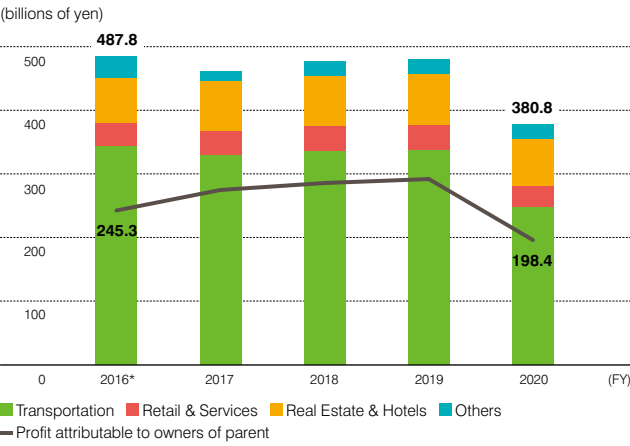
Operating Revenues



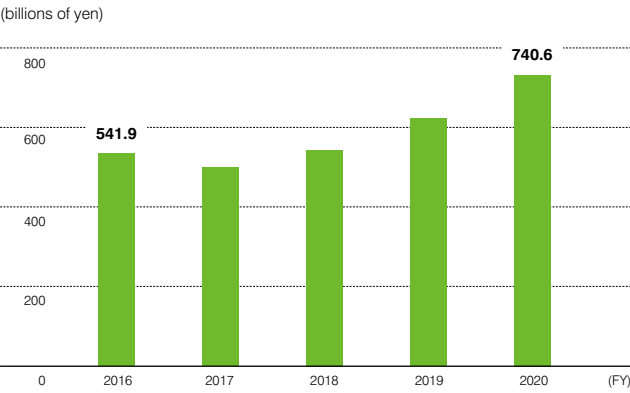
Cash Flows from Operating Activities



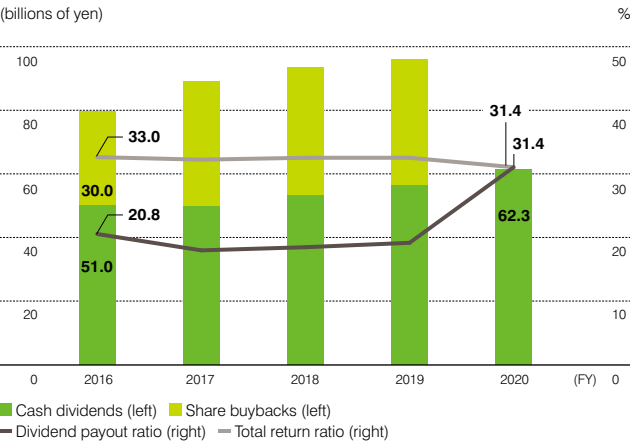
Operating Income / Profit Attributable to Owners of Parent



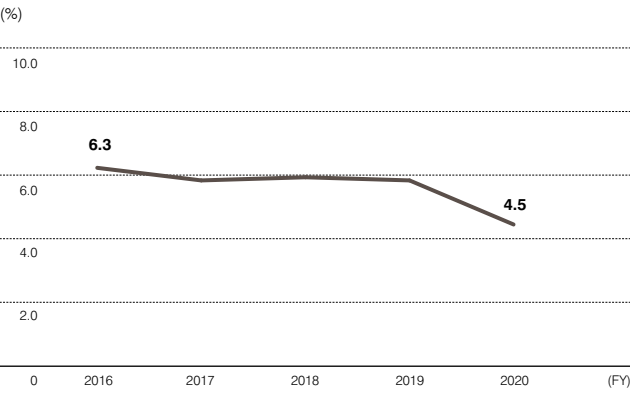
Capital Expenditures



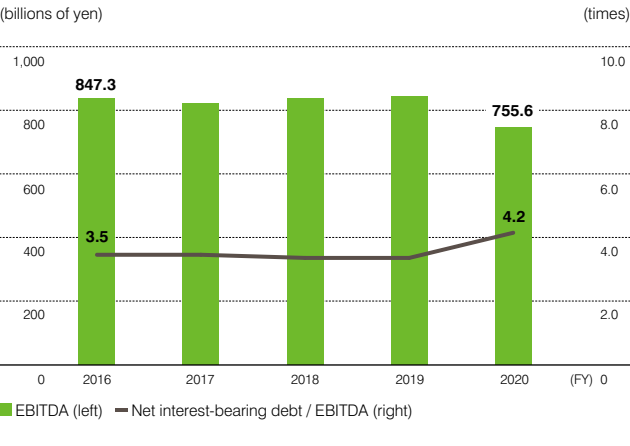
Cash Dividends / Share Buybacks / Total Return Ratio / Dividend Payout Ratio



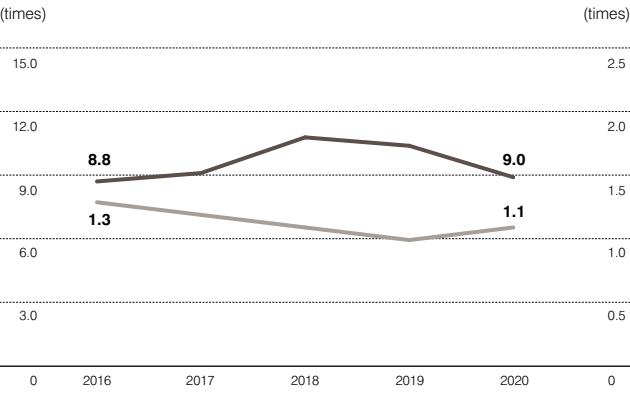
ROA



EBITDA / Net Interest-bearing Debt / EBITDA

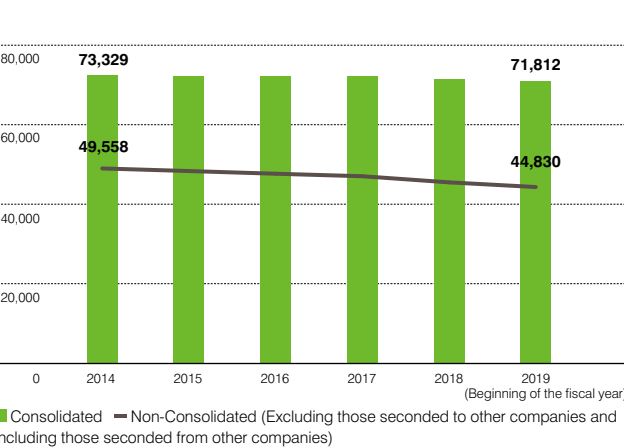


Interest Coverage Ratio / D/E Ratio

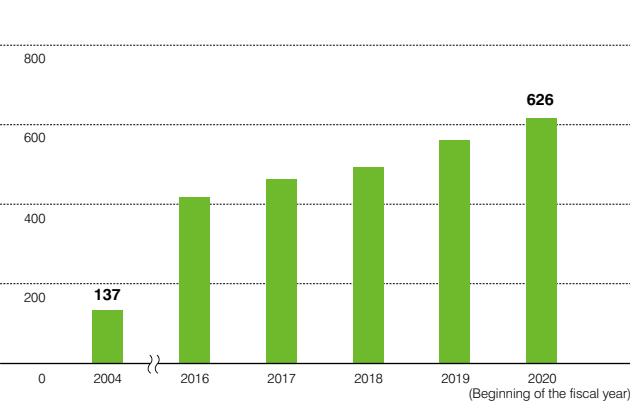


Non-Financial Highlights

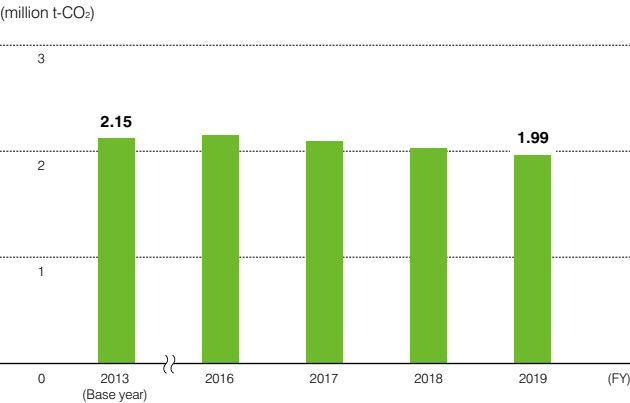
Number of Employees (Consolidated / Non-Consolidated)



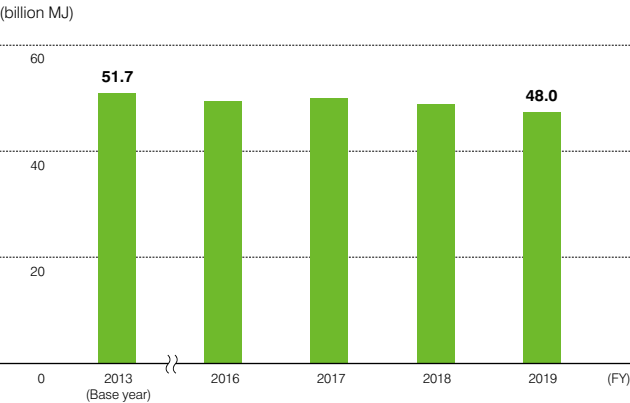
Number of Female Managers (Non-Consolidated)



CO<sub>2</sub> Emissions (Non-Consolidated)



Energy Consumption (Non-Consolidated)





# JR East Group Philosophy

We will earn the trust of our customers as a whole group by aiming for ultimate safety levels as our top priority. We will strengthen our network capabilities focusing on technologies and information, and we are committed to helping our customers and people in communities to realize affluent lives.

## Basic Principles

### Pursuing safety

By pursuing ultimate safety levels, we will offer a peace of mind to our customers.

### Customer-oriented

We will offer quality services to rise to the expectations of our customers.

### Close to regional society

By utilizing our network capabilities, we will contribute to the development of regional society.

### Autonomous and self-standing

With a broad perspective and willingness to confront challenges, we will think and act on our own initiative.

### JR East Group’s development

By fulfilling our social responsibility, we will aim to achieve sustainable growth by JR East Group.

#### Editorial Policy for This Publication

The JR East Group Report for 2020 is our first integrated report. In the past, we have separately published an annual report targeting investors and a sustainability report that introduced our activities related to safety, society, the environment, and governance. We have produced the current report to foster communication with diverse stakeholders by enhancing understanding of the Group’s medium- to long-term value creation and providing a single, easy-to-understand introduction to sustainability initiatives in our business activities. This document functions as our “safety report” of official announcements based on the Railway Business Act.

The JR East Group practices ESG management. Through our efforts to resolve social issues through our businesses, we concentrate on contributing to the development of local communities and achieving the SDGs. This report focuses on communicating in an easy-to-understand manner our creation of value under “Move Up 2027,” our Group management vision, as well as the future once these objectives have been achieved and our state of progress along this path. The report also describes our business strategies and contains financial information and non-financial information, such as on ESG-related initiatives. Most of the information in this report pertains to fiscal 2020. By using this report as a medium for dialogue that enhances communication with stakeholders, we aim to prove worthy of the trust they have placed in the JR East Group.

Going forward, we hope to continue fostering a deeper understanding of the Group’s business operations. We welcome your frank input.



**Atsuko Ito**  
Executive Officer and General Manager of Management Planning Department, Corporate Planning Headquarters  
East Japan Railway Company

#### References

International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC)  
Guidance for Collaborative Value Creation, Ministry of Economy, Trade and Industry  
Environmental Reporting Guidelines 2018  
[Japan Ministry of the Environment]

#### Reporting period

This report basically covers our activities from April 1, 2019 to March 31, 2020, although some events presented here happened earlier or in the period between the end of March 2020 and the publication of this report in August 2020.

#### Boundary of reporting

East Japan Railway Company  
JR East Group (consolidated subsidiaries (71 companies))  
Economic reporting: JR East, consolidated subsidiaries, and equity-method affiliates (six companies)  
Environment report: JR East, consolidated Japanese subsidiaries  
Social report: JR East, consolidated subsidiaries

#### Figures in this report

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

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## A Message from the President

**We will realize each goal set out in “Move Up” 2027 and become a corporate group that is able to continue creating new value in a volatile era.**

President and CEO

**Yuji Fukasawa**



### The Significant Effects of Climate Change and COVID-19 in Fiscal 2020

July 2018 saw the announcement of the JR East Group Management Vision “Move Up” 2027. Based on this vision, we will transform into a corporate group capable of using the trust it has earned from customers and local communities as the basis for the continued creation of new value in the form of people-focused initiatives that provide reassurance and enrichment. Viewing fiscal 2020, ended March 31, 2020, as a period for full-fledged implementation, we steadily advanced the creation of new value aimed at achieving “Move Up” 2027. For example, we launched Shinkansen e-ticket service, increased the ways in which *JRE POINT* can be used, and conducted test runs of the ALFA-X next-generation Shinkansen.

As a result of Typhoon No. 19 in October 2019, however, the JR East Group’s operations suffered serious damage, including flood damage and the suspension of Shinkansen operations. Further, due to the spread of COVID-19 from February 2020 onward, there was a steep decrease in the number of customers using railway services. Similarly, in the life-style service business the usage of stores in railway stations, station buildings, and hotels was lower across the board. Thus, fiscal 2020 was a year of dramatic ups and downs, with first-half conditions differing completely from those in the second half.

The aforementioned volatility reinforced my belief in the critical importance of disaster preparedness. To put it another way, the word “unexpected” cannot be in our vocabulary. Constantly envisioning all types of disasters and taking precautions accordingly is our most important responsibility. Moreover, we must not forget that such disasters are no longer once-a-century events. Going forward, the threat of disaster will be constantly just under the surface of day-to-day life. For this reason, JR East has to continue returning value to society by strengthening its preparedness for all manner of disasters and by growing sustainably. Indeed, the paramount importance of sustainability has been etched into my mind by the experiences of fiscal 2020.

### The Acceleration of “Move Up” 2027

Looking ahead 10 years, given the major changes in lifestyles that are predicted, our operating environment is likely to be extremely challenging. Simply continuing with our current business model would not lead to a bright future. In response to a changing operating environment, the JR East Group has formulated “Move Up” 2027, which sets out as a basic policy shifting “stories to create value” from the provision of services with railway infrastructure as the basis to the introduction of new value to society, focusing on the affluence of everyone in their daily lives.



A Message from the President

COVID-19 has brought a range of issues in Japan into sharp relief. Exactly the world that we were envisioning as being 10 years away has materialized before our eyes. If we view recent developments positively, they demonstrate that the strategic direction of “Move Up” 2027 is not mistaken. Furthermore, they clearly show that we need to step up the pace of efforts based on the vision.

Accordingly, we will accomplish our social mission, tackle issues that have emerged, accelerate reform, and steadily invest in growth and innovation. Further, JR East will overcome the challenging situation at present by promoting an early recovery in transportation demand.

The Construction of New Business Models

Currently, the Group has three business fields: transportation services, life-style services, and IT & *Suica* services, with mainstay transportation services generating stable cash flows. However, there are likely to be fewer travel opportunities as the population declines and telecommuting increases. Anticipating a downward trend in transportation services, “Move Up” 2027 calls for the allocation of a greater share of management resources to life-style services and IT & *Suica* services. As a result, in the allocation of management resources our goal is to change the ratio of transportation services to other businesses from 7:3 to 6:4. In addition, the linchpin enabling the three business fields to function as a single unit will be *Suica*, through which the Group has already established connections with numerous customers. At present, we are moving forward with the construction of common infrastructure that allows the use of *Suica* in a wide variety of situations.

One business model that the Group should pursue is a business that includes payment services and which forms the basis for the provision of new value through the seamless integration of an array of services. The Group has many points of contact with real-world activities. Therefore, we will cater to the future increase in e-commerce and digital marketing by establishing new infrastructure and advancing digital transformation initiatives. In these ways, we will extend the “virtual” presence of our real-world networks while catering to the needs of customers and local communities in a timely manner.

Another important business model is town development. Until now, we have focused on railways and making our services as comfortable as possible. To this end, we have concentrated on the development of railway stations and nearby facilities, including station buildings, hotels, and other commercial facilities. Going forward, however, we will take such initiatives a step farther and become involved in the development of towns themselves. By adopting a people-focused approach, we will create the people-friendly spaces needed for living and working in the coming era. Also, we will further enhance our earning power by increasing the development of shared offices and by extending the scope of our businesses through partnerships with start-ups. At present, we are developing Global Gateway Shinagawa around Takanawa Gateway Station, which opened in March 2020. The aim is to establish a model for the type of town development that we are uniquely qualified to realize. With this in mind, we are taking on the challenge of creating a design that integrates town and railway station and which caters to new values and functions. Through these efforts, we will develop a town that enables progressive companies and personnel from around the world to gather and continuously create new businesses and cultures.

Our Contribution to the Solution of Global Social Issues

Global development will be essential for the JR East Group’s growth going forward. By sharing with overseas companies the culture, expertise, and technologies that its railway business has developed during a 150-year history, the Group will not only help to address global issues but also grow significantly. For example, due to marked development in Southeast Asia traffic congestion has become a social and environmental issue in the region. This is precisely the type of issue that railways can help solve. Moreover, we are developing life-style services in Singapore, Taiwan, and Jakarta, and we will link such businesses with Global Gateway Shinagawa and other development projects.

I am certain of the major benefits that globalization accrues in terms of personnel development. As the railway business requires the performance of fixed duties and roles day in, day out, there is a tendency for employees to become inward-looking. Working overseas, on the other hand, promotes the growth of employees as the broader scope of work and the variety of tasks to be dealt with toughens them both professionally and personally. In particular, by assigning young personnel overseas, we will foster the leaders of the next generation. For about 10 years, we have been developing overseas businesses, and I have a real sense of how much the personnel of these businesses have grown. When employees who have worked overseas return to Japan, they are keen to take on new challenges, thereby creating a virtuous cycle that will greatly benefit the Group.

The Advancement of ESG Initiatives to Fulfill Our Social Mission

Since its establishment in 1987, the JR East Group has advanced initiatives aimed at developing local communities. Such initiatives reflect our belief that being regionally rooted and corporate social responsibility are at the core of business management. However, the severity of such social issues as population contraction, the aging of society, the decline of regional economies, and global environmental problems is reaching levels not seen before. For this reason, there is a greater than ever need for us to play our part as a member of society and realize environmental, social, and governance (ESG) management that addresses the issues of local communities through business activities. From the viewpoint of further strengthening the trust of local communities and customers, such management is indispensable for our long-term growth.

With respect to the environmental aspect of ESG management, railways have been attracting attention as a mode of transportation with an inherently low environmental burden. Nonetheless, our business activities use a lot of energy and emit CO<sub>2</sub>. Mindful of these facts, in May 2020 we established Zero Carbon Challenge 2050 as the next step of our environmental initiatives. By pursuing this long-term environmental goal, we will heighten the environmental superiority of railways even further and contribute to the realization of a carbon-free, sustainable society. With the aim of reducing the CO<sub>2</sub> emissions of the railway business to “substantially zero” by fiscal 2051, we will advance energy management, diversify energy sources through such measures as verification tests of hybrid railcars that run on hydrogen, and actively pursue innovation with external partners.



## A Message from the President

As for ESG management's social component, since the Great East Japan Earthquake in 2011 the manner in which we should help with restoration efforts has been a significant topic. In March 2020, JR East fully resumed operations on segments of the Joban Line on which operations had been suspended due to earthquake damage. As a result, operations have resumed on all line segments damaged by the Great East Japan Earthquake. In the second phase of efforts, we will continue examining ways of contributing to restoration, such as helping with the revitalization of disaster-hit areas through support for initiatives aimed at building a renewable energy-based society and through support for the tourism industry.

Given the JR East Group's numerous networks linking regional cities, another important task is regional revitalization. Accordingly, we will work in close collaboration with regional communities to develop cyclical systems or "ecosystems" that enable such communities to grow continuously and become self-supporting. More specifically, based on earned trust, we will invest in regional businesses and create employment and encourage new companies to establish operations in regions. For example, we are working in close partnership with regional communities to advance *sextic industrialization* of agriculture. As part of these efforts, the Group has leased from the city of Sendai the former sites of homes vacated due to tsunami damage and is creating orchards on the land. We will create business systems that, rather than simply producing and then selling things, incorporate such additional value as agritourism to generate profit continuously and cyclically.

Regarding the governance part of ESG management, the Group must ensure the aforementioned initiatives are as sustainable as possible. In addition, we must continue reducing risk with a view to realizing ultimate safety levels, which is our top priority in business management; strengthening compliance structures; and building governance structures that ensure the "safety" of business management itself. Moreover, we will thoroughly review our position in light of expectations relating to corporate governance, such as a higher percentage of outside directors and the establishment of one-year terms of office for directors.



Through ongoing concerted efforts to implement ESG management and help address social issues through its businesses, the JR East Group will contribute to the development of local communities and to the achievement of the Sustainable Development Goals (SDGs).

## The Need for Strong Leadership of the Group in Challenging Times

In fiscal 2020, we faced events that shook our values to the core. Nonetheless, our fundamental approach remains unchanged. While responding rapidly to issues as they arise, we will continue advancing farsighted initiatives. Although preparing for near-term risk is important, it cannot be our sole focus. Therefore, setting our sights on the future we will accurately identify important tasks, further accelerate reform, implement necessary investments, and realize innovation.

Of course, our near-term strategy will reflect current challenges in terms of our performance and financial position. Specifically, we will make decisions on individual investments based on the prioritization of measures. For example, with the maintenance of safety as a prerequisite, we will examine reducing or postponing investment needed for the continuous operation of business. As coexistence with the threat of COVID-19 is the new normal, reassurance and cleanliness are essential. With the maintenance of safety and quality as a major premise, we will focus on providing reassuring environments for customers by rigorously ensuring the wearing of masks, disinfection, ventilation, and social distancing. Also, anticipating a scenario in which medium- to long-term customer usage does not return to the level it was at before the spread of COVID-19, we will consider the approaches toward fares and timetables that would be needed to sustain the provision of highly safe and convenient services going forward. In an uncertain market environment, we will continue reform aimed at increasing our resilience so that we can make change into a positive factor. That said, in all our endeavors we will remain mindful of creating value that helps society develop sustainably. Accordingly, we would be grateful for the ongoing trust and endorsement of all of our stakeholders.

In closing, JR East Group Report 2020 marks the issuance of the Group's inaugural integrated report. With a view to furthering understanding of the Group's value creation over the medium-to-long term, the report employs a readily understandable format to present the vision of "Move Up" 2027 together with the initiatives that will realize the vision and thereby enhance corporate value. Consequently, we hope this report facilitates dialogue with and garners the continued support and understanding of our shareholders, investors, and other stakeholders.

August 2020

President and CEO

*Yuji Fukayama*



# JR East Group Management Vision “Move Up” 2027

**From the provision of services with railway infrastructure as the basis to the introduction of new value to society, focusing on the affluence of everyone in their daily lives**

With its sights set on likely changes in the business environment by around 2027, JR East announced the JR East Group Management Vision “Move Up” 2027 in July 2018. The Group will shift “stories to create value” from the provision of services with railway infrastructure as the basis to the introduction of new value to society—focusing on the affluence of everyone in their daily lives—and advance new growth strategies in cities, regions, and the world at large.

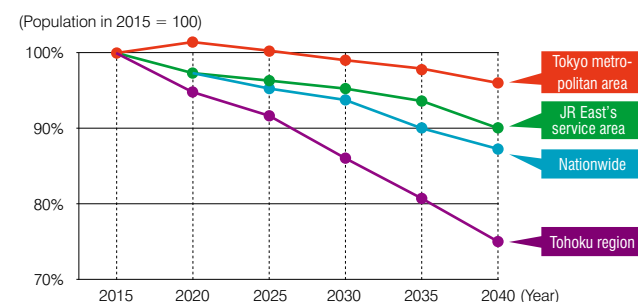
## 1 Changes in the Business Environment

In the Tohoku region, the population is declining more rapidly than the national average. From fiscal 2026 onward, the population of the Tokyo metropolitan area is expected to begin decreasing.

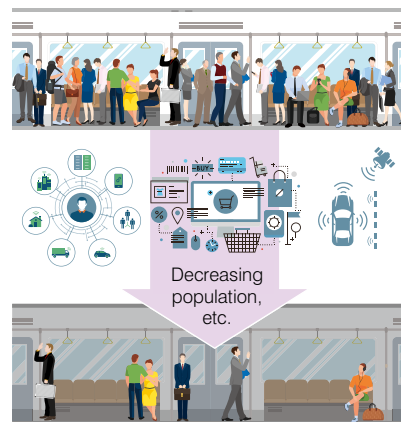
Also, when we announced “Move Up” 2027 in 2018, we expected that the need for railway transportation would decline significantly in 10 years due to changes in work styles, development of the Internet society, and practical applications of autonomous driving technologies.

Due to the epidemic of the new coronavirus (COVID-19) infections, the environment is changing faster than expected, such as a significant decrease in customers, spread of telecommuting and expansion of e-commerce. With this in mind, we must accelerate the pace of “Move Up” 2027.

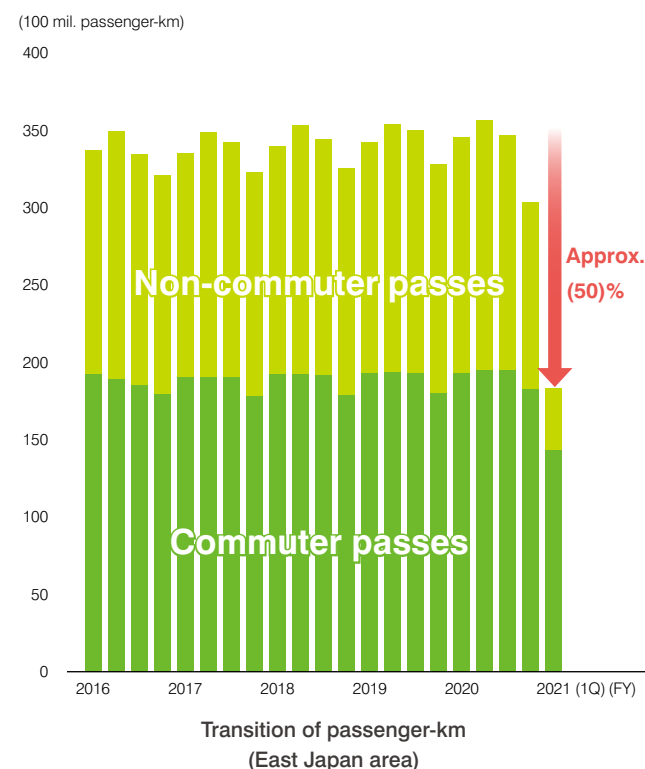
### Decreases in Population and the Need for Railway Transportation Demand



Source: IPSS (National Institute of Population and Social Security Research) Population Projections by Prefecture (2018)

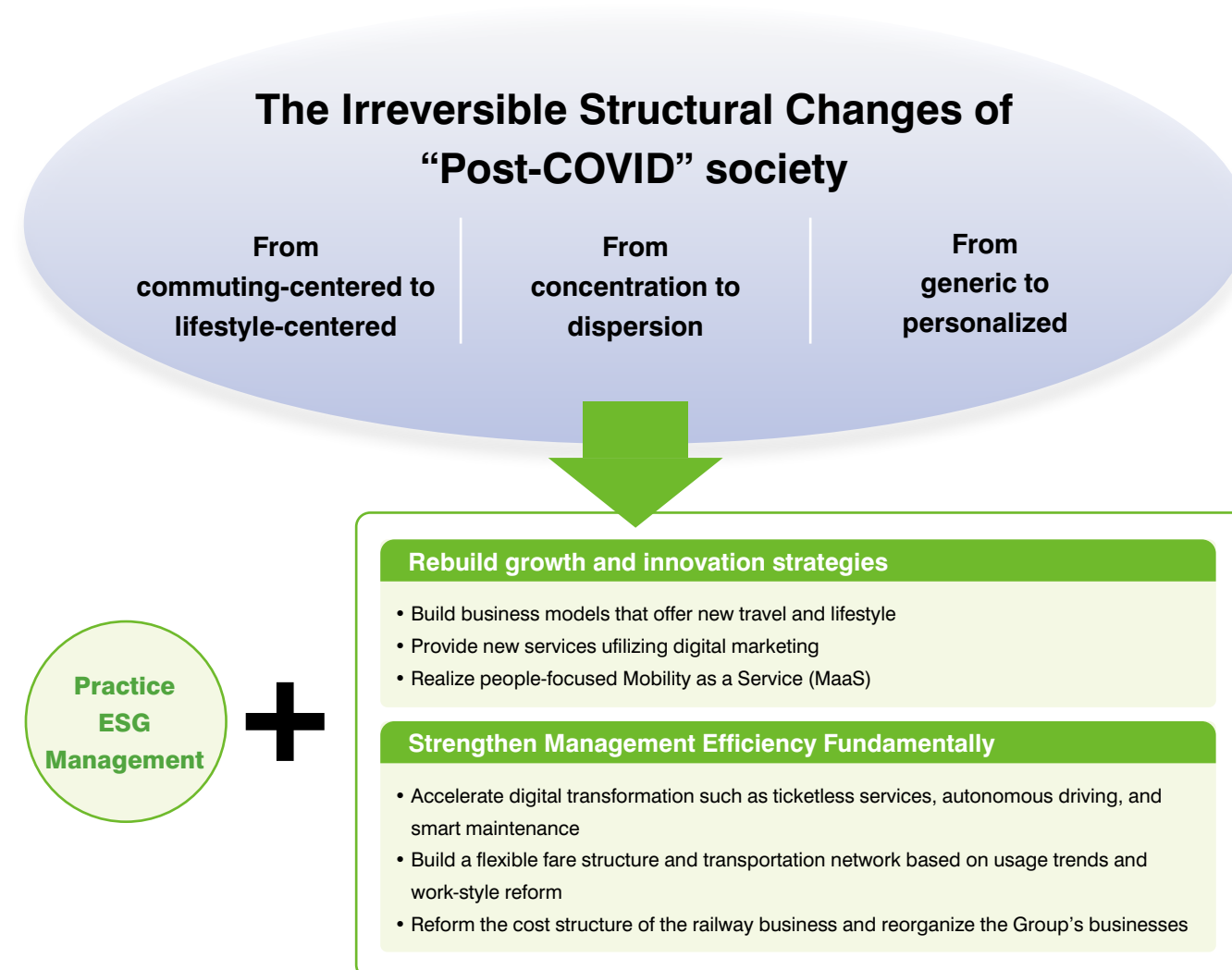
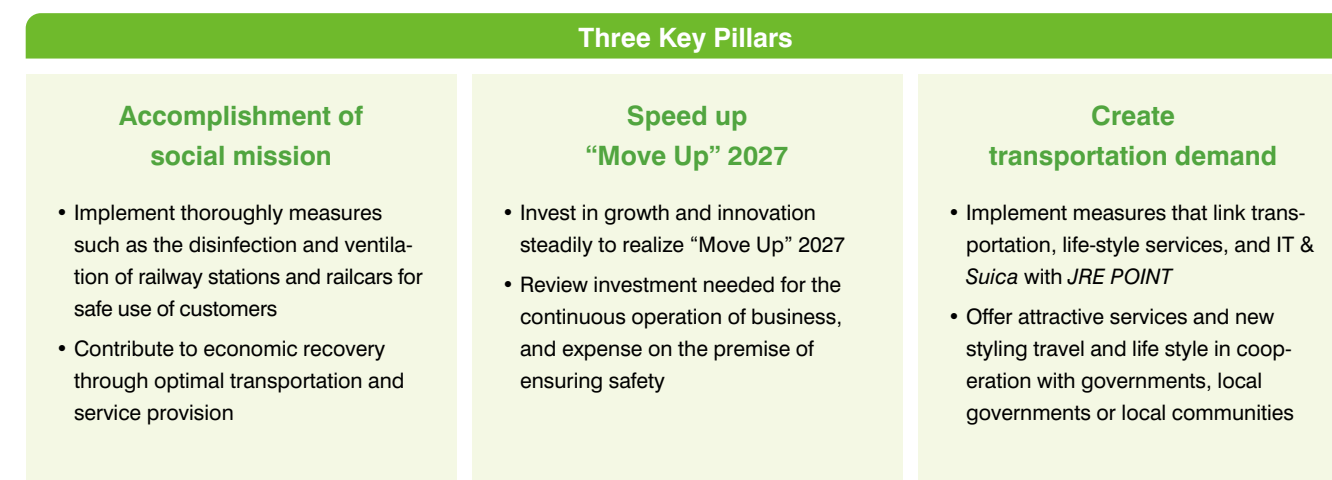


### Lower Transportation Volume due to COVID-19



## 2 Measures for “Post-COVID” Society

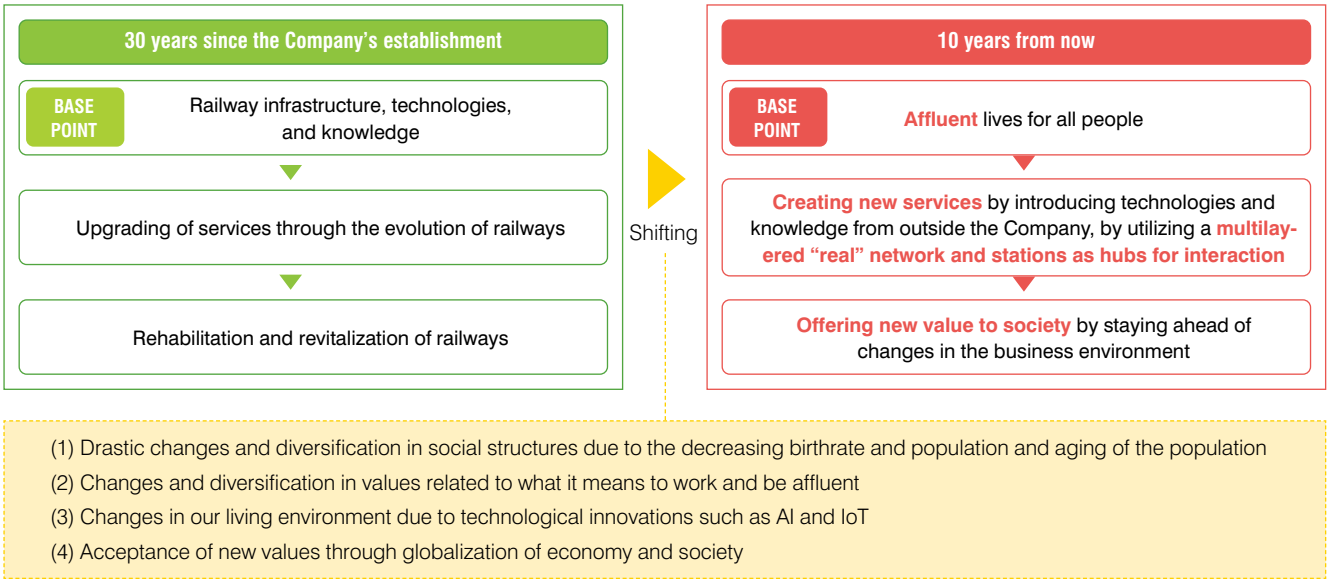
As measures for the epidemic of COVID-19, we have set out three key pillars. Also, anticipating a completely different “post-COVID” society, we will accelerate efforts to realize “Move Up” 2027. The JR East Group will rebuild its growth strategies and create new value in line with changes in customers’ behavior and values.



JR East Group Management Vision “Move Up” 2027

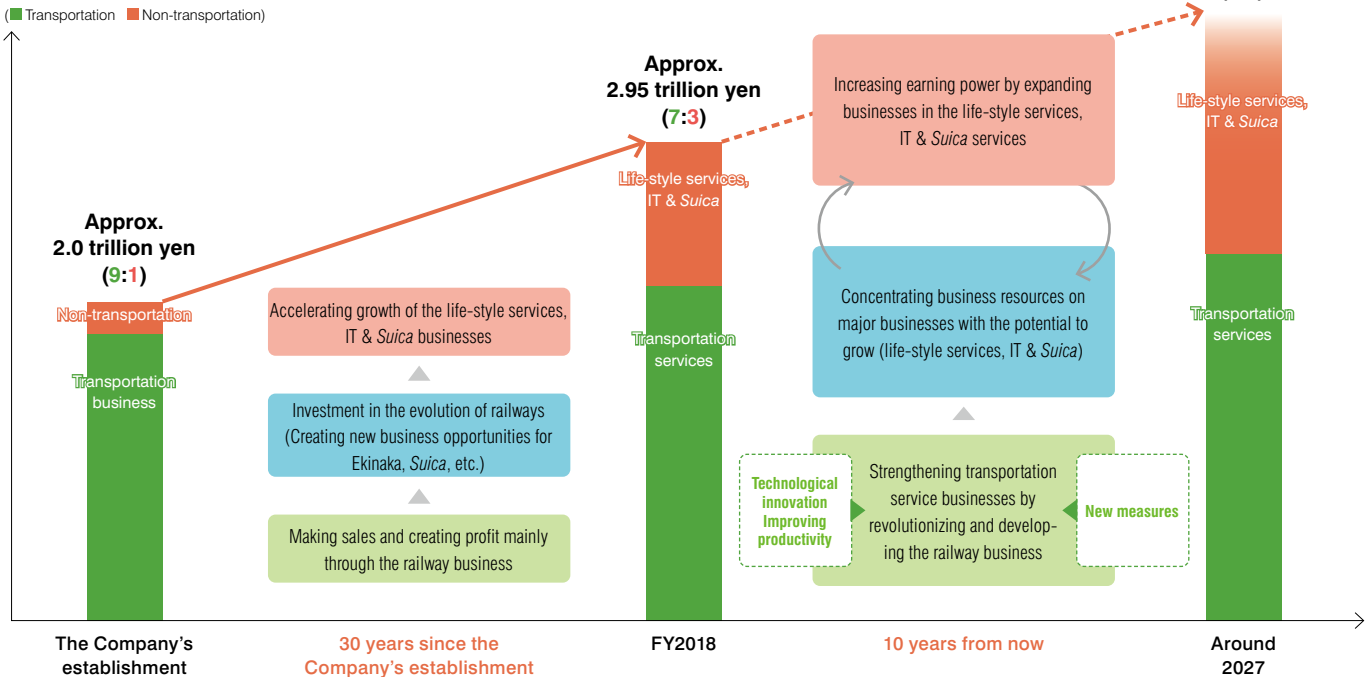
3 The Basic Policy of “Move Up” 2027

During the 30 years following its establishment, JR East developed a business model that generated profits by encouraging many customers to use railway services and railway stations through the enhancement of their convenience. With the affluence of everyone in their daily lives as our basepoint, we will create new services and provide society with them by utilizing “real” networks and introducing technologies and knowledge from outside the Company.



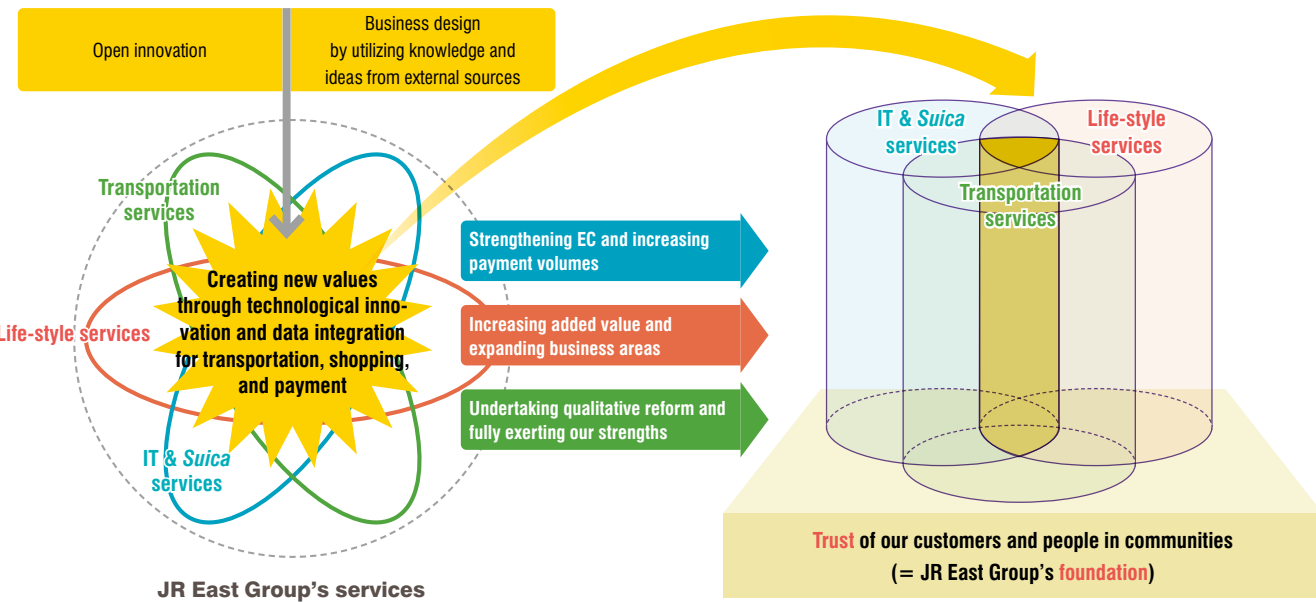
Going forward, in addition to qualitative reform, we allocate management resources to life-style services and IT & Suica businesses further, developing them as our new growth engines.

Consolidated Operating Revenues



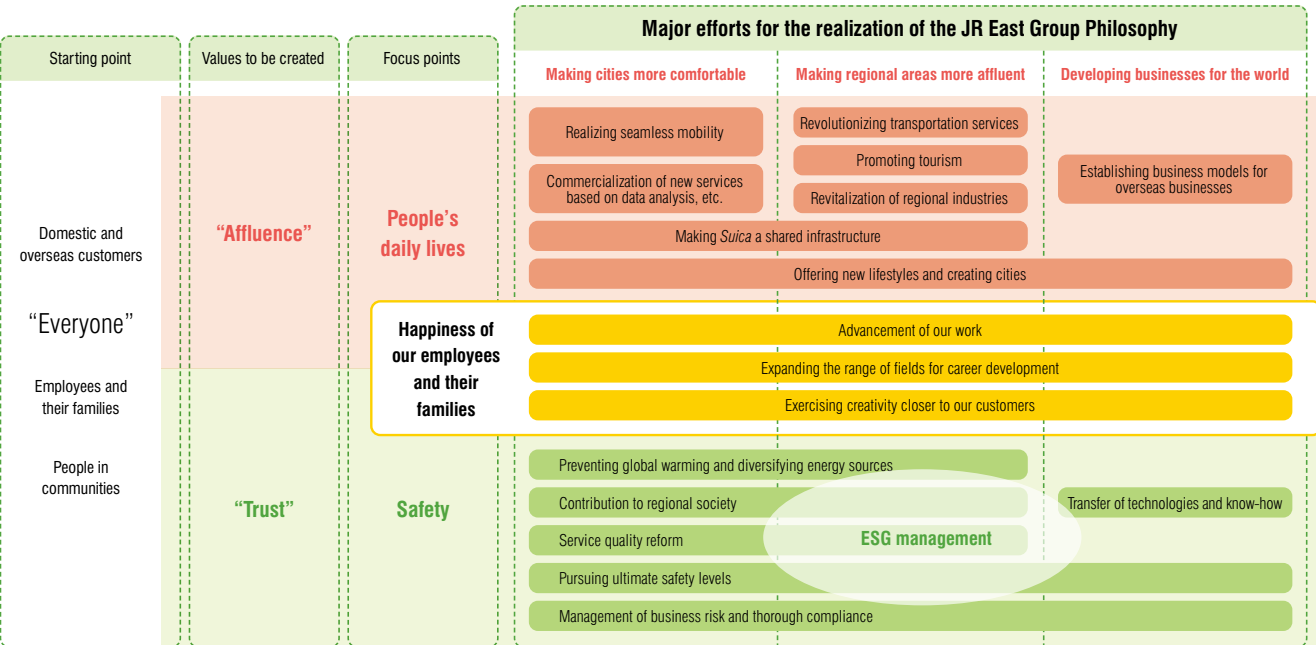
4 The JR East Group's Strengths

JR East Group's strengths lie in its multilayered “real” network that supports life infrastructure with a brand that is founded on trust and in its stations that act as hubs for interaction mainly in the Tokyo metropolitan area where people, products, money, and information are exchanged and gathered. While utilizing JR East Group's strengths, we will continue to create new values through technological innovation and data integration for transportation, shopping and payment.



