

Chernobyl, Ukraine: 1986

Fukushima, Japan: 2011

Janet Hall, OKAGE Teacher Consultant

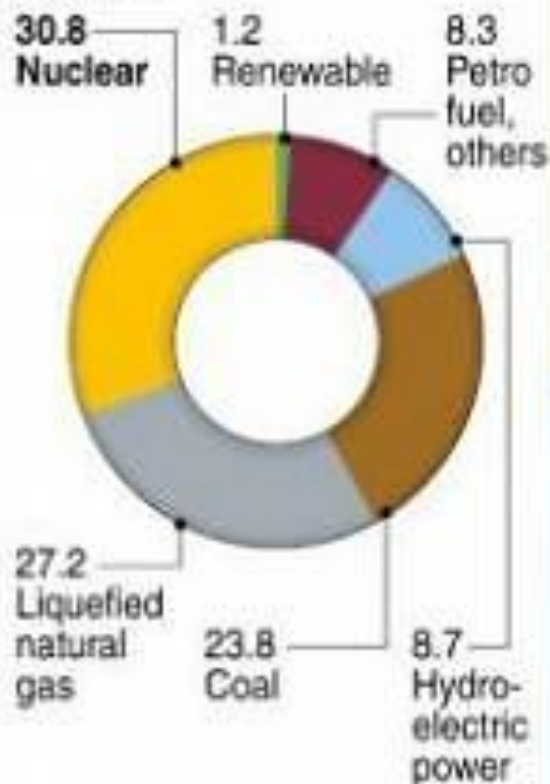


Nuclear Japan

Nuclear power provided nearly one-third of Japan's electricity before the March 11, 2011 quake and tsunami that triggered a meltdown and radiation leak at Fukushima

