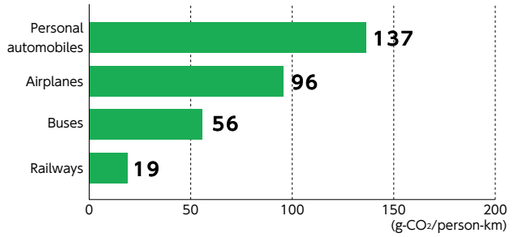
Measures to Prevent Global Warming

■Energy conservation and CO_2 reduction

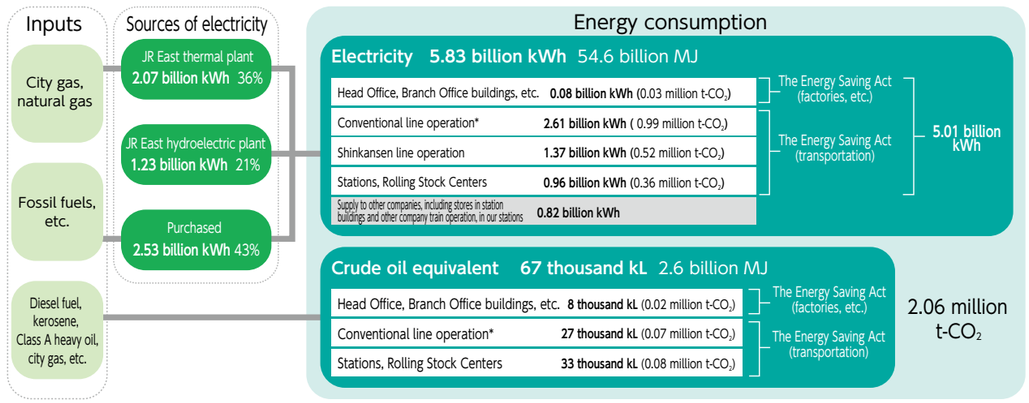
Railways are an environmentally friendly mode of transportation that accounts for a low share of the total CO_2 emissions produced by the transportation sector relative to their share of transportation volume.
However, JR East consumes around 5 billion kWh of power each year, which is a massive amount corresponding to approximately 1.4 million households.
We will therefore 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 others.
The energy flow map 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 air-conditioning. Diesel fuel and kerosene are also used to operate diesel trains and stations and office air-conditioning.

[CO_2 emissions per transportation amount (FY2018 passengers)]



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

[JR East Energy flow map]☆



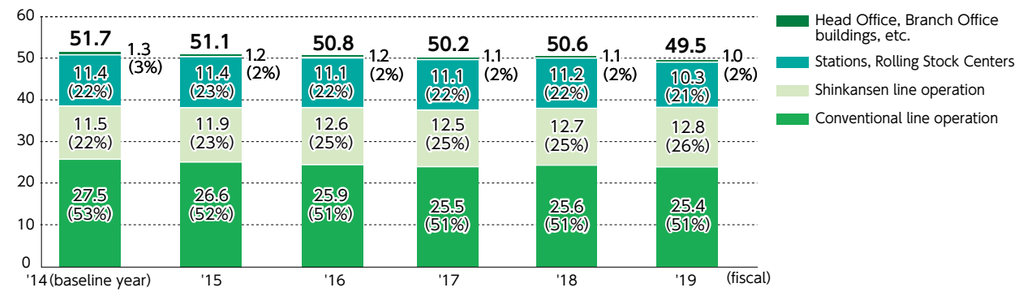
*Including BRT (Bus Rapid Transit)　(CO_2 emissions are the amount calculated with 'adjusted' emission coefficients)

●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 premise which are operated by group companies is not included in the boundary. Thus, we match the boundary 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 0MJ.

