Press Release

October 9, 2026
Electric Power Development Co., Ltd.
Green Earth Institute Co., Ltd.

J-POWER and Green Earth Institute Launch Scale-Up Demonstration Project Utilizing Oil Palm Trunks in Indonesia

—Towards Bioethanol Production and SAF Feedstock Supply from Oil Palm Trunk —

Electric Power Development Co., Ltd. (“J-POWER”; Headquarters: Chuo-ku, Tokyo; President and Representative Director, President and Executive Officer: Hideaki Kato) and Green Earth Institute Co., Ltd. (“GEI”; Headquarters: Shinjuku-ku, Tokyo; Representative Director and CEO: Tomohito Ihara) have entered into a service agreement for an integrated project involving the production of chemicals and biofuels from palm biomass residues in the Republic of Indonesia. The agreement is intended to implement a scale-up demonstration project※1 aimed at the commercialization of a business that produces bioethanol and biomass fuel from oil palm trunks (OPT: Oil Palm Trunk)※2.
Through this demonstration project, the two companies will transition from the feasibility study and evaluation phase to the scale-up demonstration phase, with a view toward the deployment of a commercial-scale plant.
※1 **Scale-Up Demonstration:** Demonstrating a technology at a larger scale to confirm its suitability for commercial deployment.
※2 **OPT (Oil Palm Trunk):** Trunks from oil palm trees that are removed after their productivity declines, typically after 20 to 25 years of age. Palm oil plantations regularly replant trees, generating large volumes of discarded trunks.

In Southeast Asia, where palm oil, the world's most widely consumed vegetable oil, is produced, oil palm plantations regularly replant trees to maintain fruit yields, generating large quantities of OPT each year. However, OPT contains high levels of moisture and sugars, improper disposal can result in greenhouse gas emissions such as methane and may also contribute to the spread of pests and plant diseases. The objective of this project is to create new value by converting such underutilized resources into products such as biofuels.

Following J-POWER's investment in GEI in 2019, the two companies have conducted studies and evaluations of the business potential of an integrated project that produces both bioethanol and biomass fuel from underutilized OPT resources. Building upon these efforts, the companies will now move to the next stage and commence a scale-up demonstration project aimed at future commercialization.

A scale-up demonstration facility will be established near Jakarta, Indonesia, where the entire process from the production of sugar solution from OPT through fermentation will be demonstrated. The project will utilize large-scale fermentation facilities operated by Indonesia's National Research and Innovation Agency (BRIN)※3 and is scheduled to conduct scale-up demonstrations through 2027. The bioethanol produced through this project is also expected to be utilized in the future as a feedstock for Sustainable Aviation Fuel (SAF).
The companies will continue their studies towards the development of a commercial-scale plant capable of processing over 100,000 tons of OPT annually by around 2030, when large-scale deployment and adoption of SAF is expected to accelerate.
※3 **National Research and Innovation Agency (BRIN: Badan Riset dan Inovasi Nasional):** A government agency responsible for research, development, and innovation policy in Indonesia.