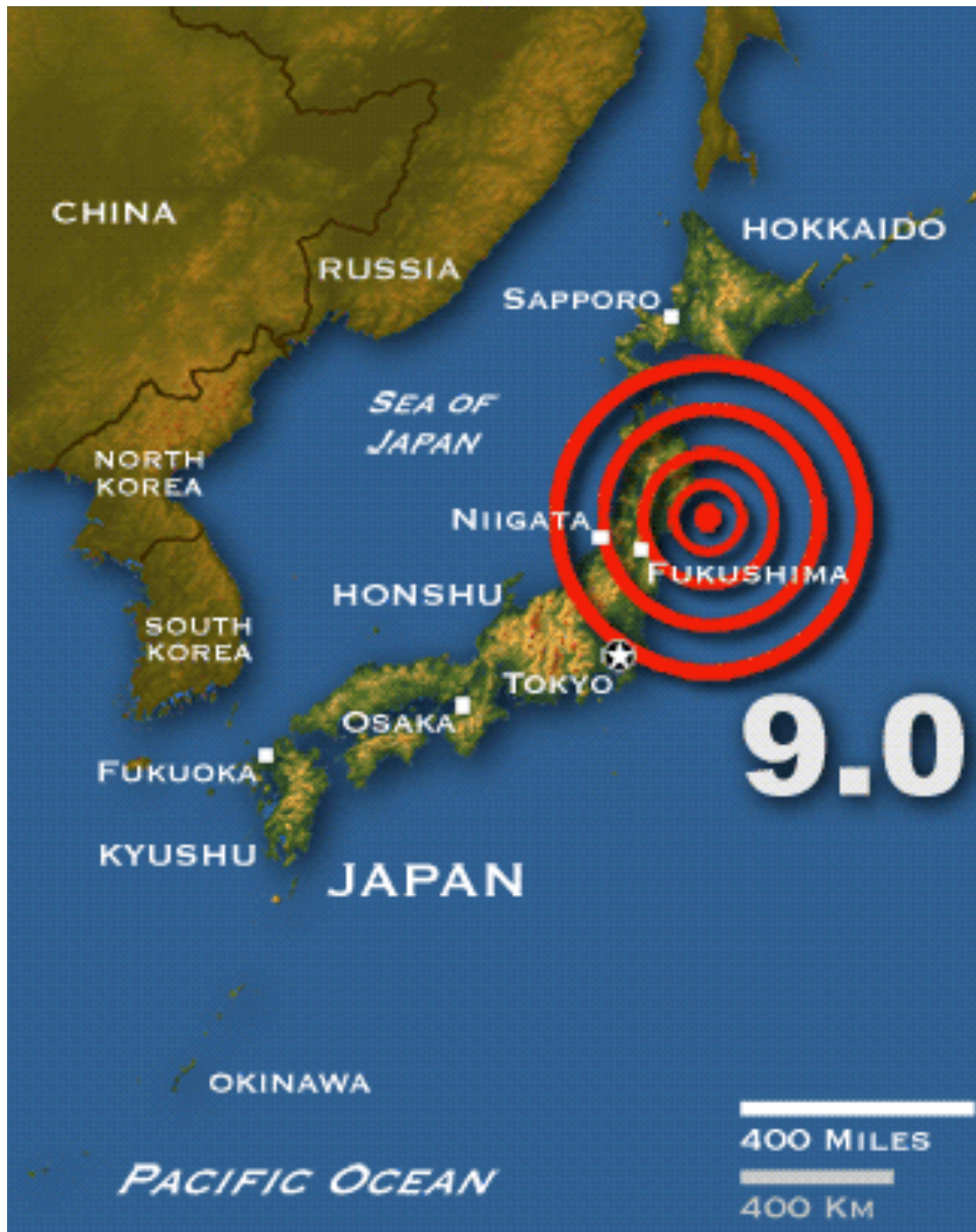
Japan's sources of power 2010

Percent



AFP

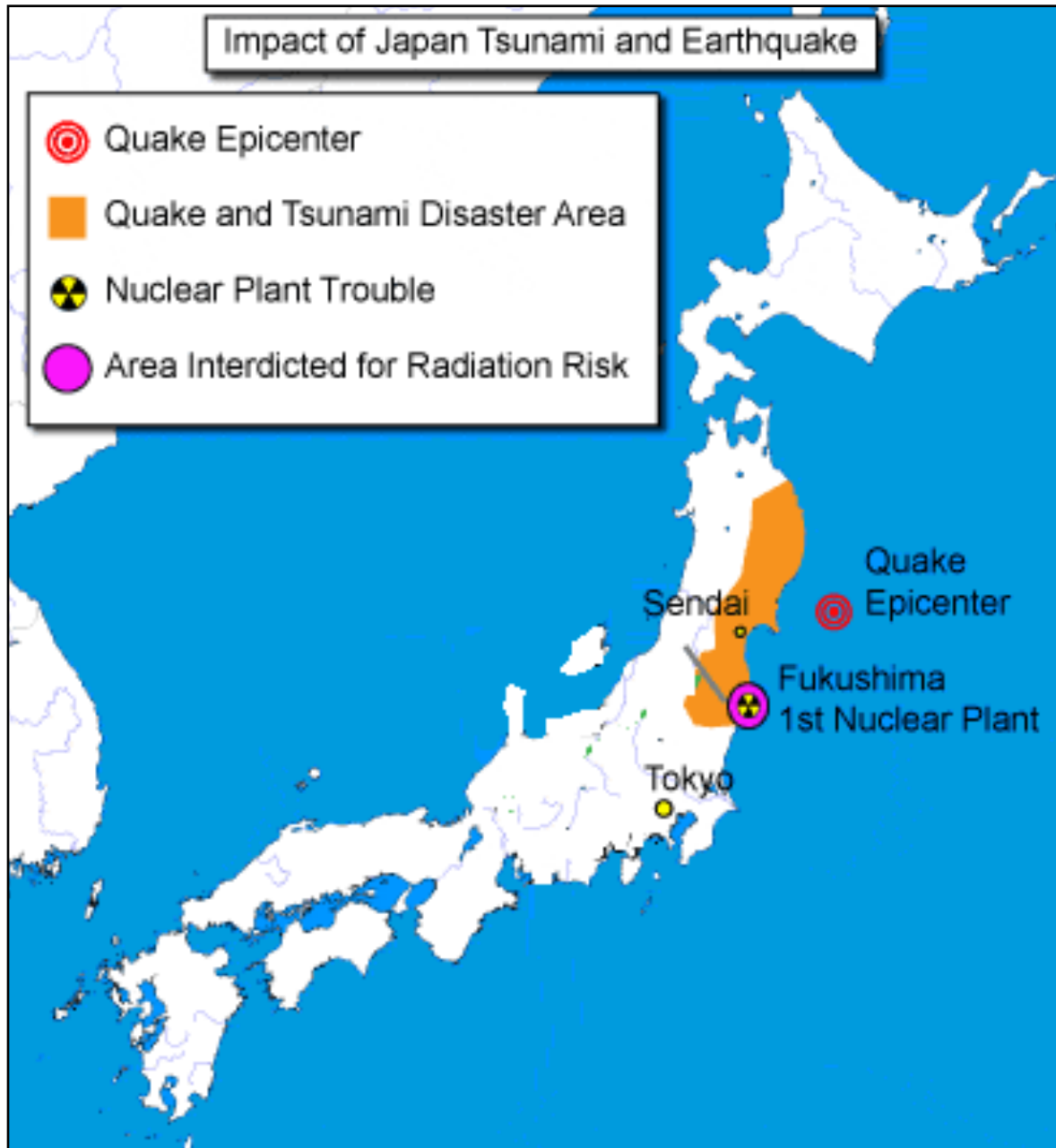
Source: Japan ANRE/Japan energy white paper 2011/JAIF