[Composition of energy consumption by JR East]☆



■Adapting to climate change

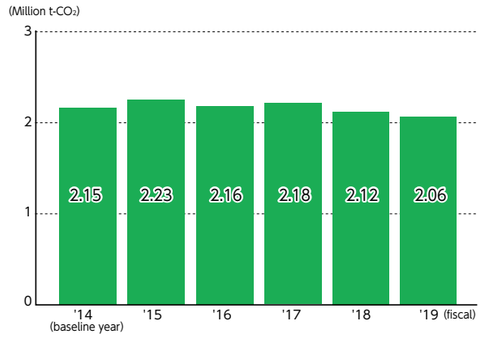
Along with global warming countermeasures, we are also seeking to respond in an appropriate manner to natural disasters, increased heat stroke risk, and other issues caused by climate change, based on the Climate Change Adaptation Act enacted in December 2018.

■Trends in CO_2 Emissions of JR East☆

Our CO_2 emissions in FY2019 totaled 2.06 million tons, a decrease of 90 thousand tons compared to FY2014 (the reference year). This is due to an improvement of the CO_2 emission coefficients of JR East's electric power due to efficient operation of its Kawasaki Thermal Power Plant and other factors. In this report, we are also reporting CO_2 emissions in Scopes 1 and 2 in accordance with the definition of the GHG Protocol*.
We are moving forward with activities to reduce all CO_2 emissions resulting from our business activities by calculating CO_2 emissions* in Scope 3 and identifying supply chain emissions.

*GHG protocol
The standard for calculation and reporting of greenhouse gas emission which was formulated by the organization which was established mainly by the WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development)
*Supply chain CO_2 emission
Sum of Scope 1, 2 and 3 which is the CO_2 emissions resulting from the whole organization activities of business operations such as raw material procurement, production, capital investment goods, business trips, commuting and others.

[Trends in JR East's total CO_2 emissions]



●Boundary
The boundary of CO_2 emissions is the same as that for the energy consumption described in p. 100.
●Calculation Method
CO_2 emissions have been calculated based on the method specified in the Act on Promotion of Global Warming Countermeasures. However, the CO_2 emissions attributable to the purchased electricity are calculated, including those from the electricity used for rail transport, by using adjusted emission coefficients for each electric power company. The CO_2 emissions in the FY2019 calculated by using actual emission coefficient is 2.09 million tons CO_2, down 60 thousand tons CO_2 compared to the previous fiscal year.

Item	Scope 1	Scope 2
FY2019 Emission Volume	1.2 million tons CO_2	1.26 million tons CO_2

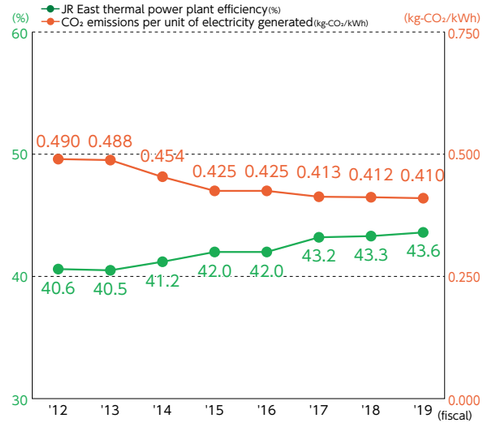
Scope 1…All CO_2 emissions directly attributable to fuel consumed in the operation of diesel railcars, operation of JR East thermal electric power plant, etc.
Scope 2…CO_2 emissions indirectly emitted from the use of electricity purchased from electric power companies.
Scope 3…CO_2 discharged by the other companies which are related to our business activities.
*The sum of the Scope 1 and Scope 2 emissions and the total CO_2 emissions do not match, since the former includes emissions associated with the production of electricity supplied to other companies.

■Thermal Power Plant of JR East

JR East operates a thermal power plant in Kawasaki City, Kanagawa Prefecture, with a total capacity of 741 thousand kW. The plant uses combined-cycle power generation units* with improved efficiency and switched fuel from oil to natural gas when the plant was renovated to reduce CO_2 emissions. Unit 1 is currently undergoing construction that will update it from kerosene to natural gas, 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_2 emission factor and power generation efficiency at thermal power plant of JR East]☆



●Calculation method
CO_2 emissions from the thermal power plant of JR East are calculated based on the method stipulated in Act on Promotion of Global Warming Countermeasures, and power generation efficiency is based on the method stipulated in the Energy Saving Act.
●CO_2 emission factor of all power generated by JR East (thermal power and hydraulic power)
Emission factor adjusted in FY2019 was 0.290 (kg-CO_2/kWh)

■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 2019, JR East had 12,280 energy-efficient railcars in operation. This accounts for 98.2% of our railcar fleet.

