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## ANNOUNCEMENT OF BUSINESS ALLIANCE WITH TORISHIMA

Torishima Pump Mfg Co Ltd. of Osaka Japan and HERMETIC-Pumpen GmbH of Germany have agreed to form a business alliance in the field of ammonia fuel.

## Background

Ammonia is attracting attention as one of the next generation of energy sources (fuels) amid the global movement to be carbon neutral and protect our future from global warming. The Japanese government is actively moving forward with the goal of introducing and promoting 20% ammonia co-firing with coal-fired power plants by 2030. As the handling of ammonia as a fuel will greatly increase in the future, the two companies will work jointly to develop a pumping system to handle liquefied ammonia safely and in large volumes.

## Roles of Both Companies and Aims

Torishima, who have been supplying pumps & pump systems for power plants for 100 years, will receive products from HERMETIC, one of the world leading companies for canned motor pumps, and will undertake engineering and maintenance for the entire system. Torishima has already received an order from IHI Corporation, a plant manufacturer, for ammonia transfer pumps. This will be the world's first ammonia co-firing demonstration project and will be conducted at a JERA coal-fired power plant. In order to meet the needs for in-tank pumps to safely handle large volumes of ammonia, particularly as the plant grows in size, we have concluded a business alliance with HERMETIC for a canned motor pump as a solution.

## Outline of HERMETIC

Founded: 1866

Headquarters: Gewerbestrasse 51, 79194 Gundelfingen, Germany Business: Design and manufacture of hermetically sealed pumps and pumping technologies. A specialist for canned motor pumps for handling liquefied gasses such as ammonia, propane, ethylene and for the most extreme applications and hazardous media.

Leading German designer and manufacturer of canned motor pumps for ammonia, propane, ethylene, other liquefied gasses as well as dangerous, toxic, explosive and valuable media.

This business alliance will add Torishima's engineering capabilities to HERMETIC's high quality products to provide in-tank pump systems for fuel ammonia that meet global needs at a high level.