5 Overview of “Move Up” 2027

With people (“everyone”) as our base point, and with “Safety,” “People's daily lives,” and “Happiness of our employees and their families” as keywords, we will continue to create values of “Trust” and “Affluence” in cities, regional areas, and around the world.





6 Toward Achievement of the SDGs

The JR East Group will implement environmental, social, and governance (ESG) management and solve social issues through our businesses to contribute to the development of local communities and the achievement of the Sustainable Development Goals (SDGs).

Specifically, safety is the top priority of JR East Group’s management. This philosophy needs to be shared thoroughly with all of our employees. Premised on this commitment, while deepening the trust of shareholders in all our businesses and continuing to meet our daily challenges by introducing new value to society, focusing on the affluence of everyone in their daily lives. Through these efforts, the Group will grow continuously and help realize a sustainable society.

With respect to the 17 SDGs, while creating value under “Move Up” 2027, the JR East Group will concentrate efforts on the realization of 9. Industry, Innovation and Infrastructure; 11. Sustainable Cities and Communities; 7. Affordable and Clean Energy; 8. Decent Work and Economic Growth; 5. Gender Equality; 12. Responsible Consumption and Production; and 17. Partnerships for the Goals.



7 Progress Report

Value to Be Created under “Move Up” 2027 to Achieve the SDGs

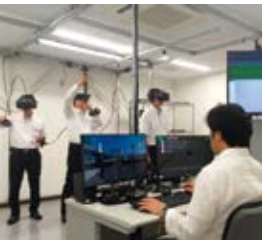
Deepening Trust by Pursuing Ultimate Safety Levels

**Target Profile** Through the pursuit of ultimate safety levels in railway services and other transportation services, we will heighten the trust of customers and local communities, thereby enabling the sustained growth of all our businesses.

| Numerical targets   | FY2023 target                     | FY2020 result                 |
|---|-----------------------------------|-------------------------------|
| Accidents due to internal causes                            | 0                                 | 0                             |
| Serious incidents   | 0                                 | 0                             |
| Railway accidents   | 20% reduction (from FY2018 level) | 137 (17 fewer than in FY2019) |
| Of which accidents on platforms involving personal injuries | 30% reduction (from FY2018 level) | 70 (5 more than in FY2019)    |

Understanding the true nature of each task, searching for potential risks voluntarily and thoroughly, and responding to them appropriately

- To deepen each employee’s understanding of the nature of his/her work, we are conducting education and training that is more practical. For example, in each section, including the workplaces of train crews and maintenance personnel, we have installed simulators that enable training using actual video footage.
- We completed installation of the aforementioned training simulators in fiscal 2020.



Advancing the safety capabilities of each employee

Advancing our safety culture even further

- To add further momentum to the “Challenge Safety Campaign,” we have begun new training aimed at gathering and disseminating know-how from workplaces that are particularly proactive in implementing initiatives.

Identifying new risks and reforming rules and systems accordingly

- We are implementing continuous improvements in response to issues in relation to Companywide and cross-divisional rules and systems and advancing preemptive safety management.

Promoting personnel development that reflects changes in the operating environment

- We are conducting safety training so that employees acquire a deeper understanding of the true nature of their work and implementing the mutual use of educational and training facilities to ensure their full utilization.



Installing safety equipment that makes full use of new technologies

- We are increasing the installation of obstacle detection devices and upgrading them through the introduction of 3D laser radar that detects the entirety of railway crossings.
- We are reducing risks associated with natural disasters and terrorism.
- We completed the installation of automatic platform gates at 48 railway stations (57 railway stations on a line-by-line basis) as of March 31, 2020.



JR East Group Management Vision “Move Up” 2027

Deepening Trust by Realizing Service Quality Reforms



Target Profile

Based on the “Medium-term Vision for Service Quality Reforms 2020,” all Group employees will make a concerted effort to tackle five main tasks, which include preventing transportation disruption and realizing railway services customers can use comfortably. Through these efforts, we will become No. 1 for customer satisfaction in the railway industry.

| Numerical targets   | FY2023 target | FY2020 result   |
|---|---------------|-----------------|
| Conventional lines within 100 km of Tokyo (versus fiscal 2018)*1                            | 50% reduction | 15% reduction*2 |
| JR East Shinkansen (versus fiscal 2018)*1   | 70% reduction | 50% reduction*2 |
| Total delay time for conventional lines in the Tokyo metropolitan area (versus fiscal 2018) | 25% reduction | 21% reduction*2 |

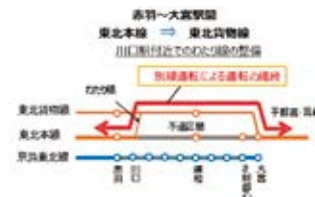
\*1 Transportation service disruptions due to internal causes \*2 Preliminary figure

Preventing transportation disruption

- We are strengthening the electrical facilities of conventional lines in the Tokyo metropolitan area.
- We are replacing railcar components as a countermeasure for railcar failure and updating control unit programs as a countermeasure for substation issues.

Minimizing the effects of disruptions on customers

- We are giving first priority to assisting customers. Employees go to disruption-affected sites as soon as possible and use various means to assist customers.
- We are minimizing damage that results from typhoons through the earlier provision of information on planned suspensions of train operations. Also, we are strengthening the safety confirmation system so that we can resume operations promptly.
- We are further developing shuttle operations and alternative line operations.



Providing customer services that cater precisely to customers' needs

- We are encouraging employees to acquire service assistant qualifications.
- We conduct an assistance campaign year-round.
- We began application-enabled message transmission between attendants at Nambu Line railway stations in March 2020 to ensure that customers requiring assistance can board trains without hindrance.



Realizing railway services passengers can use comfortably

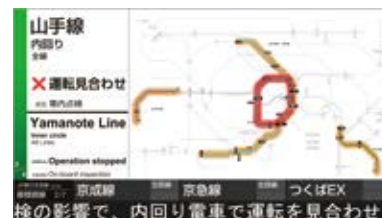
- Aiming to reform the onboard services of trains, JR East Service Creation Co., Ltd., began operations in July 2019.
- We are installing comb-shaped parts to reduce the gap between railcars and platforms.



- We completed the installation of free spaces onboard Yamanote Line railcars.

Providing information during emergencies

- We disseminate information in multiple languages via displays for providing information on transportation service disruptions and via the Shinkansen passenger information system.
- We began disseminating information on train operations in English via Twitter in December 2019.



Deepening Trust by Implementing ESG Management



Target Profile

By implementing ESG management and addressing social issues through our businesses, we will contribute to the continuous growth of local communities as well as the achievement of the SDGs.

| Numerical targets                                   | FY2023 target  | FY2020 result  |
|---|----------------|----------------|
| Energy consumption (versus FY2014)                  | 40% reduction* | 7.2% reduction |
| Child-rearing support facilities (cumulative total) | 150            | 139            |

\* Fiscal 2031 target

Environmental (E)

- We converted Nobeyama Station and Maebashi Station into “ecoste” model stations.
- We began using CO<sub>2</sub>-free electricity at Oga Station on the Oga Line in July 2019.
- We are developing hybrid test railcars that use fuel cells.
- We established the Energy Strategy Section in June 2020 with the aims of helping realize a carbon-free society and diversifying energy sources.



Social (S)

- We are advancing the establishment of child-rearing support facilities. We had established a cumulative total of 144 child-rearing-support facilities as of July 2020.
- We issued Sustainability Bonds in January 2020.
- We operated *SDGs Wrapping Trains* on the Yamanote Line from October 2019 until January 31, 2020.
- We are developing international railway personnel by accepting trainees from Asia, and we are accepting technical interns.



- We are contributing to regional health care through directly managed hospitals.
- We are advancing infectious disease countermeasures.



Governance (G)

- We are expanding and enhancing our whistle-blowing system.
- We are enhancing risk management.
- We are expanding and enhancing highly effective audits that reflect the importance of risks.
- We are analyzing and using information system data.

Heightening Trust by Supporting the Tokyo 2020 Olympic and Paralympic Games

Target Profile

As an Official Passenger and Rail Transportation Services Partner of the Tokyo 2020 Olympic and Paralympic Games, we will do our part to ensure the success of the event by providing high-quality services. The experience acquired and the personal growth attained by our employees as a result of the events will become our legacy.

Contributing to the success of the events

—Ensuring all spectators are happy and enjoy the events—

- We are upgrading railway stations near stadiums.
- We are preparing a transportation plan that reflects the events' schedule.
- We are advancing transportation demand management with a view to easing congestion on early-morning trains.
- We are installing more security cameras to strengthen security.
- We are strengthening coordination among certain railway stations and medical institutions.
- We enhanced transportation capacity and reinforced our information systems during the holding of Rugby World Cup 2019 in Japan.



Realizing an inclusive society

—Toward a society where everyone can live and work with vitality—

- We are holding seminars aimed at furthering understanding of Paralympic sports, and we are extending the scope of our support.
- We are implementing prosthetic leg experiences and other activities at various events to further understanding of an inclusive society.



Publicizing the appeal of eastern Japan to attract visitors

- We are advancing preparations to encourage travel from the Tokyo metropolitan area to Tohoku, Shinetsu, and other areas.

\* JR East is an Official Passenger and Rail Transportation Services Partner of the Tokyo 2020 Olympic and Paralympic Games.



JR East Group Management Vision “Move Up” 2027

9 INDUSTRY INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

8 DECENT WORK AND ECONOMIC GROWTH

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Achieving Affluent Lifestyles by Revolutionizing Transportation Services

Target Profile

We will increase inter-regional railway travel and profits by creating objectives for trips and moving forward with strategies to attract overseas visitors to Japan. In conjunction with these efforts, we will reform transportation service quality by pursuing autonomous driving, developing next-generation Shinkansen, and accelerating preparations for the Haneda Airport Access Line (provisional name).

| Numerical targets                                | FY2023 target    | FY2020 result    |
|--|------------------|------------------|
| Transportation operating revenues                | ¥2,100.0 billion | ¥1,994.5 billion |
| Revenues from visitors to Japan (transportation) | ¥38.0 billion    | ¥25.0 billion    |

Improving and enhancing the appeal of our transportation

- We began test runs of ALFA-X, a test railcar aimed at realizing the next generation of Shinkansen, in May 2019.
- We began direct services between Ebina Station on the Sotetsu Line and Shinjuku Station on the Saikyo Line in November 2019.
- We began operations of the *SAPHIR ODORIKO* limited express service for tourists, which is helping publicize the real charm of the Izu area, in March 2020.



Providing seamless transportation services

- We began environmental assessments of plans for the Haneda Airport Access Line (provisional name).

Contributing to the restoration of disaster-hit areas

- We resumed operations between Tomioka and Namie stations on the Joban Line in March 2020.
- We opened five new bus stations on bus rapid transit (BRT) routes along the Kesennuma and Ofunato lines in March 2020.



Upgrading and improving the functions of railway stations

- We introduced, on a trial basis, station service equipment enabled by the latest technologies to Takanawa Gateway Station, which opened in March 2020.
- Commercializing *TOUCH TO GO* unmanned stores with AI-enabled payment



A railway station guidance robot



TOUCH TO GO

9 INDUSTRY INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

8 DECENT WORK AND ECONOMIC GROWTH

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Achieving Affluent Lifestyles by Offering New Lifestyles and Creating Cities

Target Profile

We will increase profits by advancing the Shinagawa Development Project and other town development projects, developing terminal stations, and expanding and improving hotels.  
We will use completely novel ideas to extend the scope of our businesses. As part of these efforts, we will roll out more shared offices and form partnerships with start-ups.

| Numerical targets   | FY2023 target    | FY2020 result  |
|---|------------------|----------------|
| Life-style service business consolidated operating revenues | ¥1,100.0 billion | ¥870.8 billion |
| Establishment of shared offices (cumulative)                | 30               | 8              |
| Hotel guest rooms (cumulative)                              | 10,000           | 7,900          |

Advancing town development

- We decided on a town plan for phase 1 of the Shinagawa Development Project in April 2019. We are proceeding with the plan and aim to open the town in fiscal 2025 as scheduled.



Expanding business area

- We will establish shared offices at 18 locations inside railway stations through the shared-office business *STATION WORK*.



STATION WORK

9 INDUSTRY INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

8 DECENT WORK AND ECONOMIC GROWTH

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Achieving Affluent Lifestyles by Making *Suica* a Shared Infrastructure Advancing MaaS

Target Profile

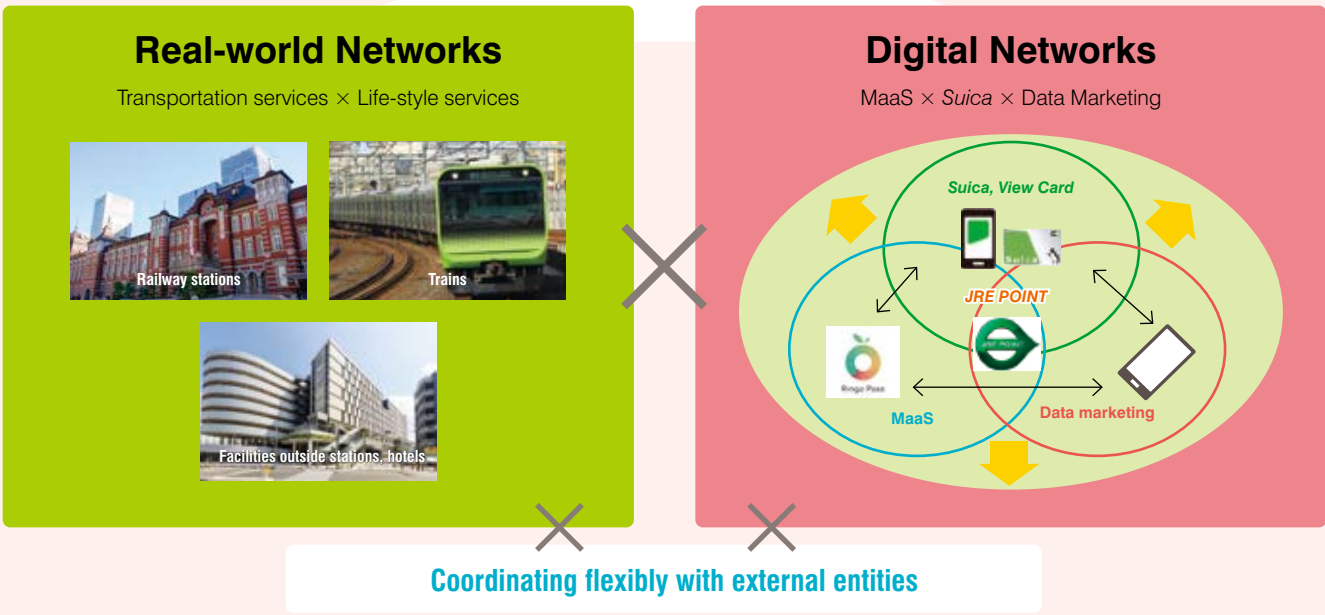
We will realize services that allow customers to combine optimal ways of traveling, purchasing, and paying in all kinds of day-to-day situations.  
Based on sustainable social infrastructure that facilitates lively interaction, we will offer services enabling everyone to lead affluent lifestyles.

| Numerical targets  | FY2023 target | FY2020 result |
|--|---------------|---------------|
| Monthly transactions for Mobility Linkage Platform service usage                       | 30 million    | 4,000         |
| Monthly transactions for <i>Suica</i> and other public transportation electronic money | 300 million   | 250 million   |
| Ticketless service usage percentage for JR East Shinkansen                             | 50%           | 17.1%         |
| <i>JRE MALL</i> members  | 700,000       | 260,000       |
| <i>JRE POINT</i> members   | 16 million    | 12.05 million |

Providing new value to customers and local communities

- We are using Mobility as a Service (MaaS), *Suica*, and data marketing to build digital networks.
- We are embedding digital networks into the real-world networks of our transportation services and life-style services, which are our strengths. In this way, we are increasing usage of our services and realizing smarter management of operations.

Integrated and people-focused



Establishing a common *Suica* infrastructure

- We launched *Shinkansen e-ticket Service* in March 2020.
- We marketed *Welcome Suica*, a new IC card for overseas visitors to Japan, in September 2019.
- We are preparing to enable the issuance of *Suica* via the Rakuten Pay app.



Realizing seamless, stress-free mobility

- We renewed the services and design of the JR EAST App in September 2019.
- We are conducting verification tests of tourism-type MaaS. We conducted the “*Niigata MaaS Trial*” between October and December 2019 and the “*TOHOKU MaaS Sendai Trial*” in February 2020.
- We released *Ringo Pass*, a smartphone app that enables the use of taxis and shared bicycles, in January 2020.



Increasing *JRE POINT* membership

- We began a service in October 2019 enabling customers to accumulate *JRE POINT* credits by using *Suica* for JR East railway services.



We established the MaaS and *Suica* Headquarters, which is tasked with cohesively advancing *Suica*, MaaS, and data marketing, in June 2020.

JR East Group Management Vision “Move Up” 2027

Realizing Affluent Lifestyles by Advancing Overseas Businesses

9

INDUSTRY INNOVATION AND INFRASTRUCTURE

11

SUSTAINABLE CITIES AND COMMUNITIES

4

QUALITY EDUCATION

8

DECENT WORK AND ECONOMIC GROWTH

10

REDUCED INEQUALITIES

12

RESPONSIBLE CONSUMPTION AND PRODUCTION

Target Profile

Aiming to establish business models for overseas businesses, the JR East Group will consolidate its technologies and know-how to further develop businesses beyond Japan, particularly in Asia. At the same time, by assigning personnel to work in our overseas businesses and by conducting various types of training, we will increase our ability to develop globally competent personnel.

Establishing business models

- We are forming projects in which we can take advantage of our strengths and know-how.
- We are taking measures in response to the international standardization of railway technologies.

Developing globally competent personnel

- We conduct various types of training overseas and operate overseas study and assignment programs that give employees firsthand experience of leading-edge research and businesses overseas. The aim of these activities is to foster internationally minded personnel who have broader horizons.



Enhancing transportation services



We are advancing a high-speed railway project in India.



We are advancing and improving operations of railway businesses in Thailand, Indonesia, and the United Kingdom.

Increasing life-style services

- We are preparing to open *Hotel Metropolitan Premier Taipei*.
- We opened *One&Co*, an interactive platform designed for Japanese companies located in Singapore, in August 2019.



Opened *One&Co* in Singapore



Preparing to open *Hotel Metropolitan Premier Taipei*

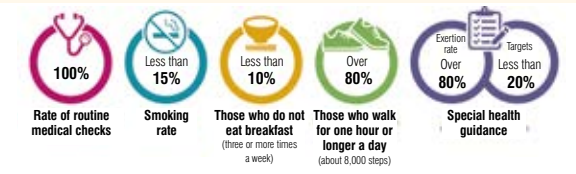
Focusing on the Happiness of Our Employees and Their Families

Target Profile

We will reform work, work styles, and workplaces to increase employees' range of opportunities. Each employee will set out their own “Move Up story” and take on the challenge of realizing their story by accelerating a cycle of participation and growth. As a result, employees and the Group will develop and grow simultaneously.

Promoting Three Reforms

- We aim to provide safer, higher-quality services on the Shinkansen by integrating operations in a centralized, specialized manner through the Shinkansen General Management Department, established in April 2019.
- We are focusing on improving the health and vitality of each employee based on the “Medium-term Vision for Health and Productivity Management 2023,” formulated in April 2019.



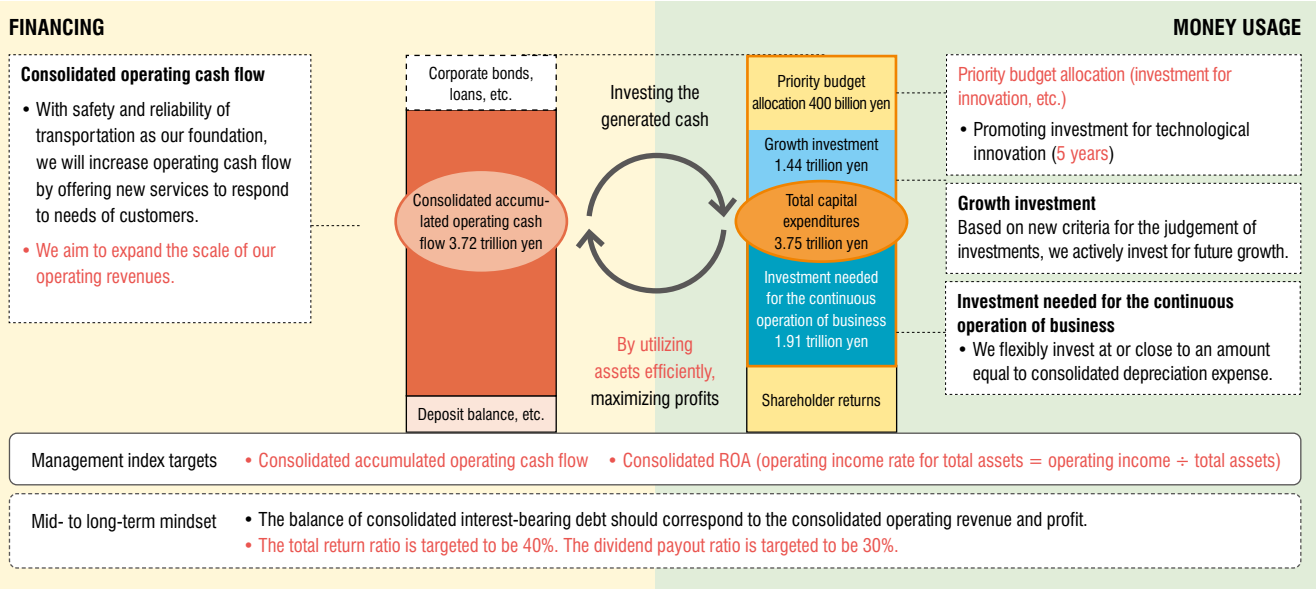
- We are advancing digital transformation.

- We are empowering women in our workplaces and helping employees balance work and child-rearing commitments. As part of these efforts, we are establishing facilities for women so that they can be assigned to all workplaces. These measures are in accordance with the “General Employer Action Plan,” formulated in April 2019.
- We launched “Cross-Organizational Projects” at 13 locations. These projects transcend job categories and comprise employees who work at facilities in the field.
- We began a new job rotation system in April 2020. The aim is to help employees grow by catering flexibly to their diverse ambitions through the provision of more opportunities to contribute in a range of different business fields.



8 “Move Up” 2027 Numerical Targets

While increasing operating cash flows, we use them for returns to shareholders and invest for future growth, using these cash flows for returns to shareholders and to implement forward-looking capital expenditures. Further, to achieve our reform in the coming 10 years, we have set numerical targets for fiscal 2023, i.e. for the first half of the period.



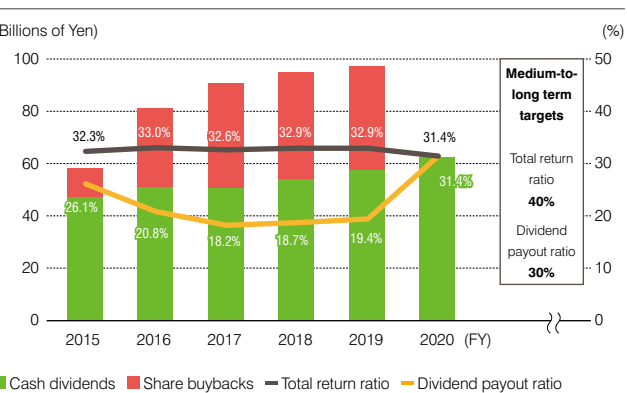
| FY2023 consolidated management targets       |                  | FY2023             | Transportation   | Retail & Services | Real Estate & Hotels | Others (includes IT & Suica services) |
|--|------------------|--------------------|------------------|-------------------|----------------------|---------------------------------------|
| Operating revenue                            | ¥3,295.0 billion | Operating revenues | ¥2,100.0 billion | ¥660.0 billion    | ¥440.0 billion       | ¥95.0 billion                         |
| Operating income                             | ¥520.0 billion   | Operating income   | ¥330.0 billion   | ¥56.0 billion     | ¥109.0 billion       | ¥26.0 billion                         |
| Consolidated accumulated operating cash flow | ¥3,720.0 billion |                    |                  |                   |                      |                                       |
| ROA  | 6.0%             |                    |                  |                   |                      |                                       |

9 Medium-to-Long-Term Financial Strategy

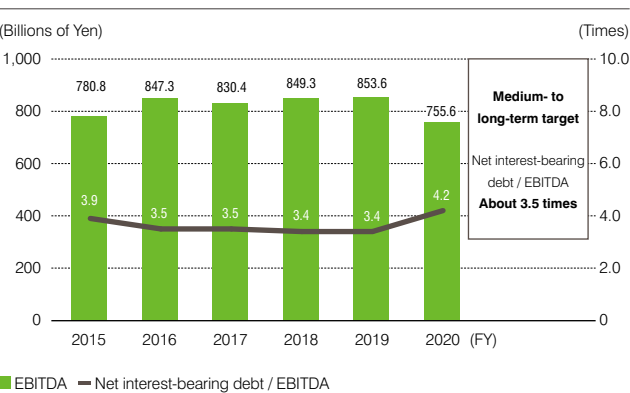
With our sights set on realizing total return ratio target of 40% and dividend payout ratio of 30%, we will stably increase a dividend and flexibly buy back our shares consistently with trends in our business results.

Considering ability to repay debt, the balance of consolidated interest-bearing debt should correspond to the consolidated operating revenue and profit. Also, net interest-bearing debt / EBITDA should be about 3.5 times.

Transition of shareholder returns



Transition of net interest-bearing debt / EBITDA



\* Net interest-bearing debt = Balance of consolidated interest-bearing debt – Balance of consolidated cash and cash equivalents  
EBITDA = Consolidated operating income + Consolidated depreciation expense



Highlight 01

# Measures to Combat the COVID-19 Pandemic

We offer our heartfelt condolences to those who have lost their lives to the COVID-19 pandemic, as well as our sincere hope for a swift recovery to those fighting the disease and their families.

The JR East Group is undertaking measures to prevent the spread of COVID-19 based on guidelines (Guidelines for measures against COVID-19 in the railway business).

## Reassuring Our Passengers about Using the Railway

The JR East Group is implementing the following ongoing undertakings.

### Measures to Prevent Infection at Railway Stations

In addition to regular cleaning, we are sterilizing our stations with antiseptics. We have placed antiseptic dispensers and soap at Yamanote Line terminal stations and other hub stations.



Our station staff wear masks and we have installed clear plastic sheets to prevent the transmission of oral or nasal particles.

"Midori no Madoguchi" ticket office staff will ensure safe distancing seating when selling reserved tickets to our passengers.



### Measures to Prevent Infection on Train Carriages

We have included antiseptic sterilization to our regular carriage cleaning regimen.



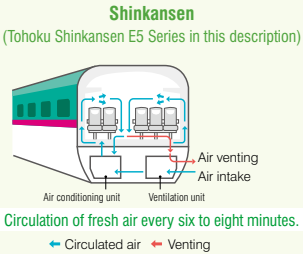
Crew members are disinfected when trains arrive at their turnaround terminals.



We ventilate carriage interiors using air conditioning as well as having crew open windows by hand.



We used air conditioning and ventilation equipment to circulate the air on Shinkansen trains and limited express trains on conventional lines.



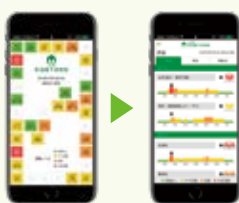
### Measures to Prevent Infection during the Sale of Reserved Seat Tickets

Passengers may select seats of their choice from the seat map.



### Measures to Prevent Infection when Boarding

The JR East app provides information on congestion on the Yamanote Line and certain stations.



Station congestion information



Train carriage congestion information

### Posting Requests for Our Passengers to Help Prevent Infection



We post requests for our passengers to help prevent infection in our stations and train carriages.

## Other Specific Undertakings

### Acceptance of COVID-19 Patients

#### JR Tokyo General Hospital

At the request of the Tokyo government, we have been accepting patients infected with COVID-19.

In addition to standard anti-infection measures, we have set up outpatient fever treatment, all medical staff wear masks, we have provided a medical questionnaire in Chinese, we have set up patient walkway lines, and we have installed temperature measurement devices at outpatient entrances.

On top of that, we make efforts to ensure that all working medical staff wear protective clothing and masks to prevent the spread of the virus.



Temperature measurement at outpatient entrances

#### Hotels and Other Facilities

A number of hotels run by the JR East Group have accepted COVID-19 patients with mild symptoms.

For the peace of mind of our guests, we conduct regular anti-septic cleaning and fresh air circulation as well as place ethanol fingertip lotion for use at various locations within our hotels. Other measures we take to prevent infection include ensuring that our hotel staff wear masks, wash their hands, and disinfect their fingertips.



Regular disinfecting of guest rooms, public areas, restaurants, and banquet halls



Alcohol disinfectant placed at various places within our hotels

### Support for Producers and Medical Staff

In collaboration with Yamagata Prefecture, JA Zennoh Yamagata, and Japan Post, we have been using Shinkansen logistics to provide support for cherry farmers in Yamagata who have been impacted by the COVID-19 pandemic, and we have been selling their fare at stores in Tokyo and Ueno stations.



Use of Shinkansen logistics

We took goods that had been intended for hotel guests under our Gunma Destination Campaign from April to June 2020 and gave them as a token of gratitude to staff at designated infection medical institutions fighting the disease on the healthcare front lines (throughout Gunma Prefecture and in parts of Saitama and Tochigi prefectures).



Gifts presented to the Maebashi Red Cross Hospital



Gift items




**Highlight 02**

## Takanawa Gateway Station Opens for Business

March 14, 2020, marked the opening of Takanawa Gateway Station as the Gateway linking Tokyo with the world. A new cityscape is scheduled to open in FY2025 under the concept of “Global Gateway Shinagawa” centered on Takanawa Gateway Station.

The objective is to create a community that continues to generate new types of business and culture by attracting advanced companies and people from Japan as well as the world and promoting a diverse array of exchange. We have undertaken the challenge of this grand project to create a station and a surrounding community from the ground up.

### Entranceway Linking Tokyo with the World

Every part of the station’s design is imbued with Japanese aesthetics so customers visiting from all over the world can experience hospitality within “Japanese” surroundings. The station’s trademark, its spacious roof, incorporates an origami motif evoking Japanese taste. The latticework is inspired by traditional “shoji” sliding doors.

The roof membranes help reduce lighting power consumption and contributes to a superior thermal environment. In conjunction with its solar panels and wind power turbines, it further works to reduce its environmental burden as an “eco-station” by incorporating environment-preserving technologies.



### The Face of a Futuristic New City

With our Shinagawa development project, we are aiming for a city opening by FY2025. We see the project as a trial run for city development providing affluent next-century communities, and as such we are undertaking the installation of a variety of technologies and the creation of new business. Spearheading our efforts is the “Takanawa Gateway Fest,” an event held at the station-front plaza aimed at fostering expectations for the area’s future. We are also proactively running proving trials for robots and other new technologies to give our customers a taste of what stations of the future will be like.


**Highlight 03**

## Resumption of Full Service on the Joban Line

The Joban Line had suspended operation due to the impact of the 2011 Great East Japan Earthquake and the Fukushima Daiichi nuclear power plant disaster. It has since then been working section by section to run safety checks and gradually resume service.

With the resumption of service on the Tomioka to Namie stretch, the Joban Line resumed full service on March 14, 2020. The Hitachi Limited Express from the Tokyo area to Sendai has also resumed service.

With this, service has now been fully resumed on all railway sections disrupted by the Great East Japan Earthquake.



### The Day the Joban Line Resumed Full Service

On March 14, 2020, the day that the Joban Line resumed full service, there were train arrival welcoming ceremonies at various stations, including Futaba, Ono, and Yonomori Stations, cheered on by people along the rail lines and other members of the community.



### Entering the Second Stage of Reconstruction

Along with the resumption of service, Futaba, Ono, and Yonomori Stations have reopened their doors to business in rebuilt or repaired station buildings.

In addition, J-Village Station, which reopened in April 2019, is now outfitted with a roof over the station-front plaza. This makes not only special events, but also everyday passengers’ experience more pleasant.

Community building is still going on in areas surrounding the stretch of recently resumed service, and we see good prospects for further reconstruction.

Going forward, in Stage 2 of reconstruction, we will use the Joban Line to stimulate communities and further invigorate both quake-hit areas and the Tohoku region as a whole.





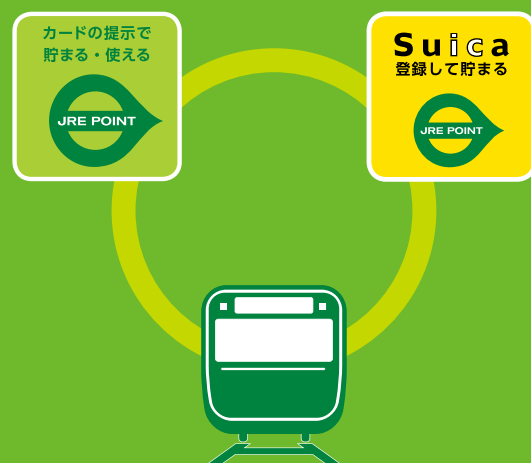
## Highlight 04

## JRE POINT

*JRE POINT* is a loyalty points program we launched in February 2016. Previously, each individual company or service within the JR East Group had their own separate loyalty points programs. The *JRE POINT* service combines those loyalty points, to make it easier for our customers to accumulate and use loyalty points.

Subsequently, we integrated “*Suica*” points and “View Thanks” points into our Group loyalty points, and in October 2019 we expanded our loyalty points service to railway use as well.

*JRE POINT* membership reached 12 million, and forms a valuable customer base for the JR East Group.



## More Opportunities to Earn and Use *JRE POINT* on Railway Use

Since October 2019, passengers can earn points when they ride the train using *Suica* (registered *Suica*). Passengers earn even more points when they use Mobile *Suica*. We will continue to expand services on the railway usage scene.

### Earning Points How to Earn *JRE POINT* on Railways

#### Since October 2019

- Customers can earn *JRE POINT* when they take conventional lines by *Suica*
- Customers can earn *JRE POINT* when they purchase *Suica* Green Tickets
- Customers can earn *JRE POINT* when they purchase a Mobile *Suica* commuter pass



#### Since March 2020

- Customers can earn *JRE POINT* when they take Shinkansen lines by *Suica* such as “Touch and Go Shinkansen” service

#### Around next Spring

- We are going to start to offer *JRE POINT* when customers take railways by multiple-ride tickets.

#### Around summer 2021

- We are going to start to offer *JRE POINT* when customers purchase train tickets at JR East Train Reservation, “*Eki-net*”.



### Using Points How to Use *JRE POINT* on Railways

#### Around summer 2021

We are going to start following two services:

- Upgrade to Green Cars and Gran Class with *Eki-net*
- Exchange for free Shinkansen and limited express tickets with *Eki-net*



## One-Stop Delivery of Attractive Services

Integrating various loyalty programs within JR East Group into *JRE POINT* delivers a number of benefits. It enables us to provide more attractive service and accumulate customers' behavior such as purchasing and traveling data. Moreover, *JRE POINT* allow us to analyze and utilize big data to improve our services. Through our *JRE POINT* service, we will achieve the goal of “one-stop provision of various services to meet individual needs” under our management vision, “Move Up” 2027.



## Highlight 05

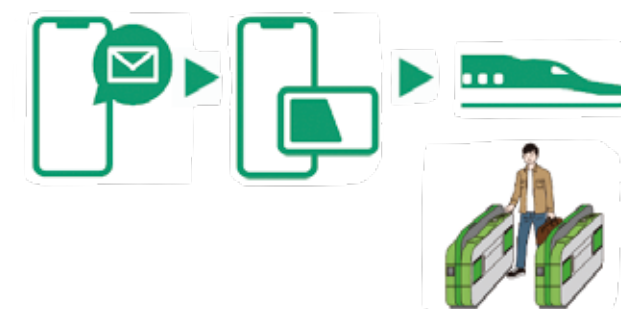
## Launch of Shinkansen e-Ticket Service

On March 14, 2020, we launched the “Shinkansen e-Ticket” service, a Shinkansen IC boarding service. Passengers who use *eki-net* or another site to make reservations on the Tohoku-Hokkaido, Joetsu, Hokuriku, Yamagata, or Akita Shinkansen lines can board by touching their transportation IC cards (*Suica* or similar) to the Shinkansen automated wicket gates.

## Reservations Anytime, Anywhere via Smartphone or PC

Shinkansen e-Tickets may be purchased via the *eki-net* reservation site (also the *eki-net* app). Change of reservations or refunds can also be done over *eki-net*.

The “*eki-net* Toku Da Ne” discount can also be used exclusively for Shinkansen e-Tickets.



## Ticketless, Touch-Based Boarding

Passengers no longer need to obtain tickets at station reserved seat ticket vending machines or ticket counters. JR East now offers ticketless boarding. Passengers can board Shinkansen trains by taking their *eki-net* preregistered Mobile *Suica* or *Suica* cards (or similar IC cards) and touching them to the Shinkansen automated wicket gates.

The service accommodates up to six passengers, meaning the whole family can enjoy ticketless boarding.

Looking ahead, when we release our all new *eki-net* (planned for around summer 2021), we will make the necessary upgrades to elevate the service to a “new normal” level of excellence.



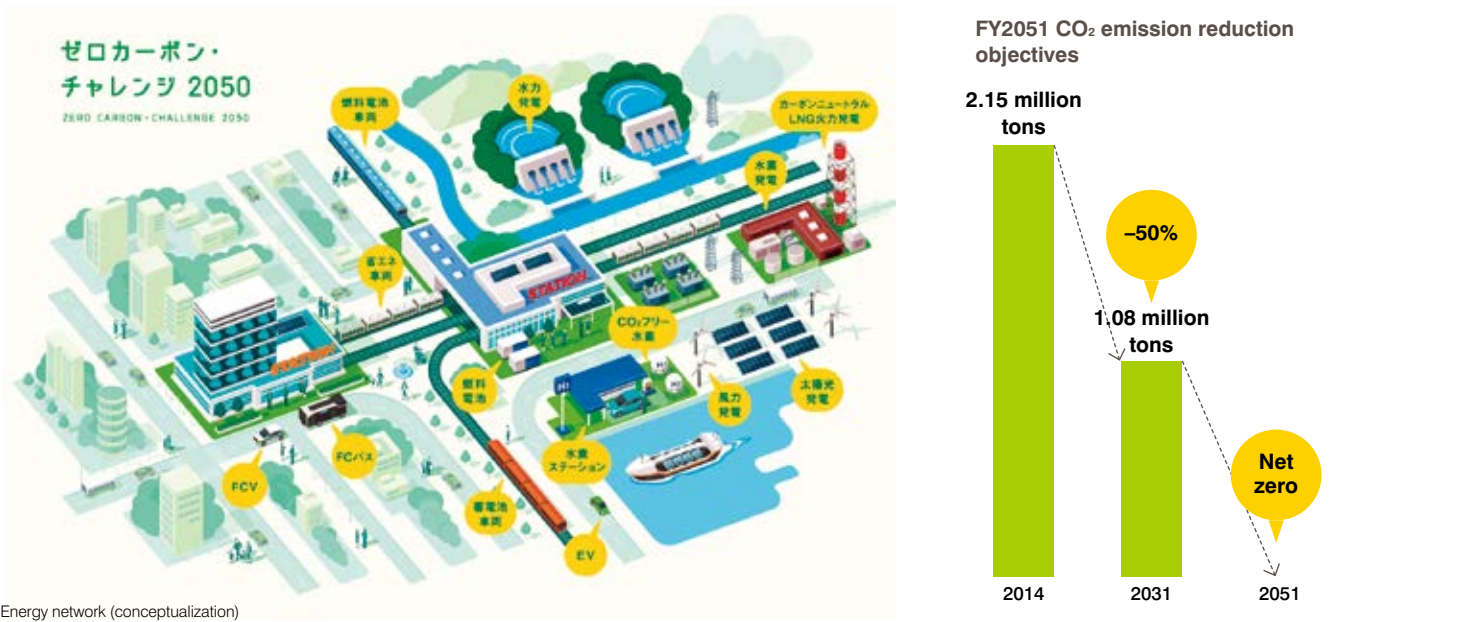
# Zero Carbon Challenge 2050

As a railway operator using large amounts of energy, it is the mission of the JR East Group to reduce its long-term CO<sub>2</sub> emissions and contribute to the achievement of a carbon-free society.

In May 2020, we formulated our new “Zero Carbon Challenge 2050” long-term environmental objectives. To enhance the environmental superiority of railways into the future and remain the transportation mode of choice, we will undertake the challenge of achieving net zero\*<sup>1</sup> CO<sub>2</sub> emissions in railway operations by FY2051.

\*1 “Net zero” refers to achieving effectively zero CO<sub>2</sub> emissions by matching the amount we emit with the amount we capture, reclaim, and use via leading-edge technologies.

