



FOR IMMEDIATE RELEASE:

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NEWS RELEASE

"Additional Agreement with J-POWER for Feasibility Study Project on Integrated Business of Green Chemicals and Pellets Production Using Oil Palm Tree Waste in Thailand"

Green Earth Institute Co., Ltd. ("GEI") and Electric Power Development Co., Ltd. ("J-POWER") have signed an additional agreement on January 13, 2023 to conduct a feasibility study on an integrated project to produce biofuels and green chemicals using palm residue in Thailand, following the conclusion of the former agreement *1 on December 12th, 2022.

GEI with its own unique biorefinery technology and J-POWER, which aims to achieve carbon neutrality by 2050 under the J-POWER "BLUE MISSION 2050," have reached an agreement to jointly explore an integrated business opportunity utilizing OPT.

Palm oil is the most widely used vegetable oil in the world, with a wide range of applications including food, detergents, and cosmetics. Due to its lower price and higher yield compared to other vegetable oil, its demand and production are increasing year by year, and global production volume is estimated to exceed 79 million tons in 2022. *2

Oil palm trees in plantations, which support this enormous global demand, are regularly replanted to maintain palm fruit yields, resulting in a large amount of waste oil palm trees (OPT*3) every year. OPT is usually shredded and landfilled in the plantation. Since improper treatment of OPTs should not only trigger greenhouse gases, but cause pest infestation in the region, improvement of OPT utilization is urgently required.

The purpose of this study is to conduct a feasibility study on the production of several green chemicals by fermentation using sap contained in OPT as raw material, and to evaluate the feasibility of a project integrating green chemicals and fuel pellets production sourced from the waste oil palm trees. With the signing of this additional contract, GEI will start another study on bio-chemical production by fermentation, in addition to the study on fuel pellets. These integrated project initiatives are expected to make effective use of OPTs that have been discarded so far and realize upcycling into biofuels and high value-added chemicals. It is also expected to contribute to the proper development of the palm oil industry throughout the world.

GEI has been working to solve various global problems under its management philosophy (mission) of "Fostering Green Technology and Walking with the Green". Through this research project with J-POWER, GEI will contribute to realize a circular economy and a decarbonized society.



X2 US Department of Agriculture"World Markets and Trade"

※3 Abbreviation for Oil Palm Trunk

GEI is listed on the Tokyo Stock Exchange.

Corporate Website: https://gei.co.jp/en/
