

News Release

December 8, 2021 AIR WATER INC. DAIHATSU MOTOR CO., LTD.

Local Technological Development of Renewable Energy (Methane Production) Adopted as NEDO

Air Water Inc. announces that its joint project with Daihatsu Motor Co., Ltd. ("Daihatsu") developing a dry methane fermentation system using beef cattle feces and urine in a local symbiotic cycle in Ryuo-cho has been adopted by the New Energy and Industrial Technology Development Organization (NEDO) as a FY2021 Research and Development on New Energy Technology for Discovering Technology Seeds and Commercializing Developed Technologies project.

In its Environmental Action Plan 2030, Daihatsu expressed its commitment to the decarbonization of the energy used in its plants, while simultaneously contributing to communities, through local production and local consumption. The Air Water Group has been developing biogas-related technologies mainly in Hokkaido. It possesses a methane fermentation system as well as technologies for the separation and purification of biogas and the processing of biogas into liquefied biomethane (LBM).

The two companies, both of which are engaged in engineering, participated in a livestock farming partnership promoted by Ryuo-cho in Shiga Prefecture, where Daihatsu's plant is located. They started working on the development of methane fermentation technology using the feces of Omi cattle, a local specialty, to achieve a local symbiotic cycle through collaboration in livestock farming technology. By extracting energy (biogas) from the feces and urine of the fattened Omi cattle, an important local industry, and feeding it to a dedicated power generator to generate electricity used for operations in the plant, we aim to promote decarbonization and at the same time return the residue to the farmland as organic fertilizer, thus creating a regional cycle. Through this initiative, we will continue to strive to create a sustainable local community towards the achievement of our SDG goals.

In this initiative, we combined Daihatsu's simple, slim and compact manufacturing, production technology, and compact engine design and control technology and the methane fermentation and plant design technologies that Air Water has accumulated over its long history to develop a good-quality, low-cost dry methane fermentation system suited for cattle feces and urine. NEDO has approved this technological development as one of its projects, so Air Water will work together with Daihatsu on livestock farming technology in Ryuo-cho to develop and construct a small biomethane fermentation plant and power generator using Omi cattle feces and urine by 2023 and conduct a demonstration test in 2024.

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