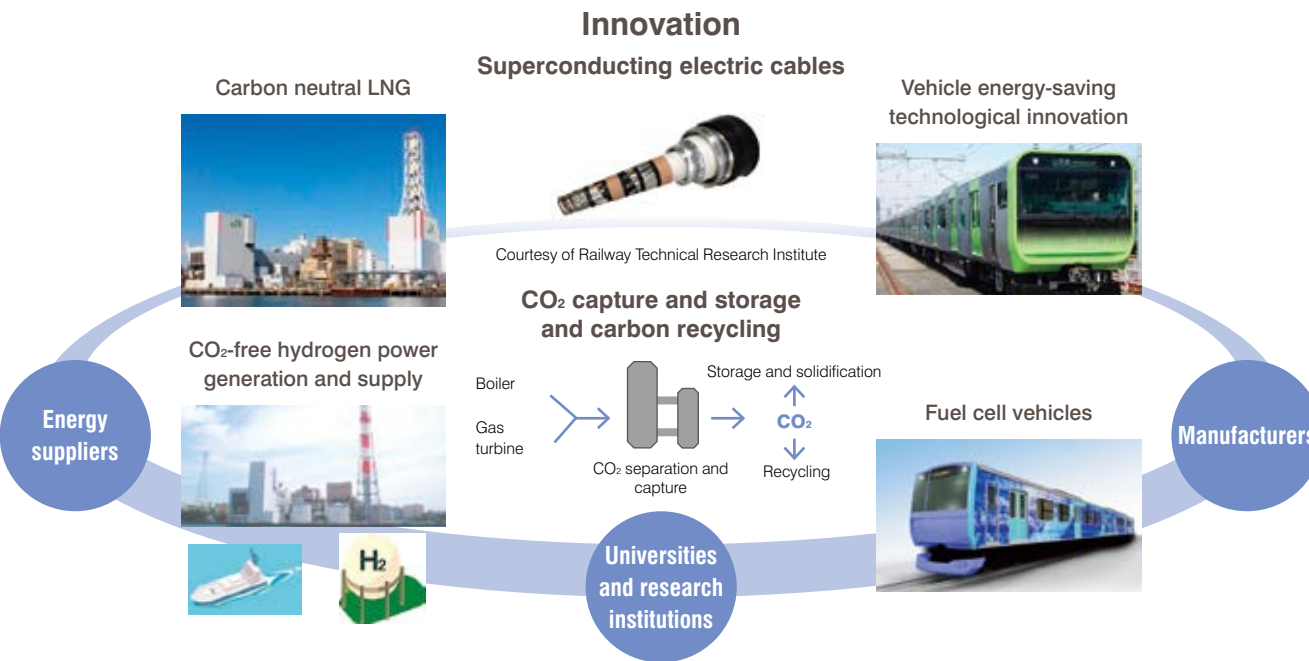
## Aiming for “Net Zero” CO<sub>2</sub> Emissions by FY2051



## Specific Undertakings to Achieve Our Objectives

The JR East Group proactively incorporates new technologies in every phase of its energy network, from generation through transmission and from storage through consumption. We also have in place a framework for pursuing technological innovation in collaboration with other companies and research institutions. We also work to develop renewable energy, and we utilize non-fossil fuel certificates\*<sup>2</sup> to supply the electricity we generate as renewable energy source feed-in-tariff (FIT\*<sup>3</sup>) electricity to stations and trains in Japan's Tohoku region. In so doing, we aim to achieve zero CO<sub>2</sub> emissions in the Tohoku region by FY2031.

\*2 Non-fossil fuel certificates: Certification of the environmental value (non-emission of CO<sub>2</sub>) of electricity generated by renewable energy sources.  
\*3 FIT: A system whereby electricity generated by renewable energy is purchased by electric power companies at fixed rates over a certain period of time.



## Utilization and application of hydrogen to achieve a sustainable carbon-free society

Through means such as the utilization and application of hydrogen, we work to diversify our energy sources, and we will accelerate efforts for a carbon-free society.

### Collaboration with Toyota Motor

JR East signed a basic agreement with Toyota on a comprehensive business partnership centered on hydrogen-based mobility collaboration between railways and automobiles. The two companies will aim to help build attractive, low-carbon communities by combining their resources to undertake feasibility studies for a variety of approaches to hydrogen utilization and application, coordinating with our numerous stakeholders, including local governments, businesses, and community citizens, and building a railway station-based hydrogen supply chain.

### Adopting Fuel Cell Buses

We have chosen to adopt fuel cell buses in anticipation of their future use in on-demand mobility in Tokyo's Shinagawa area. We are also studying the possible use of fuel cell buses for loop-line bus service at “WATERS *takeshiba*” and the rest of the Hamamatsucho Station area to make the vicinity more user friendly.



### Hydrogen Station Opening

JR East plans to open a hydrogen station on land neighboring Takanawa Gateway Station. The station will feature a presentation room for information on the utilization of application of hydrogen, and we will use the station to promote proliferation and knowledge of hydrogen energy.

We are also conducting feasibility studies on installing stationary fuel cells in railway stations in Fukushima Prefecture, and using the CO<sub>2</sub>-free hydrogen-generated electricity to power railway station services. We anticipate that such fuel sources will play a role in business continuity planning (BCP) in the case of disasters, such as by providing power supply services to local citizens for charging their mobile phones and other needs.



### Proving Trials Using Hybrid (Fuel Cell) Test Trains

JR East will commence trial runs of hydrogen-powered fuel cell test trains on the Tsurumi Line and other lines starting in FY2022.





# Safety

Priority commitment goals

9

INDUSTRY, INNOVATION  
AND INFRASTRUCTURE

11

SUSTAINABLE CITIES  
AND COMMUNITIES

Related goals

12

RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION

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Current safety record of JR East..... 46

## Our Fundamental 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 in both tangible and intangible aspects. To further reduce potential risk, JR East is committed to steadily improve tangible countermeasures and also to ensure that each one of its employees takes all possible intangible measures.

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 all people involved with railway-related work, including JR East, Group companies, and partner companies).”

### General principles of safety

JR East has prescribed General Principles of Safety for the code of conduct for its safety-related employees.

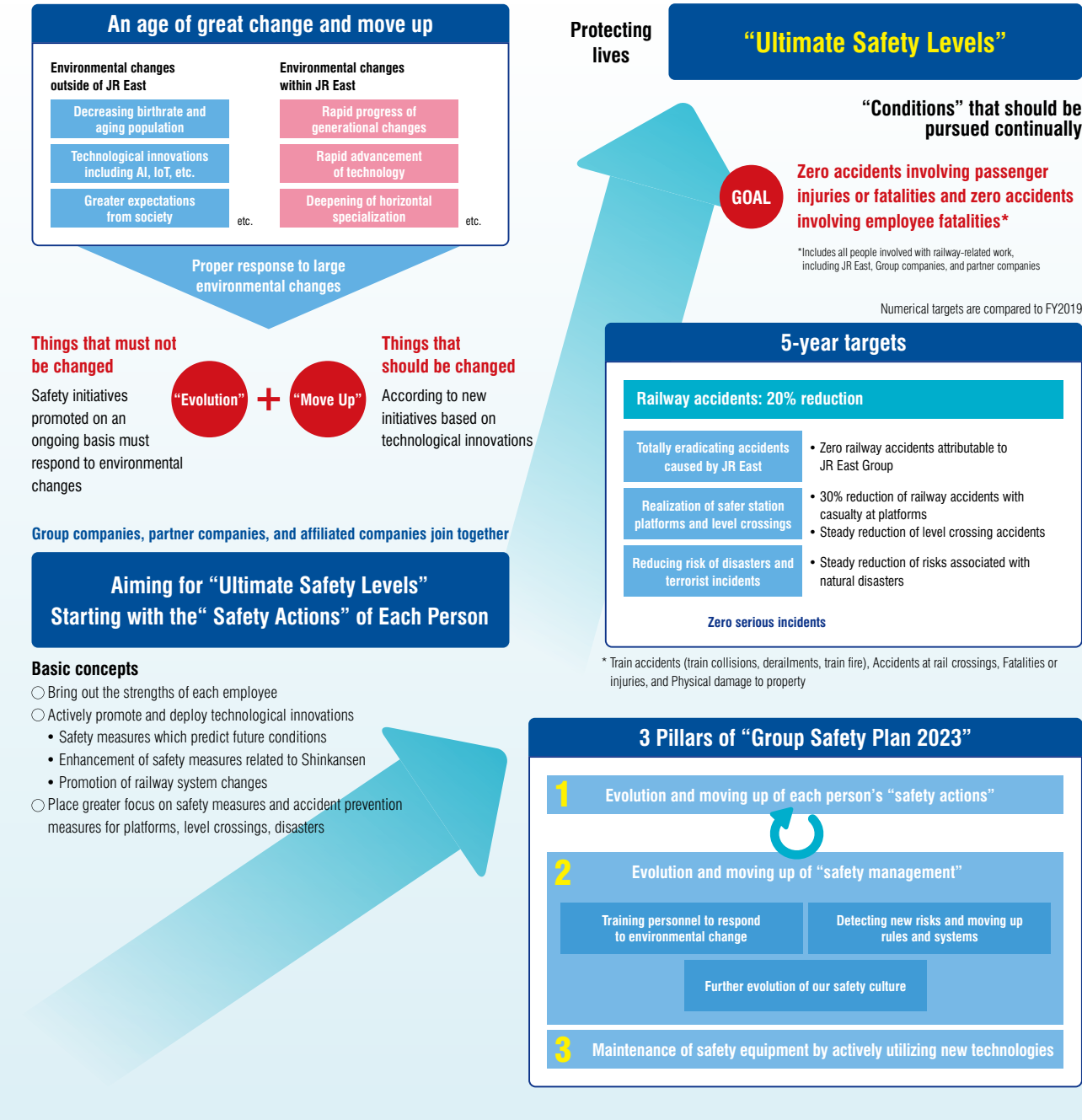
- I. Safty is the most important mission in transportation.
- II. Ensuring safety is based on exact observance of rules and procedures, and is achieved through constant practice.
- III. Enforcement of confirmation and complete contact is most important for ensuring safety.
- IV. For ensuring safety, we should cooperate together and go beyond our official responsibility.
- V. 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.

### Group Safety Plan 2023

Since our establishment, JR East has been implementing a series of 5-year safety plans. In November 2018, we formulated Group Safety Plan 2023, which is the 7th plan. Together with JR East Group companies, partner companies, and affiliated companies, JR East as a whole group will aim for “Ultimate Safety Levels” starting with the “Safety Actions” of each person.

JR East “Group Safety Plan 2023” consists of two building blocks: “Evolution” and “Move Up”, which are based on 3 Pillars: 1 Evolution and moving up of each person’s “safety actions”, 2 Evolution and moving up of “safety management”, and 3 Maintenance of safety equipment by actively utilizing new technologies. In consideration of rapid environmental changes both within and outside the Group, we will take specific measures to properly respond to these environmental changes.

Overview of “Group Safety Plan 2023”



[https://www.jreast.co.jp/e/data/pdf/group\\_safety\\_plan.pdf](https://www.jreast.co.jp/e/data/pdf/group_safety_plan.pdf)

### Further evolution of our safety culture

The safety culture which JR East Group has continually placed great value on, including the “5 Cultures,” “CS (Challenge Safety) Activity,” and “Three Actualities Principle,” is the foundation of various safety initiatives.

### Stop the train if we feel something is dangerous

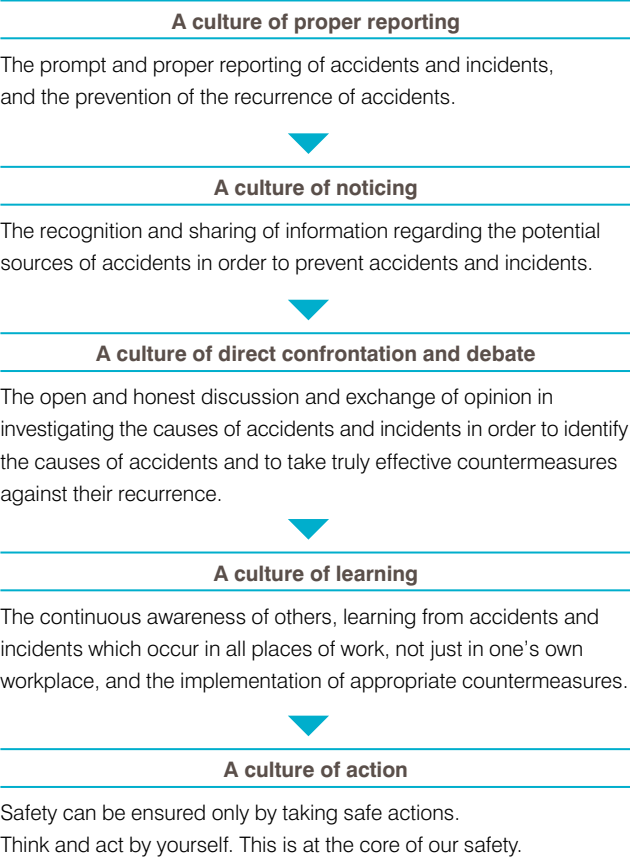
Safe and stable transport is important for our railways. Safety means

protecting lives, while stability means ensuring on-time operations of our trains. However, though stable transport is important for us, safety comes first. Trying too hard to keep to schedule sometimes results in not properly following safety confirmation procedures, which leads to risking the safety of train operations.

To secure the safety of our railway operations, the whole JR East Group will always follow our firm code of conduct to “Stop the train if we feel something is dangerous.”

Our Fundamental Concept of Safety

Further ingraining the 5 Cultures



Challenge Safety Activity (CS Activity)

We encourage all employees to be autonomous (take the initiative) in taking charge of safety, and we promote initiatives to share in safety-related deliberation in the workplace.

Through our CS Activity, we aim to change our emphasis from “reactive safety” to “proactive safety”, such that each employee thinks about safety and acts autonomously. We cultivate a culture of ongoing efforts to enhance safety, where individual employees are aware of safety, and where field sites, branch offices and the head office, are united in the process of discussing safety and formulating safety measures.

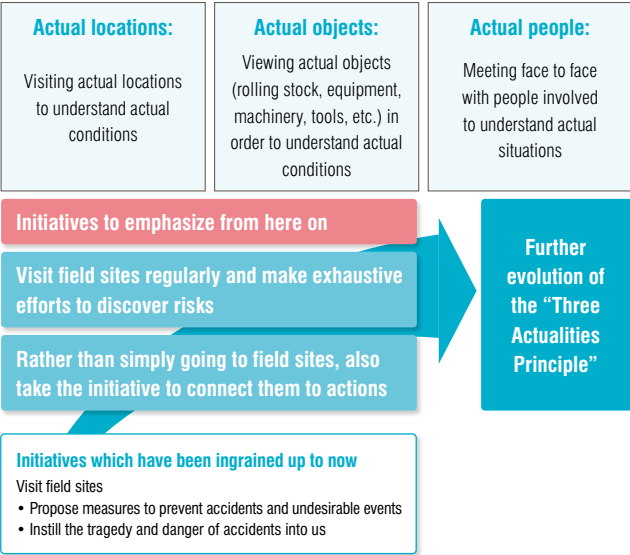
To share information useful to this activity, we publish a monthly safety newsletter, “Challenge Safety Aoshingo,” and distribute it to all employees.

The “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.

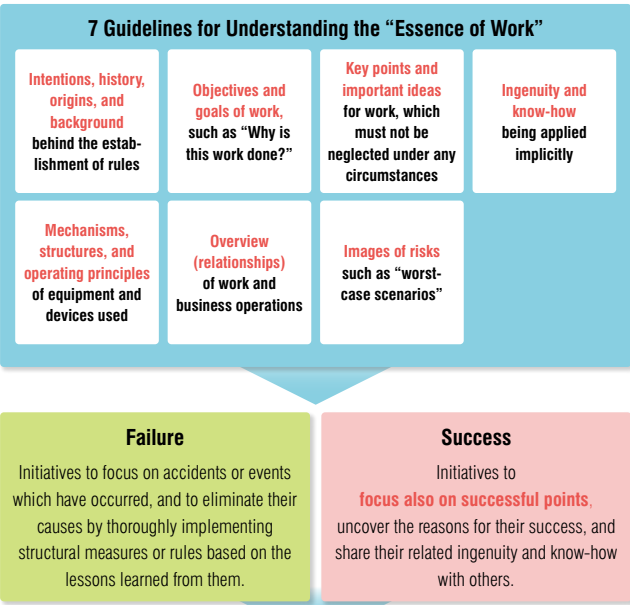
JR East Group continues to search for answers which cannot be found on paper, based on the “Three Actualities Principle” as its standard for action: actual locations, actual objects, and actual people.

\* Genba: “Genba” means actual locations, objects, and people directly related to the safety of our operations including points of contact with our customers and fields or workplaces of transport or services.



Facilitate understanding of the “essence of work”

To properly respond to large environmental changes, rather than merely learning the procedures and methods of work, we must be conscious of the “7 Guidelines” which include the purposes of work, the origins of rules, and the operating principles of equipment, to deepen our understanding of the “essence of work.”



Complementary effects of both sides

Promote initiatives to not only learn from failures, but also focus on successful points

JR East’s Safety Management Organization

Safety management regulations

In response to a revision of the Railway Business Act, JR East formulated its safety management regulations in Oct. 2006. These stipulate various safety management-related matters such as the responsibilities of top management executives in ensuring the safety of operations and on organizational matters and the selection of chief safety management officers, operation managers, and train crew training managers. To ensure transportation safety, we have built a system to promote operations centered on safety management officers and involving executives involved with safety.

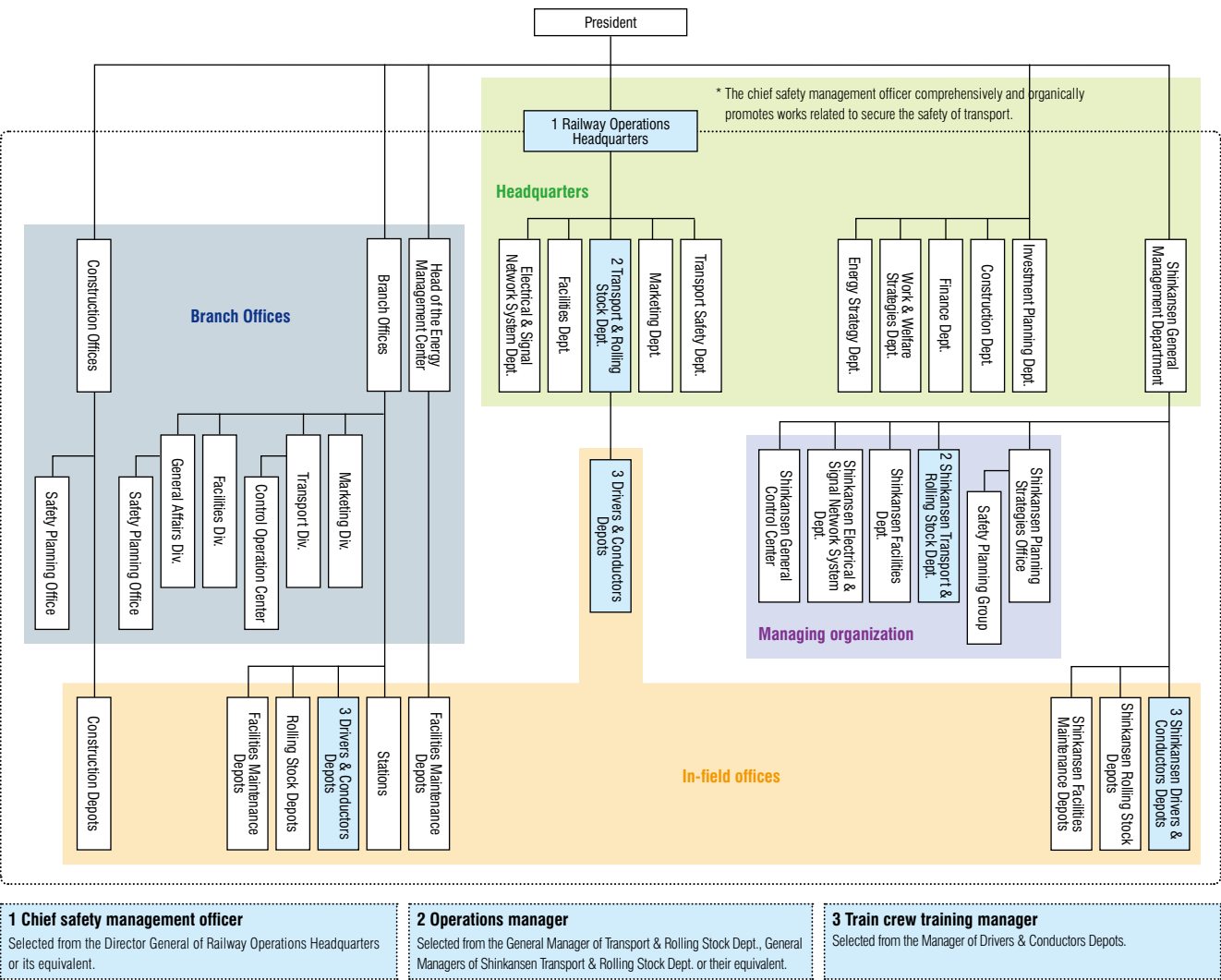
In April 2019, we established the Shinkansen General Management Department to integrate and specialize in managing Shinkansen-related operations.

Structures to Promote Safety Measures

In 1987, we established the Railway Safety Promotion Committee, chaired by the director general of The Railway Operations Headquarters, at the Head Office. This committee aims to enhance rail safety and prevent accidents by elucidating the causes of major accidents, formulating measures to prevent recurrence, and determining and promoting measures for safety-related equipment and rolling stock.

We also have Regional Safety Promotion Committees, which are chaired by the heads of the Shinkansen General Management Department, branch offices, and construction offices. These committees enhance railway safety at branch offices and seek to prevent accidents. They also liaise with the Rail Safety Promotion Committee to conduct specific measures.

Management structure for transport safety





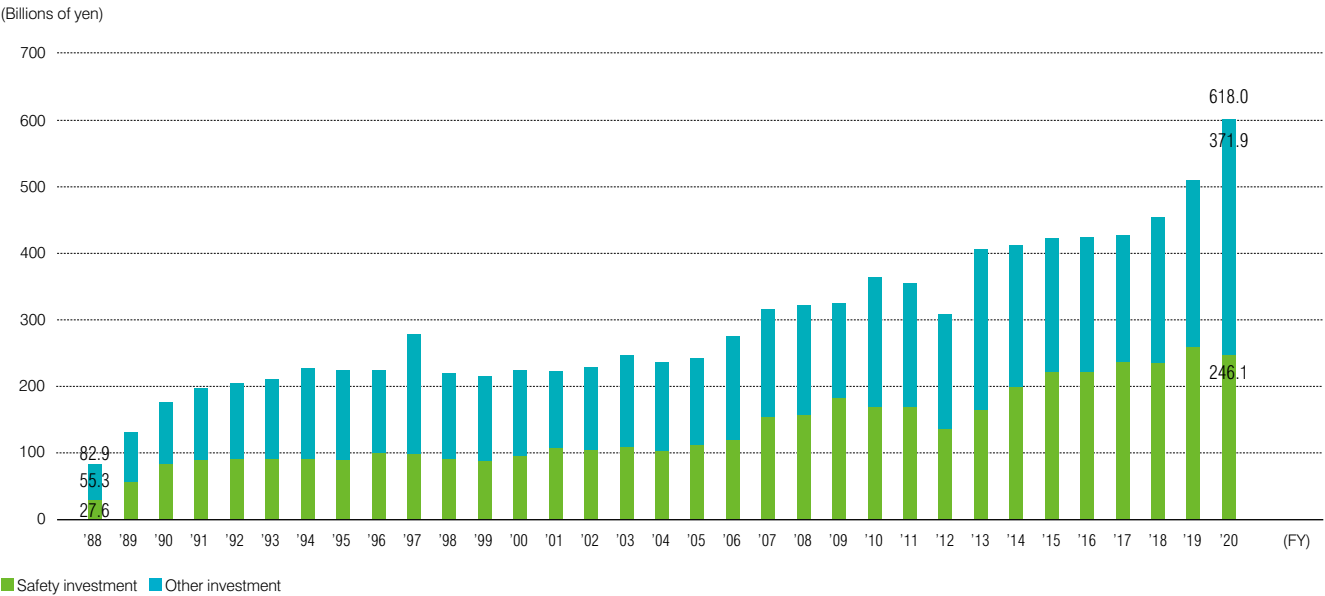
JR East's Safety Management Organization

Rules for reporting accidents and incidents

We endeavor to accurately understand accidents and incidents, analyze their causes, and implement measures to prevent them from occurring and recurring. To this end, we work to further enhance safety through accident reporting and by establishing rules pertaining to classes of accidents.



Trends in safety investment



Investment in safety facilities

JR East has invested more than 4.5 trillion yen in safety since its establishment. In its Group Safety Plan 2023, JR East plans to invest approximately 1.2 trillion yen in safety measures during the five years from FY2020 to FY2024. We will continue to focus on putting safety facilities in place. At the same time, we will more actively embrace new technologies and respond to new risks.

Efforts to Further Improve Safety Levels

Fostering safety-oriented personnel

Safety education and training

To heighten safety awareness among employees by placing priority on safety education and training, JR East is offering educational and training opportunities to its employees at the JR East General Education Center (Shirakawa City, Fukushima Prefecture) and General Training Centers (branch offices), and on-the-job training in each workplace.

The JR East General Education Center offers group training for personnel development and improvement of knowledge and skills, fostering the development of new train crews and also providing the necessary training for job transfers.



JR East General Education Center



Practical drills on training tracks

Accident History Exhibition Hall

In November 2002, we established the Accident History Exhibition Hall within the JR East General Education Center. This facility provides opportunities for all employees to learn about and reflect on the tragedies of past accidents and the major social responsibility railways bear. In October 2018, we expanded the Accident History Exhibition Hall and placed on exhibit the rolling stock involved in a 2014 accident involving a derailed Keihin-Tohoku Line train at Kawasaki Station, as well as a road-rail vehicle. We also opened the Interactive Learning Hall to encourage consideration from various perspectives of the train derailment accidents.



Accident Preservation Center

Interactive Learning Hall

Accident History Exhibition Hall

Promoting the use of educational and training facilities

As one aspect of its efforts toward training personnel to respond to environmental change, JR East is promoting the establishment of educational and training facilities that facilitate an understanding of the “essence of work.”

By the end of FY2020, we had installed crew member simulators in all transport-related workplaces. We also opened the Shinkansen Education and Training Center, which is related to the equipment of the Shinkansen, to learn knowledge about the specific rules and mechanisms of the Shinkansen.

In addition, at each branch office we have educational facilities for learning about major incidents and accidents that occurred within that branch office's jurisdiction, looking at preceding events and countermeasures. We are promoting better safety awareness among all employees of JR East, Group companies, and partner companies to achieve “ultimate safety levels”.



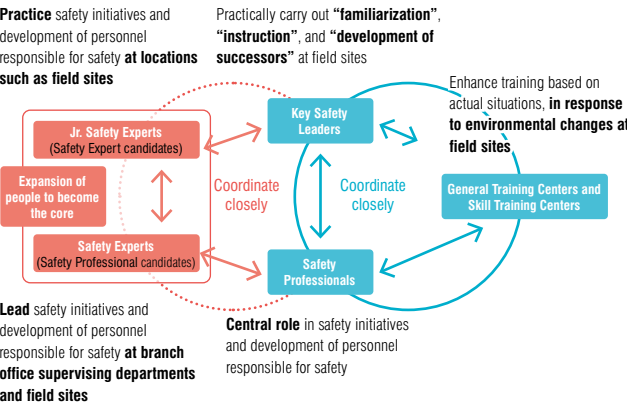
Crew member simulator bringing the training experience to life by using actual video



Safety Tradition Museum at the Mito Branch Office

Development of personnel responsible for safety

We are responding to the rapid transition to the next generation of employees by moving forward on a variety of initiatives that emphasizes cultivating employees that put safety at the core.



Safety storytellers (Narrators of Oral History)

To educate employees who can share and pass on safety-related knowledge, leadership, and technological capabilities within the Company, we have appointed highly experienced and technologically capable personnel in various specialized fields as safety storytellers (Narrators of Oral History).



Safety storyteller swearing-in ceremony

The Railway Safety Symposium

To further enhance rail safety, each year we hold the Railway Safety Symposium. We strive to gain knowledge through discussion among domestic experts and share good initiatives at workplaces.



Railway Safety Symposium

Efforts to Further Improve Safety Levels

JES-Net (JR East Safety Network)

As the division of work increasingly progresses among Group and partner companies, the JR East Safety Network (JES-Net) was established to further improve safety levels, given the essential nature of sharing common safety values and cooperation. Membership includes 36 companies. JR East Group continues to promote measures for improvement and share issues to enhance safety levels across JES-Net through safety reviews where frontline staff exchange various opinions on site.



Safety review underway

Initiatives at JR Niigata Railway Service Co., Ltd.

This company uses the Seiunkan, a training center completed in September 2019, to impart knowledge and enhance skills related to cleaning, train driving, and railcar maintenance.



Training session on wheel axle measurement

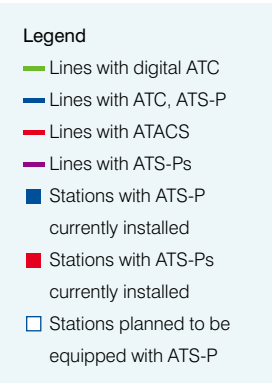


Drivers Training Simulator System

Measures to prevent train collisions

Measures to prevent train collisions

ATS and ATC  
To prevent collisions between trains, JR East has installed ATS (Automatic Train Stop) and ATC (Automatic Train Control) systems for its conventional lines and ATC for Shinkansen lines on all of its rail-way lines.



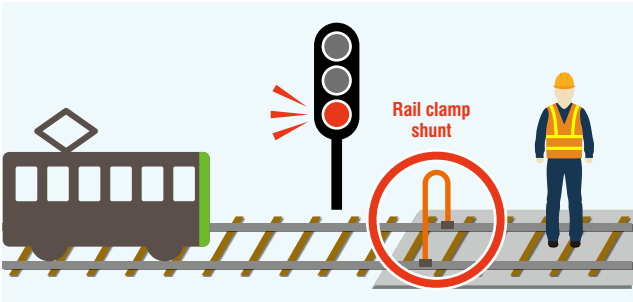
(As of the end of Mar. 2020)

Installation plan for ATS-P and ATS-Ps systems

|               | Areas for planned installation  | Installation status as of the end of FY2020  |
|---------------|---|--|
| ATS-P system  | Mainly for railway sections with frequent train operations in the Tokyo metropolitan area | Completed installation in 9 major stations and railway sections for 2,405.8km (service km) |
| ATS-Ps system | Provincial city areas and major railway sections excluding the Tokyo metropolitan area    | Completed installation in 72 major stations and railway sections for 210.8km               |

Dual safety measures

Procedures are in place to close train lines during rail construction, maintenance, and inspection (to prevent cars from entering). In addition, train shunts are used to isolate the area of track being worked on, and traffic signals are set to "stop." We install this double safety measure as a further precaution to prevent trains from entering the work location in case these other procedures fail.



Dual safety measures

Wireless system to help prevent collisions

Following a February 2014 accident involving a derailed Keihin-Tohoku Line train near Kawasaki Station, we installed a wireless system to help prevent collisions. This system supplements the emergency brake in emergency situations. A dedicated wireless terminal is used to notify trains operating in the vicinity when a state of emergency occurs so that conductors can stop their trains. This system is being used on all conventional lines.

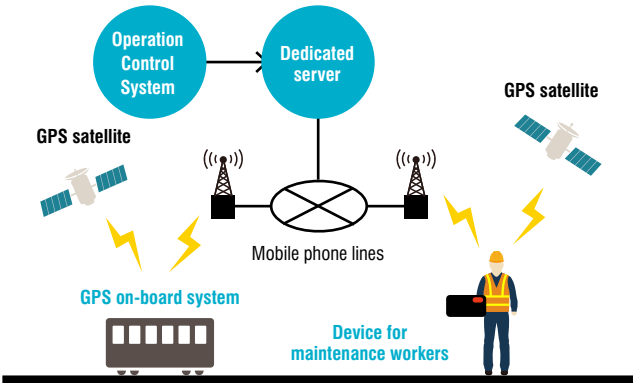
Wireless system to help prevent collisions



Train approach alarm system

Workers are provided with warning devices to communicate the "train approaching" signal. On segments where track circuits are in place, specialized wireless warning devices provide notice that trains are approaching track circuits. On segments where track circuits are undeveloped, we have installed GPS warning devices to communicate train and worker positions.

GPS train approach alarm system



Shinkansen safety measures

In April 2019, we established the Shinkansen General Management Department as a new department for the centralized and dedicated control of Shinkansen-related measures. Through this department, we aim to strengthen our response to and management of unknown risks, training of Shinkansen specialists, maintenance and enhancement of unique technologies, and rapid decision-making.

As Shinkansen-related safety measures, we are steadily performing construction to replace superannuated rail and installing equipment to prevent rails from overturning. To reduce the amount of snow brought in on high-speed sections of the Komachi, we have installed and begun using a trolley snow melting system at Okama Station on the Tazawako Line.

March 2020 marked the opening of the Shinkansen Education Rule and Training Center. This employee safety training facility has crew training simulators at all locations. It also uses full-scale equipment to encourage a better understanding of Shinkansen-specific rule mechanisms.

Furthermore, we are conducting various types of test runs using the ALFA-X test railcar, which is under development with a view to realizing the next-generation Shinkansen.



Shinkansen Education Rule and Training Center



The ALFA-X, a type E956 Shinkansen test railcar



Efforts to Further Improve Safety Levels

Preparedness against natural disaster

Our measures against earthquakes

Seismic reinforcement measures

Since 1993, we have been enacting measures to prevent bridge collapses and seismically reinforce elevated railway track pillars and bridge piers. Since FY2013, following the Great East Japan Earthquake, we have proceeded with measures on sections identified as high-priority. Based on knowledge gained from leading-edge earthquake research, in FY2018 we expanded the countermeasure area and began new reinforcement measures targeting Shinkansen girder seams.



Seismic reinforcement of embankment



Seismic reinforcement of elevated railway tracks

Emergency train stopping measures

We are constructing systems to ensure that high-speed trains can stop as quickly as possible in the event of an earthquake. For the Shinkansen, we have installed seismographs along our railway lines, in coastal areas and inland, to provide early warnings of even minor movements. In addition, we employ earthquake early warnings from the Japan Meteorological Agency and underwater seismograph information from the National Research Institute for Earth Science and Disaster Resilience in our Shinkansen early-stage earthquake warning system.

Using the seismic information provided by this Shinkansen system, we have also installed an early earthquake warning system on conventional lines to provide emergency stop notification if large-scale earthquakes are observed.

Measures to travel path departures on Shinkansen lines

We have measures in place to prevent Shinkansen trains from departing from their path of travel even in the event of derailment due to an earthquake.

L-shaped car guide



L-shaped car guide



L-shaped car guide

Preventing breaks at glued insulation joints



Rail rollover prevention devices



General emergency drills

Every year, we conduct a comprehensive disaster-preparedness drill, assuming an earthquake has struck. These drills are timed around disaster prevention week, which includes September 1. Training includes countermeasure headquarters operational drills, rescue/lifesaving training, and training on evacuation guidance. We conduct such training in cooperation with local government agencies.



Drills to operate an on-site disaster countermeasure headquarters



Drill to rescue passengers with firefighters

Preparing rescue kits and first aid kits

In the case of an earthquake with an epicenter directly beneath the Tokyo metropolitan area, many passengers might be injured and we might need to save the lives of passengers with the help of a limited number of our employees. For a major earthquake, JR East has prepared the following first aid kits and is also conducting drills to give personnel necessary first aid skills.



JR East Japan rescue/lifesaving course



Rescue kits

Measures against tsunami

Before the Great East Japan Earthquake, we had set operational restriction methods and tsunami danger zones for each location, prepared manuals, and were holding study sessions and conducting drills on guiding passengers to disembark trains for evacuation. We believe that these efforts led to the prompt evacuation of passengers away from tsunami danger zones at the time of the earthquake.



Tsunami evacuation manual



Drill to guide passengers to alight from a train for evacuation

Formulating action guidelines for evacuation to avoid tsunami

To prepare for a case when there is no time before the arrival of a tsunami, JR East formulated action guidelines for evacuation during tsunamis for each one of its employees to follow in January 2012.

Action guidelines for evacuation to avoid tsunami

1. At a time of a large earthquake, be prepared for tsunamis. Gather information by yourselves and if communication lines are disconnected, make your own decisions for evacuation. (Do not be afraid to make a mistake.)
2. Once decided to evacuate, by judging the conditions of customers, promptly guide customers to evacuate.
3. In alighting from trains, evacuating and gathering information, ask customers and local people to cooperate.
4. Even after evacuation, go to a higher place without being satisfied and thinking this would be high enough.
5. Stay evacuated with customers and do not return to field offices or trains while tsunami warnings are still issued.

Tsunami evacuation navigation system

Learning from the tsunami evacuation at the time of the Great East Japan Earthquake, we have developed and introduced tools to help crew on operating trains guide passenger evacuations in unfamiliar locations.



Tsunami evacuation navigations

Measures for rainfall

Measures for rainfall

To prevent landslides due to rainfall, JR East takes disaster prevention measures for wayside embankments in all railway sections in accordance with its plans. Especially in the Tokyo metropolitan area and for all Shinkansen routes, we take thorough measures to secure safe and stable transport.

Countermeasures for rainfall



Cutting slope protection (spray framework)



Embankment slope protection (spray framework)

Initiatives to address flooding

Having suffered significant damage due to the impact of Typhoon No. 19 (Hagibis) in October 2019, as overflowing rivers caused damage to railcars on the Hokuriku Shinkansen, we have clarified flood prevention measures. For each railway facility, we consider both tangible and intangible flood countermeasures given an assumed scale of rainfall\*1.

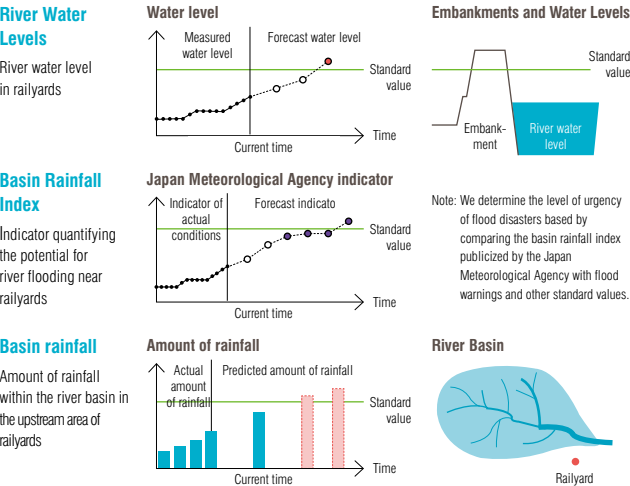
For railcars, we have put in place decision standards for railcar evacuation based on the maximum expected amount of rainfall\*2.

We are also moving forward with the development and implementation of such indicators in a system to support decisions on railcar evacuation.

\*1 This is the probable maximum level of precipitation stipulated by the Flood Control Act Enforcement Regulations (the level of precipitation used for preparation of river works). The annual probability for this level of rainfall is from one in several tens to one in 200.

\*2 This is the maximum level of precipitation stipulated in the Flood Control Act, with an annual probability of around 1/1,000.

Indicators to aid decisions about evacuating railcars



Note: In addition to these indicators, we use general meteorological information to make a comprehensive decision on railcar evacuation.

Efforts to Further Improve Safety Levels

Protecting against strong winds and gusts

Since a train accident on the Uetsu Main Line in December 2005, we have introduced the major wind-related initiatives described below.

Increased number of anemometers (wind meters)

We typically install multiple anemometers on sections wind-based operating restrictions that are in effect. We have also increased the number of anemometers in locations where windbreaks have been installed. To ensure accuracy, we are also moving toward the installation of dual anemometers.

Installation of windbreak fences

We install windbreaks to protect railcars from the wind.



Uetsu Main Line, between Sagoshi and Kita-Amarume

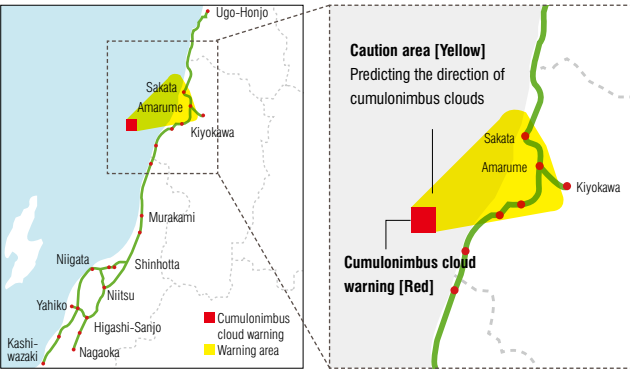
Expanded introduction of the gale warning system

With this system, operations are halted if the values measured by anemometers exceed regulation levels. Wind speed regulations also call for the halting of operations if the maximum predicted wind speed a short time in the future is expected to exceed regulation levels, based on measured values on a time axis. We have installed this system on all sections of conventional lines where wind restrictions are in place.

Utilizing meteorological information for operation control

We have developed a method to restrict operations by using meteorological information, such as rain intensity measured by the Japan Meteorological Agency's weather radar and the agency's nowcasts on the likelihood of tornados, using this information to predict gusts of wind that could be generated by cumulonimbus clouds. We are currently using this system along sections on the Sea of Japan during winter.

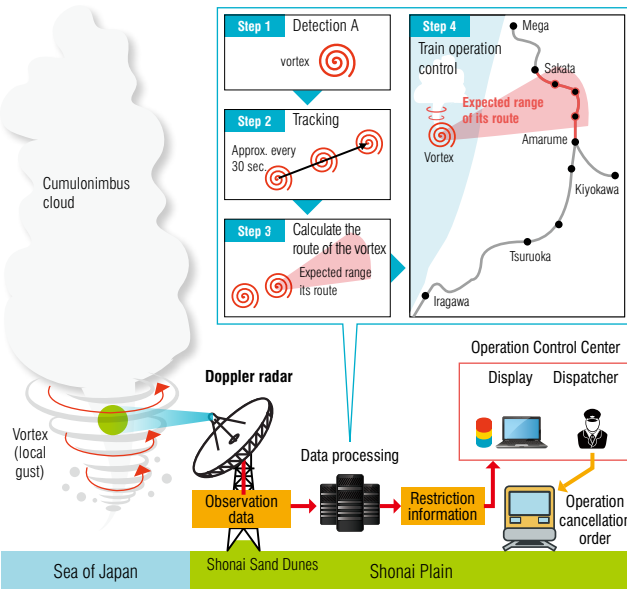
Display of operation control area by utilizing meteorological information (image)



Operation control method against wind gust using Doppler radar

We have collaborated with the Japan Meteorological Agency's Meteorological Research Institute on a system that detects vortexes by using Doppler radar to measure the movement of raindrops in the air and sounds an alarm if these vortexes come near train lines. We have put in place operating restrictions using this system in winter on the Uetsu Main Line and sections of the Rikuu West Line. We are also expanding the scope of measurement employing operating restrictions and working with the Meteorological Research Institute on research using AI to detect gusts of wind.

