

# SDGs Torishima's Initiatives

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## CLIMATE ACTION

Take urgent action to combat climate change and its impacts

Even in our immediate surroundings, we are steadily seeing the effects of climate change: In June 2022, Tokyo recorded nine consecutive days with temperatures exceeding 35°C, making it the hottest day in recorded history. The price of saury, which used to be available at supermarkets at low prices, has skyrocketed as global warming has reduced the catch. Other effects include rising sea levels, food shortages, ecosystem changes, and frequent disasters. Some predict that global temperatures will rise by up to 5.7°C by 2100.

Here is what Torishima can and must do to address the horrendous extreme weather and global warming that endangers human lives as well.

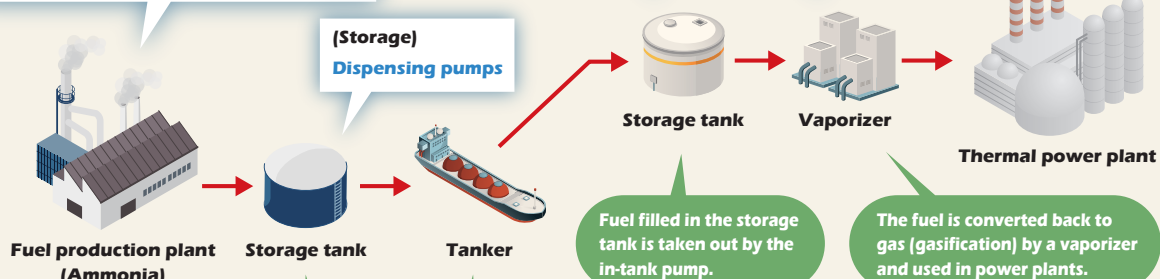
**Torishima has been pursuing higher efficiency (energy saving) pumps since its establishment in 1919.** At that time, I don't think we had any awareness of "climate change countermeasures" at all, but we must have been committed to satisfying our customers and contributing to society with pumps that consume as little electricity as possible. Now we are taking up the challenge of **developing new pumps to handle ammonia and hydrogen, which are next-generation energy sources**, as a countermeasure against climate change.

First, the development of pumps for ammonia was the result of collaboration between the design, R&D, and sales departments, which was highly evaluated and led to **Torishima's participation in a demonstration project at Japan's first ammonia co-firing thermal power plant.** We are working to further enhance the functionality of our products for larger facilities. We also plan to continue research and development of pumps for hydrogen in cooperation with specialized organizations, and **to conduct performance tests with actual liquids by the end of FY2023.** Liquefied hydrogen is difficult to handle at -253°C and there are many hurdles to overcome. We will be the first to commercialize it and aim to be the world's No. 1 company!

### Pumps for next-generation fuel supply lines (An example of the ammonia supply chain)

(Production and conversion)

**Ammonia pump**  
**Boiler feed pump**  
**Regeneration tower circulation pumps**  
**Absorption tower circulation pumps, etc.**



Ammonia and hydrogen are liquefied to reduce their volume in order to be stored and transported.

In addition to the development of pumps for next-generation fuels, we released the Super Eco Pump that achieves the world's top level of efficiency by pursuing energy savings in general-purpose pumps!

