

Press Release

October 6, 2022
Hitachi Metals, Ltd.

Introduction of Japan's Largest-Class¹ Off-Grid Solar Power Generation System

Hitachi Metals, Ltd. ("the Company") has decided to introduce a photovoltaic (PV) power generation system to its Kumagaya site, which houses the Kumagaya Works and the Global Research and Innovative Technology Center of the Magnetic Materials Business Unit. The new system will consist of solar cell modules with a total output capacity of 10 MW and will be one of Japan's largest PV systems installed on the premises of a business for its own consumption. The system is scheduled to commence operation in September 2023 and will generate electricity in an amount of approximately 11,500,000 kWh (11,500 MWh)/year, all of which will be consumed on-site. This is expected to cut CO₂ emissions by 5,100 tons/year. The Hitachi Metals Group intends to increase its use of electricity produced from renewable sources from approximately 400,000 kWh (407 MWh)/year for the current year to over 20,000,000 kWh (20,000 MWh)/year (roughly 50-fold) in FY2024. This project is intended to represent the core initiative in our efforts to increase the use of renewables.

The Hitachi Metals Group has defined a contribution to realizing a decarbonized society as an important management issue. Regarding CO₂ emissions from its operations, the Group aims to achieve a reduction of 38% in FY2030 (from FY2015) as a medium-term target and carbon neutrality by FY2050 as a long-term target, thereby contributing to the transition to a decarbonized society. To this end, we are working to expand the use of renewable energy and to promote energy conservation.

Using a so-called Third Party Ownership/Power Purchase Agreement (TPO/PPA) model for photovoltaic (PV) power generation, this project is designed to achieve the efficient installation of a renewable energy system on the Company's property.

The TPO/PPA model is a mechanism in which a power user (the facility owner) purchases electricity generated with a PV power system installed by a company that owns and operates the system (the power seller) on the ground or roof of the premises of the facility owner. This mechanism is advantageous to the facility owner (the Company) in that the facility owner is able to lower the risk involved in introducing a large-scale renewable energy system by treating it as an off-balance-sheet item². In addition to this, Kumagaya City, being blessed with longer annual hours of sunlight, is located more advantageously for solar power generation than other areas of the country. By using around 90,000 m² of Company-owned open land, consisting of idle land, recreational area and others, on the premises, it is possible to install the large-scale and high-efficient solar PV system.

TEPCO Ventures, Inc. (Headquarters: Minato-ku, Tokyo) provides planning and operation services for the solar PV system. "We sincerely appreciate Hitachi Metals for having chosen us as a co-creation partner for such a large project," said Representative Director Shinji Akatsuka of TEPCO Ventures. "I believe this project is one of Japan's largest-scale off-grid solar power generation systems that will become operational within the coming year. While many of the large-scale solar power plants in Japan supply electricity to the utility grid, this system allows for the production and consumption of electricity on-site, which is considered to be most desirable from the perspective of efficient power utilization and

decarbonization. Given the unconventional size of the system, this project is extremely unique and significant. In my opinion, this project is likely to attract tremendous attention as a promising initiative to contribute to carbon neutrality.”

The Hitachi Metals Group is promoting the introduction of renewable energy facilities at its bases in accordance with the Group-wide plan. In addition to the Kumagaya site, another PV power generation system (estimated output for the first year: approx. 2,500,000 kWh/year) based on the TPO/PPA model is scheduled to begin operation in April 2023 at the Moka site, the home of the Moka Works.

We are endeavoring to reduce CO₂ emissions from our business operations by introducing renewable energy and promoting energy conservation. At the same time, we strive to develop and supply innovative products that help address climate change issues (environmentally conscious products), thereby contributing to the transition to a low-carbon society.

Overview of the Project

Location	Kumagaya Works, Hitachi Metals, Ltd. (Kumagaya City, Saitama Prefecture)
Planning and operation	TEPCO Ventures, Inc.
Design and installation	Sharp Energy Solutions Corporation
Total capacity of solar cell modules	9,705 kW (Approx. 10 MW)
Estimated annual power generation ³	11,500,000 kWh (for the first year)

Notes:

1. Surveyed by the Company. This project is one of Japan's largest PV power systems that will commence operation by September 2023 and installed on the premises of a business for its own consumption.
2. Property that is not recorded as an asset on the balance sheet
3. Based on the conditions assumed by TEPCO Ventures

End of report

Media inquiries: Corporate Communications Dept.

<https://www.hitachi-metals.co.jp/e/ir/ir-cntct.html>