Doppler radar observation method



Doppler radar installed at Kuromori, Sakata

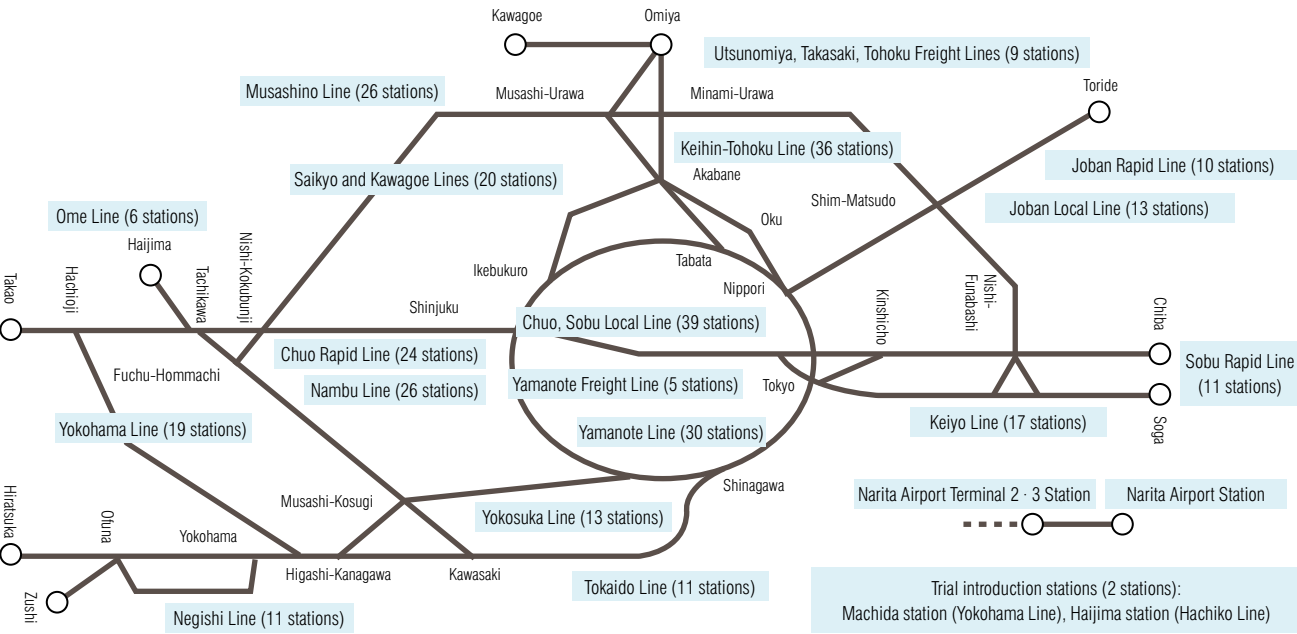
Safety measures at platforms

To prevent accidents involving customers falling from platforms or coming into contact with trains, we are installing platform doors. By the end of FY2020, we completed the installation of platform doors at 48 stations mainly on the Yamanote, Keihin-Tohoku, and Negishi lines (a total of 57 stations\* by line).

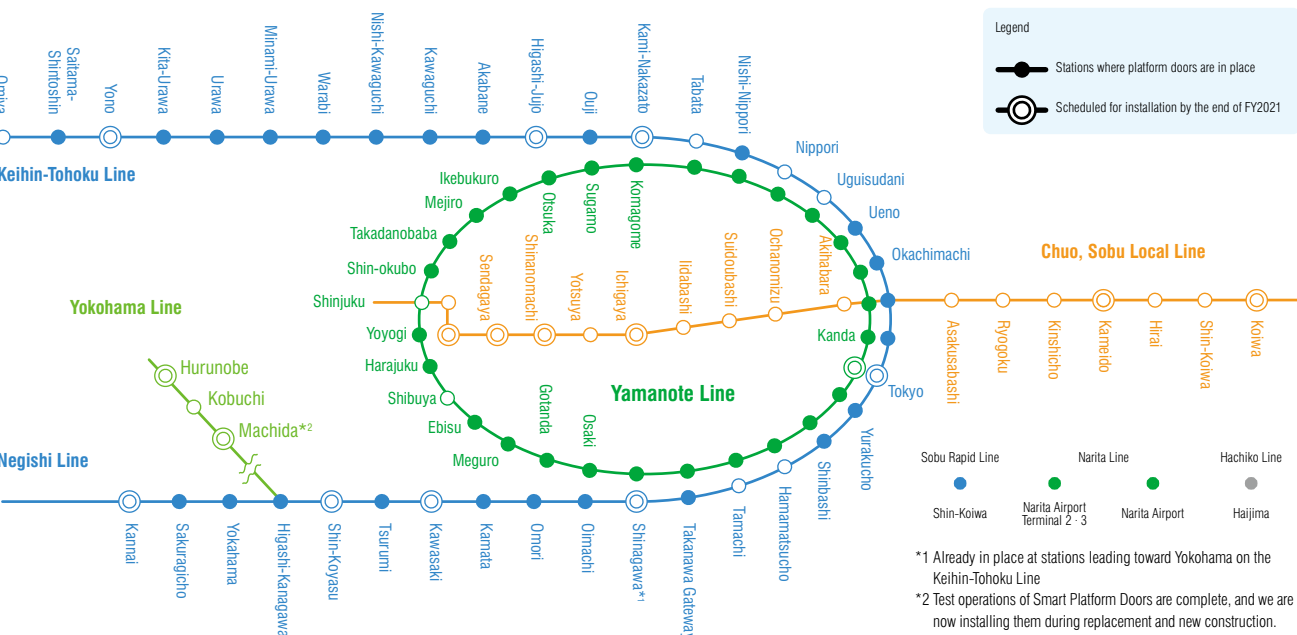
Going forward, we plan to proactively deploy newly developed Smart Platform Doors. As a result, by around the end of FY2033 we plan to have installed platform doors at all the stations on the major conventional lines in the Tokyo metropolitan area (330 stations by line, including the 243 stations where we have completed the installation to date).

\* No. of stations is counted by line, e.g., Yurakucho Station is counted as two stations, one for the Yamanote Line and one for the Keihin Tohoku Line.

Railway lines where platform doors are scheduled for installation by the end of FY2033 (as of March 2018)



Stations where platform doors are installed or scheduled for installation in FY2021(as of April 2020)



\*1 Already in place at stations leading toward Yokohama on the Keihin-Tohoku Line  
\*2 Test operations of Smart Platform Doors are complete, and we are now installing them during replacement and new construction.



Efforts to Further Improve Safety Levels

CP (color psychology) lines



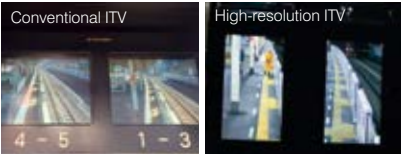
Lines use colors that people associate with danger to encourage a visual and psychological connection between danger and the edges of platforms.

Dot-Braille blocks that indicate which direction is away from the edge of the platform



We have designed linear protrusions on the insides of platforms and put in place blocks that make it easy to distinguish platforms' insides from their outsides.

Installation of high-resolution ITVs



We have installed high-resolution monitors for station employees and customers to check.



Fall detection mat



A mat placed on the tracks along the platform detects whether a person has fallen onto the tracks and notifies incoming trains to stop.

Emergency stop buttons on platforms



On platform pillars, we have installed emergency stop buttons so people on platforms can notify drivers, conductors, and station staff of danger.

Platform doors

We are installing platform doors to prevent people from coming into contact with trains or falling onto tracks.

JR East is currently working to install an increased number of emergency stop buttons on platforms and dot-Braille blocks that indicate which direction is away from the edge of the platform.

Moreover, to ask customers for their cooperation in preventing accidents, we are promoting platform zero accident campaigns.

Measures to prevent level crossing accidents

We are working to reduce accidents on roads that cross railways.

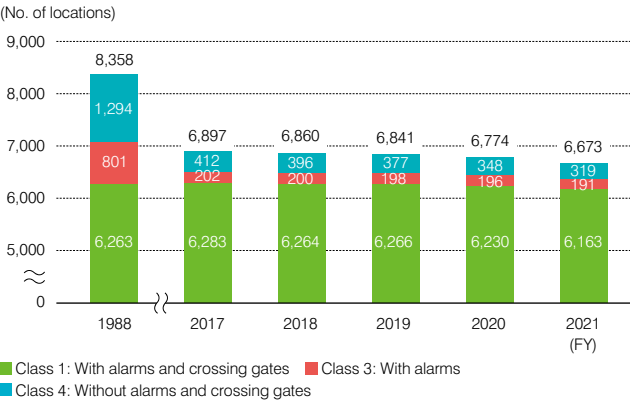
Our efforts to eliminate level crossings

Our principal measure for preventing accidents at level crossings is to eliminate such crossings. We are working with people in local communities to elevate, consolidate, and eliminate tracks. Where eliminating level crossings is difficult, such as for Class 3 and Class 4 crossings, we are converting them to Class 1 crossings.

No. of eliminated level crossings by measures such as the introduction of overhead crossings (excluding those transferred to third sectors)

| FY             | 2016 | 2017 | 2018 | 2019 | 2020 |
|----------------|------|------|------|------|------|
| No. eliminated | 18   | 42   | 20   | 17   | 7    |

Changes to the number of level crossings (as of April 1st every year)



Installing obstacle detectors

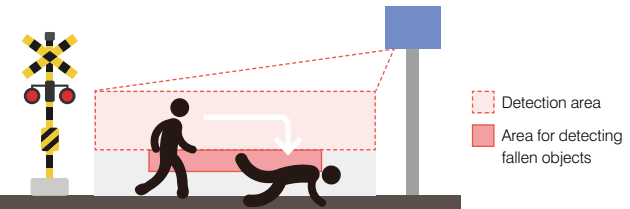
To train derailment due to collisions with automobiles (including large ones), we are installing equipment to detect automobiles stuck at level crossings that trains will be passing through.

Our obstacle detectors use 3D laser radar to detect the overall level crossing areas. Going beyond conventional functionality (the ability to detect pedestrians), the new devices feature technologies to detect people who have fallen. We began installing these devices in FY2020 and are steadily increasing their number.



Three-dimensional laser radar obstacle detector

Increasing the Level of Sophistication of Obstacle Detectors with 3D Laser Radar



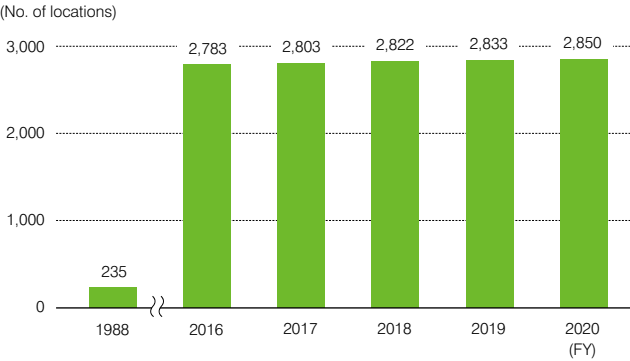
Function for detecting fallen objects

In the past, devices did not detect in certain areas to avoid over-sensitivity, such as detecting small animals. We overcame this shortcoming by adding a function that broadens the detection area around the object in question.

Noise removal function

We added a function to reduce false positives, akin to the process of using snow removal to eliminate floating substances.

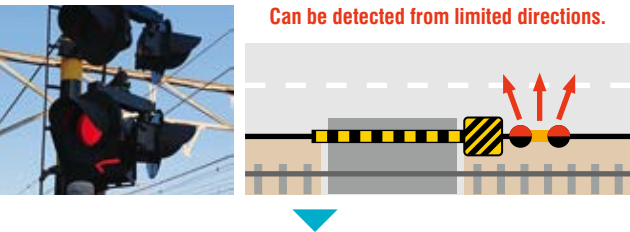
No. of locations with obstacle detectors (as of the end of Mar. every year)



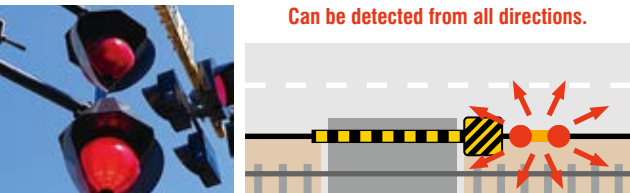
Installing omnidirectional warning lights

Regarding level crossing warning lights to notify the approaching of a train, we are replacing conventional warning lights with omnidirectional warning lights so that they can be easily detected by the elderly with lower sight lines and automobile drivers who enter level crossings from roads.

Conventional warning light



Omnidirectional warning light





Efforts to Further Improve Safety Levels

Level crossing for easier passage

Based on the Act on Promotion of Level Crossings, we are elevating and widening roads at level crossings designated for improvement. In addition, where necessary we are using colored pavements or adopting other approaches for roads that cross railways (such as building pedestrian overpasses), making improvements as dictated by local conditions.



In cooperation with road administrators, we are increasing the width of level crossings and separating crossings for pedestrians from those for automobiles by changing the colors of the roads and walkways.

Initiatives involving Class 4 level crossings

Class 4 level crossings are not equipped with alarms or crossing gates. We are working with local communities to eliminate such crossings or upgrade them to Class 1 level crossings. In addition, as another measure to prevent accidents at level crossings we are erecting signs calling for caution and erecting whistle boards to warn people at crossings of approaching trains.



Class 4 level crossing

Safety efforts with customers and people in local communities

Rather than conducting initiatives on our own as a railway operator, we communicate information to the people who use our services and elicit their cooperation in our efforts to enhance the safety of station platforms and level crossings. We also collaborate with related institutions in conducting awareness activities targeting schools. Each year, we also run campaigns, broadcasting television commercials in the JR East Service area, as well as broadcasting radio commercials jointly with other railway operators.



Level crossing zero accident campaign



Platform zero accident campaign



Holding a level crossing safety lesson



Awareness activity: hands-on simulation of pressing the emergency button at a level crossing

Current Safety Record of JR East

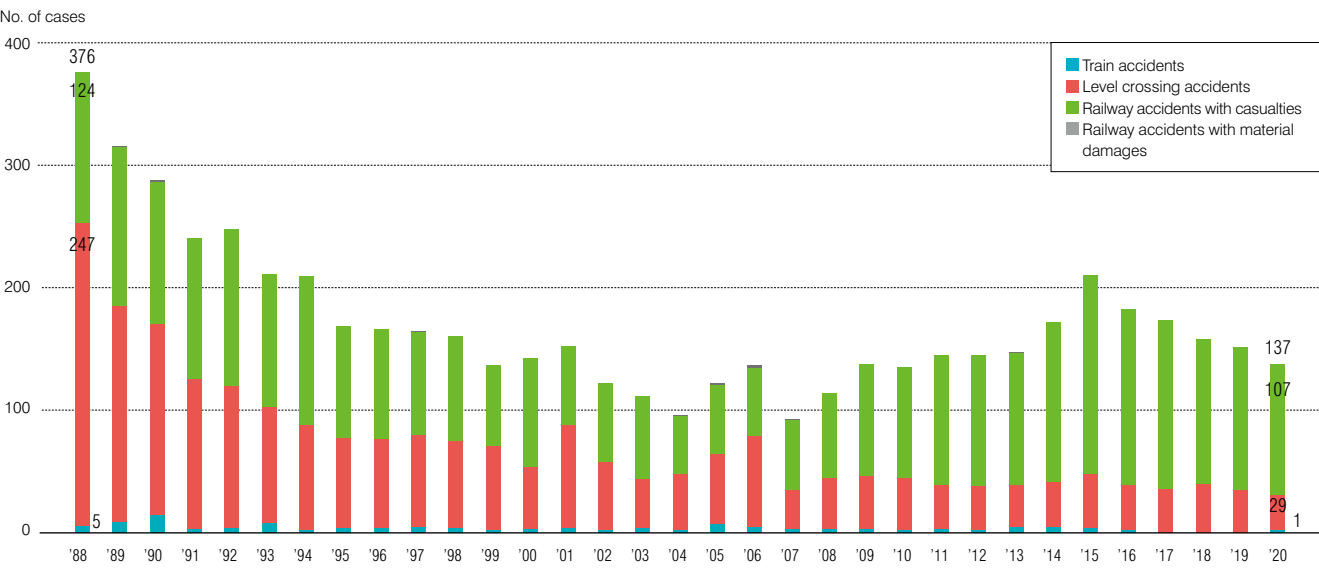
Railway accidents

In FY2020, JR East recorded 137 railway accidents, down significantly from the level at the Company's foundation. "Railway accident with casualty" account for approximately 80 percent of the total number of "railway accidents."

|   |   |
|---|---|
| Train accidents                         | Train collisions, derailments, and train fire                                   |
| Level crossing accidents                | People or automobiles being hit by trains                                       |
| Railway accidents with casualties       | People killed or injured by train operation excluding suicide                   |
| Railway accidents with material damages | Accidents causing more than 5 million yen damage to property by train operation |

Occurrences of railway accidents

\* From the third quarter of FY2014, incidents which could not be determined to be a suicide are involved in accidents at rail crossings or fatalities or injuries.



Train accidents

In FY2020, an accident occurred on the section of track between Shibukawa Station and Shikishima Station on the Joetsu Line, when a train hit landslide rubble (including uprooted trees) from a nearby slope, derailing the train.

Incidents

JR East recorded one incident (equipment failure) in FY2020.

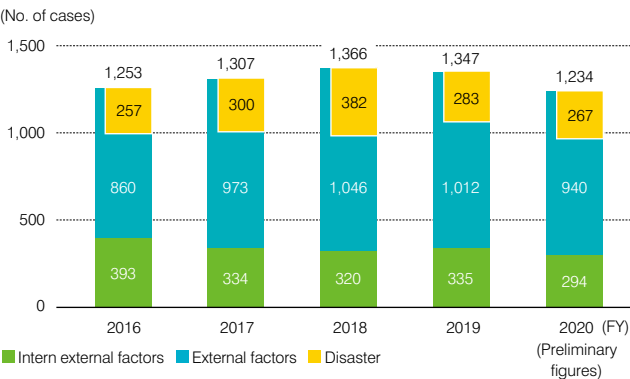
|           |   |
|-----------|---|
| Incidents | "Incidents" mean situations that could lead to a railway accident. The definitions of incidents are stipulated by the rules and regulations for railway accidents that require reporting. |
|-----------|---|

Transport disorders

JR East recorded 1,234 cases of transport disorder in FY2020.

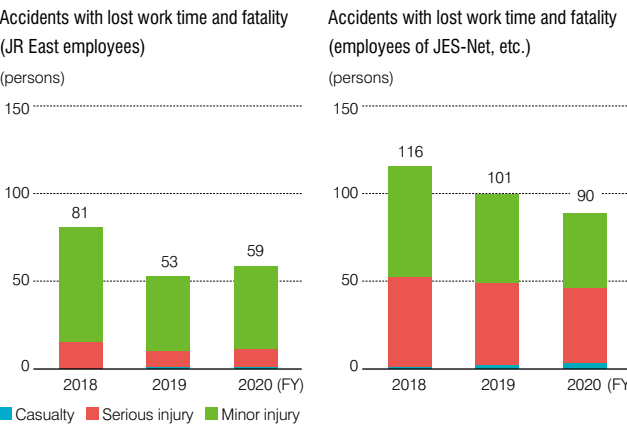
|                     |   |
|---------------------|---|
| Transport disorders | Except railway accidents, there are transport disorders, which encompass train service cancellations due to failures of trains or facilities, mishandling by employees, or disasters, or delays to passenger trains for over 30 min. or other trains for over 1 hour. |
| Disaster            | Natural phenomena such as powerful storms, heavy rainfall, heavy snowfall, flooding, high tides, earthquakes, tsunamis, etc.  |
| External factors    | External factors such as trespassing or suicide   |
| Internal factors    | Internal factors such as those related to staff, trains, or facilities  |

No. of transport disorders



Employee accident

In FY2020, three lives were lost due to accidents, and 146 accidents resulted in lost work time.





# Society

Main commitment goals

9

INDUSTRY, INNOVATION  
AND INFRASTRUCTURE

11

SUSTAINABLE CITIES  
AND COMMUNITIES

5

GENDER  
EQUALITY

8

DECENT WORK AND  
ECONOMIC GROWTH

12

RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION

Related goals

3

GOOD HEALTH  
AND WELL-BEING

4

QUALITY  
EDUCATION

10

REDUCED  
INEQUALITIES

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a Sustainable Society:  
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## Relationship with Passengers

Expanding the railway network

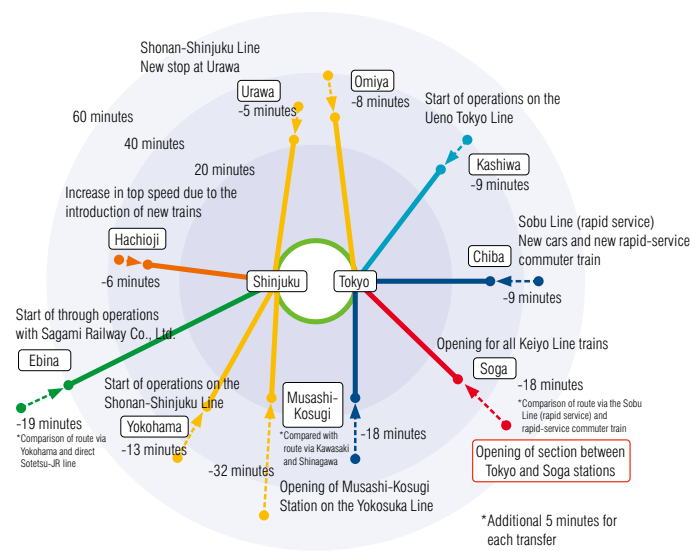
Network of conventional lines

Through such measures as commencing operation on the Shonan-Shinjuku and Ueno Tokyo lines, we are expanding the railway network to make travel faster and more convenient for passengers, which helps raise value along railway lines.

In November 2019, through operations commenced between Ebina Station on the Sotetsu Line and Shinjuku Station on the Saikyo Line, we provide a seamless link between central Tokyo and the eastern part of Kanagawa Prefecture.

We are also moving forward with plans to conduct environmental assessments on the Haneda Airport Access Line (provisional name). Going forward, we will continue working to enhance passenger convenience and contribute to development in local communities.

Changes in travel times (Compared with 1987)

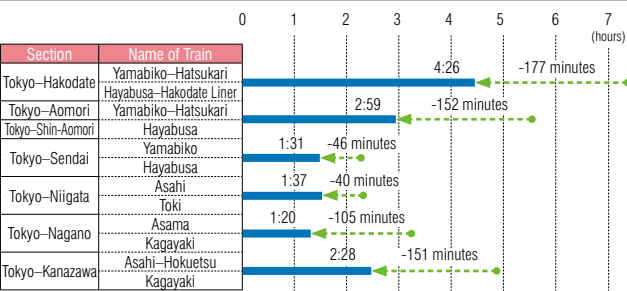


Shinkansen network

Since our establishment in 1987, expansion of the Shinkansen network and higher-performance rolling stock have shortened travel times and substantially enhanced passenger convenience.

By improving equipment and introducing new models of rolling stock, we will continue working to shorten travel times, effectively shrinking the distance between Tokyo and other regions, having a major impact on regional economies.

Changes in travel times (Compared with 1987)



Medium-term Vision for Service Quality Reforms 2020

We have been working to improve our service quality by implementing a variety of measures. "Medium-term Vision for Service Quality Reforms 2020" outlines our vision for accelerating and further developing the initiatives we have implemented to date, with the aim of being number one for passenger satisfaction in the Japanese railway industry.

"Medium-term Vision for Service Quality Reforms 2020," this document describes the acceleration and further development of the initiatives we have implemented to date, with the aim of being number one for passenger satisfaction in the Japanese railway industry.

Preventing transport disruption

We will resolutely strive to prevent transport disruptions from every aspect.

Minimizing effects of disruptions on passengers

We will respond flexibly through actions such as turning trains back and promptly resuming train operations.

Provision of information during emergencies

In order to help passengers, decide on their next step, we will communicate information without delay during emergencies.

Realizing railway services passengers can use comfortably

We will provide stations, railcars, and services that live up to passenger expectations of JR East.

Providing impressive passenger service

We will offer services that inspire passengers to use our Group again.

Confirm understanding of issues and effects of measures implemented through service quality diagnosis

We conduct service quality diagnoses to obtain an overall assessment of how passengers evaluate our transportation services, gain a quantitative understanding of customer satisfaction, and undertake initiatives to further enhance customer service quality.

We conduct an online survey of customer satisfaction. We also have employees fill out the same survey to clarify any discrepancies between customer and employee perspectives. We feed the results of these diagnoses back to branch offices as "diagnostic records of service quality." This approach helps branch offices to understand their strengths and weaknesses. This information can be reflected in branch-specific targets and measures.

Provide reliable transportation services

We are implementing various measures to improve transport quality by preventing transport disruptions and by stepping up early resumption of operations after transport disruptions, as well as preventing disruptions that affect connecting lines, in order to minimize the impact on passengers.

Preventing transport disruptions

We are trying to prevent similar transport disruptions focusing on the causes of transport disruptions that occurred in the past.

Rolling Stock

- Doubling up on major equipment and otherwise ensuring systems are redundant, and boosting reliability through the introduction of Series E235, Series E353, and other new types of rolling stock
- Performing equipment upgrades on conventional rolling stock

Equipment

- Simplifying and consolidating electrical equipment (moving to integrated overhead wiring, for example)
- Countering strong winds and snow by erecting windbreak fences and installing snow-melting systems

Other

- Introducing suicide prevention measures
- As measures to prevent collisions with animals, scattering repellent materials and introducing repellent equipment that uses laser light and sound



As suicide prevention measures, employees call out to the stationmaster, and Company veterans patrol stations.

Prompt resumption of train operations after transport disruptions and minimization of the effects of disruptions to other sections

To minimize the impact on passengers, we try to turn trains back before they enter the disrupted section or operate other routes wherever possible.

Furthermore, through drills and other measures we maintain efforts to enhance our post-disruption response abilities.

After a transportation disorder occurs, we look back and reflect on the status of each worksite at the time of response. Based on our findings, we consider measures to prevent recurrence. By sharing information about countermeasures widely throughout the Company, we strive to enhance individual employees' performance levels.



Exit guide drill



Joint training with police and firefighting personnel on restoring service following a personal-injury accident

Relationship with Passengers

Enhance information provision during transportation service disruptions

Information enhancement

We use a variety of media to disseminate information on train operation to passengers. In emergencies, we also make verbal announcements by sending data in multiple languages to station and railcar attendants (Japanese, English, Chinese, and Korean). Announcements are broadcast in stations and trains, as conditions warrant.

As web services

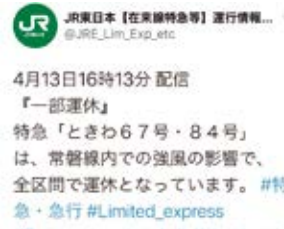
Our website

We provide information in four languages (Japanese, English, Chinese, and Korean) about train operations and whether limited express trains on conventional lines are operating.



On social media

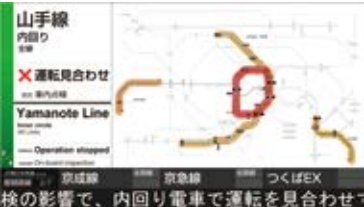
Twitter (Japanese, English)



At stations

Information display during transport disruptions

320 stations and 654 rail cars as of March 2020



QR code

We distribute these sheets to station staff to help them provide information to passengers from overseas.



In trains

LCDs



Timely information provision through smartphones

We send information via an app that allows passengers to confirm the operating status of trains on their own in a timely manner.

JR East App

In addition to route searches, this app allows passengers to easily check operation information and current train locations.



JR EAST Train Info

In addition to providing information in English, Chinese (simplified and traditional), and Korean, in March 2020 we added functionality that allows passengers to search for station names by number, landmarks, and event information. We also added external links on our website.



Doko-train

Centering on regional train lines, this feature provides information about train delays and current locations.

Announcement of train service resumption times during disruptions

When a disruption has occurred, we aim to announce the anticipated time at which operations should resume within about 30 minutes from occurrence of transport disruptions (within 15 minutes in the case of accidents resulting in casualties) and the announcement rate was 96% in FY2020. We will endeavor to enhance early provision of more accurate information going forward.

Passenger services tailored to passengers' situation

Improving passenger service

We utilize the "Green Handbook," which establishes the basics of passenger service, at workplace study sessions in an effort to enhance passenger service among all employees.



Green Handbook

Acquisition of Service Care-Fitter

We encourage our employees to qualify themselves for certification with the aims of acquiring a hospitality mindset and assistance skills. (Approximately 18,000 employees from all job category groups were certified as of the end of FY2020.)



Qualified employees wearing name badges with "Service Care-Fitter" written on them

Assistance and Support campaign

We have a campaign in which we personally greet all passengers in need, including passengers with disabilities, to make sure that they can use our stations and other facilities safely and with a sense of security. We conduct this campaign in collaboration with other transportation service operators and organizations around Japan.



We promote this campaign of greeting others to foster momentum for supporting one another and create a harmonious society.

Realizing railway services that passengers can use confidently and comfortably

Barrier-free stations

Installing elevators

JR East has been working with local governments and other entities to install equipment at stations in accordance with the "new barrier-free law (Act on Promotion of Smooth Transportation, etc. of Elderly Persons, Disabled Persons, etc.)". As of the end of July 2020, we had completed the installation of equipment in 517 stations.

Upgrading environments for people in wheelchairs

To close the gap between station platforms and railcar doors, platform doors are equipped with slopes that raise when trains arrive. Furthermore, to narrow the gap between railcars and station platforms, comb-shaped extenders are installed on the edges of platforms (two locations on each platform) at some stations on the Yamanote, Keihin-Tohoku, Chuo, and Sobu lines.

At some stations on the Yamanote Line, we aim to reduce wait times at train stations for customers who wish to get off the train on their own, by eliminating the need to contact employees at stations where they will disembark.



Comb-shaped sections

Barrier-free railcars

Series E233 trains

- Height of luggage racks and hanging straps changed at the front of train cars, including priority seating
- Clarification of priority seating areas
- Announcing devices to provide text-based dissemination of operation information and efforts to adopt universal design (Chuo Line Rapid Service, Saikyo Line, Yokohama Line, Nambu Line, others)

Series E235 trains

- More priority seating on each train
- Open space on all trains to accommodate wheelchairs and passengers using baby strollers (In addition to the Yamanote Line, future adoption planned for the Yokosuka/Sobu Line Rapid Service)



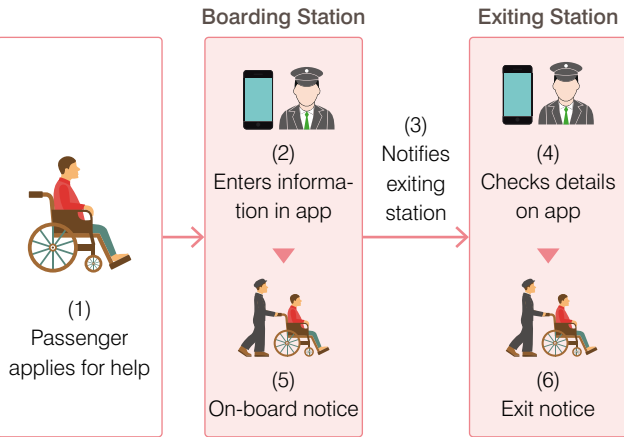
Free space on E235 series

Multipurpose rooms and spacious toilets for people in electric wheelchairs with improved handles

- Introduction of new rolling stock for Narita Express E259 Series limited express and E5 Series for the Shinkansen

App to alert personnel to passengers boarding and exiting

We have developed an app to automatically notify station and railcar attendants when passengers in wheelchairs request assistance in boarding and exiting trains. We deployed this app on the Nambu Line in March 2020. We plan to expand the app's coverage, mainly in the Tokyo metropolitan area and on the Yamanote and Keiyo lines, helping to reduce passenger waiting times.



\* The figure above shows the flow of information when using the app.



Relationship with Passengers

Escalator safety measures

We are carrying out safety enhancements, including measures to keep sandals from getting caught, protect against falls during emergency stops, and prevent steps from descending when escalators stop.

We are also working together with other railway companies, retailers, and other facilities on campaigns that use posters and other means to call for the safe and proper use of escalators.



"Escalator Safety" campaign poster

Measures against female molestation

In addition to adding women-only cars during certain hours in various railway sections in the Tokyo metropolitan area, we have been continuously installing SOS buttons on all railcars 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. We are also taking other measures to ensure that women can travel safely and peacefully. For instance, we are conducting proof-of-concept testing on anti-molestation measures that use a smartphone app.



Anti-molester campaign poster

Anti-crime and anti-terrorism measures

Installing security cameras

- Stations (near ticket gates, elevators, stairs, platforms)
- In trains\* (passenger areas and decks)
- Important equipment, etc.

\* With the exception of some rolling stock scheduled for disuse, we plan to have security cameras in place on all Shinkansen trains and conventional lines in the Tokyo metropolitan area by FY2021.

Other countermeasures

- As protection against violence, installation of SOS buttons that passengers can use to notify railcar attendants of danger
- More shields and other protective equipment, as well as first aid equipment, on Shinkansen trains

Addressing measures to reduce congestions at the morning commuter rush hours

We have been working to increase the number of trains and make cars wider. At the same time, we are introducing measures to accommodate more widely distributed passenger seating and off-peak commuting.

Crowding is one reason for train delays during morning commuting times. To address this situation, we have put up station notice posters and provided information on apps showing which train lines and cars tend to be crowded, so passengers can adjust their locations. In particularly crowded stations, we have even set up queueing and no-entry zones to smooth the flow of passenger traffic.



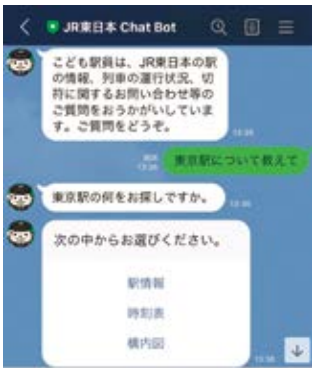
Queueing lines



Using unique characters to urge passengers to cooperate with train-riding manners

System to respond to inquiries

Our contact center fields several thousand inquiries each day. To help us respond promptly and accurately, we have introduced an operational support system that utilizes AI. Also, calls are regularly monitored and assessed in an effort to augment the quality of our responses. On our official LINE account, we use the JR East Chat Bot to respond in a chat format and respond to inquiries concerning such matters as lost property. This move is one of our efforts to enhance passenger convenience.



The "Child Station Crew Q&A" fields queries about usage and various services.



We use chat to field inquiries about lost property. The operator then accesses the lost property search system and reports search results via the "lost property chat" function.

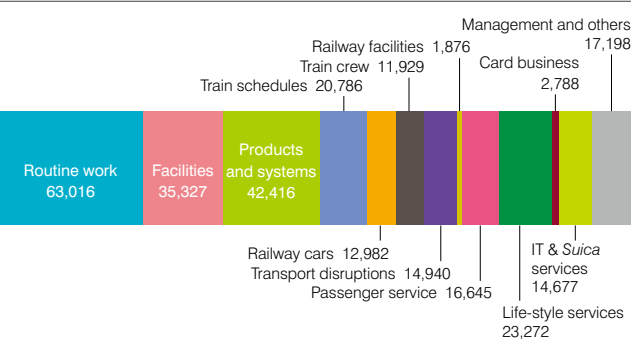
Increase mutual communication with passenger feedback as the starting point

Constant attention to passenger comments

To constantly improve our services, we believe it is most important for us to listen carefully to passenger comments, including their interests and complaints, and then promptly respond to their requests through service improvements.

We are endeavoring to collect passenger comments, including those which are received by each of our employees directly from passengers and those posted on the internet, those given over the telephone, and those which can be collected by utilizing other various types of tools. Such passenger comments amount to approximately 280,000 cases annually, and all of these comments are quickly shared and analyzed via a companywide database New Green Information System, and form the core of our improvements. We believe that each and every individual passenger comment contributes to the core of improved passenger satisfaction.

Itemized breakdown of the passenger comments in FY2020 (number)



Passenger comments are considered at various levels within the Company. While actions of improvement are taken as much as possible for the passenger comments received, if workplace and other improvements are difficult to undertake at that level, then the comments are passed on to the Passenger Comments Committee comprised of concerned executive officers, which considers the possible implementation of improvement measures. Through this system, we are striving to improve passenger services.



\* Improving the method of entering information in the JR East Train Info is one example of an improvement made on the basis of passenger feedback.

Utilization of SNS

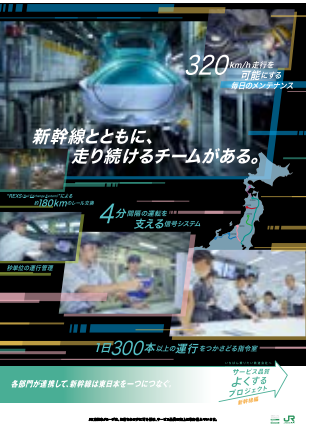
One way we learn about passengers' needs is through the feedback they provide us directly. We also recognize the need to actively gather and analyze passenger feedback from a variety of other sources. To this end, we strive to ascertain potential feedback through social media postings.

We foster communications with customers through our official Facebook and Twitter pages. We proactively send out information about various measures and campaigns, as well as commenting on and responding "Like" to postings, to identify passengers' needs and opinions.

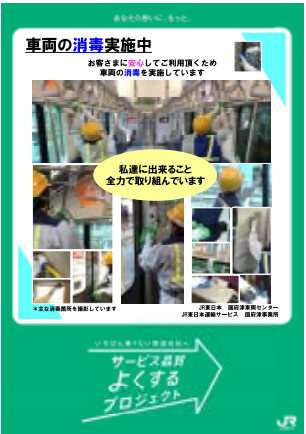


Service quality "Yokusuru Project"

Using posters, videos, and other media, we provide customers with employee insights on our policies and actions to improve the quality of our services. Individual workplaces use posters and other means to highlight improvements they have made in response to customer feedback.



Service quality "Yokusuru Project"





Relationship with Passengers

Service improvement for inbound tourists

JR EAST Travel Service Center

We have set up 72 of these locations, which sell railway passes, exchange vouchers for tickets for customers who have pre-purchased tickets overseas, handle seat reservations, and provide travel information. We maintain the system to reduce customer waiting times.

In March 2020, we took the lead in Japan in launching a Travel Information Counter within our JAPAN RAIL CAFE TOKYO. The counter handles sales of railway passes, exchanges, introduces Japan's attractions to passengers from overseas, and provides them with the impetus to travel to various parts of the country.

Railway passes for foreign visitors to Japan

We offer convenient and reasonably priced products that encourage customers to enjoy traveling about Japan by train. As of April 2020, some passes allow passengers to use automatic ticket gates and make seat reservations at designated Reserved Seat Ticket Vending Machines.

In November 2019, our website became available in nine languages, which used to be in four, and that makes information more easily understandable to a wider range of passengers.

Key Products

JR EAST PASS

Pass providing unlimited travel within the applicable area

\* Two products available: Tohoku area, Nagano/Niigata area

JR TOKYO Wide Pass

Pass providing unlimited travel within the Kanto area

\* As of April 2020, these tickets can be used in automatic ticket gates and to make seat reservations at designated Reserved Seat Ticket Vending Machines.

N'EX TOKYO Round Trip Ticket

Ticket providing access to the Tokyo area from Narita Airport

Hokuriku Arch Pass

Pass providing traveling on the Hokuriku Shinkansen

\* As of April 2020, these tickets can be used in automatic ticket gates and to make seat reservations at designated Reserved Seat Ticket Vending Machines.

Seat reservation system allowing reservations from overseas

We have introduced "JR-EAST Train Reservation," a seat reservation website that also helps passengers from overseas reserve seats on our Shinkansen and major limited express trains (available in English, simplified and traditional Chinese, and Korean).

In addition to Joyful Trains that are popular overseas, our system can now be used by even more passengers, as it allows reservations on Shinkansen and limited express trains in the JR Hokkaido service area and sections of the Hokuriku Shinkansen operating in the JR West service area.

Welcome Suica

In September 2019, the JR EAST Travel Service Center began selling *Welcome Suica* to passengers from overseas. *Welcome Suica* can be used for 28 days from the time of purchase. They do not require the ¥500 deposit that is required for other *Suica* cards, and now *Welcome Suica (with IC Special Pass)* is available, which is available in bulk sale and comes preloaded with a specially planned IC ticket. *Welcome Suica* facilitates smooth and cashless travel.



Free public wireless LAN service for overseas visitors

We offer the service at all Yamanote Line stations and other stations that are frequented by passengers from overseas (113 stations), as well as at 11 travel service centers (as of March 31, 2020). We also offer a free public wireless LAN service at the stations where Shinkansen stops via "JR-EAST FREE Wi-Fi" or services provided by municipalities or telecom companies.

We are expanding the services in railcars of Narita Express and limited express trains on the Chuo Line (E353-series), as well as on the Shinkansen.



IT and Suica business

We collaborate with other transportation operators throughout Japan, as well as companies outside the Group, to enhance passenger convenience and promote the use of *Suica* cards. We also cultivate member stores where *Suica* cards can be used as e-money and promote their use to encourage the transformation toward a cashless society.

Expanding the Suica area

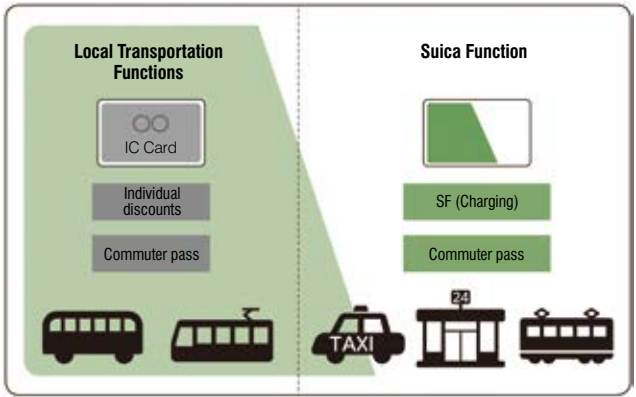
In March 2020, we expanded *Suica* use within our service area to include five stations on the Kashima Line in the Tokyo metropolitan area (from the Junikyo to Kashima Soccer Stadium stations) and 15 stations on the Joban Line, between Kusano and Namie stations (Tokyo metropolitan area) between Odaka and Iwaki-Ota stations (Sendai area). Outside our operating area, it became possible to use *Suica* cards on the Okinawa Urban Monorail.

As of April 1, 2020, the *Suica* card can be used at 840 stations in the JR East service area. Nationwide, the *Suica* card can be used at around 5,000 stations, including those available through reciprocal service arrangements with other companies.



Multi-function card for regional transit

In spring of 2021, we plan to begin providing regional transportation operators with cards that make region-specific services and *Suica* services available in a single card.



Target functionality



How the cards might be used

Cashless, customer-returns business

In October 2019, JR East Group began participating in the cashless, customer-returns business lead by the national government. Under this scheme, we reimbursed *JRE POINT* to customers who used *Suica* (registered *Suica*) or Viewcard at eligible small and medium-sized shops and companies. At the same time, we held a special marketing campaign. Under this campaign, we offered additional points back when customers used *Suica* (registered *Suica*) or *JRE CARD* at the eligible merchant stores within JR East Group. Through these initiatives, we are leading a cashless society and enhancing customer convenience.



Materials promoting the campaign

JRE CARD

*JRE CARD* is a convenient credit card that lets cardholders accumulate *JRE POINTs* when they are used at train stations or for purchases at train station buildings (*JRE CARD* preferred shops) and *JRE MALL*.