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

E7 series:
The Hokuriku Shinkansen that incorporates the highest level of cutting-edge technology

E233 series:
VVVF inverter cars for commuter and suburban transportation

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

The Kiha E200 cars, which entered into service on the Koumi Line in July 2007, are the world's first diesel-powered, electric-motor-driven hybrid railcars. Compared with the previous trains, the fuel consumption rate has been reduced by about 10% and the noise level of the trains idling at stations and accelerating on departure has been lowered by 20–30 dB. Moreover, starting from October to December 2010, we began operating the HB-E300 Series, a new type of resort train equipped with a hybrid system similar to the Kiha E200, in the Nagano, Aomori and Akita areas, and in May 2015, we began operating HB-E210 Series on the Senseki-Tohoku Connecting Line. Additionally, as a new measure toward reduction of the environmental burden in non-electric zones, we are proceeding with the development of an accumulator system, which debuted in March 2014 with the EV-E301 ACCUM railcar train, put into service on the Karasuyama Line. The introduction of the EV-E301 has enabled an elimination of emissions, as well as a reduction in CO_2 emissions and noise associated with diesel engines. On top of that, in March 2017 we started operation of the accumulator railcar train of the "EV-E801 series" which is aimed for usage on the alternating current (AC) section between Akita Station and Oga Station.

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

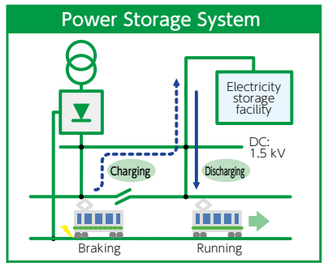
■Promotion of proactively adopting LED lighting for all new cars

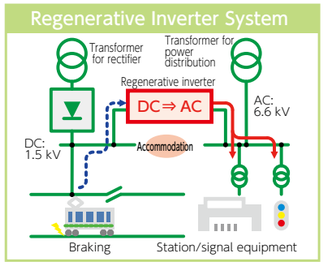
On our conventional lines, LED lighting has been introduced on new rolling stock manufactured since 2013.
For Shinkansen cars, LED lighting has been introduced on newly produced E5-series trains and E7-series trains.
At the end of March 2019, about a little over 25% of cars owned by JR East, including newly manufactured cars and renovated cars, have LED lighting. We are determined to continue making efforts for further saving of energy in railway operations.

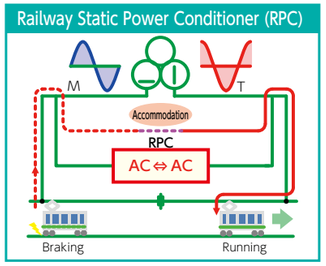
LED railcar lighting

■Effective Use of Regenerative Power

As a measure to reduce energy consumed from ground installations for train operation, we are proceeding with efforts to make more efficient use of regenerative power generated by trains when stopping.
On direct current sections, we are working to introduce power storage systems that temporarily store regenerative power and use it when needed. We have introduced these systems starting with the Ome Line Haijima substation (lithium-ion battery) that entered use in 2013, which was followed by the Takasaki Line Okegawa substation (lithium-ion battery), the Tohoku Main Line Kuki substation (nickel-metal hydride battery), and the Joban Line Kita-Senju substation (lithium-ion battery), and are evaluating their introduction at other locations. In addition, we are developing a superconductivity flywheel electricity storage system as a new medium to store electricity.
Moreover, we have introduced regenerative inverter systems, which convert direct current regenerative power generated by rolling stock into alternating current power for use by station facilities, signal equipment, etc., at the Takasaki Line Fukiage substation and Keiyo Line Kajibashi substation.
Meanwhile, with regard to alternating current sections, we introduced a railway static power conditioner (RPC) that makes it possible to alternately accommodate regenerative power generated on feeding sections, which previously could not be used, at the Joban Line Ushiku sectioning post. It has been in use since 2015.







