



Starting a biogas power generation business fueled by food waste

A subsidiary of DOWA HOLDINGS CO., LTD. (Headquarters: 14-1 Sotokanda 4-chome, Chiyoda-ku, Tokyo; Capital: 36.4 billion yen; President SEKIGUCHI Akira), DOWA ECO-SYSTEM CO., LTD. (Same location; Capital: 1 billion yen; President TOBITA Minoru) obtained new approval on January 18, 2021 to treat municipal and industrial waste at their subsidiary BIODIESEL OKAYAMA CO., LTD. (Headquarters: 3-1 Kaigan Dori 1-chome, Minami-ku, Okayama-shi, Okayama; Capital: 99 million yen; President: ISHIHAMA Yoshiro). Following trails, the DOWA Group's first biogas power generation business fueled by food waste will start in April 2021.

The biogas power generation plant where BIODIESEL OKAYAMA CO., LTD. will commence operations is the first large-scale commercial plant in the Chugoku region to use food scraps and food waste from food-related businesses. Accepting about 16,000 tons of food waste annually, the plant will generate electronic power corresponding to the annual power consumption of about 1,600 households, which will be sold through Feed-in Tariffs (FIT). The plant has preprocessing equipment for removing packaging, containers, and so forth. The food waste, that is otherwise difficult to recycle into fodder or fertilizer, will be used as a source for renewable energy^{*1}.

The plan is to provide customers of this service with recycling reports that shows CO_2 reduction effects according to the volume of the food waste processed. These reports can be used for emission business reports under the Food Recycling Law^{*2}, which will contribute to a better understanding of greenhouse gas reduction effects.

The reduced creation and efficient use of food waste is a key global challenge for creating sustainable societies. Initiatives are being advanced in Japan under the Food Recycling Law, but further initiatives for efficient use are needed as about 10 million tons of food waste is currently being disposed of by incineration, landfilling, or the similar methods (2017 estimate*3).

The DOWA Group will continue to promote better environmental and recycling services, such as the proper processing and recycling of waste, thereby contributing to the building of a sustainable society.

- *1: "What is renewable energy?" website of the Agency for Natural Resources and Energy

 https://www.enecho.meti.go.jp/category/saving_and_new/saiene/renewable/outline/ (Only in Japanese)
- *2: Act on Promotion of Recycling and Related Activities for Treatment of Cyclical Food Resources (Act No. 116 of 2000)
- *3: "On the publication of estimates for food waste and food loss in Japan (2017)," website of the Ministry of the Environment https://www.env.go.jp/press/107969.html (Only in Japanese)



[Overview of the biogas power generation plant of BIODIESEL OKAYAMA CO., LTD.]

1. Business: biogas power generation (fueled by food waste, using gas produced from the

methane fermentation)

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

3. Site area: 8,900 m²

4. Total factory area: 1,125.8 m² (incl. offices)

5. Food waste acceptance capacity: 45 tons/day

6. Generation capacity: 910 kW

7. Start of operations (planned): April 2021



The biogas power generation plant

[Corporate overview of BIODIESEL OKAYAMA CO., LTD.]

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

2. Representative: ISHIHAMA Yoshiro

3. Founded: July 2008

4. Capital: 99 million yen

5. Number of employees: 18 (as of end of December 2020)

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: production and sales of biodiesel fuel made from cooking oil waste

(about 6,000 kl in total sales as of end of December 2020)

biogas power generation fueled by food waste (planned start in April 2021)

[Corporate overview of DOWA ECO-SYSTEM CO., LTD.]

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

2. Representative: TOBITA Minoru

3. Founded: October 2006

4. Capital: 1 billion yen

5. Number of employees: about 2,600 (DOWA ECO-SYSTEM consolidated, as of end of March 2020)

6. Shareholders: DOWA HOLDINGS CO., LTD. 100.0%

7. Business: Environmental management and recycling business (resource recycling, waste

treatment, soil remediation, logistics, consulting)

[Past press releases on this matter]

"Commencement of Construction of a Biomass Power Plant Using Food Waste as the Material in Okayama-shi" September 12, 2019

https://ir.dowa.co.jp/en/ir/news/news7608876359464228123.html