

Commencement of VPP Proof-of-Concept for Tokyo Metropolitan Facilities
~ Supplying renewable energy-based power to the Tokyo Metropolitan Art Museum
from Tokyo Metropolitan Housing ~

November 1, 2024

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Today, November 1, TEPCO began a VPP^{*1} proof-of-concept experiment using city-owned facilities in coordination with the Tokyo Metropolitan Government. The proof-of-concept experiment will entail supplying the Tokyo Metropolitan Teien Art Museum with power generated by photovoltaic power generation facilities installed in the Chitosedai 1-chome Metropolitan Housing (4 buildings) in order to examine the feasibility of operation and the effectiveness of Area Energy Management Systems^{*2} (hereinafter referred to as, “AEMS”).

On June 24, 2022, TEPCO signed a Cooperative Agreement for Accelerating Initiatives Aimed at Stabilizing Power Supply and Achieving Carbon Neutrality in light of Energy Conditions^{*3 *4} (hereinafter referred to as, “Cooperative Agreement”) with the Tokyo Metropolitan Government and has been engaged in initiatives to achieve carbon neutrality ever since.

This experiment is being carried out as part of the Cooperative Agreement and seeks to build a VPP for city-owned facilities by leveraging photovoltaic power generation facilities, storage batteries, and AEMS, etc. in accordance with the Tokyo Metropolitan Government’s power HTT (*herasu* (reduce), *tsukuru* (make), *tameru* (store)) initiative as it aims to achieve its Zero-Emission Tokyo 2050 objective^{*5}.

During the proof-of-concept experiment, we expect to be able to provide the Tokyo Metropolitan Teien Art Museum with approximately 90,000kWh (power output volume from photovoltaic facilities at the Chitosedai 1-chome Metropolitan Housing) of power annually and will demonstrate through the analysis of data from demand-supply operations that the usage rate of renewable energies for the entire project can be improved in the future.

From FY2025, we will introduce facilities and AEMS to engage in optimal energy management as we add a variety of city-owned facilities, such as schools, parks, and tenement housing, etc., to the list of facilities being used for the proof-of-concept experiment, and accelerate initiatives to share power between facilities.

In order to achieve carbon neutrality by 2050, TEPCO will continue to work in cooperation with local governments to create independent and decentralized energy systems that take maximum advantage of regional renewable energy resources. Furthermore, by promoting carbon neutrality throughout the entire region and strengthening preparedness, we shall provide new value that offers solutions to regional issues.

- *1 VPP (Virtual Power Plant): A network of decentralized power sources, such as photovoltaic power generation facilities, storage batteries, and electric vehicles, etc., that are controlled together to act like a single power plant thereby enabling power output and adjustment functions to be controlled in a virtual space.
- *2 Area Energy Management System: System that enables the collective management of energy for multiple facilities using electricity and renewable energy-based power generated in a specific area.
- *3 [Signing of Cooperative Agreement for Accelerating Initiatives Aimed at Stabilizing Power Supply and Achieving Carbon Neutrality in light of Energy Conditions with the Tokyo Metropolitan Government \(Announced on June 24, 2022, in Japanese only\)](#)
- *4 [Revision to Cooperative Agreement for Accelerating Initiatives Aimed at Stabilizing Power Supply and Achieving Carbon Neutrality in light of Energy Conditions signed with the Tokyo Metropolitan Government \(Announced on June 26, 2024, in Japanese only\)](#)
- *5 [Project to achieve carbon neutrality by building VPP for facilities owned by the Tokyo Metropolitan Government ~Contributing to Zero-Emission Tokyo 2050~ \(announced on December 23, 2022, in Japanese only\)](#)

Reference

<Proof-of-Concept Facilities>

Chitosedai 1-chome Metropolitan Housing (4 buildings)
Tokyo Metropolitan Teien Art Museum



Chitosedai 1-chome Metropolitan Housing (Supply)



Tokyo Metropolitan Teien Art Museum (Demand)