JRE POINT logo



JRE CARD

JRE MALL

This is a new shopping website for creating more connections with customers revolving around *JRE POINT*. We also intend to further promote an omnichannel approach across the Group by deploying online in-station services which enable to make advance purchases at eCute stores and the like online, then pick them up in person.




Relationship with Passengers


Promoting MaaS

As stated in our corporate vision, “Move Up” 2027, we aim to develop an all-in-one “Mobility Linkage Platform” that offers travel information such as ticketing and payment services, in order to provide “seamless mobility,” “shortening total trip time,” and “stress-free travel.” We will continue advancing MaaS (Mobility as a Service) to make daily lives more convenient and travel experiences more enjoyable.


Our “JR East App” provides route navigation and train operation information, and our “Ringo Pass” integrates transactions for various mobility services. We have also been conducting MaaS trials in sightseeing destinations to provide seamless travel for tourists, as well as PoCs in the Tokyo metropolitan area.




**Ringo Pass**  
Smartphone app for mobility services

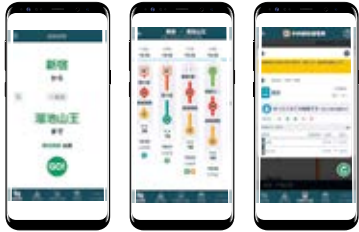


Make payment by scanning QR codes (taxis)




Unlock bicycles by tapping Suica cards (shared bicycles)






Our JR East App provides information about train operations and congestion as well as route navigation.



**ググっとくんMaaS**  
MaaS PoC for tourists during the Gunma Destination Campaign  
(April 1 to June 30, 2020)



**TOHOKU MaaS**  
MaaS PoC targeted for the Tohoku Destination Campaign  
(February 1 to 29, 2020)

Technical innovation

The Group's medium- and long-term vision for technical innovation, as formulated in November 2016, is to accelerate research and development activities so as to create new AI-based value from data gathered through business activities of the entire Group, highlighting four key areas; namely Safety and Security, Services and Marketing, Operations and Maintenance, and Energy and the Environment.

Development of next-generation Shinkansen

As a testing platform, the Class E956, named “ALFA-X” was inaugurated in May 2019. The train is operating on a trial basis in the Tohoku Shinkansen, mainly between Sendai and Shin-Aomori.

In FY2020, performance tests up to 400kph were conducted to confirm various aspects of development, including tests on the JR Hokkaido line as a through service area.

Introduction of robots

The Mobility Innovation Consortium was formed in 2017 as a venue for fostering mobility through open innovation. Membership includes more than 150 companies and organizations, such as Japanese and overseas manufacturers, as well as research institutions. Various proof-of-concept tests are underway, some involving the use of robots. As part of these activities, Takanawa Gateway Station, which opened in March 2020, features state-of-the-art station services. Robots provide guidance using AI, and autonomous mobile security and cleaning robots have been deployed on a trial basis.



Challenge of Self-Driving

JR East conducted ATO test runs on E235 Series rolling stock on the Yamanote Line from December 2018 until September 2019, and field tested autonomous-driving technology for buses with an eye on commercialization between the BRT Yanaizu Station and the Rikuzen Yokoyama Station on the Kesennuma Line from November 2019 to February 2020.


In addition to developing and rolling out cutting-edge technologies, JR East aims to realize safe, secure, and sustainable transportation services while working to resolve a variety of issues related to services, laws, regulations and social acceptance of new technologies.

Realization of smart maintenance

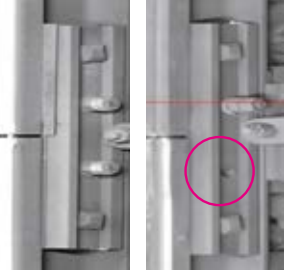
JR East is drawing up plans to optimize spending on maintenance management by transitioning to CBM,\* which is based on equipment degradation forecasts and breakdown predictions, for managing maintenance that has focused on periodic inspection to date, for rolling stock and aboveground equipment that supports railway operations.

While proactively innovating on the technological front for situational awareness, we are focusing on the evaluation duties performed by maintenance engineers to raise safety and quality to higher levels.

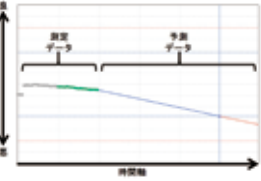
\* CBM: Condition Based Maintenance




Traditional rail track inspection



[Normal] [Defect]  
Evaluation using track material data



Track displacement prediction graph



Data analysis by a rolling stock maintenance engineer

Examples of CBM

|                      |  |
|----------------------|--|
| <b>Rolling stock</b> | Currently, the condition of major equipment is being monitored from both devices on board and those on the ground, and we plan to utilize the system for grasping signs of failure and reviewing inspection methods.                                     |
| <b>Track</b>         | We will collect data on track displacement (slight distortion and/or gap of track width), track materials (rail fastening devices), etc. and use it for prediction of track displacement, confirmation of the material condition, planning support, etc. |
| <b>Electricity</b>   | We collect data on abrasion of trolley wires (wearing of wires caused by friction), etc. and use the data for wear prediction and factor analysis.   |

Installation of monitoring systems

By installing monitoring systems for rolling stock equipment, rail track, and power equipment on operating trains, JR East is able to get a real-time picture of conditions for rolling stock and above-ground facilities.

The Company plans to install monitoring systems for rail track equipment on a total of 50 sections of approximately 6,500 kilometers of track, which is roughly 70% of JR East's rail lines, by the end of fiscal 2020. This will allow for preventive maintenance, such as making repairs and improvements at the optimal time, by replacing traditional periodic track inspections with data from monitoring systems.

For E235 Series rolling stock, which has railcar equipment with condition monitoring functions installed, JR East has taken a new approach to maintenance with monitoring-based maintenance systems that utilize condition monitoring data. Since June 2018, some scheduled inspections have been replaced with data-driven functional verifications during operations. In addition, some rolling stock allows for the accumulation of condition monitoring data, namely the E7 Series, E353 Series, GV-E400 Series, and E261 Series. For this rolling stock, railcar equipment data is analyzed to gain insights about the degradation of equipment and predict serviceable life, and this data may be used in future maintenance.



The SMART-i dedicated maintenance railcar features Shinkansen track equipment monitoring systems for Shinkansen Lines.

GNSS wireless railroad crossing control system

JR East is developing a new GNSS wireless railroad crossing control system for rural line crossings that uses satellite position data technology and common wireless technology. By using satellites to pinpoint the location of trains and common wireless technology to transmit data, we aim to improve safety and reduce maintenance costs for railway crossing equipment.



# Relationship with Society

## Strengthening collaboration with communities

### Development of large-scale terminal stations

JR East develops large-scale terminal train stations while modernizing areas around the train station through collaboration with local governments and residents, in addition to efforts to increase the convenience and pleasantness of train stations. Aiming to enhance the overall value of the area, we develop train stations with the cooperation of local communities.

We are making it easier to pass between the east and west sides of Shinjuku Station. We have also installed public art, creating an iconic square near the station's east exit.

Coinciding with our development of JR Yokohama Tower and JR Yokohama Tsuruyacho Building at Yokohama Station, we installed an atrium to facilitate pedestrian traffic. To help strengthen disaster-prevention capabilities, the buildings house a Yokohama municipal fire prevention center.

At Shibuya Station, JR East opened Phase I (East Tower) of the landmark SHIBUYA SCRAMBLE SQUARE, which is directly above and connected to the train station, creating new value and increasing the attractiveness of the area.



SHIBUYA SCRAMBLE SQUARE



JR Yokohama Tower

### WATERS takeshiba

WATERS takeshiba is an urban mixed-use development composed of a luxury hotel, offices, commercial facilities, and a theatre. We are promoting a new city development with the vision of a “city to bring forth next-generation richness,” making the maximum use of the waterside location and environment near Hamarikyu Gardens and based on the functions of the transmission based on culture and art cultivated by Shiki Theatre Company.



### Establishment of a lineside brand that will be chosen by passengers

Across the metropolitan Tokyo network, we are working on “creation of preferred lineside brands” that will make people want to visit or live in those areas by promoting development and renewal of not only the areas around stations but also locations under elevated tracks between stations through projects such as the Chuo Line Mall Project on the Chuo Line and FUN TOKYO!, as well as providing information about areas along the lines.



Chuo Line Mall Project: Chuo Line Beer Festival

## Wanoi Kakunodate, a New Hotel Brand Created by Renovating Historic Buildings

We have entered into an agreement with the city of Semboku and the Tazawako Kakunodate Tourism Association to promote tourism within the city. As part of this agreement, we are collaborating with Akita Station Building Co., Ltd. on the development and operation of *Wanoi Kakunodate*, a hotel aimed at cultivating tourism demand in the Kakunodate area and expanding potential tourism. The hotel facility comprises three former warehouses arranged to allow lodgers to enjoy their distinctive concepts and spaces. The hotel facility comprises three former warehouses arranged to allow lodgers to enjoy their distinctive concepts and spaces.

Working with people in the region, we plan to hold events at *Wanoi Kakunodate* and are creating various hospitality plans to help customers enjoy Kakunodate's streets.

Business Section, Transportation Division, Akita Branch Office



### Town development focused on stations in core regional cities

JR East is promoting town development focusing on central stations in conjunction with central urban district revitalization projects, urban planning projects, and so forth being undertaken by local governments in the vicinity of Akita Station, Niigata Station, Matsumoto Station, Iwaki Station, and others. In addition, we have concluded collaboration agreements related to town development with municipalities, business operators, etc. in each area of Aomori, Tono, Hirosaki, Aizu-wakamatsu, and Senboku to promote reconstruction of the functions of the sites around the station to contribute to activation of regional urban centers in coordination with town development in each region.



Iwaki Station South Entrance development plan (rendering)

### Collaborating on post office and station functions

We have entered an agreement with Japan Post Co., Ltd. to reinforce our initiatives for invigorating local communities. Based on this accord, in urban areas we are also collaborating with Tully's Coffee Japan Co., Ltd. in a tripartite agreement. We launched JJ+T, which provides one-stop solutions for lifestyle development, in Tachikawa Station in May 2019 (inside ecute Tachikawa). In outlying regions, we constructed a new building that will integrate post office and station counter operations at Emi Station on the Uchibo Line (Chiba Prefecture) in August 2020.

In a logistics tie-up, we are utilizing Japan Post's transportation network and the Shinkansen to deliver agricultural products on the day they are harvested, providing a farmer's market in Tokyo Station. We are involved in a wide range of such initiatives, such as considering measures to cultivate tourism and invigorate local regions.



Rendering of external view of Emi Station

### Development of the Rediscover the Region Project

Under the “Create Together” strategy, which specifies enhanced cooperation between JR East and local communities, we are promoting the Rediscover the Region Project. The aim of the project is to create new potential markets that bring increased circulation of people and goods between the Tokyo metropolitan area and other regions and also attract overseas visitors to Japan. The JR East Group has railway networks, 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 and more. The strategy utilizes JR's such unique abilities to discover traditional cultures, local produce, and other tangible and intangible tourist resources as well as to promote the interactive exchange of information and to expand sales channels between the Tokyo metropolitan area and local communities.



Farm-to-city market in Yamagata (Ueno Station)



Rediscover regions project logo

### Participation in primary industry

To resolve issues facing the primary industry and make food more attractive through farm products, in 2014 we joined local farmers in the establishment of an agricultural corporation, thereby entering agribusiness. The Company produces high-quality tomatoes at JR Tomato Land Iwaki Farm in the city of Iwaki, Fukushima Prefecture, which Group companies use as food ingredients. At JR Niigata Farm, in the city of Niigata, we produce rice used in sake, promoting the development of Japanese brewing culture.



JR Tomato Land Iwaki Farm



JR Niigata Farm



Large-scale hands-on fruit garden for tourists in Arahama Ward, Sendai City



Relationship with Society

Addressing measures to promote tourism

Trains for enjoying riding

We are working to create “fun-to-ride trains” that center on the train-riding experience itself. Individual trains have their own interior designs and themes. While gazing out of the train windows, passengers can enjoy meals, sweets, arts, music, and even an on-board foot bath, making aboard the trains a special new experience.



JR East agrees with the concept of POKÉMON with YOU, a disaster assistance outreach program run by The Pokémon Company, and operates a special POKÉMON with YOU train with the cooperation of The Pokémon Company.

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Saphir Odoriko, a new limited express train for tourists in the Izu area

March 2020 marked the commencement of operations of this train, aimed at helping passengers experience the true culture of the Izu area and communicate the area's charm to people from around the world.



Shift to digital promotions

We have been transforming our promotions for stimulating tourism by shifting to digital as a communications platform. Our JR SKISKI Campaign promotion was primarily TV commercials targeting young people with the objective of stimulating demand for skiing. In the past, we enlisted the help of fresh talent and artists to stir up talk about skiing, but we are now pursuing digital promotions that utilize YouTube videos and behavioral analysis of the core target age group (18–24 years old) in light of changes in the media contact environment in recent years.



\* JR SKISKI Campaign



\* After natural disasters struck in 2019, JR East ran the “Tabi wo Chikara ni!” campaign.

Enhancing the Value of Traveling Space

To “enhance the value of traveling space,” JR East Service Creation Co., Ltd. concentrates on offering services that heighten the value of the train spaces where passengers spend time, while contributing to regions and society. We are in charge of providing the announcements that make passengers happy they are riding on Shinkansen and limited express trains.

In October 2019, we launched a “regional invigoration” initiative to sell various regional specialties on a rotating monthly basis on Shinkansen and limited express trains in the JR East area. In-train announcements provide notice of availability, and attendants offer these items for sale to passengers.

Administrative and Human Resources Team, JR East Service Creation Co., Ltd.



Destination campaign (DC)

The JR Group, along with local governments, local tourism providers, and travel agencies, ran this major campaign to promote tourism in a bid to lure in visitors and increase passenger volumes on JR lines, while also developing local tourist attractions, running a concentrated ad campaign and preparing for an influx of visitors. The Gunma DC was held from April to June 2020. The Tohoku DC will be held from April to September 2021, which coincides with the 10th year since the Great East Japan Earthquake. Plans call for encouraging visitors to the region by combining tourism materials for the six prefectures in the Tohoku region.



Restoration of railway sections devastated in the Great East Japan Earthquake

We have been steadily proceeding with restoration work and resumption of operations in railway sections on the Pacific Coast that suffered extensive damage due to the tsunami, beginning with sections where safety can be ensured.

On March 14, 2020, we resumed service between Tomioka and Namie, within 20km of the Fukushima Daiichi Power Station. As a result, the entire Joban Line is again operational.

For the section between Yanaizu and Kesennuma on the Kesennuma Line and the section between Kesennuma and Sakari on the Ofunato Line, in order for communities to achieve further development as full-scale urban recovery efforts progress in disaster-hit areas, we proposed that operation of our BRT service continue as a sustainable transport mode that will contribute to restoration. The proposal has been approved by all lineside municipalities. Based on the requests of lineside municipalities in both sections, we are



The day operations recommenced throughout the Joban Line

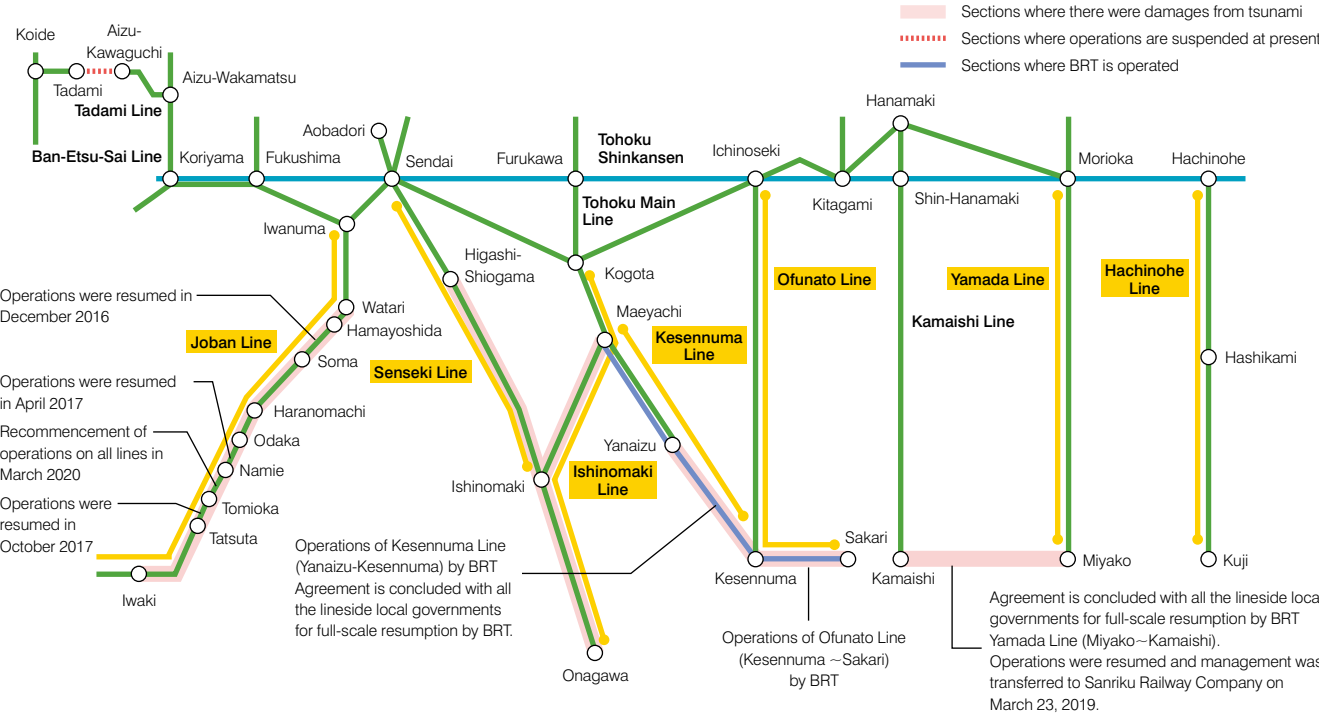


Kesennuma Line BRT on exclusive lines



Transfers to bus rapid transit on the Ofuna Line and Sanriku Railway (Sakari Station)

Sections where operations were suspended as of April 1, 2020





Relationship with Society

Contribution to community medicine

In response to an increase in chronic diseases of elderly people due to the aging of society, we opened a regional comprehensive care hospital ward in JR Sendai Hospital in 2015 and JR Tokyo General Hospital in 2018, and established an orthopedic trauma unit to perform wide-ranging musculoskeletal diagnosis and a lymph trauma unit as distinctive characteristics of JR hospitals. We provide safe and high-quality medical services that meet the needs of local patients.

We are also reinforcing hospital functions in terms of both environment and skill by arranging environments and conducting periodic training to enable continuous provision of medical services in the event of natural disasters like an earthquake in the metropolitan area, infectious diseases, etc., in an aim to become a “selected hospital” in response to trust from local people. We are working with government bodies to help fight COVID-19 by conducting diagnosis and accepting patients.



JR Tokyo General Hospital



JR Sendai Hospital



Outpatient treatment of fevers at JR Tokyo General Hospital

Collaboration with venture companies to solve social issues

We established JR East Startup Co., Ltd. to encourage swifter open innovation. By investing in and collaborating with venture companies, we aim to cultivate new businesses and services with the aim of invigorating regional development and contributing to more abundance lifestyles.

Cultural activities

East Japan Railway Culture Foundation

In order to continuously utilize management resources for social contribution, in 1992 we established the East Japan Railway Culture Foundation, which became a public interest incorporated foundation in April 2010. This organization has successfully promoted local culture through our railway business, studies and research on railways, and taken part in driving international cultural exchange related to railways.

Major Initiatives

- Operation of the Railway Museum
- Operation of the Tokyo Station Gallery
- Operation of the Former Shimbashi Station
- Operation of the Former Manseibashi Station
- Operation of Ome Railway Park
- Support for regional cultural projects
- Holding of concerts (Sendai Station, Ueno Station, Former Shimbashi Station)
- Hosting of railway company trainees from other Asian countries (JR East Fellowship Training, JR East Fellowship Course)



Railway Museum



Support for regional cultural projects (Honjo, Saitama Prefecture)

Office sharing business “STATION WORK”

As an approach to work-style reform, which is a social issue, and to provide a new service at stations, we started “STATION WORK,” an in-station office sharing business, on August 1, 2019.

We will provide space where people can work safely in a highly secure environment in a station, which has the least movement loss. We have expanded the operations at major stations of the Yamanote Line, as well as at Sendai Station and other regional locations, increasing the number of sites to 18 (as of July 2019). Going forward, we will increase the number of locations.

Childcare support services  
HAPPY CHILD PROJECT

JR East has opened childcare support facilities such as “nursery schools near stations” located in easily accessible areas usually within a five-minute walk from stations in order to support the combination of childcare and work for child-raising families living along our train lines. To date, we have opened 144 facilities (as of April 2020). JR East aims to increase the number of these facilities to 150 by the end of FY2023. These nursery schools near stations provide added convenience as they allow parents to drop off and pick up their children on the way to and from work. As evidenced by children who are accompanied to nurseries by their fathers, we encourage paternal participation in childcare as well.

We have not only nursery schools but also various other facilities such as an “after-school care program near stations” and “exchange community square,” etc.



View of a “nursery school near station”

Development of COTONIOR

“COTONIOR” is a coined word composed of “child (codomo) + to + senior,” expressing the operational theme of being multipurpose facilities that encourage interaction among different age groups by offering childcare and services for seniors.

With a well-thought-out facility layout, seasonal events, and such, COTONIOR has created a heartwarming place where children and senior generations interact that brings together a wide range of generations.



COTONIOR Kichijoji

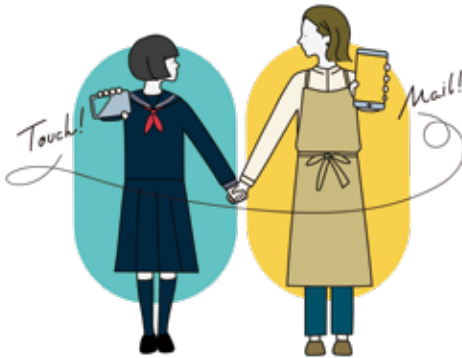
Launch of the mamorail child watching-over service

As a new child-rearing support option, we have commenced a joint business with Central Security Patrols Co., Ltd. By touching their registered card to a ticket gate, children communicate to parents that they have passed through that station.

In April 2020, we added the Bureau of Transportation of the Tokyo Metropolitan Government and Tokyo Metro Co., Ltd. to this service offering, increasing the service area to 495 stations in the Tokyo metro area.

Service Overview

|                              |   |
|------------------------------|---|
| Usage fee                    | 500 yen per month                                 |
| Persons eligible for service | Elementary, junior high, and high school students |
| Applicable cards             | Suica, PASMO                                      |
| Notification method          | Email or JR East app                              |





Topics

# Regional Revitalization

The Japanese government has announced the Comprehensive Strategy for the Invigoration of Towns, People and Work, outlining key national and regional initiatives targeting regional revitalization. Overarching themes are to stem the population decline as the birthrate continues to fall, to rectify an overconcentration of the population in the Tokyo area.

Substantial depopulation is expected to persist within the JR East service area, as well. This situation is leading to a call for regional vitalization initiatives in Tohoku and other regions. As a business operator whose networks connect numerous regions, we encourage new flows of goods, people, and information and promote tourism, agriculture, and other local industries, along with employment. Expanding the exchange of people between metropolitan and outlying areas and greater personal relationships helps to increase regional resident populations. We see our Group mission as helping with the sustainable development of towns where people wish to live, can work, and want to visit.

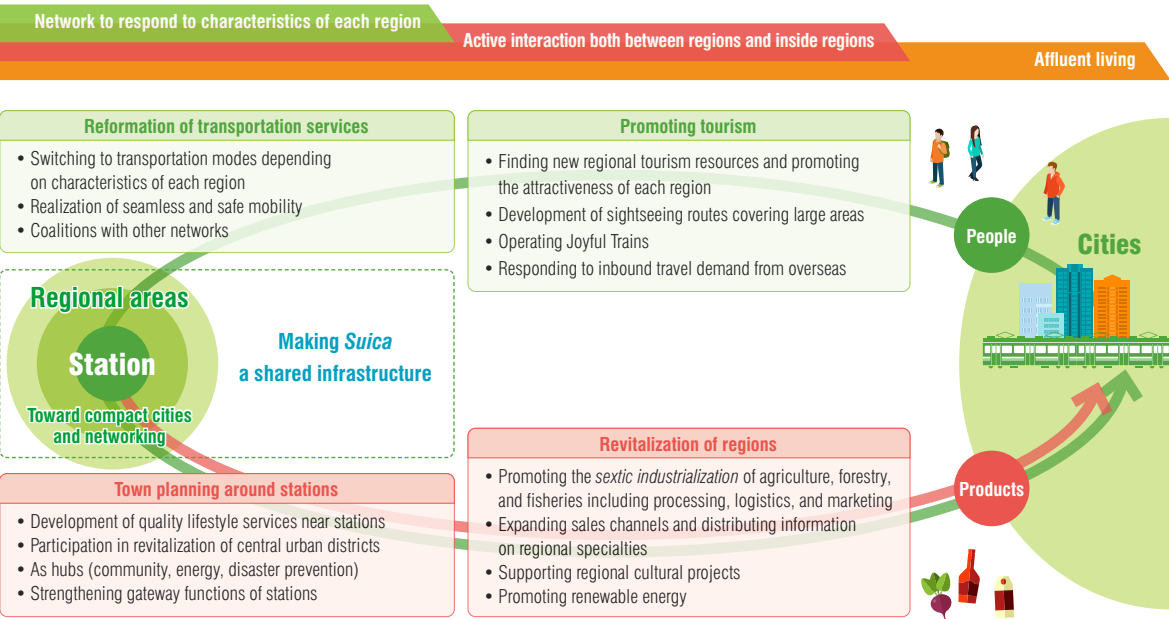
As our business is closely linked with local communities, ensuring that their societies are healthy and vigorous supports the sustainable growth of the JR East Group. Amid efforts to invigorate regional communities, we are developing MaaS and considering new modes of transportation. These moves are part of our initiative to promote regional revitalization by working with people in local communities to provide optimal regional transportation. In consultation with regional communities, through our businesses we endeavor to resolve the social issues they face and contribute to their ongoing development.



Helping producers by allowing distribution on Shinkansen lines



Community development around Akita Station in collaboration with Akita Prefecture and Akita City



## Developing our business on the world stage

### Working as a unified team for the Indian High Speed Rail Project

JR East provides support in inter-governmental negotiations, while Japan International Consultants for Transportation Co., Ltd. prepares the detailed design documents, bidding documents, as well as training program and materials for National High Speed Rail Corporation Limited (NHSRCL) core staff.



Image of Indian High Speed Rail (courtesy of JICA)



NHSRCL training institute lodging facility

### Joint management of railway operation project in the U.K.

West Midlands Trains Ltd. (owned jointly by JR East, Mitsui & Co., Ltd. and Abellio UK) began operation in December 2017. As environmentally friendly railways draw more attention throughout Europe, JR East can make use of its years of experience toward optimizing the franchise's operations.

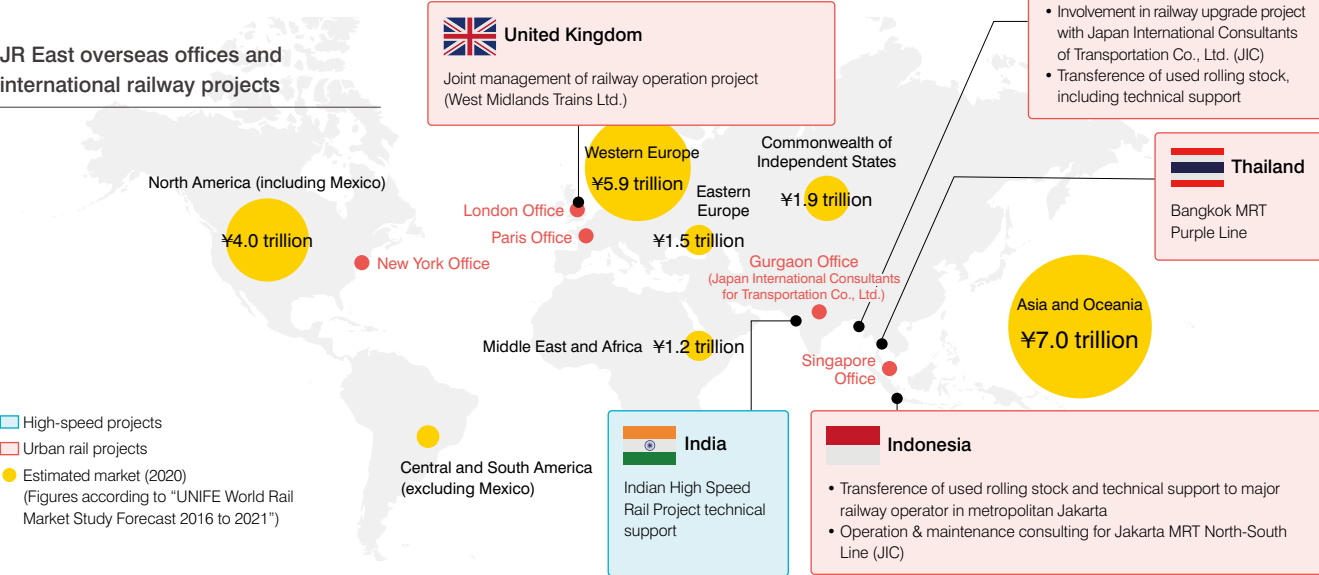


Trains operated by West Midlands Trains Ltd.



Birmingham Snow Hill Station, a major train station

### JR East overseas offices and international railway projects



### Participation in the Purple Line Project

The JR East Group provided rolling stock for the Purple Line, an urban railway in Bangkok, Thailand, that opened in August 2016. Maintenance services for rolling stock and ground facilities are provided by Japan Transportation Technology (Thailand) Co., Ltd., a local affiliate established by JR East in conjunction with corporations Marubeni and Toshiba, contributing to reliable railway services for Bangkok on par with those in Japan.



### Technical support for railway operators overseas

Work is underway to develop a public transportation system to relieve traffic congestion in Jakarta, Indonesia's capital. JR East has been providing PT Kereta Commuter Indonesia (KCI) with series 205 rolling stock since 2013 to bolster transportation capabilities as per their request. We have also been providing ongoing technical support to enhance the technology, employee skills, and services of KCI.



Series 205 trains transferred from Japan in service in Jakarta



KCI conductors learning pre-departure inspection procedure during technical support training

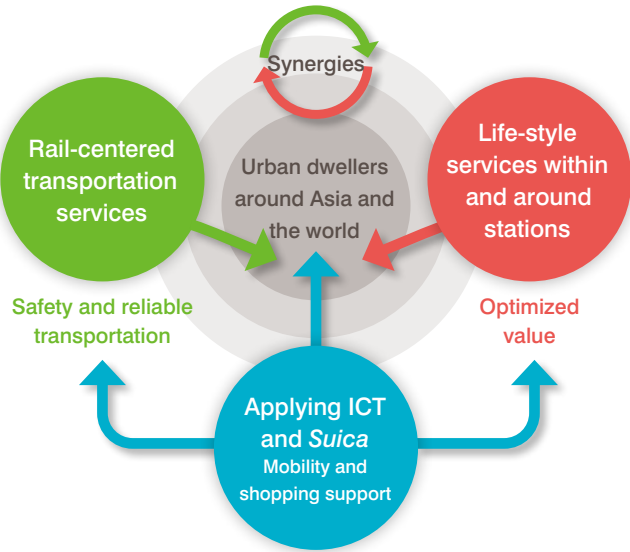


Relationship with Society

New business undertakings

Through the challenge of overseas projects, the JR East Group is nurturing new talent and constantly honing its technology for the future, the new technology and expertise from which in turn benefit domestic initiatives as well. With careful risk management, we are raising up a business model for our international operations to combine and integrate the Group's strengths and remain sustainable over the long term. In so doing, our hope is to make a worthwhile contribution to lifestyles of people around the world, particularly Asia.

JR East Group business concept



Developing lifestyle business overseas

The JR East Group is putting the expertise and experience it has gained in Japan to use by promoting the life-style service business overseas, as well.

In Singapore, in April 2019 we opened JW360° within Jewel, a large commercial facility near Changi Airport. Designed to evoke a natural "Japanese style," JW360° features restaurants, retail outlets, and other establishments. Meanwhile, August 2019 marked the opening of One&Co, an interactive platform for Japanese companies with locations in Singapore's central business district, and in September we acquired commercial rights inside ticket gate areas of the Thomson-East Coast Line.

In addition, Lumine Co., Ltd. operates stores in Singapore and Jakarta, and atré Co., Ltd. has an atré store inside Breeze Nanshan, a shopping center in Taipei.

Leveraging the business experience it has cultivated to date, the JR East Group intends to further promote its business overseas.



Atré in Breeze Nanshan (Taiwan)

International standardization initiatives

During the overseas projects we have participated in to date, we have encountered a variety of issues due to differences between the technical specifications assumed by overseas clients and Japanese proposals, such as the clients' demand for technological conformity to international and local standards with significant differences from Japanese approaches.

We thus established the Standardization Strategies and Promotion Division within the International Affairs Headquarters in June 2019, to address such issues in a strategical manner.

Making efforts only to meet the existing international standards to encourage overseas proliferation of Japanese railway technologies and expand our business will impose a heavy burden on us. In some cases, we may even need to revise the technologies we have nurtured in Japan. Therefore, by participating in the deliberation of railway-related international standards developed by institutions such as ISO and IEC, we will seek to harmonize Japanese technical specifications and international standards.

As the importance of public transport is being reevaluated around the world, the JR East Group will utilize areas of expertise to introduce and develop advanced technologies from Japan to other countries. We believe our initiatives toward international standardization are also an extremely important part of our contribution to international society.

Compliance Checks in Overseas Business

The JR East Group focuses upon long-term profitability by taking a thorough approach to risk management in each overseas project.

My group is in charge of risk management and ensuring compliance within the scope of the JR East Group's overseas business. We gather information and data relevant to each overseas project, including that of Group companies, and offer advice on risks and strategy. In addition, we host study sessions for Group companies that may be considering overseas business projects. In these sessions, we provide case studies of the risks inherent in overseas business and highlight considerations to be aware of regarding compliance and conflicts.

We work to help the JR East Group continue to make good use of its accumulated knowledge and experience to develop overseas business, aspiring to ensure sustainable growth while effectively balancing our business approach between passive and aggressive modes.



Global Business Risk Management Group  
International Affairs Headquarters

Contributing to world society by international cooperation and through international institutions

In FY2020.3, JR East welcomed 630 visitors representing organizations from some 40 countries to promote better understanding of each other's business. As a member of organizations such as the International Union of Railways (UIC) and the International Association of Public Transport (UITP), our involvement in discussion and events on an international level hosted by these organizations, we have an opportunity to mutually and actively share our thoughts and information.



Observing Shinkansen under maintenance



UITP Global Public Transport Summit (Stockholm, June 2019)

Personnel training

We are stepping up our efforts to raise up open-minded and globally adept human resources through overseas work experience and training. We offer overseas on-the-job training programs, in which employees from Japan undergo training over several weeks in a foreign country with local specialists and take part in actual operations. Such exposure to unfamiliar lifestyles and different working cultures can enhance an employee's knowledge as well as technical skills. Forty-seven employees took part in this program in FY2020.3.



JR East trainees helping out at a travel fair (London)



Meeting held with local staff in India

Developing international railway personnel

As one aspect of ESG management, we are working to develop international railway personnel.

In April 2019, we began offering JR East Technical Intern Training. Under this program, 11 trainees from Vietnam Railways and KAIZEN Yoshida School (a Japanese-language school in Ho Chi Minh City) were invited to study at the Omiya General Rolling Stock Center and JR East Rail Car Technology & Maintenance Co., Ltd. The program utilizes a Technical Intern Training Program to provide instruction on the maintenance of rolling stock air conditioning equipment, bogies, and wheel sets.

Meanwhile, in September 2019 we hosted three trainees involved in station services and line track at Myanma Railways railway in cooperation with the Japan International Cooperation Agency (JICA). At the training location in Ueno Station, they practiced offering guidance to passengers and assisting wheelchair-bound passengers. At the Sendai Track Maintenance Technology Center, they studied such practical topics as inspecting tracks, railroad Switches, and rail flaws.



Morning assembly at JR East Rail Car Technology & Maintenance Co., Ltd.



Technical trainee maintaining a train carriage



Trainee inspecting rail track for Myanma Railways



# Relationship with Employees

## Efforts to help individual employees play a leading role

The entire JR East Group works to enhance employee skills. We endeavor to pass on the technologies and skills to ensure top-level safety, help employees develop their career plans, and cultivate employee motivation, working together as a group to support growth.

### Steady succession of technologies

We utilize our own facilities for education and training. We also make use of “technology experts” (employees who are highly motivated toward human resource development and have high levels of technical expertise) and designated employees who have been rehired post-retirement as “advisors” or “meisters.”

### Expansion of activities to satisfy the motivations of employees

We are expanding our elective training and online education options to motivate individual employees and elicit their potential capabilities. We undertake a variety of measures. Specifically, we hold Practical Manager Development Training (around 320 trainees) to cultivate future managers and have an overseas experience program (around 230 participants) to broaden the worldview of our employees through experience in living and studying overseas.

Through such efforts as “My Project,” we are also expanding opportunities for employees to take the initiative on operational improvements.



### Encouraging employees to develop career plans

We hold career interviews, provide training to help employees build their careers, and promote exchanges of opinion that go beyond internal divisional boundaries.

We put our emphasis on management education for managers, who have a major impact on employee career building. We offer training to help employees gain knowledge and learn skills in areas they are closely involved in, help managers themselves gain a broader perspective, and enable employees to hone their skills through interaction with other companies.

### Conducting new job promotions

In the past, we employed operational personnel to work in specific areas and followed a uniform progression: from station staff to conductor to driver. We have revised that approach to provide greater human resource flexibility through “new job promotions.” By providing more leeway, we aim to enable individual employees to take up various challenges and take the initiative in experiencing diverse operations and growing so they can realize their dreams for the future.

## Realizing Diverse Working Styles That Connect Frontline Operations with Branch Office Planning Sections

While handling my planning activities in the Transportation Department, once a week or so I serve on the crew of the Uetsu Main Line (between Akita and Ugo-Honjo). Doing so has helped me to understand how branch office and frontline operations are connected and what the Company’s business consists of. Crewing has made me even more aware of the importance of safety to our operations.

I believe that experiencing work as a member of both crew and the planning section has broadened my perspective by helping me see the Company’s operations from each of these perspectives.

I plan to help promote even more diverse working styles by communicating this experience to other employees.

Planning Section, Transportation Department  
Akita Branch Office



### A Group-wide project

To achieve continuous growth for our employees and the Group at large, we aim to promote meaningful work by having our employees interact with our customers on a closer basis so that they can exhibit greater creativity. As of May 2020, 13 projects are active, with employees from different workplaces coming together to solve issues in the areas along our railways and create new value. For example, the Hachioji Branch’s Kainokuni Innovation Project examined train schedules from the perspectives of three parties: stations, drivers, and the branch. The project also involved creating brochures for tourists covering the areas around some stations.



Activities for Kainokuni Innovation Project

## Human resource education with the entire JR East Group working as one

The JR East Group aims to realize integrated Group management and maximize Group value, so we promote positive human resource exchange in terms of fostering human resources. 885 employees of Group and partner companies participated in the training exercises in which held 12 times in FY2020.

### Education of next-generation managers and administrators of Group companies

We conduct the “JR East Group seminar for fostering management personnel (General Manager course and Section Manager course)” to cultivate next-generation managers and administrators of Group companies. As well as continuing to provide courses for the heads of departments and section leaders, we have added courses for people who will become managers in the next fiscal year. This move is part of our effort to cultivate core personnel in our companies. Former trainees of this seminar include employees who have already become directors of their companies.

We are also undertaking an initiative to change our various training programs so that employees at our parent company and Group companies can undergo training together. These programs include Practical Manager Development Training (for the next generation of managers), Technological Academy (engineers), and JR East Group Exchange Training (aims to have trainees interact with employees).

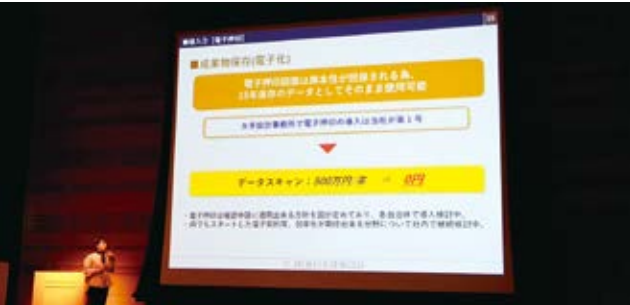


Seminars to cultivate Group managers

### Creating opportunities to share activities for improvement across Group companies

Once every year, the JR East Group Improvement Activity Meeting is held as a venue for exchanging information by sharing case studies of improvement activities at Group companies. During this meeting, companies present and discuss case studies of their initiatives, and the panel summarizes examples of initiatives being taken to facilitate the exchange of opinions among participants.

Through this meeting, participants can gain an understanding of improvement activities being undertaken at other companies, and learn about successful examples at other companies to glean ideas about what may work at their own companies. At My Project Exchange Meetings, where employees of JR East share examples of improvement activities, ideas are exchanged through the showcasing of improvement activities at Group companies that participate in the meetings. The objective is to share case studies of initiatives across the Group and to enhance competitiveness within the Group.



Reporting conference on activities for improvement of the Group



Relationship with Employees

Promotion of diversity management

The JR East Group proactively implements measures to promote diversity in line with its aim of being a corporate group able to draw out and maximize the abilities of its diverse workforce, from an awareness that strengths are derived from diverse viewpoints and differences in value systems that reflect the unique character of employees who work for the Group, such as their gender, experiences and skills.

Empowering women and general employer action plan

Since it is common for employees in the railway business to work irregular hours, railway jobs were less accessible to female employees at the beginning of the Company's history. As the times have changed, we are doing much more to promote the careers of women. We employ women in every area of the Company and their average length of employment is growing. According to our First General Business Owner Action Plan covering the five years starting in 2014, we engaged in initiatives to promote the employment of women, support them in childcare and continued employment, and encourage promotions of women to higher positions. In FY2020, we implemented a revised Second General Business Owner Action Plan, which calls for continuation of our initiatives to promote the employment of women and lengthen the average years of service for women, and strengthens measures to support female employees in childcare and to encourage promotion of female employees to higher positions. As of



April 1, 2020, the Company employed 8,334 women (16.2% of the workforce), 626 of whom were in administrative roles at their current organizations or in management positions at planning departments (6.3% of managers).

JR East Japan received the highest rating, "Eruboshi (Grade 3)," from the Ministry of Health, Labor and Welfare based on the Law concerning the Promotion of Women's Career Activities.

