

May 25, 2022
East Japan Railway Company
ENEOS Corporation

Partnership Agreement Signed to Expand CO₂-free Hydrogen Use to Decarbonize Railways —First joint study for social implementation of hydrogen-hybrid trains in Japan—

East Japan Railway Company (President and CEO Fukasawa Yuji; “JR East”) and ENEOS Corporation (President: Saito Takeshi; “ENEOS”) announced that they have signed a partnership agreement to jointly study the expansion of CO₂-free hydrogen utilization for the decarbonization of railways.

The two companies will collaborate to develop Japan’s first hydrogen-hybrid trains and stationary hydrogen stations for these trains, aiming for social implementation by 2030. The facilities are expected to be integrated hydrogen stations that will supply CO₂-free hydrogen to various fuel cell (FC) mobility vehicles (fuel cell vehicles, buses, trucks, etc.) including hydrogen-hybrid trains, as well as to facilities around train stations.

The two companies will also jointly work on decarbonizing the electricity supply to railways centered on the Tokyo metropolitan area. Specifically, they will consider supplying CO₂-free hydrogen from ENEOS’s CO₂-free hydrogen supply base in the Keihin Waterfront Area to JR East’s Kawasaki Thermal Power Station for hydrogen co-firing power generation. Through this, the two companies aim to supply power generated from the hydrogen co-firing power generation to railways by the early 2030s.

JR East is committed to the Zero Carbon Challenge 2050, with a long-term group-wide goal of net-zero CO₂ emissions by fiscal 2051 in order to improve its environmental competitiveness and continue to be a corporate group that creates new value for society in the future. As part of this effort, JR East is working to achieve a hydrogen society by studying the utilization of hydrogen at the Kawasaki Thermal Power Station and starting the demonstration tests of the hydrogen-hybrid train HYBARI in March 2022.

One of the ENEOS Group’s envisioned goals stated in Long-Term Vision to 2040 is contributing to the achievement of a low-carbon, recycling-oriented society, and ENEOS Group are working to achieve carbon neutrality. As part of this effort, ENEOS is working to build a CO₂-free hydrogen supply chain in anticipation of a hydrogen-oriented society and the expansion of hydrogen supply to a wide range of business fields.

The two companies will contribute toward achieving a decarbonized society by leveraging their expertise accumulated in the railway and energy businesses to lead the creation of a CO₂-free hydrogen supply chain that encompasses CO₂-free hydrogen production, transportation, and consumption.



Conceptual image of the integrated hydrogen station

* The designs of the hydrogen station and train are merely conceptual.