■Progress of introducing renewable energy

We have installed solar and wind power generators at stations and rolling stock centers, furthering our self-consumption (utilizing generated energy at our own facilities) initiatives. At some stations such as Tokyo Station, we have installed solar panels on top of platforms and on the roofs of stations, utilizing them for the station's facilities, etc. In addition, the electricity generated at the solar power generator installed inside the Keiyo Rolling Stock Center is used not only at the rolling stock center, but also in the operation of railways via our own distribution lines. In July 2018, we installed 9 small-scale wind power generators at Oga Station, which are covering the station's power consumption needs. Some of the electricity is also being used to operate the ACCUM alternating current accumulator railcar train. With these initiatives, we self-consumed approximately 2.15 million kWh in FY2019.

For initiatives using the feed-in tariff (FIT) scheme for renewable energy, we have gradually started operating solar power generators known as mega solar power plants and large-scale wind power generators, and have generated approximately 18.4 million kWh of electricity in FY2019. Moreover, we began the operation of the joint venture Hachinohe Biomass Power Plant (output approximately 12 MW: Hachinohe City, Aomori Prefecture) in April 2018. For geothermal power generation, we are conducting a development study on geothermal resources in Shizukuishi-cho, Iwate Prefecture. In addition, in May 2019, Group company JR-East Energy Development Co., Ltd. started operating two joint ventures, the Mitane Wind Power Generation Station (output: approximately 7.5 MW) and the Minehama Wind Power Generation Station (output: approximately 5 MW). Going forward, we will continue to actively introduce and use renewable energy.

Wind

Minehama Wind Power Generation Station
Power generation output approx. 5 MW
(Began use in May 2019)

Wind

Mitane Wind Power Generation Station
Power generation output: approx. 7.5 MW
(Began use in May 2019)

Solar light

Tomioka Revitalization Mega Solar Power Plant SAKURA
Power generation output
Approx. 30 MW
(Began use in November 2017)

Woody biomass

Hachinohe biomass power plant
Power generation output
Approx. 12 MW
(Use scheduled to begin in April 2018)

Geothermal

Omatsukurayama southern region geothermal resource development survey
Surface study currently underway

■Saving energy at stations

As we have done for office buildings, we have promoted energy conserving initiatives at stations, such as revision of air conditioning systems in line with the upgrading of facilities and replacing platform lighting into LED lighting.

In FY2019 we replaced a total of about 7.7 thousand platform lights with LED lighting and through this replacement we were able to reduce annual power consumption by about 1.6 million kWh.

Furthermore, along with upgrading of facilities such as the air-conditioning and ventilation systems used to cool underground platforms and concourses at Tokyo Station and Ueno Station, we have introduced BEMS.* We are managing energy using this system, which is designed to improve energy conservation by changing how air-conditioning systems are used based on data analysis.

Specifically, we are analyzing daily operating data for facilities collected with BEMS and implementing initiatives to revise the method of operation so that use of the pumps that distribute cooling water for air-conditioning and platform ventilation airflow will be more efficient.

As a result, in FY2019, we reduced annual energy consumption by 1.15 million kWh compared with FY2016.

Revision of how these systems are used is an ongoing process: we will cross-check and analyze the impact of changes in station usage conditions and the air environment and the aging of facilities on the operating data and continue working to make adjustments accordingly in order to optimize performance.

*BEMS (Building Energy Management System): system that plays a role in saving energy by capturing building energy use and indoor environment conditions.

Equipment monitoring center screen

Example of BEMS screen

■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 also by soft measures such as implementation of "cool-biz" initiatives, thermal control of air conditioners and scrupulous shutting off of lights by employees.

JR Shinjuku Miraina Tower, which opened in 2016, has acquired a class S rating as an environmentally friendly and energy-efficient office building, which is the highest rating under the CASBEE environmental labeling system, an initiative of the Ministry of Land, Infrastructure, Transport and Tourism.

