



Objectives

As part of our support for the fight against global warming, we are enhancing several train stations to serve as models of our “ecoste” concept, which introduces energy-saving improvements, renewable energy, and various other environmentally friendly technologies at the target stations. This endeavor seeks to help make our society sustainable as we put into action our vision for ESG management. Our efforts include adopting new technologies that can mitigate global warming through energy conservation and creation, and diversifying our sources of energy.

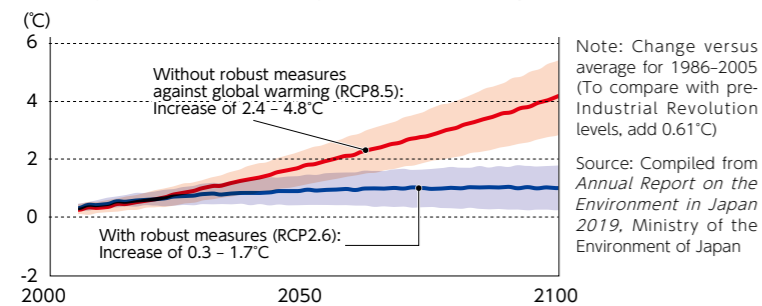
Tackling global warming

Global warming—the sustained increase in the average temperature of our planet’s atmosphere—causes a rise in the sea level and worsens the effects of natural disasters. Unless action is taken to stop global warming, it will have serious impacts on our lives, society, economy, and natural environment.

The JR East Group has laid out a set of environmental goals to be achieved by FY2031. These goals reflect the aims of the Paris Agreement, which was adopted at the 2015 UN Climate Change Conference and will serve as an international framework for global warming countermeasures from 2021 onward.

One of our initiatives is to combat global warming by developing ecoste.

[Changes in Earth’s average surface air temperature]



[Our FY2031 goals]

Environmental action category	Focus	Target for FY2031
Measures to prevent global warming	Energy consumption by railway operations	25% reduction (versus FY2014)
	CO ₂ emissions by railway operations	40% reduction (versus FY2014)

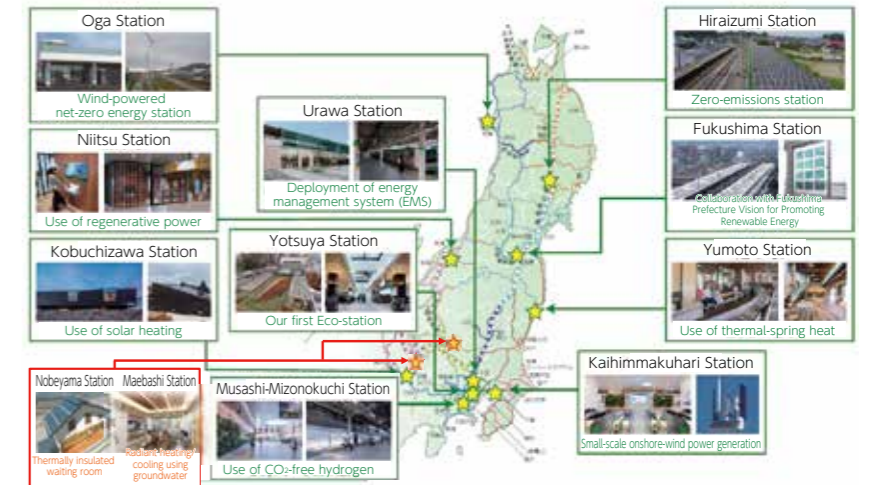
Development of ecoste promises a 40% reduction of CO₂ emissions on average

Introducing eco-friendly technologies in ways tailored to local features

The ecoste initiative rests on four pillars—saving energy, creating energy, eco-consciousness, and environmental harmony—and tailors the concept to each station by adapting to local features. We plan to complete the development of 12 ecoste by the end of FY2020.

In December 2018, we received the 2018 Minister of Land, Infrastructure, Transport and Tourism’s Award for Enterprises Demonstrating Excellence in Environmental Protection in honor of our proactive commitment to helping protect the environment through the development of ecoste.

Following the completion of ecoste development, we will leverage the insights gained from this project to continue exploring ways to make our stations more eco-friendly so that we can further contribute to environmental protection.



Eco-station projects to be completed by end-FY2020

VOICE



Creating ecoste adored by the community

Architectural Design Headquarters, JR East Design Corporation

One of the big challenges in designing an Eco-station is selecting a set of eco-friendly measures and feasible environmental technologies suited to each location. To date, we have implemented a variety of measures that leverage local features, including the use of solar/thermal power, marine wind power, hydrogen energy, and regenerative power.

My hope is that each ecoste will become even more adored by community members when they see how it contributes to environmental protection with ecological measures that exploit local advantages.

An ecoste on a local line

Building and Facilities Center, Facilities Dept., Nagano Branch Office, East Japan Railway Company



Nobeyama Station, situated on the Koumi Line in Nagano Prefecture and at the highest elevation of all JR stations, is set to re-open as an ecoste in January 2020. Given its small size, we chose a set of eco-friendly measures deployable at other stations with the same scale of ridership, which make up around 40% of all JR East stations.

The eco-friendly measures include wall coatings that store and release heat to offset the cold of winter, and thermoelectric devices that visitors can activate with their own body heat. Also, the new station will have several features that mirror the area’s scenic beauty, such as interior walls covered in locally grown larch wood and a ceiling designed to look like a starry sky. In these ways, we are designing it to be a station that will whet tourists’ interest in this area and have them experience eco-friendly ideas in action.

Developing an ecoste with a Maebashi touch

Takasaki Structural Engineering Center, Takasaki Branch Office, East Japan Railway Company



Maebashi Station, on the Ryomo Line in Gunma Prefecture, will begin operating as an ecoste in March 2020. In addition to incorporating state-of-the-art technologies used for various Eco-stations, it will have a system that utilizes one of Maebashi City’s distinctive assets—an ample supply of groundwater. A variety of environmentally friendly materials are being used for the interior, including recycled glass. Guided by the input of local stakeholders, we are pursuing design and construction in ways that put a true Maebashi touch on this project. We are doing everything we can to create an Eco-station model station that will be cherished by everyone in the community and will be a fitting symbol of Maebashi, a town that is hailed as the “City of Water, Greenery, and Poetry” and that takes pride in its abundant groundwater and the richly natural environment of Mt. Akagi.

See page P96-P99 for a related article