

# Robot lifts bits of melted fuel at Japan's Fukushima plant

14 February 2019



The clean-up is an especially difficult operation

A robot arm has successfully picked up pebble-sized pieces of radioactive fuel at Japan's Fukushima nuclear plant in a complex operation seen as key to clean-up efforts after the 2011 meltdown, officials said Thursday.

Operator Tokyo Electric Power (TEPCO) on Wednesday sent down a remote-controlled probe to the melted fuel at the bottom of the plant's reactor 2, one of three that melted down after a [massive earthquake](#) and tsunami in March 2011.

It caught five small pieces of the fuel debris and lifted them up some five centimetres (two inches).

"We were able to confirm that the fuel debris can be moved," said Yuka Matsubara, a spokeswoman.

"We accomplished the objective of this test," she told AFP, adding that the company plans to actually remove some fuel [debris](#) as a sample by March next year.

Robots have already peered inside the reactor to

allow experts to assess the melted fuel visually, but Wednesday's test was the first attempt to work out how fragile the highly radioactive material is.

Removing the melted [fuel](#) is considered the most difficult part of the massive clean-up operation in the wake of the worst nuclear disaster since Chernobyl.

It is not expected to begin until 2021, and TEPCO has other issues to resolve including how to dispose of large quantities of contaminated water stored in containers at the plant site.

The March 2011 tsunami that caused the meltdown was triggered by a massive undersea quake and killed around 18,000 people.

Tens of thousands were forced to evacuate their homes because of the threat of radiation.

Authorities have been working to rebuild the region, about 240 kilometres (150 miles) north of Tokyo, although areas near the crippled plant remain uninhabitable because of radiation dangers.

© 2019 AFP

APA citation: Robot lifts bits of melted fuel at Japan's Fukushima plant (2019, February 14) retrieved 16 June 2019 from <https://phys.org/news/2019-02-robot-bits-fuel-japan-fukushima.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*