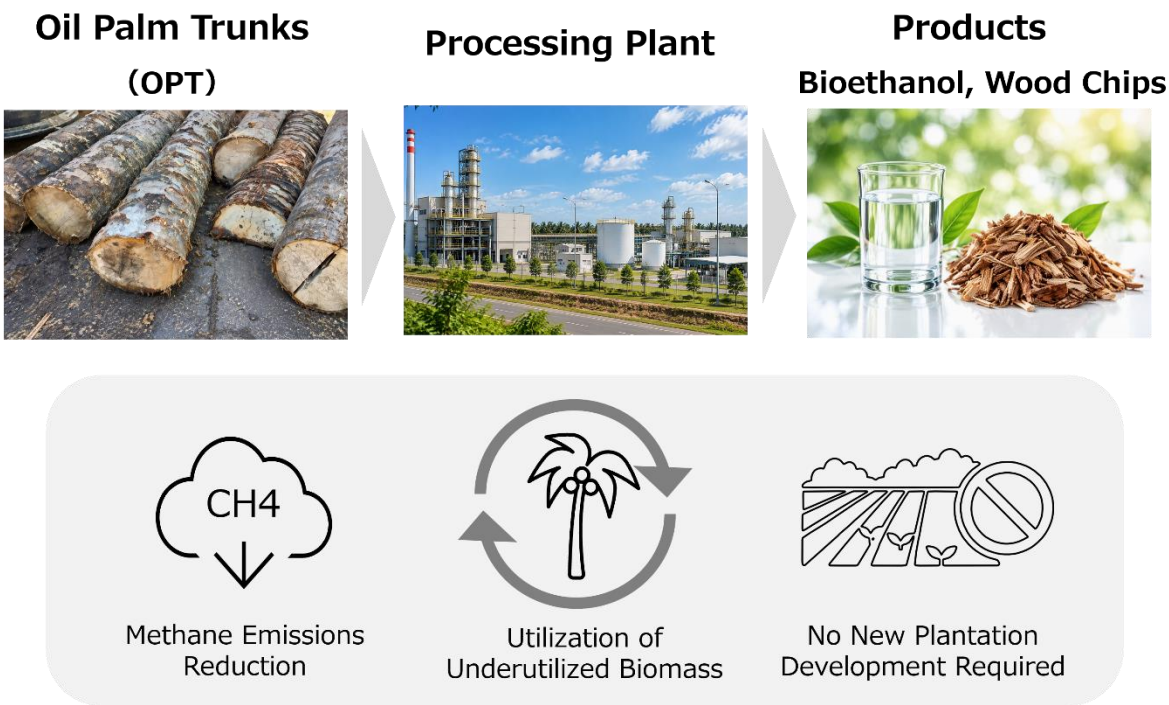

Figure: Process Flow of the Project

This project does not involve new deforestation or agricultural land development to secure feedstock. Rather, it is a circular initiative that utilizes underused biomass generated by existing industries and converts it into high-value products. Another key feature of the project is that the bioethanol produced will be derived from non-food feedstocks※4.
※4 **Bioethanol Derived from Non-Food Feedstocks:** Bioethanol produced from feedstocks that are not used as food, such as agricultural residues and woody biomass. Unlike bioethanol produced from food crops such as corn or sugarcane, it is less likely to compete with food supply chains.

J-POWER will continue to leverage the technologies and expertise it has cultivated through its power generation business and other operations to create new business opportunities and advance decarbonization initiatives toward achieving carbon neutrality by 2050, as outlined in the "J-POWER BLUE MISSION 2050."

GEI will utilize its proprietary biomanufacturing technologies to realize the biofuel energy revolution envisioned in its "Medium- to Long-Term Vision" targeting global markets including Southeast Asia. Through these efforts, GEI aims to contribute to the realization of a decarbonized society and accelerate the social implementation of biomanufacturing technologies worldwide.

Company Overview

Electric Power Development Co., Ltd. (Tokyo Stock Exchange Prime Market)

Under its corporate philosophy of *"We will meet people's needs for energy without fail, and play our part in the sustainable development of Japan and the rest of the world."* J-POWER engages in a wide range of power generation, transmission, and distribution businesses both in Japan and overseas. The company has also announced the "J-POWER BLUE MISSION 2050," under which it aims to achieve virtually zero CO_2 emissions from its own power generation business by 2050 and continues to pursue initiatives toward that goal.

Established:	September 16, 1952
Head Office:	6-15-1 Ginza, Chuo-ku, Tokyo, Japan
Representative:	Hideaki Kato, Chief Executive Officer
Capital:	JPY 180,502 million (as of March 31, 2026)
Number of Employees (Non-consolidated):	1,994 (as of March 31, 2026)
Business Activities:	Electric utility business
Website:	https://www.jpower.co.jp/

Green Earth Institute Co., Ltd. (Tokyo Stock Exchange Standard Market)

GEI's mission is *"Fostering green technology and walking with the earth."* The company develops and commercializes green chemicals utilizing innovative biomanufacturing technologies. Through the social implementation of biofuels, chemicals, and other biomass-derived products, GEI seeks to realize a sustainable circular society with lower environmental impacts.

Established:	September 1, 2011
Head Office:	5-6 Shinjuku 3-chome, Shinjuku-ku, Tokyo, Japan
Representative:	Tomohito Ihara, Chief Executive Officer
Capital:	JPY 1,602,365 thousand (as of September 30, 2025)
Number of Employees (Non-consolidated):	50 (as of September 30, 2025)
Business Activities:	Development and commercialization of green chemicals utilizing innovative biomanufacturing technologies
Website:	https://gei.co.jp/