

# Storage of nuclear waste a 'global crisis': report

January 30 2019

---



Greenpeace says its analysis of waste storage facilities in seven countries with nuclear power revealed several were near saturation

Nuclear waste is piling up around the world even as countries struggle to dispose of spent fuel that will remain highly toxic for many thousands of

years, Greenpeace detailed in a report Wednesday.

An analysis of waste storage facilities in seven countries with [nuclear power](#) revealed that several were near saturation, the anti-nuclear NGO said.

All these nations also confronted other problems that have yet to be fully contained: fire risk, venting of radioactive gases, environmental contamination, failure of containers, terrorist attacks and escalating costs.

"More than 65 years after the start of the civil use of nuclear power, not a single country can claim that it has the solution to manage the most dangerous radioactive wastes," Shaun Burnie, a nuclear expert at Greenpeace Germany and coordinator of the report said in a statement.

In particular, storing waste material from [nuclear power reactors](#) deep in the ground—the most researched long-term storage technology—"has shown major flaws which exclude it for now as a credible option," he said.

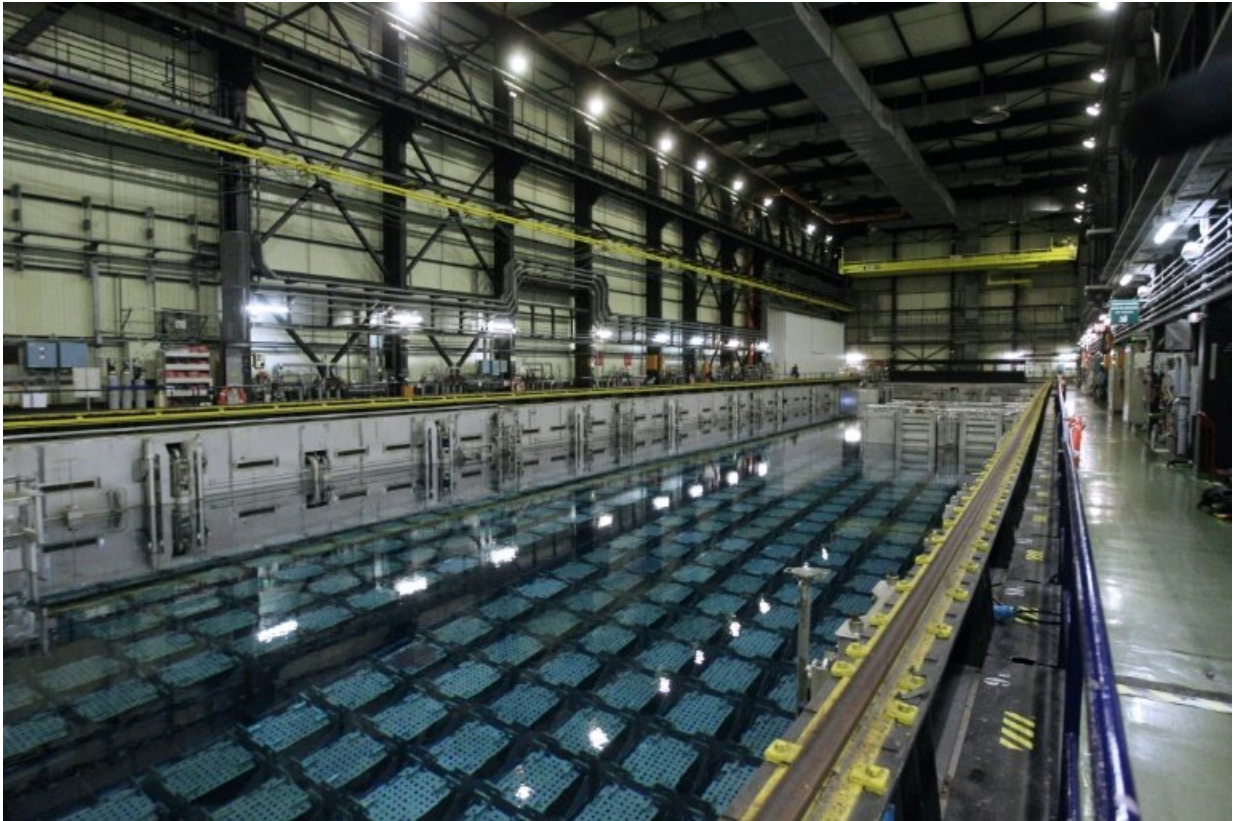
Currently, there is a global stockpile of around 250,000 tonnes of highly radioactive spent fuel distributed across some 14 countries.

Most of this fuel remains in so-called "cooling pools" at reactor sites that lack secondary containment and remain vulnerable to a loss of cooling. Some lack a source of back-up power.

The partial meltdown of Japan's Fukushima nuclear power plant in 2011 made clear that the high-heat hazard of spent fuel pools is not hypothetical.

The 100-page report, compiled by a panel of experts, dissected

shortcomings in the management of voluminous waste in France, which has the second largest nuclear reactor fleet (58) after the United States (about 100).



France has the world's second largest nuclear fleet but several oversight bodies have voiced concern over the capacity of massive cooling pools such as this one in Normandy

"There is no credible solution for long-term safe disposal of [nuclear waste](#) in France," the report said.

French oversight bodies have already raised concerns about capacity of massive cooling pools in Normandy at the La Hague site.

In response, energy giant Orana, which manages the site, said in a statement that "there is not risk of saturation of the pools in La Hague until 2030."

In the United States, billions of dollars and decades of planning have failed to secure a geological disposal site, the report notes.

The Yucca Mountain underground facility—decades in construction—was finally cancelled in 2010 by the Obama administration.

Meanwhile, some 70 percent of spent fuel in the United States remains in vulnerable cooling pools, often in densities several times the greater than originally intended.

Nuclear waste from [uranium mining](#) is also a major environmental concern.

The world's inventory of [uranium mill tailings](#)—sandy [waste material](#) that can seep into the local environment—was estimated at more than two billion tonnes as of 2011.

The other countries covered in the report are Belgium, Japan, Sweden, Finland and Britain.

© 2019 AFP

Citation: Storage of nuclear waste a 'global crisis': report (2019, January 30) retrieved 25 April 2024 from <https://phys.org/news/2019-01-storage-nuclear-global-crisis.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.