Thanks to their superior performance as office buildings in reducing CO_2 emissions, seven offices—including GranTokyo South Tower, GranTokyo North Tower, JR Shinagawa East Building, and Sapia Tower—earned recognition as Offices Taking Excellent Specific Global Warming Countermeasures (top-level office building) under the Tokyo Metropolitan Ordinance on Environmental Preservation. During the first planning period under the ordinance (FY2011 to FY2015), we were able to reduce CO_2 in the amount largely exceeding the obligatory amount. We will use the exceeded amount of reduction for emission trading within the Group and others as stipulated in the ordinance.

Top-Level Offices	Semi-Top-Level Offices
Sapia Tower, JR Shinagawa East Building, GranTokyo South Tower, GranTokyo North Tower, JP Tower, JR Minami-Shinjuku Building	JR Tokyo Meguro Building

JR Shinjuku Miraina Tower, ranked "S" in the CASBEE

JR Minami Shinjuku Building recognized as a top-level workplace

Top-level establishment certification presentation ceremony (July 2018)

Topics

Achieving a Sustainable, Low-Carbon Society through the Use of Hydrogen

At JR East, we are working to diversify our energy, such as utilizing hydrogen, as part of "Move Up" 2027. We are accelerating the shift toward a low-carbon society by promoting initiatives involving the use of hydrogen.

■Collaboration with Toyota Motor Corporation

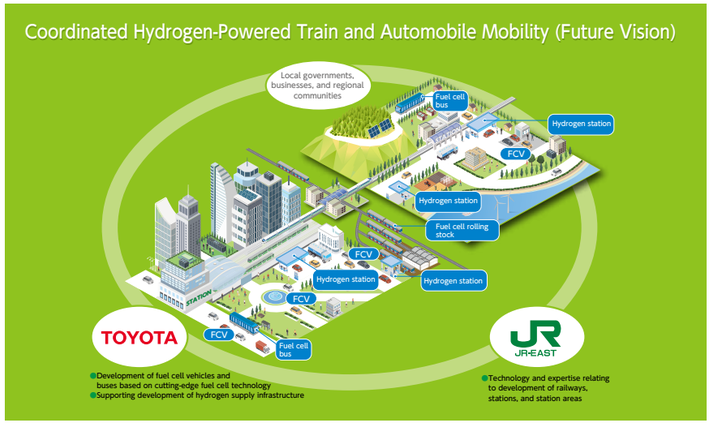
With the aim of addressing global warming, the diversification of energy, and other issues by supporting the achievement of a sustainable, low-carbon society, JR East signed a basic agreement with Toyota Motor Corporation in September 2018 to partner on a comprehensive project revolving around coordinated hydrogen-powered trains and automobile mobility.

Vision for the Future

Contributing to the creation of appealing low-carbon communities by cooperating with various stakeholders, such as local governments, businesses, and regional communities, to establish a hydrogen supply chain with train stations serving as hubs.

Specific Forthcoming Initiatives

1. **Promoting the spread of hydrogen energy by developing and expanding hydrogen stations**
   1. Establishing hydrogen stations as part of the Shinagawa Development Project being carried out by JR East
   2. Introducing fuel cell vehicles and buses in regional transportation networks that link to railways
   3. Supporting the development and expansion of hydrogen stations in the eastern Japan area by using land owned by JR East
2. **Introduction of fuel cell technology for rolling stock**
   1. Technological research relating to safe transportation methods for vehicles with large quantities of hydrogen on board
   2. Resolving various issues relating to the development and introduction of fuel cell rolling stock



■Manufacturing fuel cell hybrid test train and Implementing Field Trials

We are aiming to manufacture trial rolling stock equipped with a hybrid system that uses hydrogen-powered fuel cells and batteries as power sources and to conduct field trials on operational railway lines in FY2021.

The benefits of using hydrogen as a fuel source include reducing CO_2 emissions and enabling the diversification of energy, which will help ensure a stable supply of energy in the future.

Furthermore, these railcars will be the world's first-ever fuel cell rolling stock capable of using high-pressure hydrogen (70 MPa), which will make it possible to extend their travel distance.

We are planning to conduct field trials on the Tsurumi Line, the Nambu Line's Shitte Branch Line, and the Nambu Line (between Shitte and Musashi-Nakahara) and will work with Kanagawa Prefecture, Yokohama City, and Kawasaki City to develop the environment required for the trials.