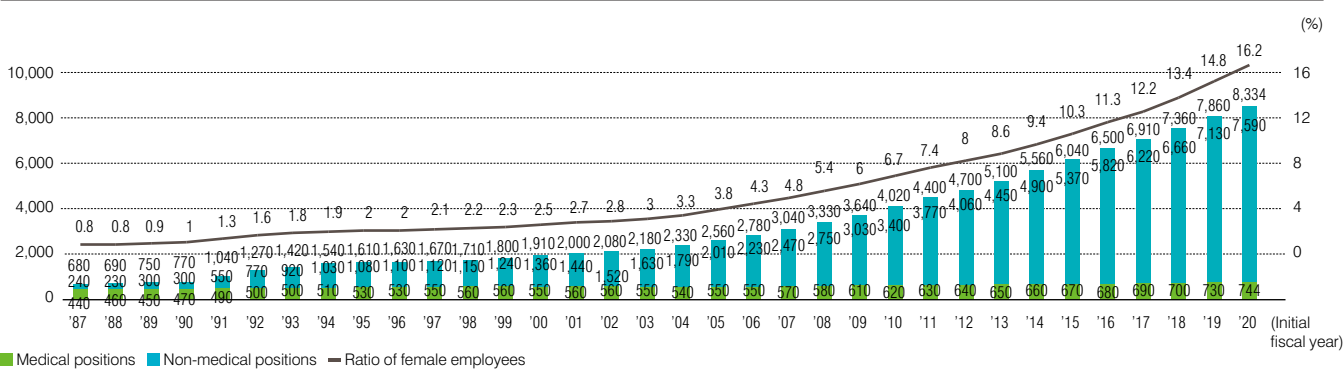
Setting goals to promote women in the workplace

- Aim for new graduate employees to comprise at least 30% women.
- Promote the establishment of women's facilities in workplaces and create an environment at all workplaces in which women can actively participate.
- Improve the convenience of on-site daycare centers at workplaces and give ample support to employees who are working while engaged in childcare or nursing care.
- Accommodate a range of working styles and create an environment in which all employees can happily continue working for the Company.
- Have women fill at least 10% of management positions.

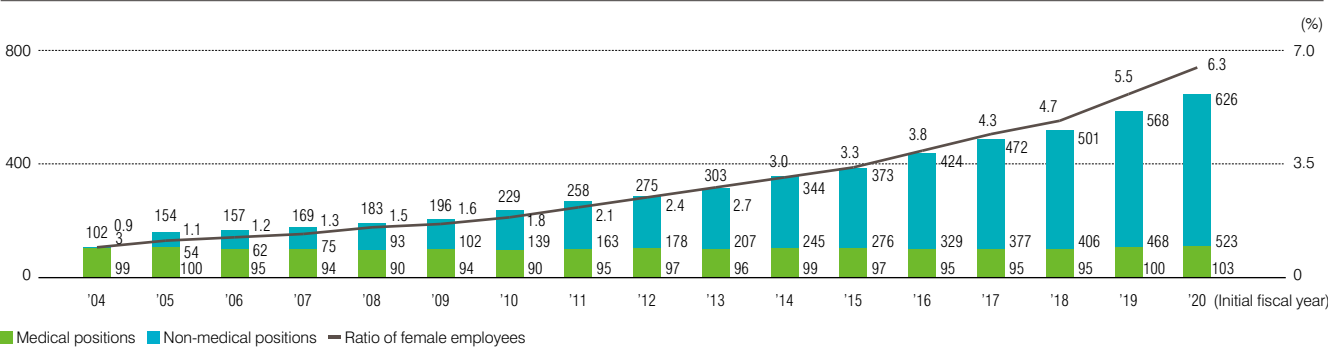
Eruboshi certification conditions of Group companies

| Company name                             | Eruboshi |
|--|----------|
| JR East Information Systems Company      | ★★★      |
| JR East Personnel Service Co., Ltd.      | ★★★      |
| JR East Marketing & Communications, Inc. | ★★       |
| JR East Management Service Co., Ltd.     | ★★★      |
| JR East Logistics Co., Ltd.              | ★★★      |

Female employees since JR's founding



Change in the number of women managers



Support for employees engaged in childcare or nursing care

To create an environment in which a diverse range of employees can thrive, we offer support to employees who are engaged in childcare or nursing care regardless of sex. Our current system surpasses the support required by law (three years of childcare leave, one year of nursing care leave), including options to take time off, work shorter hours, and work fewer days. Moreover, we are moving forward with changes that will add measures such as granting time off for spouses of those having recently given birth and lengthening the period of leave for those accompanying spouses who are transferred overseas. Also, since there are many employees who work irregular hours, we have established childcare facilities inside of our workplaces that operate 24 hours (14 locations as of April 2020). We plan to implement trainings and seminars to promote understanding when it comes to employees working and engaged in childcare or nursing care. We will also sponsor our Work-Life Program at workplaces. The program delivers information about working while juggling childcare and/or nursing care responsibilities.



Employing persons with disabilities

We will continue to create an environment in which employees with disabilities can work actively in various positions in addition to active recruitment. We have about 800 employees with disabilities as of June 2020, an employment rate of 2.58%, which is above the statutory rate of 2.2%. We will continue to fulfill our social responsibility by putting in place environments where employees with disabilities can work comfortably.

JR East Green Partners Co., Ltd.

JR East Green Partners, a special JR East subsidiary, was started in April 2009 and charged with the task of overall management of uniforms used in JR East. Since then, we have been striving to expand the places where the disabled can be active such as the newly started printing business, crop maintenance business, collection and delivery/sorting business for business goods, and inventory management business of amenity goods of "TRAIN SUITE Shiki-Shima."



Name tags worn by JR East employees are made by JR East Green Partners Co., Ltd.

Employment of senior employees

Since FY2009, we have introduced a re-employment system, our Elder Employees System, for those under the age of 65, so that employees nearing retirement age can count on a stable lifestyle before they become eligible to draw their national pension. The

system, which has been extended to include JR East and its Group companies, is also designed to ensure personnel training and the passing on of technical knowledge throughout the Group as large numbers of employees of Japan's national railways retire at once.

Promoting foreign employees

We strive to employ the best candidates regardless of nationality. As of April 2020, we employed 80 foreign nationals in a wide range of areas including at stations and on train crews, but also in the planning department and other areas.



Foreign employees representing JR East at an employment fair for students

Initiatives to promote understanding of LGBT employees

We recognize members of the LGBT community as an important part of the diversity of our organization and consider it our duty to create a comfortable work environment free of discrimination. Up until the present, we have expanded the scope of our human resources and benefits systems to include partners of employees identifying as LGBT. We have also implemented trainings and seminars for all Group employees. In addition, in 2017 we added a section on the importance of understanding LGBT employees to our Compliance Action Plan Handbook. We strive to educate all employees on these issues every year. Further, for three consecutive years the Company has received a ranking of "Gold" (the highest) on the PRIDE index, which evaluates companies' LGBT initiatives.



Opening diversity consultation counters

We are establishing a Diversity Consultation Window offering consultation for our employees on all diversity-related issues.

Human rights enlightenment

We have established a human rights enlightenment promotion committee at the Head Office, which is working to improve employees' awareness of human rights. In addition, we are striving to establish an inclusive workplace environment for everyone.

(Concrete measures)

- Implement human rights seminars and study conferences
- Implement measures to increase thinking about human rights (company reports, creation of a human rights awareness slogan)
- Exchange information with other corporate members of the Industrial Federation for Human Rights, Tokyo
- Corporate Correspondence Society to mutually increase awareness



Human rights seminar



Relationship with Employees

Renovation of way of working

We believe that providing work that is invigorating and meaningful to diverse employees and making that work more productive helps individuals grow. It also contributes to corporate growth and the creation of new value for society.

Introduction of teleworking, expansion of flex-time

Since 2019, JR East has allowed some employees to work remotely as a flexible work style that can be done anywhere. We believe a better work-life balance can be attained by reducing the amount of time spent commuting to work and working more efficiently, and using the freed-up time to enhance personal lifestyles. Since 1997, JR East has had a flex-time system in place for the corporate planning division and other departments, allowing employees to adopt more flexible work schedules. In 2019, JR East adjusted its systems in view of actual conditions, introducing a flex-time system without a core work time alongside the rollout of remote work, while also expanding its satellite offices. In July 2020, the Company expanded its flex-time system for some worksites, such as construction work offices, and will continue to diversify work styles.

Transfer to outside the area by open application

Employees' activities are basically limited to the area they are assigned when they first enter the Company. However, we ensure that employees wishing to work in other areas due to childcare, nursing care, or a spouse's change of job are able to make a smooth transition through our open application system.

Expansion of the re-employment support system

Since 1994, we have been implementing a reemployment support system for employees who have left the Company in order to raise children or provide nursing care. This system offers such employees information on job offerings within the JR East Group. In 2019, we removed eligibility restrictions, making it available to all regardless of the reason cited for leaving the Company, and revised the system to allow us to attract a broad range of human resources who used to work in the Company.

To Improve working environment

Health Management Mid-term Vision 2023

The JR East Group aims to ensure the physical and mental health of all employees. To maximize their enthusiasm and capabilities and facilitate vigor at work, we are promoting employee health improvements based on our "Health Management Mid-term Vision 2023."

Health Management Declaration

The health and vitality of each employee is paramount for the JR East Group to realize "Our Ideal Future" set forth in the management vision "Transformation 2027" as employees assume the leading role in realizing this vision.

We aim to become a company group that takes the lead for the health and longevity of Japanese society by realizing a spiritually rich life for all people through the practice of health management.

Numerical target for the end of FY2024

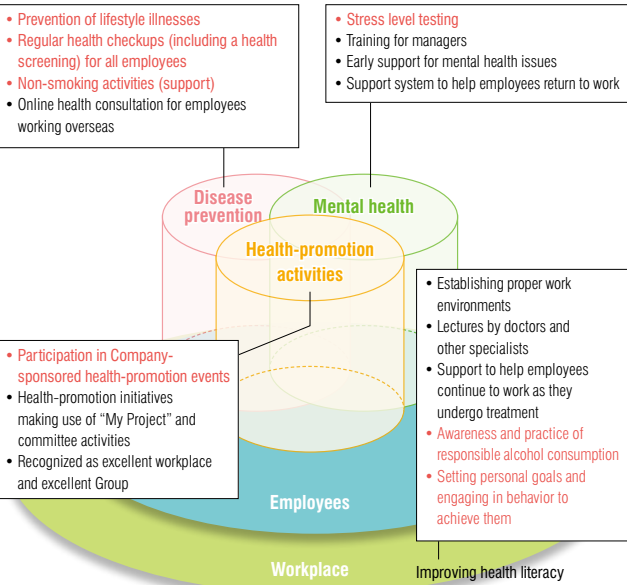


Health management promotion system

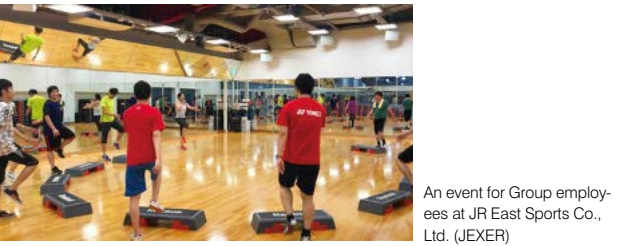
The system to promote health management consists of dedicated departments at the Head Office and branch offices, JR East Health Promotion Center, JR Sendai Hospital Health Management Center, and seven other Railway Medical Checkup Centers. In addition, we support employees' health needs in collaboration with two hospitals under our management, the JR Tokyo General Hospital and JR Sendai Hospital, and contribute to local healthcare.

Health management activities

To improve the health of our employees, we systematically implement initiatives related to the promotion of disease prevention, mental health, and health promotion activities while improving health literacy\*, the foundation for healthy living.



\* Health literacy: Knowledge about health-related issues and the awareness to act in ways that are conducive to health.



An event for Group employees at JR East Sports Co., Ltd. (JEXER)

Support for recreational club activities

We support various recreational activities through our workplaces in addition to employee-managed clubs (29 in all) to make workplaces more cheerful through employee interactions outside of work hours.

Company sports initiatives

Company sports teams such as JR East Baseball Team (Tokyo), JR East Tohoku Baseball Team (Miyagi), JR East Running Team (Tokyo), JR East Women's Judo Team (Tokyo), and JR East Akita Basketball Team (Akita) are active while based in their respective regions and actively contributing to their communities by organizing initiatives such as sports classes for local elementary schools.



Baseball team instruction



Judo class given by Women's Judo Team

Toward Support of Workplace-Based Health Promotion Activities

In order to achieve the targets set "Health Management Mid-term Vision 2023," our center supports voluntarily health promotion activities that employees can enjoy at their workplaces.

We identified workplace health issues from health checkup and questionnaire data with Narashino Transportation Depot and held a study as "My Project." After the study, we provided information to improve sleep quality and held stretching classes to prevent backache and shoulder stiffness, and shared what we learned with train crews at other workplaces.

We will continue to provide health information where appropriate to improve the health literacy of our employees, and aim for "wellness" as well as "health."



Chiba Railway Medical Checkup Center

# Toward the Realization of a Sustainable Society: Achievement of SDGs

## Topics

## Toward the Realization of a Sustainable Society

We at the JR East Group are working to resolve social issues and achieve the SDGs through our business.



### System to promote sustainability

Aiming to realize a sustainable society, the Sustainability Strategy Committee, chaired by our President and CEO, formulates and promotes the Group's basic policies for the resolution of social issues such as global environmental problems.

### Issuance of sustainability bonds

In January 2020, JR East issued its first Sustainability Bond. Sustainability Bonds are bonds that raise funds for projects that help solve environmental and social problems. The funds raised from this Sustainability Bond will be used by JR East, as a railway company, to acquire E235 Series rolling stock (Yokosuka-Sobu Express Line) and overhead wire and battery-powered EV-E801 Series rolling stock (Oga Line).

By issuing its first Sustainability Bond, JR East intends to broaden awareness of its efforts at ESG management and win the trust of stakeholders, including customers, local communities and society, shareholders and investors, and employees, while tying into the sustainable growth of the JR East Group.



The EV-E801 Series is a new type of battery electric multiple unit train that can run in AC-powered sections and non-powered sections.

### Wrapping Yamanote Line trains with information on the SDGs

We wrapped trains on the Yamanote Line to advertise the Group's activities to customers and local residents, and to promote understanding of the SDGs, which still have low recognition in Japan. (The campaign ran from October 2019 to the end of January 2020).

During the campaign, we worked to promote understanding of the SDGs with support from our partners at the United Nations Information Centre and the Ministry of Foreign Affairs.

We displayed icons representing the 17 SDGs on car exteriors and hanging straps inside of cars, and explained the Group's efforts toward achieving each goal on interior TV displays and posters. We made every effort to attract the attention of as many riders as possible, including adding colorful checked patterns to seats. The campaign received positive feedback from students and overseas visitors.



The next-generation commuter cars of the E235 Series incorporate many new technologies designed to further improve service and stability for a user base mainly comprising those commuting to work or school in Greater Tokyo.



### Developments in the "Get Rid of Plastic Waste" Campaign

We are working to reduce plastic waste at the Group's directly managed stores (Ekinaka stores [inside stations] and hotels).

#### Plastic straws

Paper and biodegradable alternatives\*1

Switched to straws made of biodegradable materials (completed March 2020).

\*1 Biodegradable: Having the property of decomposing naturally due to the work of microorganisms, ultimately becoming carbon dioxide and water (e.g., cotton).

#### Plastic shopping bags

Biomass\*2

Promotion of the use of shopping bags made from renewable materials (planned completion of the switch by September 30, 2020)

\*2 Biomass: Renewable, biological organic resources, excluding those produced with fossil fuels (corn and sugar cane)

#### Other contributions

We utilize posters, point of purchase displays, and videos so that our customers can be more aware of plastic issues and better understand the Group's efforts.

In addition, as compulsory payment for plastic shopping bags went into effect on July 1, 2020, we distributed a total of 500,000 eco bags at the Group companies' directly operated stores to promote awareness of reduction efforts.



We collaborated with Snow Peak and Japan Environmental Design to create the eco bags, which use materials derived from recycled PET bottles.



### Initiatives to tackle food waste

A food waste problem arose at Ekinaka stores in Tokyo Station as a result of the necessity of maintaining enough food products until closing time and the fact that customer traffic fluctuated significantly due to weather. In view of this problem, CoCooking Co., Ltd., which operates TABETE, will buy food that Ekinaka stores could not sell, and sell it to station employees through Rescue Deli. This initiative, the first to concentrate on matching needs after the closure of store operating hours, reduced overall food loss at Ekinaka stores.



### "Plant Based" Aims for food diversity



The Group launched "Plant Based," a new brand that sells only plant-derived food materials based on the slogan: "Welcome food diversity so that we can all happily share a table."

We joined with Tokyo souvenir manufacturers to develop products that avoid using animal-derived ingredients or alcohol. The hurdle to making delicious sweets without using ingredients such as eggs and butter is high. However, after repeated trial and error, we are confident in the taste of the resulting sweets and are glad to see them on store shelves.

We hope that the development of Plant Based will contribute to the momentum of the food diversity movement so that customers from around the world comfortably can enjoy safe and delicious food in Japan.

Tokyo Branch  
Business Department  
Planning and Regional Co-creation Section



# Environment

Priority commitment goals



Related goals



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## Aiming to Realize a Sustainable Society

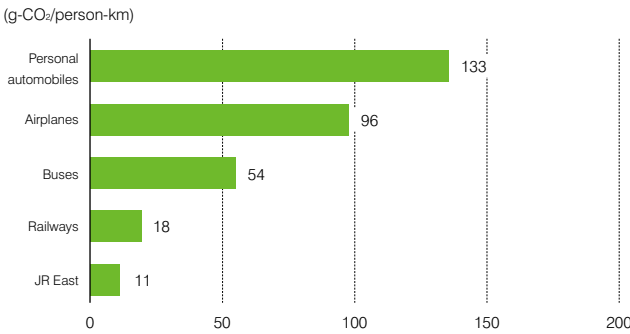
Further enhancing railways’ superior environmental friendliness

As one pillar of its ESG management, on the environmental front the JR East Group aims to help realize a carbon-free society. To prevent global warming and diversify our energy use, we are introducing renewable energy, engaging in energy-saving technological innovation, and working to use hydrogen as energy when operating railways and developing cities.

Railways are one of the most energy-efficient modes of transportation. CO<sub>2</sub> emissions per volume transported are relatively low, making railways an eco-friendly mode of transport. That said, the environment surrounding the transportation business is changing, and technological innovation is underway that will substantially boost the environmental performance of automobiles. Meanwhile, climate change and other environmental problems are growing increasingly serious. Marine plastic and other problems related to resource recycling are emerging. Under such circumstances, companies are being called upon to assume a greater responsibility for reducing environmental impact.

Moving forward, we will strive to make railways even more environmentally friendly so they will remain the transport mode of choice. In addition, in our aim to realize a sustainable society we will work constantly to resolve social problems through our business activities.

CO<sub>2</sub> emissions per transportation amount (FY2019 passengers)



Source: Ministry of Land, Infrastructure, Transport and Tourism website

Note: External Assurance on environmental performance

KPMG AZSA Sustainability Co., Ltd. has been engaged in providing external assurance on a set of selected environmental performance on pages 77–85 so that the reliability of the data in this report is ensured. The particular indicators that are assured are marked with a ☆ for clarity.

## Measures to Prevent Global Warming

Formulation of environmental goals

With the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) held in December 2015 adopting the Paris Agreement, JR East has set environmental goals to be achieved in FY2031.

In May 2020, we formulated a new target: achieving “net zero CO<sub>2</sub> emissions by FY2051. We also revised upward our targets for reducing CO<sub>2</sub> emissions and energy consumption in the railway business by FY2031 (compared to 2014).

When revising these targets, we have targeted only energy derived from fossil fuels (excluding hydroelectric power generation, which is a non-fossil-fuel source), in line with the report in the Act on the Rational Use of Energy. Accordingly, the standard value for energy consumption is 41.4 billion MJ, and the reduction target is 16.6 billion MJ. Our energy consumption in FY2020 was 37.8 billion MJ.

By working to meet these targets, we will contribute toward the realization of a carbon-free society.

| Target Parameter                | Before Revision | After Revision |
|---------------------------------|-----------------|----------------|
| CO <sub>2</sub> emission volume | 40% reduction   | 50% reduction  |
| Energy consumption              | 25% reduction   | 40% reduction  |

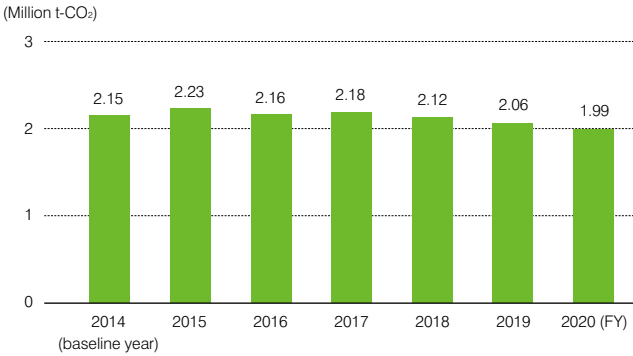
Trends in total CO<sub>2</sub> emissions

Our CO<sub>2</sub> emissions in FY2020 totaled 1.99 million tons, a decrease of 160 thousand tons compared to FY2014 (the reference year).

In this report, we are also reporting CO<sub>2</sub> emissions in Scopes 1, 2, and 3 in accordance with the definition of the GHG Protocol\*.

\*GHG Protocol  
The standard for calculation and reporting of greenhouse gas emissions which was formulated by the organization which was established mainly by the WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development).

Trends in total CO<sub>2</sub> emissions☆



• Boundary of data  
The boundary of data for CO<sub>2</sub> emissions is the same as the boundary for energy consumption shown on page 80.

• Calculation methods  
Our calculation of CO<sub>2</sub> emissions is based on the methods set forth in the Act on Promotion of Global Warming Countermeasures. However, for CO<sub>2</sub> emissions on energy provided from external sources and used as electric power in railway transport, our calculations use adjusted emission factors for each electric power company. Using basic emission factors, CO<sub>2</sub> emissions for FY2020 were 2.01 million t-CO<sub>2</sub> (down 0.08 million t-CO<sub>2</sub> year on year).

•CO<sub>2</sub> emissions, by scope (non-consolidated)

| Item                                | Scope 1☆                       | Scope 2☆                       | Scope 3☆                       |
|-------------------------------------|--------------------------------|--------------------------------|--------------------------------|
| CO <sub>2</sub> emissions in FY2020 | 1.29 million t-CO <sub>2</sub> | 1.21 million t-CO <sub>2</sub> | 4.74 million t-CO <sub>2</sub> |

\* Scope 1 All CO<sub>2</sub> emissions directly attributable to fuel consumed in the operation of diesel railcars, operation of JR East thermal electric power plant, etc.  
\* Scope 2 CO<sub>2</sub> emissions indirectly emitted from the use of electricity purchased from electric power companies.  
\* Scope 3 CO<sub>2</sub> discharged by the other companies which are related to our business activities.  
\* The sum of the Scope 1 and Scope 2 emissions and the total CO<sub>2</sub> emissions do not match, since the former includes emissions associated with the production of electricity supplied to other companies.

Calculation standards for each category are as follows.  
Category 1: Calculated as the amount spent on the purchase of products and services (only JR East) in relation to repairs or for system use x emission factor\*<sup>1</sup> for each product and service  
Category 2: Calculated as the amount of capital expenditure (only JR East) x emission factor\*<sup>2</sup> per unit price of capital goods in the railway transport department  
Category 3: Calculated as purchased fuel, electricity, and heat used (only JR East) x emission factor\*<sup>3</sup> for each type of energy by amount used  
Category 13: Calculated as total floor area of buildings owned by JR East x emission factor\*<sup>2</sup> per building used and unit of total floor area for food and beverage shops

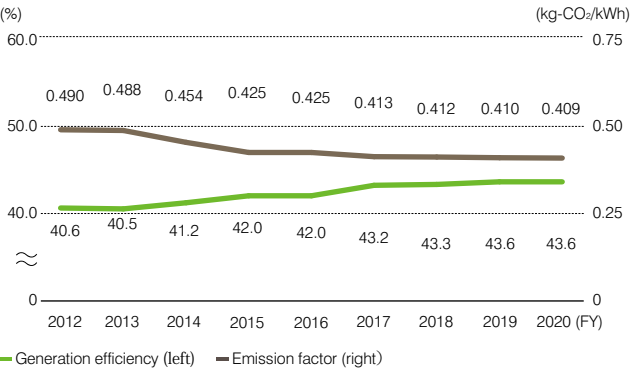
\*1 Uses emission factor data from the Embodied Energy and Emission Intensity Data for Japan Using Input-Output Tables (3EID) (2005 edition)  
\*2 Uses emission factor data from the Emission Intensity Database for the Calculation of an Organization’s Greenhouse Gas Emissions Generated by the Supply Chain (Ver. 2.6) (March 2019), Ministry of the Environment  
\*3 For fuel, uses intensity data from the Basic Database for the Carbon Footprint Communication Program, Ver. 1.01, Ministry of the Environment; for electricity and heat, uses emission factor data from \*2

Thermal power plant of JR East

JR East operates a thermal power plant in the city of Kawasaki, Kanagawa Prefecture, fueled by city gas and natural gas with a total capacity of 741 thousand kW. In the plant’s update, it is being equipped with combined-cycle power generation units\* with improved efficiency and renovated to reduce CO<sub>2</sub> emissions. Unit 1 is undergoing construction update, targeting operation in 2021.

\* 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.

CO<sub>2</sub> emission factor and power generation efficiency at thermal power plant of JR East☆



— Generation efficiency (left) — Emission factor (right)

• Calculation method  
CO<sub>2</sub> emissions from the thermal power plant of JR East are calculated based on the method stipulated in the Act on Promotion of Global Warming Countermeasures, and power generation efficiency is based on the method stipulated in the Energy Saving Act.

• CO<sub>2</sub> emission factor of all power generated by JR East (thermal power and hydraulic power)  
The emission factor adjusted in FY2020 was 0.286 (kg-CO<sub>2</sub>/kWh).

Measures to Prevent Global Warming

Specific environmental targets

JR East is working to resolve global environmental problems by setting numerical targets for each basic unit and policy.

Figures in parentheses are in comparison to FY2014.

|                                    | Performance indicators   | Unit              | Reference value (FY2014) | FY2021 goal              | FY2020 result                         |
|------------------------------------|--|-------------------|--------------------------|--------------------------|---------------------------------------|
| Measures to prevent global warming | Energy consumption from railway business activities              | Billions of MJ    | 51.7                     | 48.5 (6.2% reduction)    | 48.0 <sup>☆</sup> (7.2% reduction)    |
|                                    | Electricity consumption for train operation (Shinkansen lines)   | kWh/car-km        | 2.49                     | 2.36 (5.1% reduction)    | 2.39 <sup>☆</sup> (3.7% reduction)    |
|                                    | Electricity consumption for train operation (conventional lines) | kWh/car-km        | 1.59                     | 1.46 (8.3% reduction)    | 1.49 <sup>☆</sup> (6.4% reduction)    |
|                                    | Energy consumption at branch offices, etc.                       | kL/m <sup>2</sup> | 0.0407                   | 0.0366 (10.0% reduction) | 0.0341 <sup>☆</sup> (16.2% reduction) |

Progress of Environmental Measures

|                                    | Performance indicators                                       | FY2021 goal           | FY2020 result                                       |
|------------------------------------|--|-----------------------|---|
| Measures to prevent global warming | Implementation of more ecoste model stations                 | Total of 12 Stations  | Total of 12 Stations                                |
|                                    | Switching platform and concourse lighting to LEDs            | Total of 62,000 units | Total of 69,000 units (reduction of 146 million MJ) |
|                                    | Improving efficiency of large-scale air-conditioning systems | Total of 10 Locations | Total of 9 Locations (reduction of 78 million MJ)   |

Annual Targets through FY2021

|                                    | Performance indicators  | FY2021 goal                                   | FY2020 result                       |
|------------------------------------|---|---|-------------------------------------|
| Measures to prevent global warming | Reduction rate of energy consumption intensity of each JR East subsidiary | Every year 1% reduction in each Group company | 1% reduction by all Group companies |
| Measures for resource circulation  | Recycling rate for waste generated at stations and on trains              | 94%   | 93%                                 |
|                                    | Recycling rate for waste generated at General Rolling Stock Centers, etc. | 96%   | 95%                                 |
|                                    | Recycling rate for waste generated in facility construction projects      | 96%   | 93%                                 |
|                                    | Implementation rate of recycling by subsidiaries                          | 100%  | 100%                                |
| Environmental management           | Setting of numeric targets by each JR East subsidiary                     | Targets to be revised continually             | Established                         |

■ Targets for Group companies

Ecoste

Through our “ecoste” initiative, we are introducing a variety of energy conservation, renewable energy, and other eco-friendly technologies at stations. In FY2020, 12 stations completed their target of becoming “ecoste” model stations. In addition, Takanawa Gateway Station opened as an “ecoste” station. We plan to use the knowledge we have accumulated to continue developing “ecoste” stations.



Nobeyama Station (ecoste)



Maebashi Station (ecoste)

Effective use of regenerative power

We are attempting to utilize effectively the regenerative electric power that is produced when trains stop.

This regenerative electric power is stored temporarily in a power storage apparatus that contains a battery. We have introduced this system at eight locations to date. We are also developing a new storage medium, a superconducting flywheel power storage system.



Superconducting flywheel power storage system

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

In addition to the world’s first diesel hybrid railcar, the KiHa E200 (Koumi Line), we have introduced the HB-E300 (Nagano, Aomori, Akita, and Niigata regions), which has the same hybrid system. The rate of fuel consumption on these trains is approximately 10% lower than for conventional rolling stock. Also, the sound they emit when starting and stopping at stations is 20–30 dB lower.

We are introducing a battery power train system as a new environmental impact reduction measure for non-electrified sections. We have deployed an EV-E301 (nicknamed ACCUM) using this system as the EV-E801 on the Oga Line. This system eliminates the exhaust gas emitted from steam trains’ engines and reduces CO<sub>2</sub> emissions and sound.



EV-E801 series Accumulator railcar train for use on alternating current (AC) section

Reducing energy consumed for train operations

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. By the end of March 2020, JR East had 12,221 energy-efficient railcars in operation. This accounts for 98.4% of our railcar fleet.



E235 series: Conventional line equipped with a state-of-the-art train information management system



E7 series: Shinkansen railcars that incorporate cutting-edge technology



E233 series: VVVF inverter cars for commuter and suburban transportation

Environmentally friendly and energy-efficient office buildings

We have pursued energy-saving initiatives through hard measures such as introducing LED lighting and high-efficiency devices into office buildings and by soft measures such as implementation of “cool-biz” initiatives and thermal control of air conditioners. Thanks to its superior performance in reducing CO<sub>2</sub> emissions, JR SHINJUKU MIRAINA TOWER has been certified as an Office Taking Excellent Specific Global Warming Countermeasures (top-level office building) under the Tokyo Metropolitan Ordinance on Environmental Preservation. This brings JR East’s total to eight, including one at the secondary level. During the first planning period under the ordinance (FY2011 to FY2015), we were able to reduce CO<sub>2</sub> emissions substantially more than the obligatory amount. We used the excess reduction for emission trading within the Group and others as stipulated in the ordinance. We also plan to exceed the CO<sub>2</sub> reduction requirement by more than the required amount during the second planning period (FY2016 to FY2020).

| Top-Level Offices   | Semi-Top-Level Office    |
|---|--------------------------|
| Sapia Tower, JR Shinagawa East Building, GranTokyo South Tower, GranTokyo North Tower, JP Tower, JR Minami-Shinjuku Building, and JR SHINJUKU MIRAINA TOWER | JR Tokyu Meguro Building |



JR SHINJUKU MIRAINA TOWER, ranked “S” in the CASBEE



Top-level workplace certification logo in the CASBEE



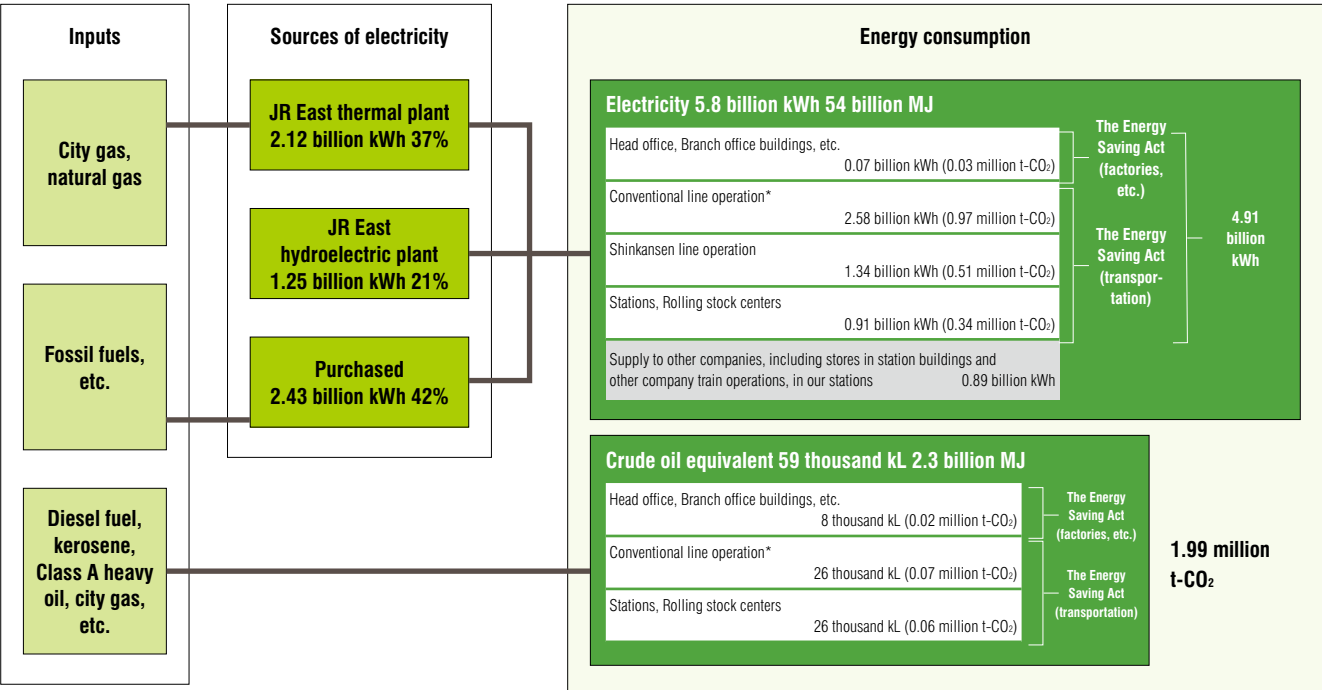
Measures to Prevent Global Warming

Energy flow map\*

This shows the flow of energy from input through consumption. Power supplied by our own power plants and power companies is used for train operation and for station and office lighting and aircon-  
ditioning. Diesel fuel and kerosene, etc. are also used to operate diesel trains and stations and office airconditioning.

Our energy consumption

We will strive to save energy for train operation, which accounts for about 80% of our total energy consumption, and, furthermore, it will be necessary to conduct energy-saving activities even in offices and other facilities.

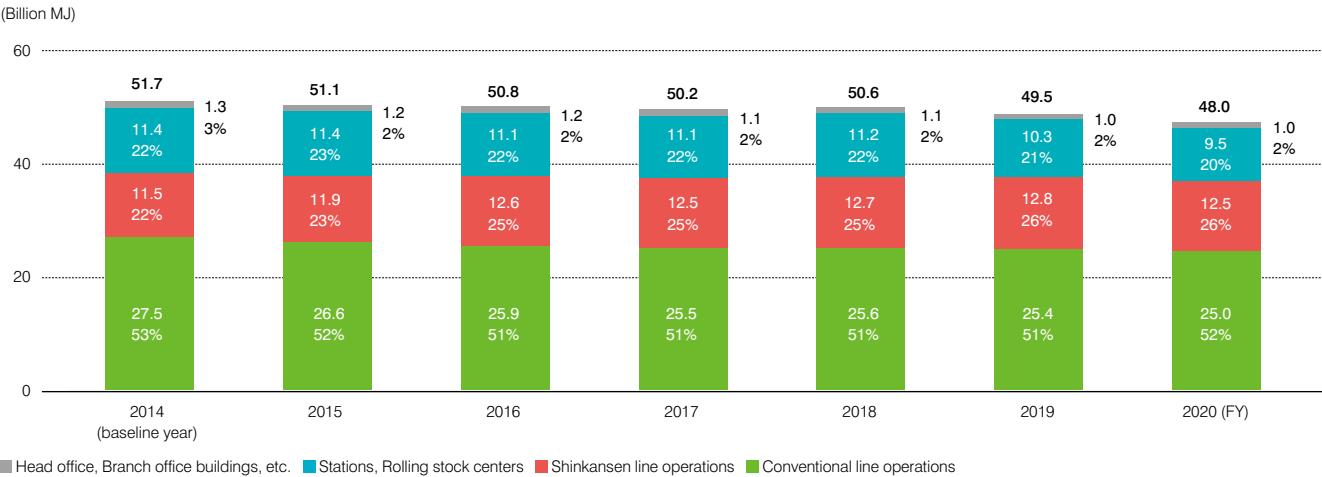


•Boundary  
Though, in principle, the boundary for energy consumption is only JR East, it nonetheless includes energy consumption for the applicable operations of the companies with whom we entrust station operations. On the other hand, the energy consumption of shops on station premises which are operated by Group companies is not included in the boundary. We match the boundary for the energy consumption for the entire JR East business with that of transportation, plants, and others defined by the Act on the Rational Use of Energy (The Energy Saving Act).

•Calculation method  
Energy consumption was calculated by the method defined by the Energy Saving Act.

•Hydraulic power generated by JR East  
The foregoing energy consumption is calculated by the idea of the Energy Saving Act, but hydraulic power generated by JR East is calculated by multiplying by 9.76MJ/kWh. As for hydraulic power generated by JR East, reports required by the Energy Saving Act are reported by the OMJ.

Composition of energy consumption by JR East\*



Overview of JR East Group's energy initiatives

The Group aims to optimize energy at various stages: create, send, store, and utilize. Moreover, approximately 25% of energy consumed during train operations, etc., is renewable energy such as hydroelectric, solar, and wind power, which produce zero CO<sub>2</sub> emissions.

### Creating (energy creation)

- Improve efficiency of thermal power plant
- Steady maintenance and operation of hydroelectric power plants
- Promoting the introduction of renewable energy

### Delivering

- Improving the power transmission efficiency of JR East's own power grid

### Storing (Energy storage [power storage/heat storage])

### Utilizing (Energy-saving)

- Accumulator railcar train
- Eco model stations
- High-efficiency equipment
- Eco-friendly office buildings

### Diversification of energy

- Implementing and enhancing hydrogen stations
- Introducing fuel cell buses and vehicles
- Developing trial fuel cell railcars

### To trains, stations, office buildings, etc.

Measures to Prevent Global Warming

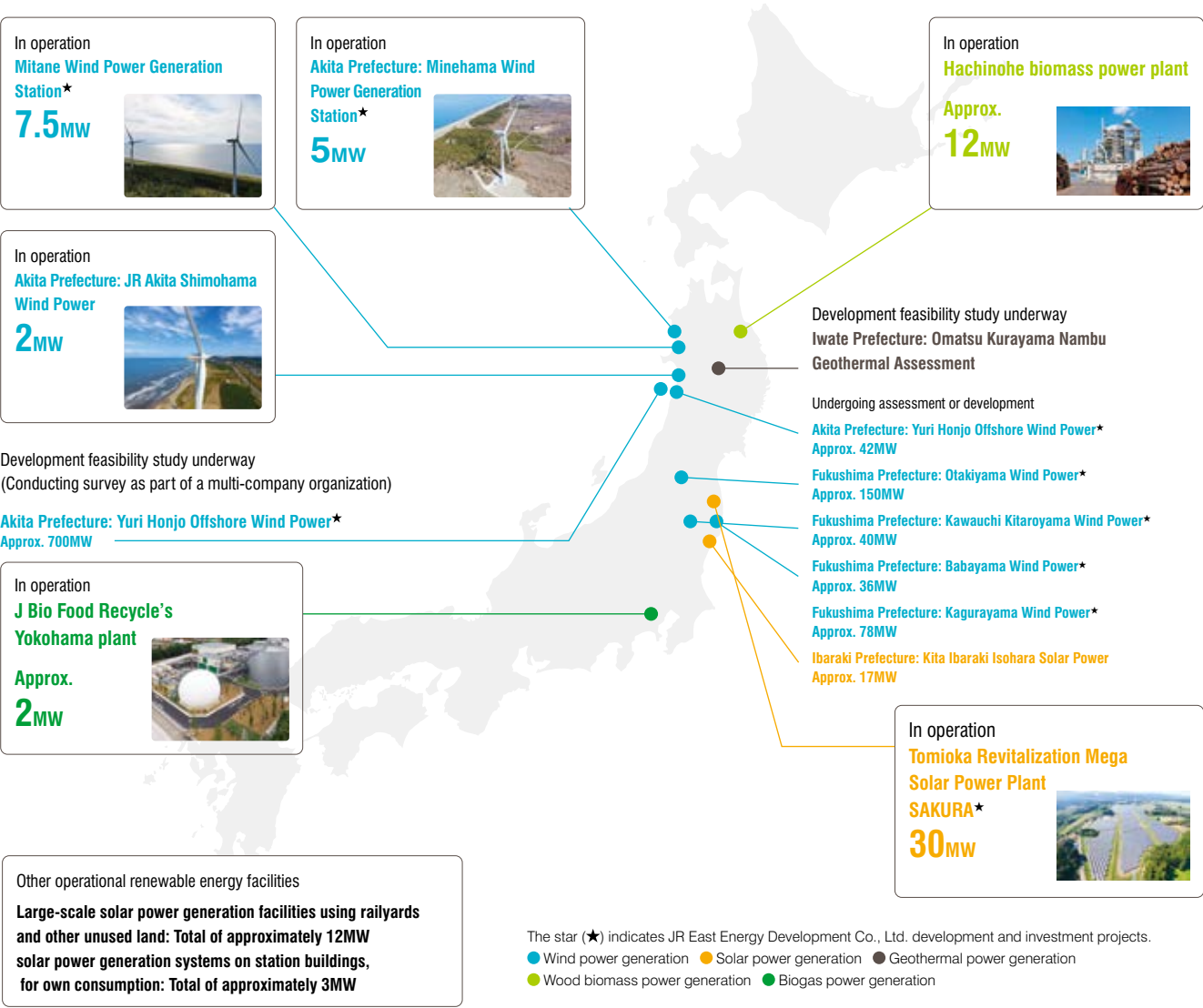
Progress of introducing renewable energy

We place solar panels on the roofs of platforms and station buildings and in rolling stock centers, using the energy they generate for our own use or on other trains passing through our tracks. In July 2018, we installed a compact wind power turbine at Oga Station. In addition to covering that station's electricity requirements, some power from the turbine is used for the ACCUM, which is driven by an AC storage battery. Through such efforts, in FY2020 we generated approximately 2.70 million kWh for our own consumption.

