Selected to Participate in Green Hydrogen Production Facility Construction Project in the Central Breakwater Outer Landfill Site

~Aiming to Product Green Hydrogen on a Landfill in Tokyo~

June 20, 2025

Tokyo Electric Power Company Holdings, Inc.

On June 12, Tokyo Electric Power Company Holdings, Inc. was selected by the Bureau of Industrial and Labor Affairs, Tokyo Metropolitan Government to partner with the Tokyo Metropolitan Government as it engages in the Bureau's "Green Hydrogen Production Facility Construction Project in the Central Breakwater Outer Landfill Site" (hereinafter referred to as, "Project").

Expanding the use of renewables is crucial for achieving a carbon neutral society. However, some forms of renewables, such as solar and wind power, face the challenge of fluctuating output depending on the season and weather, making it difficult to control supply.

Hydrogen, on the other hand, is capable of storing large amounts of energy over long periods, and is expected to play a key role as a balancing and stabilizing energy source that can help address the intermittency issues associated with renewables. Moreover, hydrogen does not emit CO2 when used as a fuel. Green hydrogen, produced using carbon-free power sources, such as renewables, also has the advantage of generating no CO2 emissions during production.

This Project leverages these unique attributes of hydrogen. In collaboration with the Tokyo Metropolitan Government, we will carry out the basic design of a green hydrogen production facility, to be installed alongside a megawatt-class solar power generation facility at the Central Breakwater Outer Landfill Site in Koto-ku, Tokyo.

Specifically, building on our experiences in solar power and hydrogen production projects, including our demonstration at Komekurayama* in Yamanashi Prefecture, during FY2025 we will design the essential facilities required to stably produce and supply high-quality hydrogen. This includes a solar power system with a capacity of over 1,000kW, a water electrolysis hydrogen generator with a capacity of approximately 100Nm³/h, and high-pressure gas equipment for transporting the hydrogen via compressed hydrogen trailers and cylinder bundles (cardles). In addition, we shall also design the infrastructure necessary for water supply, electricity supply, and wastewater treatment, as well as office buildings and structures to house the control and operating equipment.

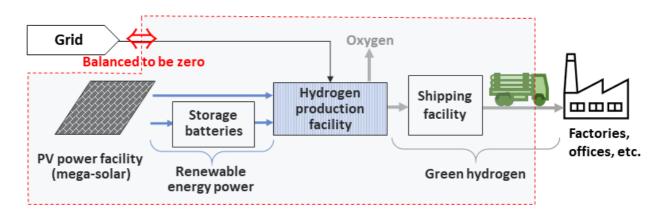
Through the Project, we will strive to further accelerate the adoption of renewables and green hydrogen in Japan as we aim to create a carbon neutral society.

* Implemented by Yamanashi Prefectural Government, Toray Industries, Inc., TAKAOKA TOKO CO., LTD. and TEPCO Energy Partner, Inc. in accordance with the "Agreement on P2G System Technical Development and Demonstrative Research to Achieve a CO2-Free Hydrogen Society" (Executed on November 4, 2016)

<Green hydrogen production facility concept diagram>



<Flow diagram>



^{*}The concept diagram and flow diagram illustrate plans when the Project was proposed and may change in accordance with design progress, etc.