Through the field trials, we will collect data that will help with the practical implementation of fuel cell railcars in the future – e.g., by optimizing fuel cell control technology and identifying technological development items relating to ground installations.

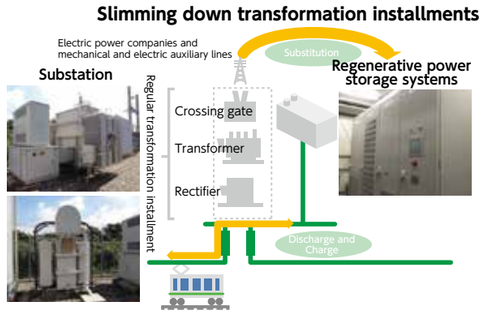
FV-E991 series fuel cell hybrid test train

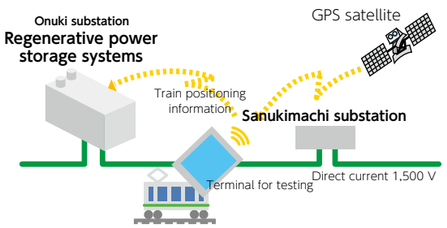
■Slimming Down Transformer Substations Utilizing Regenerative Power Storage Systems

By replacing the equipment located at substations with regenerative power storage system, we are aiming to economize maintenance manpower by slimming down substation facilities. At the Onuki substation on the Uchibo Line, we tested whether regenerative power storage systems could supply the electric power needed by trains instead of a substation between October 2017 and September 2018.

Specifically, we conducted running tests based on the premise of a power failure at nearby substations during the peak morning period and confirmed that it was possible to operate trains without any problems. We also conducted tests based on the premise of a large-scale power failure, during which no power transmission at all would be possible, and confirmed that it was possible to run trains stopped between stations to the nearest station using only power from regenerative power storage systems. Moreover, we discovered that as a result of controlling charge and discharge amounts by using GPS-based train positioning information to determine appropriate values, it is possible to reduce battery capacity by approximately 30%.

In the future we hope to coordinate train energy conservation operation patterns with above ground facilities control, aiming for energy conservation of railways.

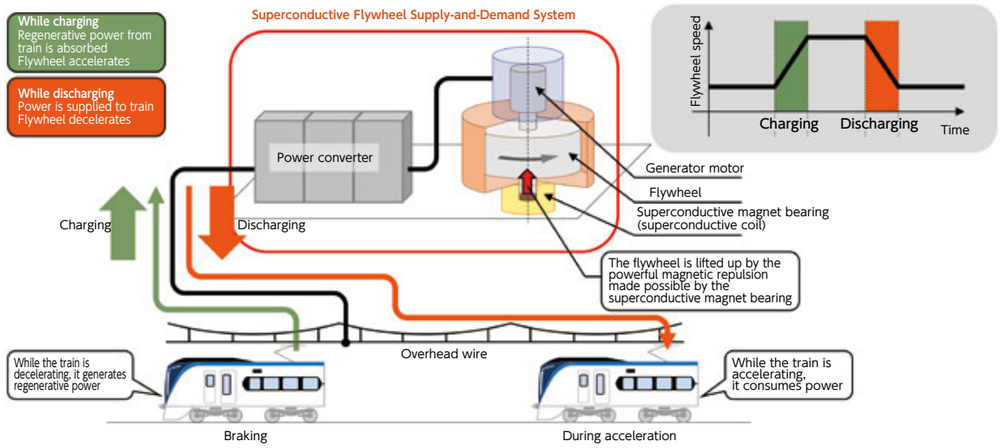




■Superconductive Flywheel Electricity Storage System for Railways

The superconductive flywheel electricity storage system stores (charges) regenerative power as kinetic energy by rotating a large disc (flywheel) lifted up by means of superconductive technology and converts (discharges) this kinetic energy into electrical power again as needed.

Compared to lead and lithium-ion batteries, the benefits of this technology include the fact that there is less deterioration from repeated charging and discharging and there is no need for maintenance due to friction, since the flywheel is lifted up and rotated. At present, we are planning to conduct field trials at the Anayama substation on the Chuo Line (Nirasaki City, Yamanashi Prefecture) and forecast that it will be possible to use around 470 kWh/day of regenerative energy and reduce CO_2 emissions by 79 tonnes per year.