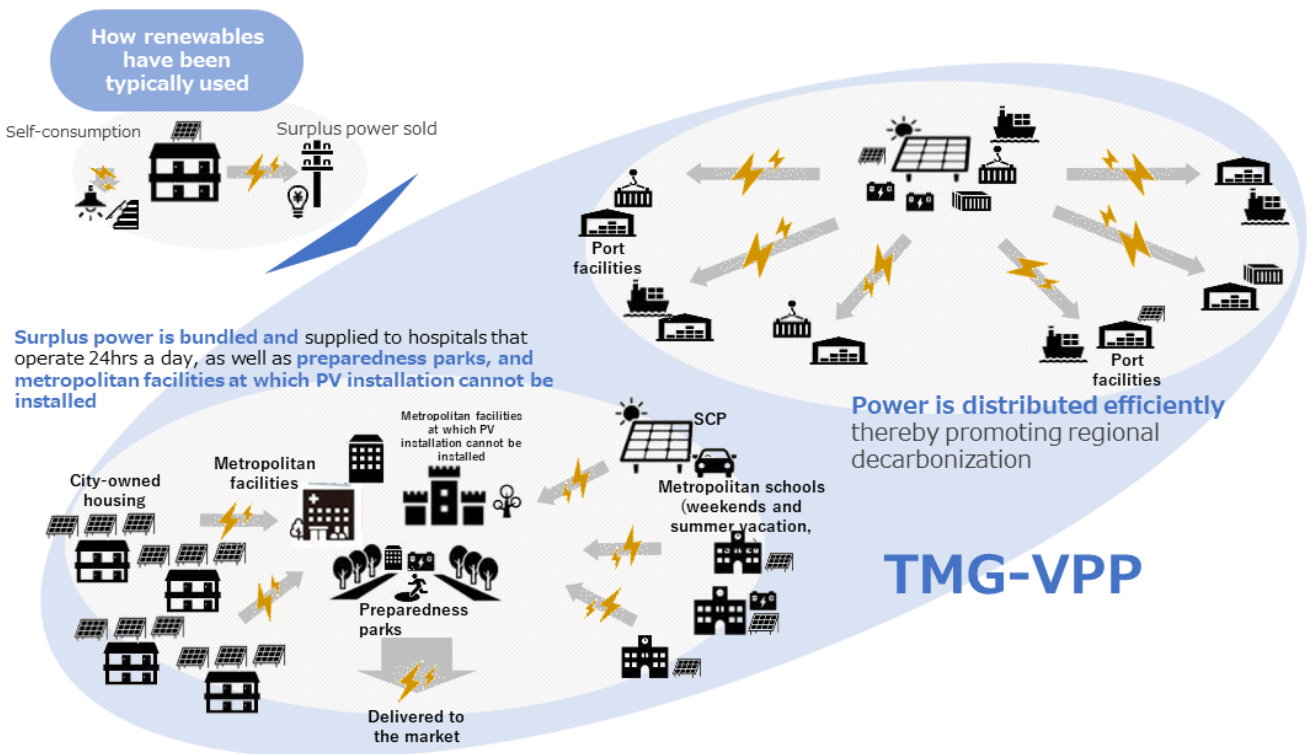
<Target Facilities (Planned)> *Excluding facilities used for the proof-of-concept experiment

Asahi-cho 2-chome Metropolitan Housing #5 (1 building); Shakuji-machi 2-chome Metropolitan Housing #3 (6 buildings); Tobu Medical Center for the Disabled; Hikarigaoka Park; Yumenoshima Park; Takashio Tatsumi housing complex; Land in Oi Terminal; West shed in №10 Terminal; №4-6 shed in №10 Terminal; Domestic Trade Miscellaneous Goods shed in Tatsumi Terminal; Bulk Cargo Shed in Terminal of Inner-Central Breakwater; Tagara High School; Nerima High School; Chitosegaoka High School: Nerima Special Needs School

<Concept drawing of Tokyo AEMS>



<Concept drawing of VPP using Tokyo Metropolitan facilities>



*TMG: Tokyo Metropolitan Government