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DK-Power Received “New Energy Foundation Chairman's Prize” of the “2023 New Energy Award” for its Micro-Hydroelectric Power Generation

Recognized for utilizing existing waterworks facilities at no cost to local governments

DK-Power, Ltd. (Headquarters: Suita City, Osaka Prefecture, President: Tetsuya Matsuura, and hereinafter referred to as “DK-Power”), a company within the Daikin Group, recently received the “New Energy Foundation Chairman's Prize” of the “2023 New Energy Award,” which is sponsored by the New Energy Foundation. DK-Power operates a micro-hydroelectric power generation business that utilizes existing municipal waterworks facilities to generate electricity at no cost to the local governments.

The New Energy Award is a system that promotes new energy establishment by recognizing efforts that include the development and application of new outstanding energy-related machinery and equipment, activities that foster public awareness, utilization of decentralized energy systems, and the introduction of initiatives rooted in the local community.

Previously, the micro-hydroelectric power generation business had struggled to become profitable due to high installation costs relative to the amount of power generated, but DK-Power changed that with its success in miniaturization and lowering of costs for micro-hydroelectric power. DK-Power has also received high acclaim for originality in a business model that reduces the financial burden on local governments by having DK-Power bear initial and maintenance costs.

For a generator, the system utilizes a low-cost, miniaturized, high-efficiency motor that was developed by the air conditioning and oil hydraulic equipment businesses of Daikin Industries. DK-Power further lowered costs with the use of a vertical inline pump reverse turbine that uses an inexpensive general-purpose pump. By selling the generated electricity as renewable energy under the feed-in tariff system (FIT system), initial and maintenance costs can be offset from the revenue generated from the sale of electricity with a portion of the profits shared with the local government. In this way, DK-Power realizes a business model that gives back to local governments without burdening municipalities with any costs.

DK-Power began operations in 2017 as the first startup company under Daikin Industries through the commercialization of a research project theme of the Technology and Innovation Center, the development base for core technologies of the Daikin Group. DK-Power has developed the micro-hydroelectric power generation system by leveraging the energy-saving technologies that the Daikin Group has cultivated in developing its air conditioning and hydraulic equipment. DK-Power has expanded an energy creation business for use at water facilities owned by local governments and other organizations through the installation of this system. Since electricity is generated from the unused hydroelectric energy at existing water facilities, the installation of new, large-scale facilities is unnecessary. Local governments promoting environmental protection have also highly praised the system for its capacity to generate energy without emitting CO₂ during the power generation process. DK-Power is currently developing micro-hydroelectric power generation projects at more than 40 water facilities nationwide.

Together with the support of the Daikin Group, DK-Power plans to further promote the use of micro-hydroelectric power generation systems and contribute to the realization of a carbon-neutral society by providing sustainable and independent electricity with low environmental impact.