New Electricity Storage System

TICKET TO TOMORROW

As part of our energy and environment strategy, we will begin field trials of the superconductive flywheel electricity storage system for railway use in FY2020. Based on measurement data and simulations, we have selected the Anayama Substation on the Chuo Line for installation, where we will be able to make continuous effective use of regenerative energy generated on the down-sloping section.

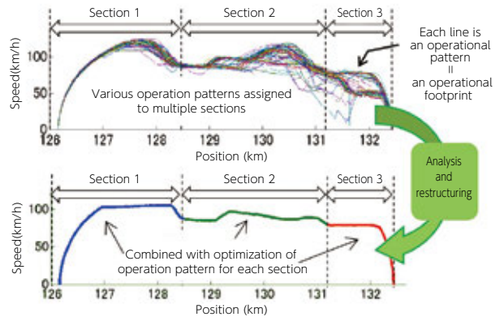
This system, which applies superconductive maglev technology to a conventional railway line, will mark the world's first-ever demonstrative introduction of an electricity storage medium using superconductive technology. As we move forward with this project, it will therefore be necessary to consider it from multiple perspectives. Those involved are working together closely to steadily resolve issues and validate the effectiveness of the system with the aim to support its future implementation in the railway sector.

Environmental Engineering Research Laboratory, Research and Development Center of JR East Group, East Japan Railway Company

■Energy-saving operation patterns

Approximately 80% of the energy consumed by JR East is energy required for operating trains (operational energy). In order to reduce this operational energy, we have begun using operation patterns that minimize operational energy as much as possible (energy-saving operation patterns) along with optimizing various operation patterns used to run trains in service.

Because we were able to validate the effects through operation trials, we are proceeding with research and development of methods to utilize the effects in actual train operation.



Progress of Environmental Conservation Activities at Each Workplace

■Creating an environment-conscious culture

JR East believes it is important to promote environmental activities with clear goals established for the entire JR East Group, and to have every employee actively involved. We are expanding the scale of our environmental activities by promoting "JR East Eco Activities" at each work place, developing leaders through environmental education, and sharing recognition of outstanding environmental efforts through the presentation of awards.

Grass-Roots Eco Activities

TICKET TO TOMORROW

In FY2019, I took part in an overseas training course in Singapore that focused on the topic of the environment. I observed their local eco activities in practice and realized the importance of steadily continuing to pursue small-scale actions, such as water and electricity conservation when it comes to preserving our planet.

Today, I am promoting eco activities in the workplace as part of the Ichinoseki Transportation Depot Eco-Friendly Promotion Committee. Going forward, drawing on what I learned during my overseas training, and through activities that raise each employees' awareness of environmental issues, I am working to implement eco activities at the grass-roots level.

Ichinoseki Transportation Depot, Morioka Branch Office

■Environmental education & training system

For effective environmental management, it is essential that all employees have appropriate knowledge on environmental issues. We provide environmental education lectures to our employees in training in order to develop environmental personnel who can play a central role in the local organization of JR East and group companies.

Training of those responsible for environment
●**Persons trained:** those responsible for environment at local organizations, etc. ●**Objective:** improvement of ability in environment-related matters as trainers to field offices, etc. ●**Number of participants:** 22
Shinkansen Environmental Measures Training
●**Persons trained:** those responsible for environment at each Branch Office ●**Objectives:** learning of basic knowledge about relevant rules and regulations for noise and vibration ●**Number of participants:** 14
JR East Group Environmental Management Promotion Conference
●**Persons participating:** those responsible for environment at all group companies (twice a year) ●**Objective:** promotion of environmental management for the entire JR East Group
Implementation of training and lectures on environment in Branch Offices

■Internal environmental audits

At our General Rolling Stock Centers and others which obtained ISO 14001 certification, in-house auditors are trained through external training programs, and conduct routine audits at the centers in order to evaluate environmental activities.

