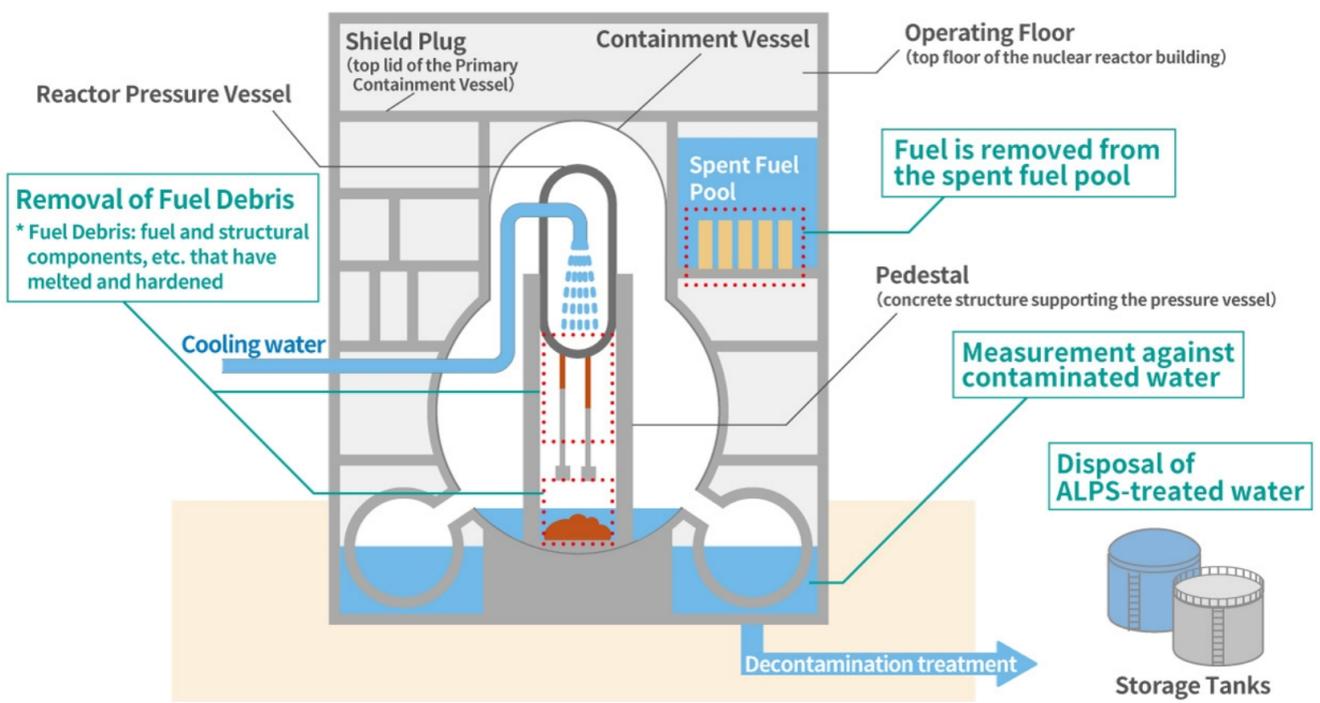


Fukushima decommissioning



Source: Excerpt from “Portal Site of Measures Dealing with Decommissioning, Contaminated Water and Treated Water: Main Initiatives,” Ministry of Economy, Trade and Industry

1. Removal of fuel debris

Debris refers to the nuclear fuel and reactor core fragments that melted and solidified due to the accident. In November 2024, the experimental removal of fuel from Unit 2 was completed, and planning is underway to shift to full-scale removal operations based on the data that was obtained.

2. Removal of fuel from spent fuel pools

All of the fuel has been removed from Units 3 and 4, and preparations are currently underway for Units 1 and 2. (*As of April 1, 2025)

3. Measures to deal with contaminated water

Water used to cool the nuclear reactor and groundwater mix with radioactive materials and produce contaminated water. To address this, an impermeable land-side wall and groundwater bypass were installed. The water that was already contaminated is being decontaminated using the Advanced Liquid Processing System (ALPS) and is managed after a significant amount of radioactive material has been removed.

4. Disposal of ALPS-treated water

The process to release the treated water into the sea was started in 2023. Before being released, the water was decontaminated to below the regulatory limits, and diluted in accordance with international standards.

5. Treatment and disposal of waste, dismantling of the nuclear reactor building, etc.

Highly radioactive waste is sealed in special containers and strictly managed. Some metal and concrete confirmed to be safe is expected to be reused. Efforts are aimed at ultimately dismantling the buildings and facilities and restoring the site to a state free from the effects of radiation.

Decommissioning work on the Fukushima Daiichi Nuclear Power Station requires long-term planning from a 30-to-40-year timeframe. While this is a difficult task without precedent anywhere else in the world, steady progress is being made while prioritizing safety under the banner of “balancing revitalization with decommissioning.”

Related Link

[Revitalization of Fukushima](#)