In addition to working with JR East Energy Development Co., Ltd. to develop renewable energy, we are actively introducing renewable

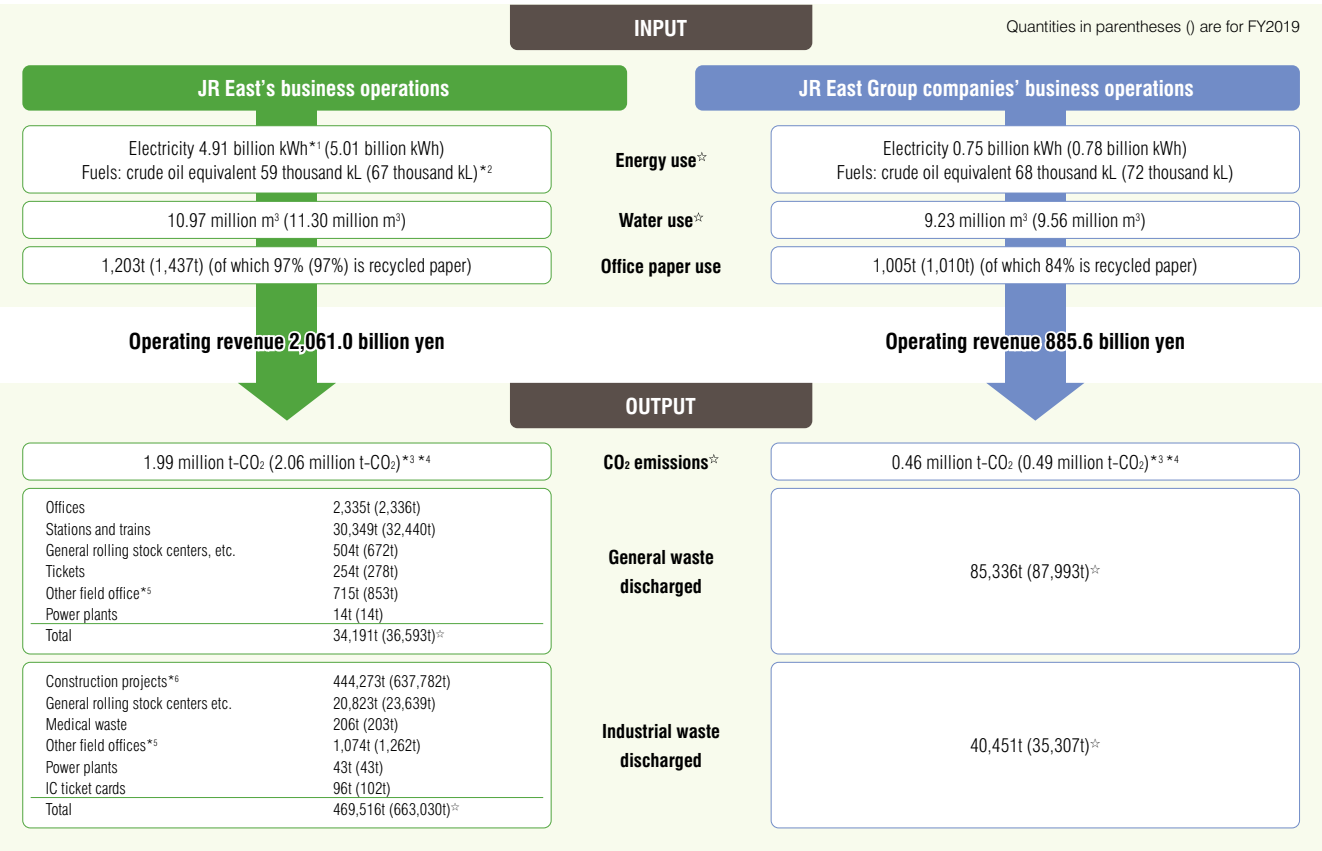
energy (wind, solar, and geothermal) initiatives, centered on the Tohoku region. Taking advantage of the feed-in tariff (FIT) system, we have steadily launched operations at megasolar power plants and large wind power generation plants. In FY2020, we generated approximately 19.40 million kWh of electricity. Using "non-fossil certificates" obtained through the development of renewable energy, we are providing "CO<sub>2</sub>-free electricity" for our trains. As a result, we aim to achieve zero CO<sub>2</sub> emissions in the Tohoku region by FY2031

The JR East Group's current renewable energy development plan

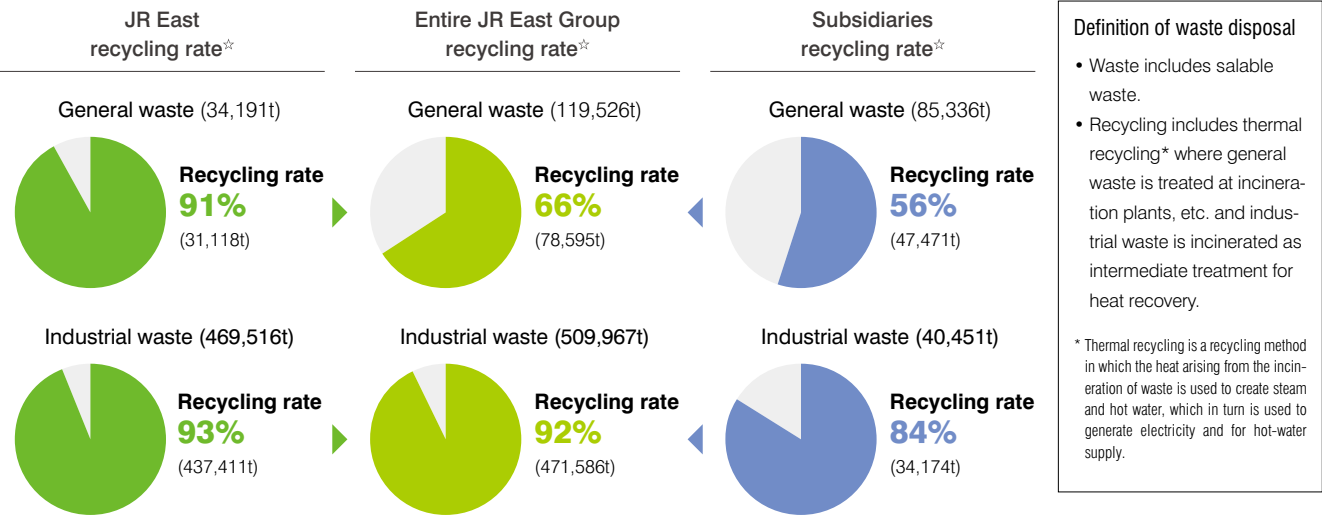


In addition to the plan outlined above, we plan to work with JR East Energy Development Co., Ltd., collaborating with local communities on further study and development to promote solar and wind power generation plants. By FY2051, we aim to develop enough renewable energy to cover around 30–40% of the energy we use in the railway business. This figure rises to 50–60% for renewable energy if the hydroelectric power plants we operate are added in.

JR East Group's environmental impact  
FY2020 Results



\*1 Electricity: Both electricity generated in JR East's power plants and used internally and electricity purchased from electric companies are included. Please refer to the "JR East Energy flow map" on page 80 for details about electricity generation and use.  
\*2 Fuels: Natural gas and other fuels used for generating electricity in JR East's thermal power plants are not included.  
\*3 CO<sub>2</sub> emissions by Scope: Scope 1 emissions of the entire Group are 1.40 million tons CO<sub>2</sub>\*\* and Scope 2 emissions 1.48 million tons CO<sub>2</sub>\*\* (please see page 77)  
\*4 CO<sub>2</sub> emissions attributable to electricity purchased from external suppliers are calculated based on the adjusted emissions coefficient.  
\*5 Other field offices: Technical centers, equipment maintenance centers, and other locations such as train crew offices.  
\*6 Construction projects: Waste generated by our construction projects, but for which contractors legally become the waste-discharging entities, is included in industrial waste.





# Measures for Resource Circulation

## Measures for resource circulation

All Group companies promote 3R practices (Reduce, Reuse, Recycle) to reduce the various waste products produced through our business activities and achieve an environmentally friendly society. We have already met our FY2021 recycling rate targets for each type of waste product.

Moreover, JR East Group will work as one to tackle the plastics issue, which is an important topic both socially and internationally. Our efforts include setting new targets for reduced emissions and recycling ratios.

## Collection and reuse of recyclable waste

We are working to enhance recycling rates. For example, JR East Tokyo Materials Recycling Center (operated by JR East Environment Access Co., Ltd.) makes a thorough effort to sort waste from stations and trains, which contains recyclable materials. Such waste as magazines and newspapers is recycled into coated paper or office paper used internally. Used tickets are all recycled into such items as toilet paper and cardboard (recycling rate of 100%).

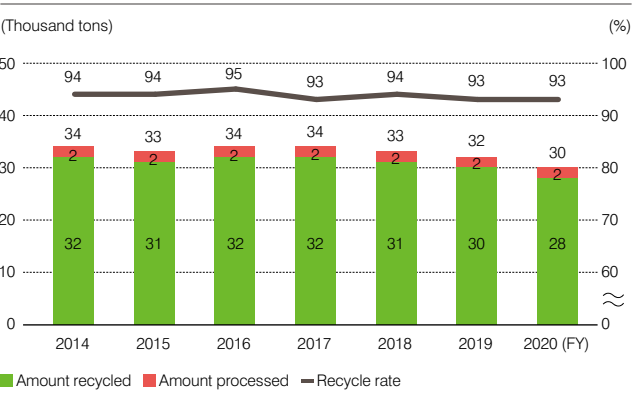


JR East Tokyo Materials Recycling Center



Office paper for internal use, made from recycled paper

## Waste from construction projects



## Food recycling / Biogas power generation project

We recycle food products and operate a biogas electricity generation business through J BIO FOOD RECYCLE (jointly established with the JFE Group). We source a daily volume of as much as 80 tons of food waste from our subsidiaries and food manufacturers and utilize biogas created by methane fermentation processing to generate electricity.

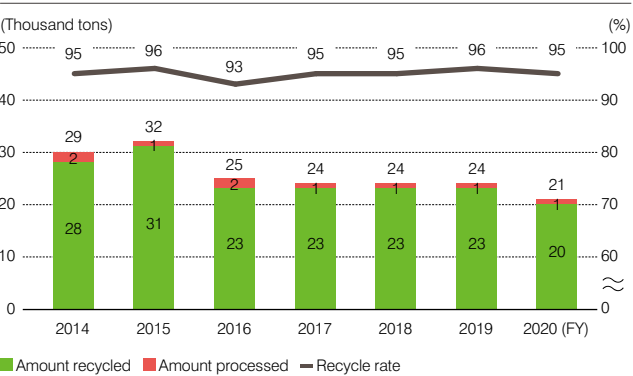
We can process the same amount of food waste as is generated by approximately 3,000 families. We also capture some of the byproduct heat and utilize it inside the plant.



## Recycling at general rolling stock centers

At our regional General Rolling Stock Centers, waste is sorted into 20 to 30 categories to reduce waste generation and promote recycling.

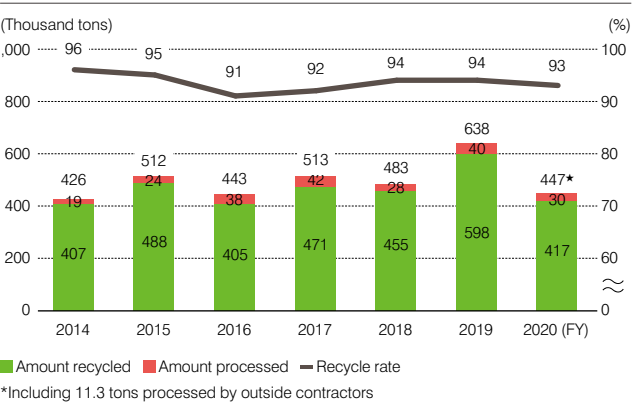
## Waste from general rolling stock centers



## Reducing construction waste

JR East endeavors to appropriately process the byproducts of construction and to reduce construction waste by internally standardizing design and construction methods.

## Waste from construction projects



\*Including 11.3 tons processed by outside contractors

# Others

## Biodiversity

### Hometown Forestation Program

Since 2004, we have promoted the achievement of a sustainable society with our involvement in the Hometown Forestation Program, an initiative to protect biodiversity by planting native tree species to regenerate forests. So far, we have undertaken this initiative in Fukushima, Niigata, and Miyagi prefectures. Since 2019, we have been moving forward with the Shima Furusato Forest Project in Nakanojo, Gunma Prefecture.



Shima Furusato Forest Project hosted in 2019

### Forest development along railway lines

Since 2008, we have been promoting the "railway trees project" project aiming to protect environments along railways and mitigate natural disaster damage to tracks. We plan to fundamentally review our concept of ideal railway forest management and replant trees when they are due to be replanted over the course of roughly 20 years.

Currently, we hold around 1,080 plots of forestland along railways (approximately 3,900 hectares with 5.8 million trees). These trees have the effect of absorbing roughly 15,000 tons of CO<sub>2</sub> from the atmosphere, or 0.8% (as of FY2020) of the Company's CO<sub>2</sub> emissions.

## Chemical substance management

### Under the act for rational use and proper management of fluorocarbon

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. Under the Act for Rational Use and Proper Management of Fluorocarbon, we reported a leakage amount of around 4 thousand t-CO<sub>2</sub>\* for FY2020.

## Chemical substance management and reduction

The Company is classified as a business operator handling over a certain amount of specified chemical substances under the PRTR framework\*. Accordingly, 11 of our sites reported emissions and transfer amounts to the relevant local government bodies in FY2020.

Also, considering the impact on ecosystems, we are working to reduce and substitute chemical substances such as by introducing stainless steel railcars that do not require painting.

\*PRTR system  
A system where companies notify their releases and transfers of chemical substances as required by the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Law concerning Pollutant Release and Transfer Register (PRTR)). It encourages the monitoring and control of toxic chemical substances emitted into the environment and measures to prevent negative impact on the environment.

## Promoting green procurement and purchasing

### Green sourcing

The "JR East Code of Conduct for Material Procurement" posted on our website indicates a procurement policy that emphasizes the fulfillment of corporate social responsibility. We ask all of our partners to comply with the "Green Procurement Guidelines," which were devised to promote observance of the relevant regulations and to reduce the environmental burden.

Reference: Code of Conduct for Material Procurement of JR East

[http://www.jreast.co.jp/e/data/procurement/code\\_of\\_conduct.html](http://www.jreast.co.jp/e/data/procurement/code_of_conduct.html)

### Promoting green purchasing

At JR East, we primarily promote the procurement of environmentally friendly office supplies, and have prepared a structure where relevant products can be purchased through our in-house goods procurement system.

## Established Ekimachi Energy Create Co., Ltd.

We established Ekimachi Energy Create Co., Ltd. in April 2020 to handle the supply and management of energy for the Shinagawa development project, which is scheduled to open in FY2025. Going forward, we aim for development that incorporates advanced environmental and energy technologies.

TCFD Recommendation-Related Initiatives

Since the adoption of the Paris Agreement, the countries and governments of the world have made a major shift toward decarbonization. Companies now must ascertain the financial impact of climate change-related risk and to disclose relevant information. JR East will draw up scenarios based on objective data to ascertain the financial impact of future climate change in the transportation service business. The business is vulnerable to natural disasters, which are intensifying in scale as climate change progresses. We will proactively work to disclose information using the framework of the Task Force on Climate-related Financial Disclosures (TCFD). Further, we expressed our support for the TCFD recommendations in January 2020.

Disclosure of information based on TCFD recommendations

| Recommendations        | Content   |
|------------------------|---|
| Governance             | We have established a Sustainability Strategy Committee chaired by our president and representative director to manage sustainability-related initiatives, set goals regarding climate change mitigation, and confirm progress versus targets.                |
| Strategy               | Our strategy is to identify important risks associated with climate change, assess the probable impacts on our business activities, and verify the validity of our business strategies.   |
| Risk Management        | The Sustainability Strategy Committee is working to ascertain climate change-related risks for each department and to prevent or reduce them.   |
| Indicators and Targets | We use reduction of energy consumption and CO <sub>2</sub> emissions as climate-related indicators and targets. We have also set environmental management indicators to better understand the relationship between those reductions and environmental impact. |

Climate change-related strategy

(1) Awareness of risks and opportunities

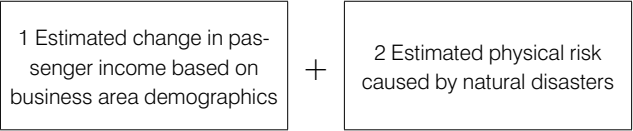
The risks and opportunities associated with climate change are those that result from the transition to a new framework, such as the strengthening of regulations and technological progress that occurs in the process of decarbonization, and those that result from physical changes, such as severe weather caused by global warming. We examined physical risks after estimating passenger income based on future demographics as a baseline for analysis. We recognize the following points as major climate change risks and opportunities.

| Main risks and opportunities |   | Timeframe   |
|------------------------------|---|-------------|
| Physical risks               | Damage to railway facilities and equipment and suspension of operations due to wind and water disasters       | Short term  |
|                              | Decrease in the number of passengers due to extreme weather events (heavy rain, extreme heat)                 | Long term   |
| Transition risks             | Cost increases due to the introduction/strengthening of a carbon pricing system                               | Medium term |
|                              | Decrease in passenger numbers due to competition with other means of transportation such as electric vehicles | Long term   |
|                              | Decrease in passenger numbers due to damage/change to tourist attractions                                     | Long term   |
| Opportunities                | Increase in passenger numbers due to preference for low-CO <sub>2</sub> -emissions transportation             | Long term   |

Short term: Less than three years  
Medium term: Three to nine years  
Long term: 10 years or more

(2) Scenario analysis

The scenario analysis targeted the transportation services business. The number of passengers in the business is expected to fall due to population decline (declining birthrate and aging population), and it is predicted that the impact will be particularly significant in rural areas. Over the medium-to-long term, in addition to macrosocioeconomic factors such as population decline, factors resulting from progressing climate change are expected to take a toll. In order to ascertain the financial impact of these factors and to verify the adequacy of our business and environmental strategies, we conducted the following scenario analysis with 2050 as the target year.



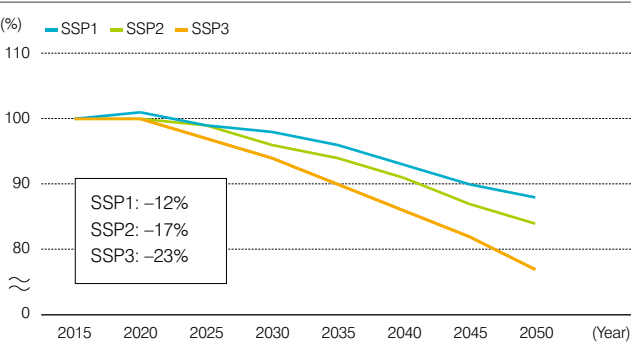
1 Estimated change in passenger income based on business area demographics

We estimated changes in passenger income up to 2050 based on data such as the Shared Economic Pathways (SSPs)\*1 data on population and GDP\*2, which are used across a range of fields in climate change research. The result was a difference of about 11% in the 2050 population estimate in ¥0.4 trillion in the passenger income estimate between the social scenario of “Sustainability” (SSP1) that we aim for and the opposing scenario of “Regional Rivalry” (SSP3).

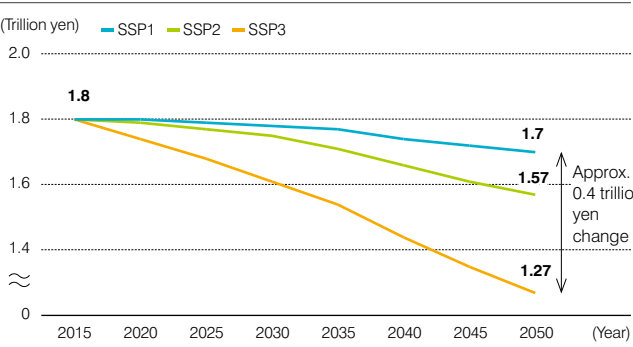
\*1 Shared Economic Pathways (SSPs): Scenarios of projected socioeconomic global changes up to 2100.  
\*2 Population data taken from the National Institute for Environmental Studies’ “Japan Shared Economic Pathways Population Estimates by Municipality.” GDP data taken from the International Institute for Applied Systems Analysis (IIASA)’s “Global Dataset of Gridded Population and GDP Scenarios.”

| Scenario      | State of domestic society   | Birthrate | Mortality rate |
|---------------|---|-----------|----------------|
| SSP1 (2°C)    | Sustainability: Development of renewable energy and environmental technology, urban concentration, compact development with robust networks | High      | Moderate       |
| SSP2 (Middle) | Middle of the Road: Maintain the status quo, current trends progress relatively unchanged   | Moderate  | Moderate       |
| SSP3 (4°C)    | Regional Rivalry: Uniform population decline, depopulation of regional areas  | Low       | Moderate       |

Business area population estimates by scenario (versus 2015)



Business area population estimates by scenario (versus 2015)



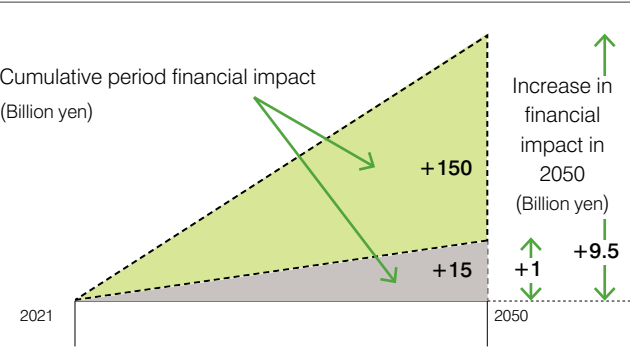
2 Estimated physical risk caused by natural disasters

For RCP2.6 (2°C) and RCP8.5 (4°C) scenarios\*3, we analyzed physical risks from natural disasters (floods, storm surges, landslides) caused by climate change, and estimated the financial impact until 2050 based on certain assumptions. The calculation factored in future disasters, calculated using the rate of increase in the occurrence of natural disasters due to 2°C and 4°C rises at about 100 locations in the business area, and the financial impact of natural disasters during the 10 years from FY2011 to FY2020. We concluded the single-year financial impact (decrease in fares and increase in disaster recovery expenses) until 2050 would be between ¥0.5 and ¥4.8 billion in the RCP2.6 (2°C) scenario and between ¥1.5 and ¥5.3 billion in the RCP8.5 (4°C) scenario. These are still first-stage scenario analyses; moving forward, we plan to carry out a quantitative evaluation of the financial impact on our major routes based on disaster scenarios, and work to refine estimates.

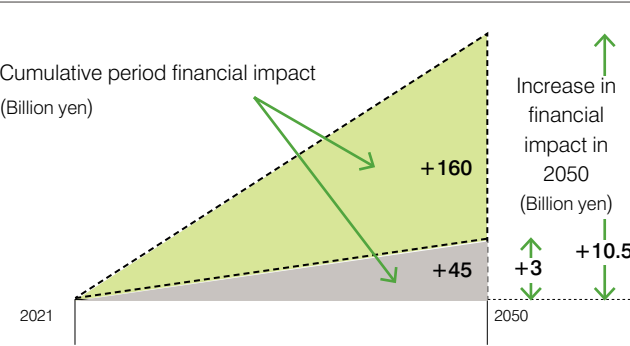
\*3 Representative Concentration Pathways (RCPs): Representative Concentration Pathway Scenarios used in the IPCC Fifth Assessment Report

| Climate change scenario | Period (FYs) | Increase in financial impact in 2050 (Billion yen) | Financial impact (Billion yen) (decrease in fares and increase in disaster recovery expenses) |         |
|-------------------------|--------------|--|---|---------|
|                         |              |  | Cumulative period   | Annual  |
| RCP2.6 (2°C)            | 2022 ~ 2051  | 1~9.5  | 15~145  | 0.5~4.8 |
| RCP8.5 (4°C)            |              | 3~10.5   | 45~160  | 1.5~5.3 |

Potential increase in financial impact under RCP2.6



Potential increase in financial impact under RCP8.5



(3) Future policy and initiatives based on analysis results

We have long been working to mitigate climate change by introducing energy-saving railcars and improving the efficiency of our power plants. In May 2020, we set a new long-term environmental goal of achieving “effectively zero” CO<sub>2</sub> emissions in the railway business in FY2051 with our Zero Carbon Challenge 2050 initiative. Moving forward, we aim to further increase the environmental advantage of railways over other forms of transportation and contribute to the realization of a carbon-free, sustainable society.

In addition, we have signed partnership agreements regarding “compact town” development with local government bodies in regional areas based on the idea of enriching local communities. These initiatives will lead to the creation of bustling city centers and inflow of tourists. We position such efforts as contributing to the realization in Japan of a sustainably developing society, and will continue to promote attractive development centered on stations.



# Directors and Auditors

(As of June 2020)



## Directors

- 1

Chairman  
Tetsuro Tomita
- 2

President and CEO  
Yuji Fukasawa
- 3

Executive Vice President  
Fumihisa Nishino
- 4

Executive Vice President  
Tadao Maekawa
- 5

Executive Director  
Tomomichi Ota
- 6

Executive Director  
Ryoji Akaishi
- 7

Executive Director  
Yoichi Kise
- 8

Executive Director  
Kiwamu Sakai
- 9

Director (Outside Director)  
Motoshige Itoh
- 10

Director (Outside Director)  
Reiko Amano
- 11

Director (Outside Director)  
Masaki Sakuyama
- 12

Director (Outside Director)  
Hiroko Kawamoto

## Auditors

- 13

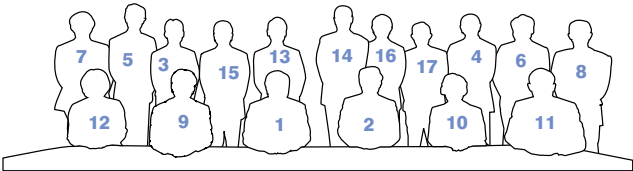
Full-time Corporate Auditor  
(Outside Auditor)  
Keiji Takiguchi
- 14

Full-time Corporate Auditor  
(Outside Auditor)  
Takashi Kinoshita
- 15

Corporate Auditor  
(Outside Auditor)  
Seishi Kanetsuki
- 16

Corporate Auditor  
(Outside Auditor)  
Kimitaka Mori
- 17

Corporate Auditor  
Nobuyuki Hashiguchi



# Message from an Outside Director



## JR East’s Board of Directors

My impression is that JR East’s Board of Directors conducts in-depth deliberation across a wide range of themes. During these deliberations, the Board of Directors incorporates “input from the outside” from independent executives. This includes outside directors like myself. As a result, deliberations go beyond just being discussions among friends to incorporate an extensive scope of perspectives, such as trends in other industries and social changes.

It is desirable for the chairman to conduct meetings in a manner that encourages active deliberation. In addition to being capable of clearly explaining the areas of business for which they are responsible, I think it is good for internal executives to be able to voice opinions on other fields, and for outside executives to actively provide input from the perspective of independent executives. On JR East’s Board of Directors, Chairman Tomita fills these roles. Since my appointment as outside director in 2015, the increase in input from outside executives has been noteworthy, and I sense that these comments are invigorating internal executives. Personally, JR East came into contact with society in many ways, so I like to offer remarks about JR East’s management from a broad-ranging social perspective.

## “Move Up 2027,” Our Group Management Vision

I think everyone in the JR East Group has rallied behind “Move Up 2027,” the Group management vision that was announced in July 2018, and is working seriously on its initiatives. However, COVID-19 has changed the operating environment significantly, and the questions we need to address now are how we respond to this changing environment and how we go beyond it. To realize the “Move Up 2027” objectives, it is essential to carefully weigh the risk and return of each investment. On this basis, I believe it is desirable to deliberate deeply about how the JR East Group should expand its business directions and then to reflect this discussion in investment decisions.

To grow sustainably, one of the biggest risks the JR East Group faces is to ensure safety, including its response to increasingly devastating and diverse disasters. At the same time, however, the JR East Group has the chance to expand substantially embracing digital transformation and broadening the value it adds in the railway and ancillary businesses.

Around the world, activity is accelerating with regard to social issues and the SDGs. The JR East Group also needs to assess its routine operations and continue engaging in initiatives through this lens. I believe the Board of Directors also provides a good forum for more in-depth exchanges of opinion surrounding the Group’s SDG initiatives.

We are feeling the impact of COVID-19, and social trends are changing markedly. I would like to contribute by deliberating on how these shifting trends will affect “Move Up 2027” and what new initiatives will be necessary.

## In Closing

To date, the JR East Group has continued to respond as necessary to the changes in society. Even amid major upheavals in the operating environment like we are currently experiencing, I anticipate that JR East will respond to the needs of the times.

To do so, communicating more closely with society is important. The Company is working to enhance disclosure; I would like to see even more effort to communicate information through a variety of channels. I hope to hear a host of opinions from our stakeholders.



# Corporate Governance

Basic corporate governance philosophy

To achieve the sustained business growth and to improve its medium-to long-term corporate value, JR East pursues achievement of the ultimate in safety to enhance reliability for customers and to create a spiritually affluent life for people as our business so that the expectations of all our stakeholders including shareholders, customers, and local communities will be met by making transparent, fair, firm, and timely decisions.

JR East has set "the Guidelines of Corporate Governance" which were developed by the Board of Directors as the material which shows the basic concept of our corporate governance and its concrete activities and presents it on our corporate website.

Governance system

Our Board of Directors consists of 12 members including four outside directors (as of June 23, 2020), and it generally meets monthly to decide statutory requirements and other key operational matters and to supervise overall operations. The Board of Directors has established an Executive Committee consisting of 8 directors and 12 senior executive officers. This Executive Committee generally meets once a week and deliberates on matters to be decided by the Board of Directors and other important management issues. In addition, the Group Strategy Formulation Committee consisting of 8 directors, 12 senior executive officers, and 4 executive officers is formed with the aim of the development of all JR East groups, and meets as required to discuss important group issues such as management strategies for each business field.

Directors

12 (Including four outside directors)



Auditors

5 (Including four outside auditors)



Before resolving agenda items to appoint or dismiss directors or the president and representative director, in the interests of objectivity, appropriateness, and transparency we consult first with the Personnel Deliberation Committee, which comprises independent outside directors and other directors.

When determining director compensation, we first consult with the Remuneration Deliberation Committee, which is made up of independent outside directors and other directors.

Reasons for adopting our current corporate governance system

We have established a Board of Directors due to the need to make decisions that reflect various types of expertise and experience in such areas as safety assurance in the railway business, which account for a majority of earnings, and from a medium- to long-term perspective. We also have in place a Board of Corporate Auditors, which is made up of corporate auditors and is independent from the Board of Directors.

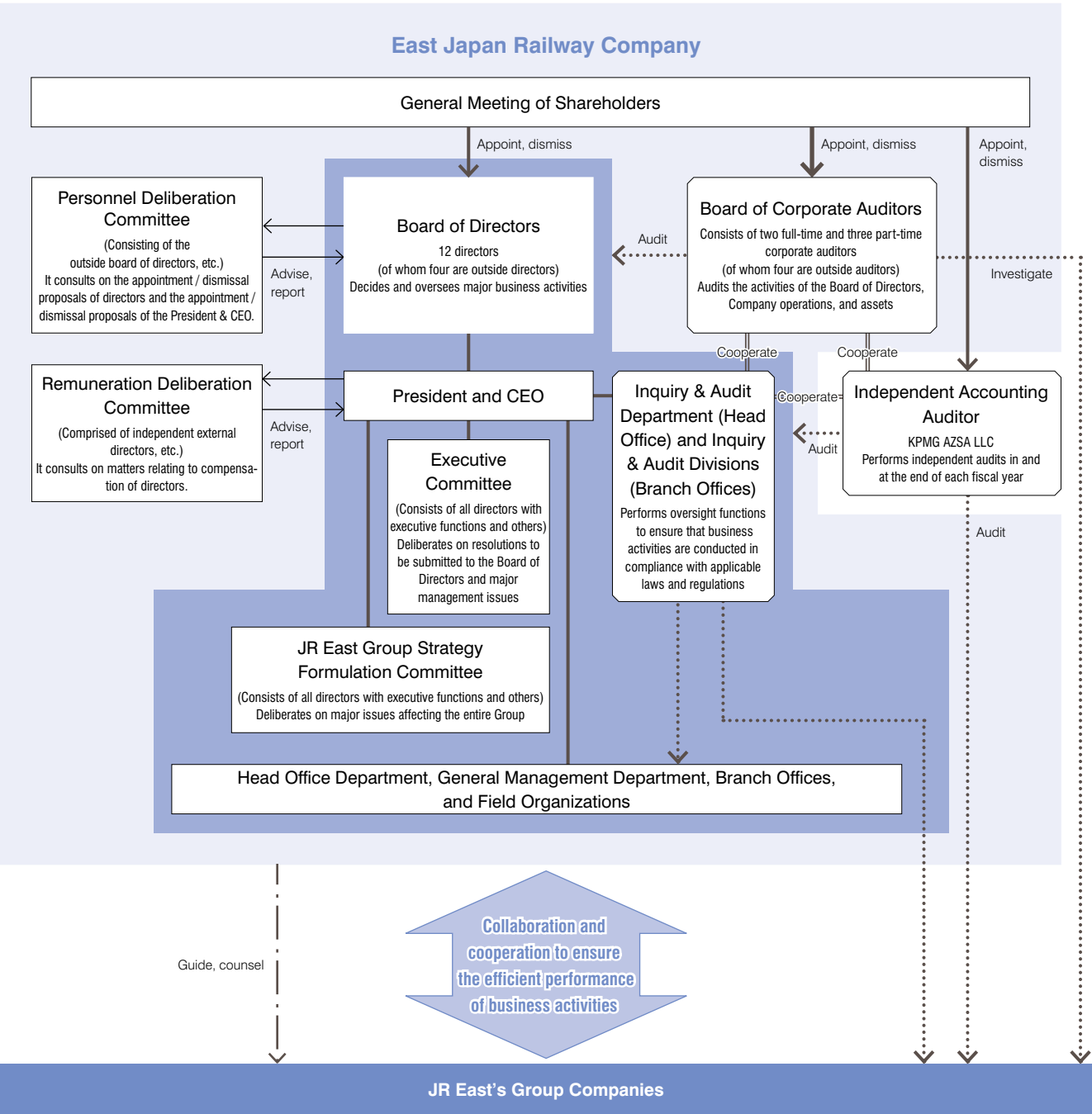
Audits by corporate auditors, internal audits, and accounting audits

The Company has five corporate auditors (of whom four are outside corporate auditors), two full-time and three part-time. One of the part-time corporate auditors is qualified as a certified public accountant and has extensive experience related to finance and accounting. We assign around 10 dedicated staff members to assist the corporate auditors. In accordance with the policy determined by the Board of Corporate Auditors, the corporate auditors attend the Board of Directors and other important meetings, audit the status of operations and financial assets, and regularly exchange views with the representative director and outside directors. Furthermore, the Corporate Auditors communicate and exchange information with directors and corporate auditors of Group companies, and obtain reports as needed on the operations of Group companies. The Board of Corporate Auditors meets once each month, in principle, mainly to consider such matters as audit policies, methods, division of duties, and planning, and the appropriateness and status of operation of the Board of Directors' resolutions related to the Group internal control system. The Board of Corporate Auditors assesses individual corporate auditors' audit activities and shares awareness of any problems among corporate auditors.

JR East has assigned approximately 100 full-time employees to handle internal audits at the corporate headquarters and in branch offices, organizing an audit system to ensure the lawful and effective corporate operation. In addition, we have an audit agreement in place with KPMG AZSA LLC (an accounting auditor) to perform accounting audits at mid-term and year-end.

Incidentally, there were no major violations of laws or regulations and the matters relating to the products and service in FY2020.

Corporate governance system (as of June 23, 2020)



Corporate Governance

Ensuring board of directors effectiveness

Once each year, an analysis and assessment of effectiveness of the Board of Directors is performed, as described below.

- The effectiveness of the Board of Directors is assessed from the perspective of the board’s roles and responsibilities, including transparent, fair, quick, and decisive decision-making.
- As to the assessment method, all directors independently evaluate the Board of Directors’ effectiveness. These results are analyzed, independent outside directors are asked for their opinions, and the Board of Directors’ method of operations may be revised, if necessary.

Results of the analysis and assessment of board of directors effectiveness at the board of directors meeting on April 14, 2020

- The results of self-assessment confirmed that the Board of Directors appropriately considers matters for deliberation, conducts sufficient reporting to fulfill its role in supervising business execution, and had a compliance system in place. Based on these results, the Company determined that its Board of Directors was sufficiently fulfilling its roles and responsibilities, and analyzed the board as being effective.
- Based on opinions from the independent outside directors, to further enhance the effectiveness of the Board of Directors we have enhanced director training through such measures as holding site visits, for independent outside directors and hosting lectures by outside experts. In addition, we worked to further enhance Board of Directors reporting to augment the monitoring of progress on “Move Up 2027.”

Executive compensation

The Company pays directors who are not outside directors monthly compensation based on their roles as consideration for their every-day business execution, within the scope of compensation resolved at the General Meeting of Shareholders. In addition, these directors receive performance-linked compensation based on management performance, shareholder dividends, and their degree of contribution to operating performance and the achievement of the Company’s medium-term management vision during that fiscal year.

In consideration of their job responsibilities, outside directors and corporate auditors receive no performance-linked compensation. They receive monthly compensation as consideration for business execution within the scope of the compensation amount resolved at the General Meeting of Shareholders.

Details of the Company’s executive compensation for FY2020 are provided as follows.

|  | People | Total Amount   |
|--|--------|--|
| Directors<br>(excluding outside directors)         | 12     | ¥516 million<br>(base compensation: ¥451 million;<br>performance-linked compensation: ¥64 million) |
| Corporate auditors<br>(excluding outside auditors) | 2      | ¥12 million<br>(base compensation: ¥12 million)  |
| Outside executives                                 | 9      | ¥125 million<br>(base compensation: ¥125 million)  |
| Total  | 23     | ¥654 million<br>(base compensation: ¥589 million;<br>performance-linked compensation: ¥64 million) |

Note: These figures include compensation paid to two directors and three corporate auditors who stepped down at the close of the 32nd Ordinary General Meeting of Shareholders on June 21, 2019.

Indices for performance-linked compensation and the reason for their selection

In addition to “performance during the year,” a director’s success during a given business year is measured through an overall assessment of indices including “operating performance” and “shareholder returns” (business characteristics strongly associated with cooperation among business departments) and “level of contribution to the Group management vision, ‘Move Up 2027’” (business characteristics associated with a long span of time from the planning stage to the appearance of results). To assess performance during the year and the level of contribution, the president and representative director conducts goal-setting interviews and tracing interviews with individual directors regarding the achievement level of annual plans and the Group management vision, “Move Up 2027.”

In FY2020, the Company generally moved forward according to plan with projects planned under the Group management vision, “Move Up 2027.” However, we fell short of our numeric targets due to the impacts of Typhoon No. 19 (Hagibis) and COVID-19. Measures to reduce performance-linked compensation have been introduced, taking into consideration the impact of Typhoon Hagibis and COVID-19 on targets for FY2020, as well as the likelihood of the pandemic affecting performance in FY2021.

Performance-linked compensation and ratio of compensation not linked to performance

The ratio of base compensation to performance-linked compensation for directors who are not outside directors is typically around 4:1, excluding the variable portion for individual directors’ performance. That ratio varies within a certain scope, based on individual performance. Measures to reduce performance-linked compensation have been introduced, taking into consideration the impact of Typhoon Hagibis and COVID-19 on targets for FY2020, as well as the likelihood of the pandemic affecting performance in FY2021.

Basic concept of compliance

JR East positions Compliance as a basic policy of the corporate management to build a better relationship of trust with regional communities and society.

We adopted the “Policy on Legal and Regulatory Compliance and Corporate Ethics” as the Group’s corporate activity guidelines, and we comply with all related laws including the railway business law in various business fields such as the transportation services, life-style services and IT/ *Suica* business, and we thus conduct business in accordance with corporate ethics.

Overview of compliance at the JR East Group



Policy on legal and regulatory compliance and corporate ethics

We uphold regulatory compliance and corporate ethics in accordance with the Group’s philosophy and activities principles. To improve the efficacy of this policy, we have distributed the “Compliance Action Plan Handbook” to all members of the Group. This handbook outlines the actions expected of every employee. It is revised periodically to reflect changes in laws and the social environment.

Furthermore, in conjunction with the development of overseas business, we formulated and announced the “Basic Policy for the Prevention of Bribery Relating to Foreign Public Officials.”



Compliance Action Plan Handbook

Promotion of compliance

To help each employee better understand the importance of compliance, each year we conduct compliance education for all employees. In FY2020, at each workplace we showed videos related to abuse of authority and discussed case studies of compliance violations at other companies. In these ways, we work to impart specific knowledge and awareness to help prevent compliance violations that could affect management.

The head of each workplace regularly checks operational appropriateness using questionnaires. We use the “Confirmation Support Sheet of Basic Issues,” which summarizes fundamental compliance-related matters, for ongoing checking and confirmation. To ascertain potential compliance risks inherent in customization activities, we distribute questionnaires to all Group employees in an effort to detect any early signs of major scandals.

Compliance hotline

We have established consultation desks both internally and outside the Group to facilitate consultation and reporting related to compliance. We accept consultations and reports from business partners and retirees and publish how we accept them on our website.

In FY2020, we received 223 consultations and messages on a wide range of issues such as the handling of laws and regulations, and problems in human relations and harassment, and responded to them properly and respectfully.



Corporate Governance

Implementation of the internal control system

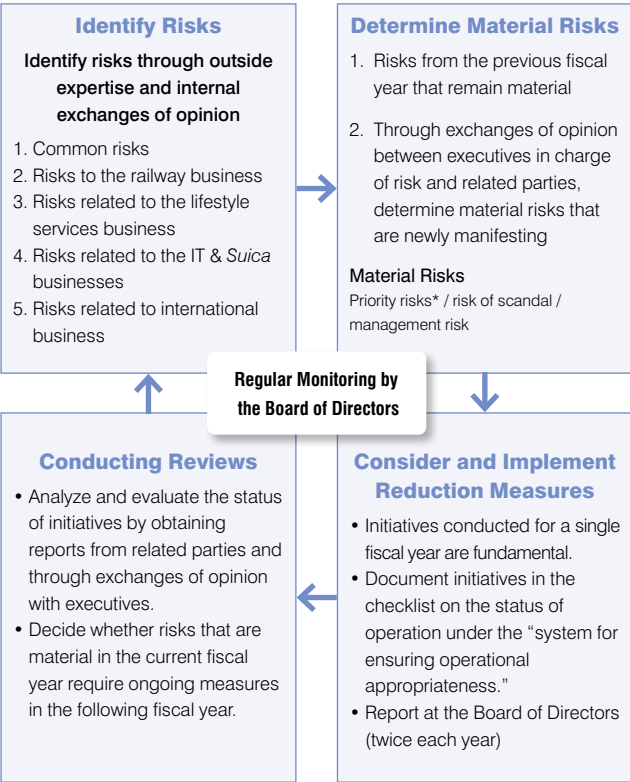
JR East has an internal control system in place to ensure compliance based on the Companies Act, risk management, and efficient business execution. We have also established and operate systems necessary to ensure the appropriateness of documents and other information related to financial calculations, based on the Financial Instruments and Exchange Act.