[ISO14001-certified facilities]

Certified facilities	Year and month of certification
〈JR East〉	
Kawasaki Thermal Power Plant	Mar-01
Tokyo General Rolling Stock Center	Mar-01
Omiya General Rolling Stock Center	Feb-02
Shinkansen General Rolling Stock Center	Nov-02
Koriyama General Rolling Stock Center	Dec-03
Nagano General Rolling Stock Center	Feb-05
Akita General Rolling Stock Center	Jul-05

Certified facilities	Year and month of certification
〈Group companies〉	
East Japan Eco Access Co., Ltd.	Nov-99
Nippon Restaurant Enterprise Co., Ltd. (CK headquarters)	Sep-02
JR East Mechatronics Co., Ltd.	Mar-08
East Japan Marketing & Communications, Inc.	Aug-08
Japan Transport Engineering Company	Oct-14

Environmental Communication

■Development of Environmental Education by Delivering Lectures on Request

To contribute to the development of a sustainable society, JR East initiated environmental education programs in FY2010 for children to understand environmental issues and their relationship to society. JR East employees working in each area visit neighboring schools for the programs. In FY2019, the program was implemented at around 80 schools, primarily elementary schools, in the JR East area. These types of initiatives have been held by all of our branch offices across the East Japan area. As these initiatives were well-received, we received an Excellence Award at the Career Education Awards sponsored by the Ministry of Economy, Trade and Industry in FY2018.

Delivering Lectures

■Initiatives for: environmental activities of the Shinanogawa Power plant

In July 2016, we opened the "Citizen house; Ojiya Shinanogawa Hydroelectric Plant House" as a part of popularization activities for the Shinanogawa Hydraulic Power Plant to give the opportunity to learn about the mechanism of hydraulic power generation which is a source of clean energy. We have been popular among the people of the local community, and in December 2017, the number of visitors reached 100,000.
On top of that, we release juvenile salmon as a part of initiatives to harmonize water usage and the river environment of the Shinanogawa River with the people of the local community.

Ojiya Shinanogawa Hydroelectric Plant Citizen House

Measures for resource circulation

■Waste reduction and recycling

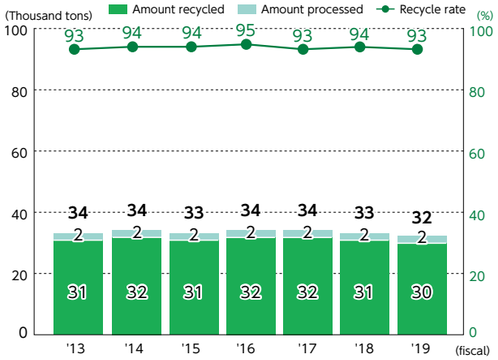
JR East generates many kinds of waste through its railway operations, including daily general trash removed from trains and stations and industrial waste from our General Rolling Stock Centers. Restaurants and retail stores in our lifestyle businesses also produce garbage and general waste. In order to reduce all these various forms of waste, JR East actively supports the approach known as "reduce, reuse, and recycle." For recycling in particular, goals are set for each type of waste.
Moreover, JR East Group will work as one to tackle the plastics issue, which is an important topic both socially and internationally.

■Recycling waste collected from stations and trains☆

Since trash from stations and trains contains recyclable materials, we placed separation bins in stations to have customers cooperate in separating trash. In October 2010, to further improve recycling rates by implementing thorough separation of trash, we built the JR East Tokyo Materials Recycling Center (operated by East Japan Eco Access Co., Ltd.) and started its operation.

JR East Tokyo Materials Recycling Center

[Waste from stations and trains]



Recycling trash generated at stations within the company

Magazines, newspapers and similar paper items collected from our segregated trash boxes at stations and trains are being recycled into coated paper and stationery and used in our offices.

Newspapers and other papers collected in stations and elsewhere are recycled into office paper used by our company.

■Reducing and recycling tickets

Collected used tickets are sent to a paper mill, which removes iron powder from the ticket backs then recycles all the paper as toilet paper, corrugated cardboard, etc. (recycling rate of 100%)

Used tickets collected at stations are recycled into toilet paper.

■Recycling at General Rolling Stock Centers☆

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

[Waste from General Rolling Stock Centers]