On March 11, 2011, a 9.0 earthquake hit off the east coast of Japan.

The earthquake triggered a powerful tsunami along Japan's east coast. The tsunami killed 20,000 people.





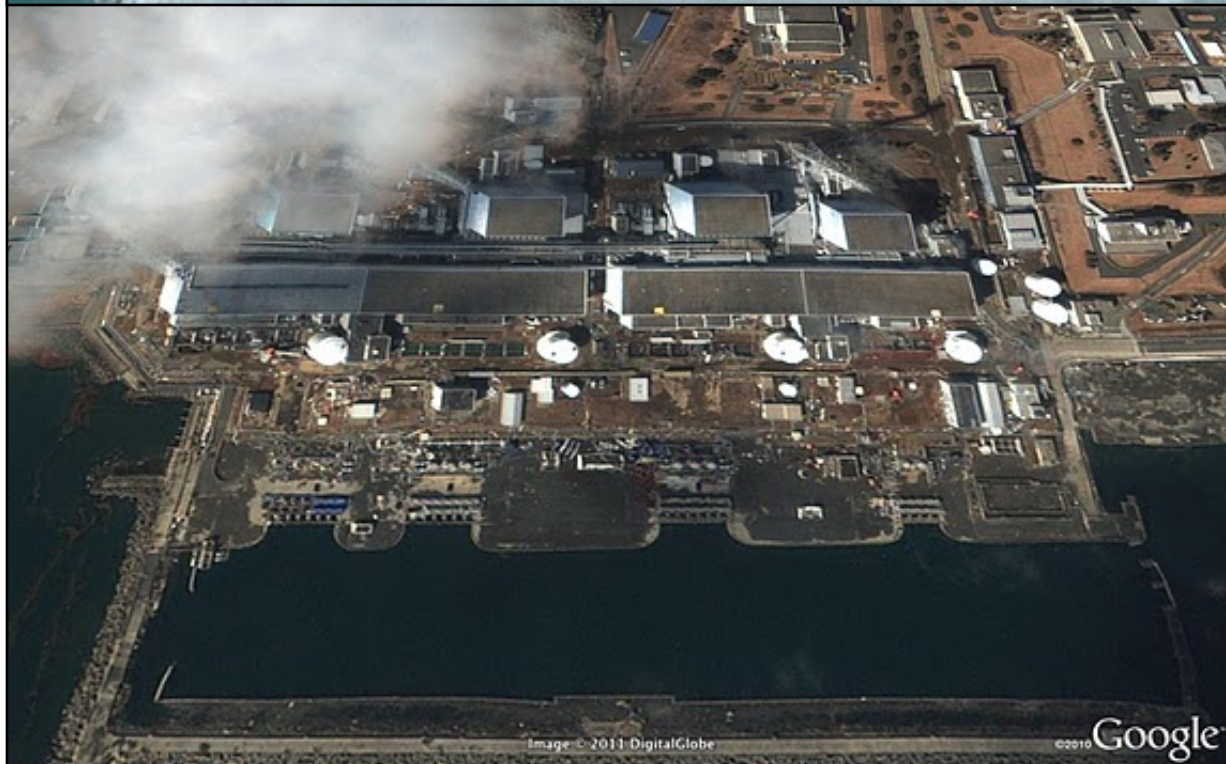
The Fukushima Nuclear Power Plant computers automatically shut down its nuclear reactors because of the earthquake.