Risk management

JR East established the Crisis Management Headquarters to centrally collect and manage information, and to promptly respond in the event of major crises affecting business operations of JR East Group, etc. On top of this, we established the Crisis Management Office as the risk management unit within the Corporate & Strategies Legal Strategies Department at the Head Office that takes responsibility for Headquarters' secretarial work. In these ways, we are striving to be prepared for any potential risks the JR East Group may face.

With respect to the preventive measures against serious risks endangering the business operation of JR East Group, we identify, analyze, and evaluate risks inherent in all our business operations, and we identify the serious risks and have undertaken actions to reduce these risks annually in accordance with their priority. In doing so, in collaboration with the internal audit division we have positively conducted risk reducing activities.

Risk management initiatives



\*Risks of particular importance to be addressed each fiscal year

Risk Management Initiatives at the JR East Group

The JR East Group faces operational and other risks related to the railway business in addition to the same sort of risks as other companies face: the risk of scandal, management risk, accident risk, risk of natural disasters, and a host of others.

To date, the Company has addressed risks as they appeared, centering on the railway business, and sought to reduce risk. However, we recognize the need to take a bird's-eye view toward the Group's overall business and identify, analyze, evaluate, and formulate measures to reduce risk on an ongoing basis. Accordingly, we have configured new measures that incorporate the PDCA cycle (plan, do, check, act). In addition, based on "Move Up 2027" we are endeavoring to achieve sustainable growth for the Group by ascertaining the risk of changes in the internal and external environment and promoting measures to continue reducing risks.

Risk management is important across all workplaces, and it is an ongoing part of everyday operations rather than a transient activity. As compliance activities that support this risk management, we provide reminders about our internal reporting system. We also hold annual training for all employees themed on "recognizing and addressing risks before the consequences become grave," thereby raising their awareness of risk management.



Risk Management Unit  
Corporate and Legal Strategies  
Department

Ensuring information security

JR East has designed and introduced an information security management system outlined by the "JR East Group's Basic Policy for Information Security." We constantly monitor the trends around us and take additional countermeasures, as necessary. Furthermore, in cooperation with the external organizations, we have minimized the security risks by regularly monitoring for fraudulent incidents and communications.

(Internal Initiatives)

- Distribution of the "10 Points on Information Security" (Rules related to use of the information system) and ensuring thorough awareness
- Conducting annual training for all employees



10 Points on Information Security

Personal data protection

Pursuant to applicable laws and regulations including the "Act on the Protection of Personal Information," JR East Group has published its "Basic Policy for Personal Information Handling" and formulated the "Regulations for the Management of Personal Information," and we improve our handling of personal information in tandem with legal revisions. In addition, we are revising our rules to reinforce our personal information management system and reduce the risk of information leaks and appointed Chief Privacy Officers who have the responsibility of strictly protecting personal data. Furthermore, as one of several measures responding to the EU General Data Protection Regulation (GDPR), which came into force in May 2018, we have now published an English-language version of our privacy policy and others on our website.

Through leaflets for raising employee awareness, 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. Furthermore, in order to ensure proper control of personal data, the Group conducts periodical internal workplace audits.



Leaflet entitled "Points of Caution on the Handling of Personal Information"

Dialogue with investors and shareholders

We create opportunities for constructive dialogue with shareholders and investors to deepen their understanding of the JR East Group's businesses and build long-term, trust-based relationships. As a result, we strive to ensure sustainable business growth and build corporate value over the medium-to-long term.

(Specific Initiatives)

- Financial results briefings (twice each year), individual meetings, overseas IR presentations (in FY2020, in the United States, Europe, Asia, and Australia), as well as meetings on business themes of particularly high interest
- Shareholder-only events (examples to date: nighttime railway museum, special tours of a Shinkansen General Rolling Stock Center tours of the Marunouchi Station Building in Tokyo Station)



Employee communication

Executives communicate actively with Group employees by visiting workites and exchanging opinions at roundtables.

To enhance bilateral communication between executives and Group employees, in FY2019 we introduced "venues for discussing transformation," holding these discussions at various locations in relation to "Move Up 2027," the Group's management vision. (In FY2020, we held these discussions approximately 100 times.) Numerous executives visited individual regions, and the discussions resulted in spirited exchanges of opinion about independent challenges and initiatives for realizing "Move Up 2027" among Group employees.

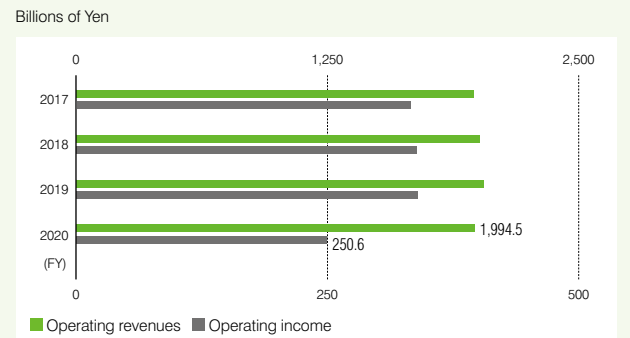
# Review of Operations

Revenue trends are extremely uncertain due to the impact of the COVID-19 pandemic. Accordingly, at present our forecast for FY2021 remains undetermined.

## Transportation



Operating revenues and operating income by segment



### Group companies by segment

|   |  |
|---|--|
| JR BUS KANTO Co., Ltd.                    | JR Akita Railway Services Co., Ltd.                  |
| JR Bus Tohoku Co., Ltd.                   | JR Niigata Railway Services Co., Ltd.                |
| Tokyo Monorail Co., Ltd.                  | JR Nagano Railway Services Co., Ltd.                 |
| JR EAST VIEW Travel Service Co., Ltd.     | JR Higashinihon Linen Co., Ltd.                      |
| JR East Rental & Lease Co., Ltd.          | JR East Service Creation Co., Ltd.                   |
| JR East Net Station Co., Ltd.             | JR East Design Corporation                           |
| JR East TESSEI Co., Ltd.                  | JR East Facility Management Co., Ltd.                |
| JR East Transportation Services Co., Ltd. | Union Construction Co., Ltd.                         |
| JR East Environment Access Co., Ltd.      | Japan Railway Track Technology Consultants Co., Ltd. |
| JR East Station Service Co., Ltd.         | Japan Transport Engineering Company                  |
| JR Takasaki Railway Services Co., Ltd.    | JR East Rail Car Technology & Maintenance Co., Ltd.  |
| JR Mito Railway Services Co., Ltd.        |  |
| JR Chiba Railway Services Co., Ltd.       |  |
| Morioka Railway Servicing Co., Ltd.       |  |

### Fiscal 2020 Topics

- *Shizuoka Destination Campaign* (April–June 2019)
- *Niigata Prefecture and Shonai Area Destination Campaign* (October–December 2019)
- J-Village Station on the Joban Line (opened April 2019)
- Tabi wo Chikara ni Campaign (November 2019 to March 2020)
- Takanawa Gateway Station (opened March 2020)
- Limited SAPHIR ODORIKO express (commenced operation March 2020)

## Retail & Services



Operating revenues and operating income by segment



### Group companies by segment

|   |  |
|---|--|
| Tetsudo Kaikan Co., Ltd.                | JR East Logistics Co., Ltd.                |
| JR East Retail Net Co., Ltd.            | JR East Sports Co., Ltd.                   |
| JR East Foods Co., Ltd.                 | GALA YUZAWA Co., Ltd.                      |
| JR East Water Business Co., Ltd.        | JR East Marketing & Communications, Inc.   |
| KINOKUNIYA Co., Ltd.                    | JR East Media Co., Ltd.                    |
| JR East TOHOKU SOUGOU SERVICE Co., Ltd. | The Orangepage, Inc.                       |
| East Japan Railway Trading Co., Ltd.    | JRE Business Development Taiwan, Inc.      |
|   | JR East Business Development SEA Pte. Ltd. |

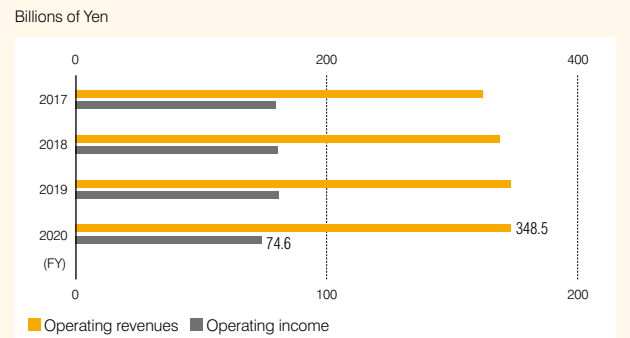
### Fiscal 2020 Topics

- *GRANSTA* (opening of new stores and renovation of existing stores in April and July 2019)
- *JJ+T* (opened May 2019)
- Verification sales test of delivered fresh seafood via Shinkansen (June 2019)
- First convenience store that only utilizes self-checkouts of *NewDays* (opened July 2019)
- *ecute Omiya* (renovated November–December 2019)
- First *JAPAN RAIL CAFE* in Japan (opened March 2020)

## Real Estate & Hotels



Operating revenues and operating income by segment



### Group companies by segment

|   |                                       |
|---|---------------------------------------|
| Atré Co., Ltd.  | Tokky Co., Ltd.                       |
| LUMINE Co., Ltd.                                      | Station Building MIDORI Co., Ltd.     |
| Yokohama Station Building Co., Ltd.                   | JR East Building Co., Ltd.            |
| Shonan Station Building Co., Ltd.                     | Nippon Hotel Co., Ltd.                |
| JR Chuo Line Mall Co., Ltd.                           | Sendai Terminal Building Co., Ltd.    |
| JR East Department Store Co., Ltd.                    | Morioka Terminal Building Co., Ltd.   |
| JR Tokyo West Development Co., Ltd.                   | Akita Station Building Co., Ltd.      |
| Kinshicho Station Building Co., Ltd.                  | JR East Urban Development Corporation |
| Chiba Station Building Co., Ltd.                      |                                       |
| JR East Aomori Business-Development Company Co., Ltd. |                                       |

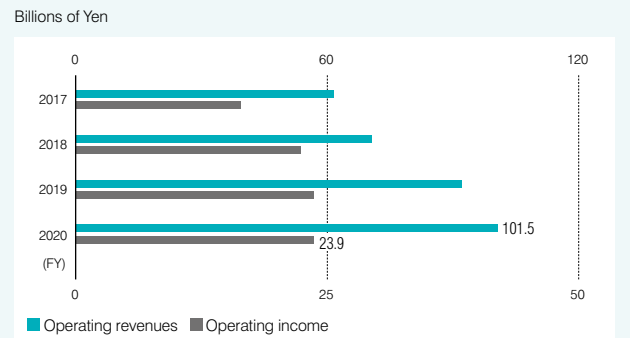
### Fiscal 2020 Topics

- *S-PAL Sendai* (renovated April 2019)
- *Lieto-garden MITAKA* (opened July 2019)
- *JR EAST HOTEL METS AKIHABARA* (opened October 2019)
- Phase I of *SHIBUYA SCRAMBLE SQUARE* (East Tower) (opened November 2019)
- *PLAYatré TSUCHIURA* (fully opened March 2020)

## Others



Operating revenues and operating income by segment



### Group companies by segment

|                                      |  |
|--------------------------------------|--|
| JR East Information Systems Company  | Japan International Consultants for Transportation Co., Ltd. |
| JR East Management Service Co., Ltd. |  |
| JR East Personnel Service Co., Ltd.  | JR East Energy Development Co., Ltd.                         |
| JR East Green Partners Co., Ltd.     | Shinjuku South Energy Service Co., Ltd.                      |
| Viewcard Co., Ltd.                   | Ekimachi Energy Create Co., Ltd.                             |
| JR East Consultants Company          | JR East startup Co., Ltd.                                    |
| JR East Mechatronics Co., Ltd.       |  |

### Fiscal 2020 Topics

- Promoted the adoption of *Suica* e-money use in taxis, eating and drinking establishments, and post offices
- Launched sales of *Welcome Suica*, an IC card for visitors to Japan (September 2019)
- Began offering *JRE POINT* rewards when using *Suica* on our railways (October 2019)
- Participated in Point Reward Project for Consumers Using Cashless Payment and conducted *JRE POINT* Reward Campaign (October 2019 to June 2020)
- Provided consultation services for the Detailed Design Study on the High Speed Railway Construction Project in India
- Supervised the construction of a training center for National High Speed Rail Corporation Limited in India



# Consolidated Balance Sheets

East Japan Railway Company and Subsidiaries  
March 31, 2019 and 2020

|  |             | Millions of Yen | Millions of U.S. Dollars |
|--|-------------|-----------------|--------------------------|
|  | 2019        | 2020            | 2020                     |
| <b>Assets</b>  |             |                 |                          |
| Current Assets:                                      |             |                 |                          |
| Cash and cash equivalents                            | ¥ 263,740   | ¥ 153,794       | \$ 1,411                 |
| Receivables:   |             |                 |                          |
| Accounts receivable–trade                            | 575,386     | 565,251         | 5,186                    |
| Unconsolidated subsidiaries and affiliated companies | 13,777      | 10,685          | 98                       |
| Other  | 4,744       | 4,359           | 40                       |
| Allowance for doubtful accounts                      | (2,019)     | (1,937)         | (18)                     |
|  | 591,888     | 578,358         | 5,306                    |
| Inventories  | 60,253      | 69,652          | 639                      |
| Real estate for sale                                 | 1,393       | 1,876           | 17                       |
| Other current assets                                 | 61,501      | 53,945          | 495                      |
| Total current assets                                 | 978,775     | 857,625         | 7,868                    |
| Investments:   |             |                 |                          |
| Unconsolidated subsidiaries and affiliated companies | 79,405      | 94,536          | 867                      |
| Other  | 221,923     | 203,462         | 1,867                    |
|  | 301,328     | 297,998         | 2,734                    |
| Property, Plant and Equipment:                       |             |                 |                          |
| Buildings  | 2,796,233   | 2,944,258       | 27,012                   |
| Fixtures   | 6,171,476   | 6,311,831       | 57,907                   |
| Machinery, rolling stock and vehicles                | 2,883,496   | 2,933,448       | 26,912                   |
| Land   | 2,064,591   | 2,121,844       | 19,466                   |
| Construction in progress                             | 385,348     | 412,754         | 3,787                    |
| Other  | 268,842     | 288,526         | 2,647                    |
|  | 14,569,986  | 15,012,661      | 137,731                  |
| Less accumulated depreciation                        | 7,877,762   | 8,050,627       | 73,859                   |
| Net property, plant and equipment                    | 6,692,224   | 6,962,034       | 63,872                   |
| Other Assets:  |             |                 |                          |
| Deferred tax assets                                  | 209,049     | 217,782         | 1,998                    |
| Other  | 178,300     | 201,621         | 1,850                    |
|  | 387,349     | 419,403         | 3,848                    |
|  | ¥ 8,359,676 | ¥ 8,537,060     | \$ 78,322                |

|  |            | Millions of Yen | Millions of U.S. Dollars |
|--|------------|-----------------|--------------------------|
|  | 2019       | 2020            | 2020                     |
| <b>Liabilities and Net Assets</b>  |            |                 |                          |
| Current Liabilities:   |            |                 |                          |
| Current portion of long-term debt  | ¥ 235,453  | ¥ 235,293       | \$ 2,159                 |
| Current portion of long-term liabilities incurred for purchase of railway facilities | 4,200      | 4,308           | 40                       |
| Prepaid railway fares received   | 105,215    | 96,781          | 888                      |
| Payables:  |            |                 |                          |
| Accounts payable–trade   | 61,766     | 45,736          | 420                      |
| Unconsolidated subsidiaries and affiliated companies                                 | 116,174    | 118,912         | 1,091                    |
| Other  | 648,611    | 671,762         | 6,162                    |
|  | 826,551    | 836,410         | 7,673                    |
| Accrued expenses   | 115,833    | 116,429         | 1,068                    |
| Accrued consumption taxes  | 22,532     | 6,833           | 63                       |
| Accrued income taxes   | 58,882     | 32,252          | 296                      |
| Other current liabilities  | 70,309     | 220,931         | 2,026                    |
| Total current liabilities  | 1,438,975  | 1,549,237       | 14,213                   |
| Long-Term Liabilities:   |            |                 |                          |
| Long-term debt   | 2,601,878  | 2,600,742       | 23,860                   |
| Long-term liabilities incurred for purchase of railway facilities                    | 327,927    | 323,405         | 2,967                    |
| Net defined benefit liability  | 554,237    | 512,063         | 4,698                    |
| Deposits received for guarantees   | 146,407    | 151,234         | 1,387                    |
| Deferred tax liabilities   | 3,704      | 4,830           | 44                       |
| Allowance for partial transfer costs of railway operation                            | 2,418      | 1,759           | 16                       |
| Provision for large-scale renovation of Shinkansen infrastructure                    | 72,000     | 96,000          | 881                      |
| Other long-term liabilities  | 117,751    | 124,363         | 1,142                    |
| Total long-term liabilities  | 3,826,322  | 3,814,396       | 34,995                   |
| Contingent Liabilities   |            |                 |                          |
| Net Assets:  |            |                 |                          |
| Common stock:  |            |                 |                          |
| Authorized 1,600,000,000 shares;   |            |                 |                          |
| Issued, 2020 – 377,932,400 shares;   |            |                 |                          |
| Outstanding, 2020 – 377,241,172 shares   | 200,000    | 200,000         | 1,835                    |
| Capital surplus  | 96,797     | 96,796          | 888                      |
| Retained earnings  | 2,705,184  | 2,809,369       | 25,774                   |
| Treasury stock, at cost, 691,228 shares in 2020                                      | (5,508)    | (5,547)         | (52)                     |
| Accumulated other comprehensive income:  |            |                 |                          |
| Net unrealized holding gains (losses) on securities                                  | 58,966     | 32,976          | 303                      |
| Net deferred gains (losses) on derivatives under hedge accounting                    | 1,584      | 2,405           | 22                       |
| Revaluation reserve for land   | (418)      | (418)           | (4)                      |
| Foreign currency translation adjustments   | (6)        | (15)            | (0)                      |
| Remeasurements of defined benefit plans  | 10,575     | 10,630          | 98                       |
| Non-Controlling Interests  | 27,205     | 27,231          | 250                      |
| Total net assets   | 3,094,379  | 3,173,427       | 29,114                   |
|  | ¥8,359,676 | ¥8,537,060      | \$78,322                 |

Consolidated Statements of Income and Comprehensive Income

East Japan Railway Company and Subsidiaries  
Years ended March 31, 2019 and 2020

(I) Consolidated Statements of Income

|  | Millions of Yen |            | Millions of U.S. Dollars |
|--|-----------------|------------|--------------------------|
|  | 2019            | 2020       | 2020                     |
| Operating Revenues   | ¥3,002,043      | ¥2,946,639 | \$27,033                 |
| Operating Expenses:  |                 |            |                          |
| Transportation, other services and cost of sales             | 1,921,527       | 1,933,704  | 17,740                   |
| Selling, general and administrative expenses                 | 595,655         | 632,094    | 5,799                    |
|  | 2,517,182       | 2,565,798  | 23,539                   |
| Operating Income   | 484,861         | 380,841    | 3,494                    |
| Other Income (Expenses):                                     |                 |            |                          |
| Interest expense on short- and long-term debt                | (40,851)        | (39,312)   | (361)                    |
| Interest expense incurred for purchase of railway facilities | (21,694)        | (21,474)   | (197)                    |
| Loss on sales of fixed assets                                | (280)           | (1,452)    | (13)                     |
| Impairment losses on fixed assets                            | (2,275)         | (7,578)    | (70)                     |
| Interest and dividend income                                 | 5,404           | 6,151      | 56                       |
| Equity in net income (loss) of affiliated companies          | 5,871           | 5,614      | 52                       |
| Gain on sales of fixed assets                                | 2,675           | 7,296      | 67                       |
| Disaster-damage losses                                       | —               | (19,323)   | (177)                    |
| Provision for allowance for disaster-damage losses           | —               | (12,459)   | (114)                    |
| Other, net   | (5,092)         | (14,129)   | (130)                    |
|  | (56,242)        | (96,666)   | (887)                    |
| Income before Income Taxes                                   | 428,619         | 284,175    | 2,607                    |
| Income Taxes:  |                 |            |                          |
| Current  | 110,110         | 83,722     | 768                      |
| Deferred   | 21,184          | 1,965      | 18                       |
| Profit   | 297,325         | 198,488    | 1,821                    |
| Profit Attributable to Non-Controlling Interests             | (2,109)         | (59)       | (1)                      |
| Profit Attributable to Owners of Parent                      | ¥ 295,216       | ¥ 198,429  | \$ 1,820                 |
|  | Yen             |            | U.S. Dollars             |
| Earnings per Share   | ¥773            | ¥525       | \$5                      |
| Cash Dividends Applicable to the Year                        | 150             | 165        | 2                        |

(II) Consolidated Statements of Comprehensive Income

|   | Millions of Yen |          | Millions of U.S. Dollars |
|---|-----------------|----------|--------------------------|
|   | 2019            | 2020     | 2020                     |
| Profit  | ¥297,325        | ¥198,488 | \$1,821                  |
| Other Comprehensive Income:   | (1,397)         | (25,159) | (231)                    |
| Net unrealized holding gains (losses) on securities                                 | (4,414)         | (23,561) | (216)                    |
| Net deferred gains (losses) on derivatives under hedge accounting                   | 587             | 815      | 7                        |
| Foreign currency translation adjustments  | (6)             | (9)      | (0)                      |
| Remeasurements of defined benefit plans   | 1,324           | (458)    | (4)                      |
| Share of other comprehensive income of associates accounted for using equity method | 1,112           | (1,946)  | (18)                     |
| Comprehensive Income  | ¥295,928        | ¥173,329 | \$1,590                  |
| Comprehensive Income Attributable to:   |                 |          |                          |
| Comprehensive income attributable to owners of parent                               | ¥293,878        | ¥173,303 | \$1,590                  |
| Comprehensive income attributable to non-controlling interests                      | 2,050           | 26       | 0                        |

Consolidated Statements of Changes in Net Assets

East Japan Railway Company and Subsidiaries  
Years ended March 31, 2019 and 2020

|   | Shares                                  |              | Millions of Yen |                   |                |   |   |                              |  |   |                           |            |
|---|---|--------------|-----------------|-------------------|----------------|---|---|------------------------------|--|---|---------------------------|------------|
|   | Number of Issued Shares of Common Stock | Common Stock | Capital Surplus | Retained Earnings | Treasury Stock | Net Unrealized Holding Gains (Losses) on Securities | Net Deferred Gains (Losses) on Derivatives under Hedge Accounting | Revaluation Reserve for Land | Foreign Currency Translation Adjustments | Remeasurements of Defined Benefit Plans | Non-Controlling Interests | Total      |
| Balance at March 31, 2018   | 385,655,500                             | ¥200,000     | ¥96,730         | ¥2,496,075        | ¥ (5,457)      | ¥63,339   | ¥ 730   | ¥(474)                       | ¥ —                                      | ¥ 8,387                                 | ¥25,222                   | ¥2,884,552 |
| Cash dividends (¥150 per share)   | —                                       | —            | —               | (55,585)          | —              | —   | —   | —                            | —  | —                                       | —                         | (55,585)   |
| Profit attributable to owners of parent   | —                                       | —            | —               | 295,216           | —              | —   | —   | —                            | —  | —                                       | —                         | 295,216    |
| Increase/decrease due to merger   | —                                       | —            | —               | (140)             | —              | —   | —   | —                            | —  | —                                       | —                         | (140)      |
| Purchase of treasury stock  | —                                       | —            | —               | —                 | (41,021)       | —   | —   | —                            | —  | —                                       | —                         | (41,021)   |
| Disposal of treasury stock  | —                                       | —            | —               | (0)               | 3              | —   | —   | —                            | —  | —                                       | —                         | 3          |
| Retirement of treasury stock  | (3,833,300)                             | —            | —               | (40,967)          | 40,967         | —   | —   | —                            | —  | —                                       | —                         | —          |
| Increase/decrease in treasury stock arising from change in equity in entities accounted for using equity method | —                                       | —            | —               | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —          |
| Change in scope of equity method  | —                                       | —            | —               | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —          |
| Purchase of shares of consolidated subsidiaries   | —                                       | —            | 67              | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | 67         |
| Increase/decrease caused by organization restructuring of companies to which the equity method is applicable    | —                                       | —            | —               | 10,641            | —              | —   | —   | —                            | —  | —                                       | —                         | 10,641     |
| Reversal of revaluation reserve for land  | —                                       | —            | —               | (56)              | —              | —   | —   | —                            | —  | —                                       | —                         | (56)       |
| Other   | —                                       | —            | —               | —                 | —              | (4,373)   | 854   | 56                           | (6)                                      | 2,188                                   | 1,983                     | 702        |
| Balance at March 31, 2019   | 381,822,200                             | ¥200,000     | ¥96,797         | ¥2,705,184        | ¥ (5,508)      | ¥58,966   | ¥1,584  | ¥(418)                       | ¥ (6)                                    | ¥10,575                                 | ¥27,205                   | ¥3,094,379 |
| Cash dividends (¥165 per share)   | —                                       | —            | —               | (59,764)          | —              | —   | —   | —                            | —  | —                                       | —                         | (59,764)   |
| Profit attributable to owners of parent   | —                                       | —            | —               | 198,429           | —              | —   | —   | —                            | —  | —                                       | —                         | 198,429    |
| Increase/decrease due to merger   | —                                       | —            | —               | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —          |
| Purchase of treasury stock  | —                                       | —            | —               | —                 | (40,019)       | —   | —   | —                            | —  | —                                       | —                         | (40,019)   |
| Disposal of treasury stock  | —                                       | —            | —               | (0)               | 1              | —   | —   | —                            | —  | —                                       | —                         | 1          |
| Retirement of treasury stock  | (3,889,800)                             | —            | —               | (40,122)          | 40,122         | —   | —   | —                            | —  | —                                       | —                         | —          |
| Increase/decrease in treasury stock arising from change in equity in entities accounted for using equity method | —                                       | —            | —               | —                 | (143)          | —   | —   | —                            | —  | —                                       | —                         | (142)      |
| Change in scope of equity method  | —                                       | —            | —               | 5,642             | —              | —   | —   | —                            | —  | —                                       | —                         | 5,642      |
| Purchase of shares of consolidated subsidiaries   | —                                       | —            | (0)             | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | (0)        |
| Increase/decrease caused by organization restructuring of companies to which the equity method is applicable    | —                                       | —            | —               | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —          |
| Reversal of revaluation reserve for land  | —                                       | —            | —               | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —          |
| Other   | —                                       | —            | —               | —                 | —              | (25,990)  | 821   | —                            | (9)                                      | 55                                      | 26                        | (25,097)   |
| Balance at March 31, 2020   | 377,932,400                             | ¥200,000     | ¥96,797         | ¥2,809,369        | ¥ (5,547)      | ¥32,976   | ¥2,405  | ¥(418)                       | ¥(15)                                    | ¥10,630                                 | ¥27,231                   | ¥3,173,428 |

|   | Shares                                  |              | Millions of U.S. Dollars |                   |                |   |   |                              |  |   |                           |          |
|---|---|--------------|--------------------------|-------------------|----------------|---|---|------------------------------|--|---|---------------------------|----------|
|   | Number of Issued Shares of Common Stock | Common Stock | Capital Surplus          | Retained Earnings | Treasury Stock | Net Unrealized Holding Gains (Losses) on Securities | Net Deferred Gains (Losses) on Derivatives under Hedge Accounting | Revaluation Reserve for Land | Foreign Currency Translation Adjustments | Remeasurements of Defined Benefit Plans | Non-Controlling Interests | Total    |
| Balance at March 31, 2019   | 381,822,200                             | \$1,835      | \$888                    | \$24,818          | \$ (51)        | \$ 541  | \$15  | \$ (4)                       | \$ (0)                                   | \$97                                    | \$250                     | \$28,389 |
| Cash dividends (\$2 per share)  | —                                       | —            | —                        | (548)             | —              | —   | —   | —                            | —  | —                                       | —                         | (548)    |
| Profit attributable to owners of parent   | —                                       | —            | —                        | 1,820             | —              | —   | —   | —                            | —  | —                                       | —                         | 1,820    |
| Increase/decrease due to merger   | —                                       | —            | —                        | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —        |
| Purchase of treasury stock  | —                                       | —            | —                        | —                 | (367)          | —   | —   | —                            | —  | —                                       | —                         | (367)    |
| Disposal of treasury stock  | —                                       | —            | —                        | (0)               | 0              | —   | —   | —                            | —  | —                                       | —                         | 0        |
| Retirement of treasury stock  | (3,889,800)                             | —            | —                        | (368)             | 368            | —   | —   | —                            | —  | —                                       | —                         | —        |
| Increase/decrease in treasury stock arising from change in equity in entities accounted for using equity method | —                                       | —            | —                        | —                 | (1)            | —   | —   | —                            | —  | —                                       | —                         | (1)      |
| Change in scope of equity method  | —                                       | —            | —                        | 52                | —              | —   | —   | —                            | —  | —                                       | —                         | 52       |
| Purchase of shares of consolidated subsidiaries   | —                                       | —            | (0)                      | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | (0)      |
| Increase/decrease caused by organization restructuring of companies to which the equity method is applicable    | —                                       | —            | —                        | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —        |
| Reversal of revaluation reserve for land  | —                                       | —            | —                        | —                 | —              | —   | —   | —                            | —  | —                                       | —                         | —        |
| Other   | —                                       | —            | —                        | —                 | —              | (238)   | 7   | 0                            | (0)                                      | 0                                       | 0                         | (231)    |
| Balance at March 31, 2020   | 377,932,400                             | \$1,835      | \$888                    | \$25,774          | \$ (51)        | \$ 303  | \$22  | \$ (4)                       | \$ (0)                                   | \$97                                    | \$250                     | \$29,114 |



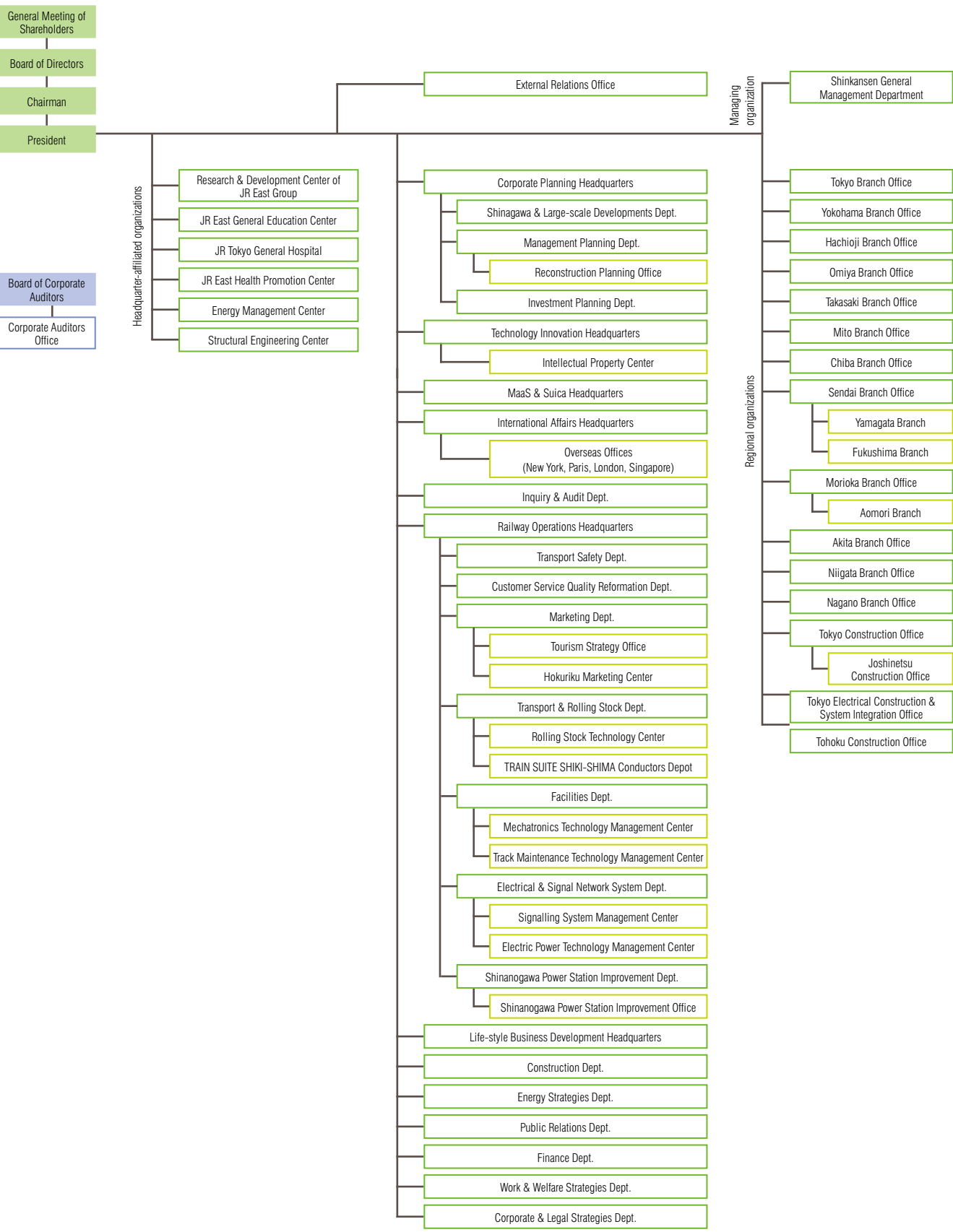
Consolidated Statements of Cash Flows

East Japan Railway Company and Subsidiaries  
Years ended March 31, 2019 and 2020

|   |           | Millions of Yen | Millions of U.S. Dollars |
|---|-----------|-----------------|--------------------------|
|   | 2019      | 2020            | 2020                     |
| Cash Flows from Operating Activities:   |           |                 |                          |
| Income before income taxes  | ¥ 428,619 | ¥ 284,175       | \$ 2,607                 |
| Depreciation  | 368,723   | 374,743         | 3,438                    |
| Impairment losses on fixed assets   | 2,275     | 7,578           | 70                       |
| Amortization of long-term prepaid expense                                       | 8,759     | 10,089          | 93                       |
| Net change in provision for large-scale renovation of Shinkansen infrastructure | 24,000    | 24,000          | 220                      |
| Net change in net defined benefit liability                                     | (45,131)  | (42,863)        | (393)                    |
| Interest and dividend income  | (5,404)   | (6,151)         | (56)                     |
| Interest expense  | 62,545    | 60,786          | 558                      |
| Construction grants received  | (59,847)  | (45,660)        | (419)                    |
| Loss from disposition and provision for cost reduction of fixed assets          | 97,003    | 74,662          | 685                      |
| Disaster-damage losses  | -         | 19,322          | 177                      |
| Provision for allowance for disaster-damage losses                              | -         | 12,459          | 114                      |
| Net change in major receivables   | (66,286)  | 20,121          | 185                      |
| Net change in major payables  | 48,267    | (42,263)        | (388)                    |
| Other   | (16,963)  | (31,108)        | (286)                    |
| Sub-total   | 846,560   | 719,891         | 6,605                    |
| Proceeds from interest and dividends  | 6,091     | 8,157           | 75                       |
| Payments of interest  | (62,944)  | (60,883)        | (559)                    |
| Payments of disaster-damage losses  | (3,145)   | (4,832)         | (44)                     |
| Payments of partial transfer costs of railway operation                         | (6,848)   | (4,520)         | (42)                     |
| Payments of income taxes  | (115,913) | (109,120)       | (1,001)                  |
| Net cash provided by operating activities                                       | 663,801   | 548,693         | 5,034                    |
| Cash Flows from Investing Activities:   |           |                 |                          |
| Payments for purchases of fixed assets  | (649,038) | (703,909)       | (6,458)                  |
| Proceeds from sales of fixed assets   | 4,815     | 13,777          | 126                      |
| Proceeds from construction grants   | 65,196    | 40,798          | 374                      |
| Payments for purchases of investment in securities                              | (7,756)   | (29,541)        | (271)                    |
| Proceeds from sales of investment in securities                                 | 3,021     | 1,522           | 14                       |
| Other   | (10,664)  | (24,248)        | (222)                    |
| Net cash used in investing activities   | (594,426) | (701,601)       | (6,437)                  |
| Cash Flows from Financing Activities:   |           |                 |                          |
| Commercial paper  | 0         | 150,000         | 1,376                    |
| Proceeds from long-term loans   | 143,000   | 129,100         | 1,184                    |
| Payments of long-term loans   | (119,707) | (110,453)       | (1,013)                  |
| Proceeds from issuance of bonds   | 125,000   | 105,000         | 963                      |
| Payments for redemption of bonds  | (165,000) | (125,000)       | (1,147)                  |
| Payments of liabilities incurred for purchase of railway facilities             | (4,419)   | (4,414)         | (40)                     |
| Payments of acquisition of treasury stock                                       | (41,021)  | (40,019)        | (367)                    |
| Cash dividends paid   | (55,585)  | (59,764)        | (548)                    |
| Other   | (2,961)   | (1,040)         | (10)                     |
| Net cash provided by financing activities                                       | (120,693) | 43,410          | 398                      |
| Effect of Exchange Rate Changes on Cash and Cash Equivalents                    | (56)      | (98)            | (0)                      |
| Net Change in Cash and Cash Equivalents   | (51,374)  | (109,596)       | (1,005)                  |
| Cash and Cash Equivalents at Beginning of Year                                  | 314,934   | 263,740         | 2,420                    |
| Increase in Cash and Cash Equivalents from Newly Consolidated Subsidiary        | 99        | —               | —                        |
| Increase in Cash and Cash Equivalents due to Merger                             | 81        | —               | —                        |
| Increase in Cash and Cash Equivalents Resulting from Absorption-Type Demerger   | —         | (350)           | (4)                      |
| Cash and Cash Equivalents at End of Year  | ¥ 263,740 | ¥ 153,794       | \$ 1,411                 |

Organization

June 23, 2020



# Corporate Data

As of March 31, 2020

## Paid-in Capital

¥200,000 million

## Rating Information

AA+ (Rating and Investment Information, Inc.)

AA- (S&P Global Ratings Japan Inc.)

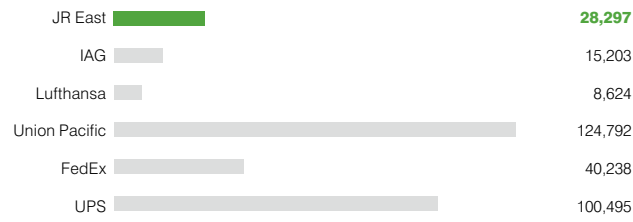
Aa3 (Moody's Japan K.K.)

## Comparison of Market Capitalization

### INTERNATIONAL

#### Total Stock Market Value

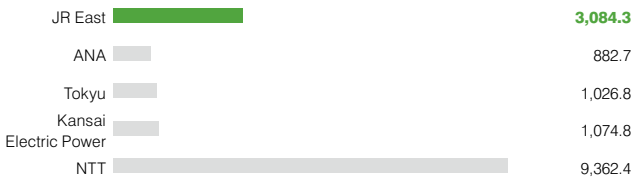
Millions of U.S. Dollars



### DOMESTIC

#### Total Stock Market Value

Billions of Yen

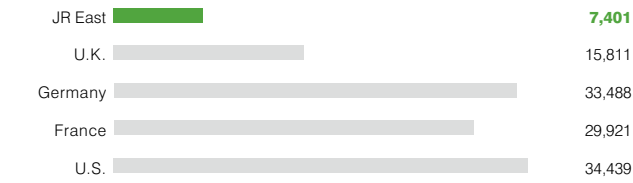


## International Railway Comparisons

### TRANSPORTATION MARKET

#### Railway Line Networks

Kilometers

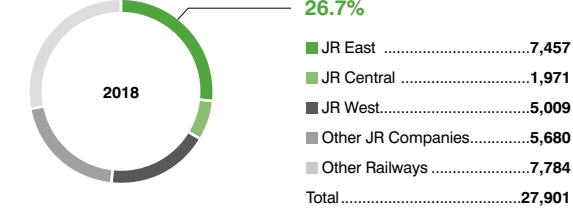


## Railway Operations in Japan

### SHARE OF DOMESTIC RAILWAYS

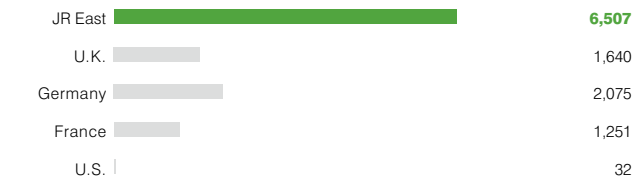
#### Passenger Line Network

Kilometers



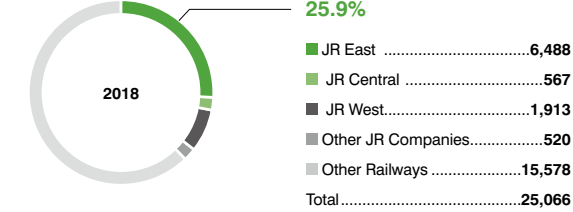
#### Number of Passengers

Millions



#### Number of Passengers

Millions



# Stock Information

As of March 31, 2020

## Fiscal Year

April 1 to March 31

## Total Number of Shares Issued

377,932,400

## Number of Shareholders

223,723

## Stock Exchange Listing

Tokyo

## Transfer Agent

Mitsubishi UFJ Trust and

Banking Corporation

4-5, Marunouchi 1-chome,

Chiyoda-ku, Tokyo 100-8212, Japan

## Major Shareholders

| Name of Shareholders                              | Number of Shares Held (Shares) | Shareholding Percentage (%) |
|---|--------------------------------|-----------------------------|
| The Master Trust Bank of Japan, Ltd. (as Trustee) | 25,796,500                     | 6.83                        |
| Japan Trustee Services Bank, Ltd. (as Trustee)    | 15,114,500                     | 4.00                        |
| Mizuho Bank, Ltd.                                 | 14,260,000                     | 3.78                        |
| The JR East Employees Shareholding Association    | 10,620,443                     | 2.81                        |
| MUFG Bank, Ltd.                                   | 8,925,000                      | 2.36                        |
| Nippon Life Insurance Company                     | 8,015,560                      | 2.12                        |
| The Dai-ichi Life Insurance Company, Limited      | 8,000,000                      | 2.12                        |
| Sumitomo Mitsui Banking Corporation               | 7,507,000                      | 1.99                        |
| JP MORGAN CHASE BANK 385151                       | 7,298,628                      | 1.93                        |
| Japan Trustee Services Bank, Ltd. (as Trustee 5)  | 7,168,100                      | 1.90                        |

The shareholding percentage is calculated based on the total number of issued shares excluding 330,572 shares of treasury stock.

## Stock Price

Yen

