

September 12, 2019

DOWA HOLDINGS CO., LTD.

Commencement of Construction of a Biomass Power Plant Using Food Waste as the Material in Okayama-shi

BIODIESEL OKAYAMA CO., LTD. (Headquarters: 3-1 Kaigan Dori 1-chome, Minami-ku, Okayama-shi, Okayama; Capital: 99 million yen; President: Yoshiro Ishihama), a subsidiary of DOWA ECO-SYSTEM CO., LTD. (Headquarters: 14-1 Sotokanda 4-chome, Chiyoda-ku, Tokyo; Capital: 1 billion yen; President: Minoru Tobita), which is a subsidiary of DOWA HOLDINGS CO., LTD. (Same location; Capital: 36.4 billion yen; President: Akira Sekiguchi) have obtained permission to construct a municipal waste treatment facility dated September 10, 2019, and will begin constructing a biomass power plant that will use food waste as the material.

Since 2009, BIODIESEL OKAYAMA CO., LTD. has been manufacturing and selling biodiesel fuels, which are made from waste edible oil, jointly with the city government of Okayama. The cumulative total sales are approximately 5,200 kiloliters (as of August 31, 2019). Biodiesel fuel is used for garbage trucks, fixed route buses, and other diesel vehicles, and BIODIESEL OKAYAMA CO., LTD. has been contributing to the effective use of food waste and reduction of consumption of fossil fuels.

To further promote the effective use of food waste, which is difficult to recycle into fodder or fertilizers, BIODIESEL OKAYAMA CO., LTD. will begin biomass power generation using food waste as the material. Biomass power generation using methane fermentation is deemed promising as a self-reliant and decentralized renewable energy that makes effective use of local resources. The plant to be constructed is planned to accept approximately 16,000 tons of food waste every year, generate power by using methane fermentation, and generate and sell power equivalent to annual consumption of around 1,600 households.

Reduction of generation and effective use of food waste is an important task for building a sustainable society.

In Japan, initiatives have been taken in response to the Law on Promotion of Recycling and Related Activities for Treatment of Cyclical Food Resources, which was established in 2000. Of approximately 27 million tons of food waste that was generated annually, approximately 17 million tons of the waste was recycled into fodder, fertilizers, and other resources. The remaining approximately 10 million tons of food waste was disposed of by incineration, landfilling, or the similar methods (estimates for FY2016*1). Further initiatives are deemed necessary for reducing the generation and making effective use of food waste.

The DOWA Group will continue to promote the enhancement of environmental management and recycling services, including the appropriate treatment and recycling of waste, thereby contributing to building a sustainable society.

^{*1} Source: Ministry of the Environment https://www.env.go.jp/press/106665.html

DOWA

[Overview of the plant to be constructed by BIODIESEL OKAYAMA CO., LTD]

1. Business: Biomass power generation (using gas from methane fermentation of food waste)

2. Location: 7-49 Chikko Sakaemachi, Minami-ku, Okayama-shi, Okayama

3. Site area: 8,900m²

4. Food waste disposal capacity: 45 tons/ day

5. Power generation capacity: 910 kW

6. Commencement of construction (plan): September 2019

7. Commencement of operation (plan): April 2021



Illustration of Biomass Power Plant

[Overview of BIODIESEL OKAYAMA CO., LTD.]

1. Headquarters: 3-1 Kaigan Dori 1-chome, Minami-ku, Okayama-shi, Okayama

2. Representative: Yoshiro Ishihama

3. Established: July 20084. Capital: 99 million yen5. Number of employees: 9

6. Shareholders: DOWA ECO-SYSTEM CO., LTD. (91.0%)

DOWA ELECTRONICS MATERIALS OKAYAMA CO., LTD. (4.5%)

DOWA IP CREATION CO., LTD. (4.5%)

7. Business: Manufacturing and sales of biodiesel fuels made from waste edible oil

[Overview of DOWA ECO-SYSTEM CO., LTD.]

1. Headquarters: 14-1 Sotokanda 4-chome, Chiyoda-ku, Tokyo

Representative: Minoru Tobita
Established: October 2006

4. Capital: 1 billion yen

5. Number of employees: Approx. 2,600 (consolidated/ DOWA ECO-SYSTEM Group)

6. Shareholder: DOWA HOLDINGS CO., LTD. (100%)

7. Business: Environmental management and recycling business

(resource recycling, waste treatment, soil remediation, logistics, consulting)