

October 26, 2022

Meidensha Corporation

Meiden Group to start selling hydroelectric power with aim of becoming a comprehensive provider of hydropower generation

EAML Engineering CO., Ltd.(EAML), a group company of Meidensha Corporation (Meiden), plans to sell hydroelectric power generated at a small hydroelectric power plant in Hiroshima Prefecture that it acquired from the Shobara Agricultural Cooperative Association (JA Shobara). The sale is set to take place in the first half of fiscal 2025. Higashihiroshima, Hiroshima Prefecture-based EAML is scheduled to overhaul the plant by renewing all its equipment by the end of fiscal 2024.

Under its Medium-term Management Plan 2024, which covers the period through fiscal 2024, the Meiden Group is promoting sustainability management so that it can “work to build a new society through integrity to the Earth, society, and people, and through the power of co-creation.” One of the Group’s sustainability goals is to expand its renewable energy-related business to help attain carbon neutrality. Meiden has developed sophisticated technologies, particularly in hydroelectric power generation, since its founding in 1897 and has installed relevant equipment at many locations. This is one of Meiden’s main areas of expertise.

Japan has many undeveloped sites that have potential for hydroelectric power generation. Some 2,600 of them are suitable for building hydroelectric power plants with an output less than 5,000kW, a type of project at which the Meiden Group excels. If all these 2,600 sites were utilized, electricity equivalent to that by four nuclear power plants could be generated.

To realize carbon neutrality in 2050, the Group aims to be a comprehensive provider of hydropower generation that not only provides products and services to capitalize on the energy produced by water resources, as well as managing hydroelectric power plants, including the operations of such plants and maintenances. The acquisition of the hydroelectric power plant in Shobara represents a step toward entering the business of selling electricity.

The Eikane Power Plant began operating in 1966. The site of this plant was suggested

to JA Shobara by EAML as being suitable for a small hydroelectricity power plant. The power generation facility consists of a horizontal shaft Francis turbine (manufactured by EAML) and a horizontal three-phase AC induction generator (made by Meiden), with a permitted output of 140kW. The plant's operations are currently suspended due to its age (55 years since the start of operations) and damage it sustained in 2018's torrential rains. In response to calls from local businesses and residents for it to resume power generation, EAML decided to revamp the power plant so that it will be operational in the first half of fiscal 2025.

Main renovation work

- Replacing penstock, turbine, generator, etc.
- Renovating the water inlet, headrace, water outlet, etc.

EAML signed an agreement regarding power supply during disasters with the Shobara city government ahead of Eikane Power Plant's resumption of operations. Under the agreement, the power plant will constantly store electricity it generates in a battery, which will be used as an energy source for evacuation shelters for local residents in the event of a disaster.

EAML will actively make business proposals to efficiently renovate and operate small, aging hydroelectric power plants and develop areas for new power plants to promote the use of small hydroelectric power plants. By doing so, the company will help expand utilization of renewable energy and solve regional problems.

The Meiden Group, for its part, will capitalize on the strengths of Meiden as a manufacturer of generators and controllers for hydroelectric power generation, and of EAML as a manufacturer of turbines that also can combine all the equipment for installation. The Group will thus manufacture and install reliable power generation systems and expand its activities in this sector to become a comprehensive hydroelectricity provider.

- Outline of EAML Engineering CO., Ltd.
A hydroelectricity power-related manufacturer whose strength is in manufacturing turbines for small-capacity hydroelectric power plants.
Its predecessor, EAML Company, was established in 1947 by Shiro Oda, an engineer who served as an executive for Chugoku Haiden K.K., the predecessor of

the Chugoku Electric Power Co., Inc.

EAML is an acronym of Electric, Agriculture, Machine and Life, reflecting the company's aim of enriching the lives of farming communities with electric machinery.

Representative	President Katsumasa Yamaguchi
Founding	August 21, 1947
Head office	10852-1 Hara, Hachihonmatsu-cho, Higashihiroshima City, Hiroshima Prefecture
No. of employees	121 (as of April 1, 2022)
Business operations	<ul style="list-style-type: none">● Designing, manufacturing, selling and repairing hydroelectric power generation equipment and peripheral equipment● Constructing, running, managing, operating, maintaining and repairing hydroelectric power plants● Selling electricity from hydroelectric power plants
Major shareholders	Meidensha Corporation, the Chugoku Electric Power Co., Inc.
Main customers	Electric power companies, agricultural cooperative associations, local governments, heavy electrical equipment manufacturers, private companies