But **then the tsunami hit the plant.**



Fukushima NPP

← before the tsunami



← after the tsunami

Fukushima NPP

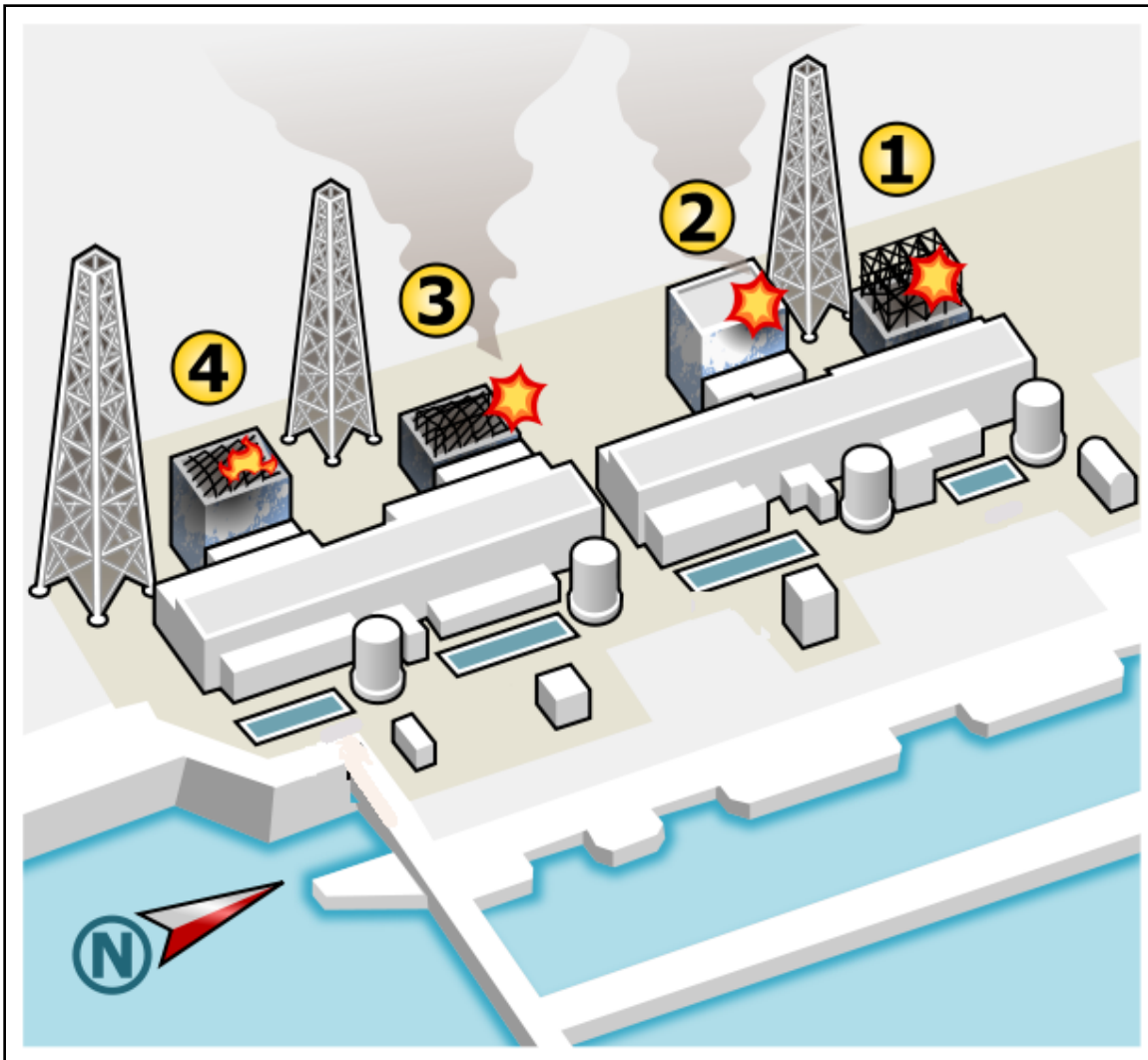
The tsunami destroyed the plant's **back-up generators.**

That meant they couldn't cool their reactors.



The day of the tsunami, the outer building holding **reactor #1** exploded.

Three days later, the building holding **reactor #3** exploded.



The next day, the building holding **reactor #4** exploded.

There was also an explosion inside **reactor #2** building that day.

A huge concern was the actual core of each reactor. Even with sea water pumped into the reactors, heat was building up.



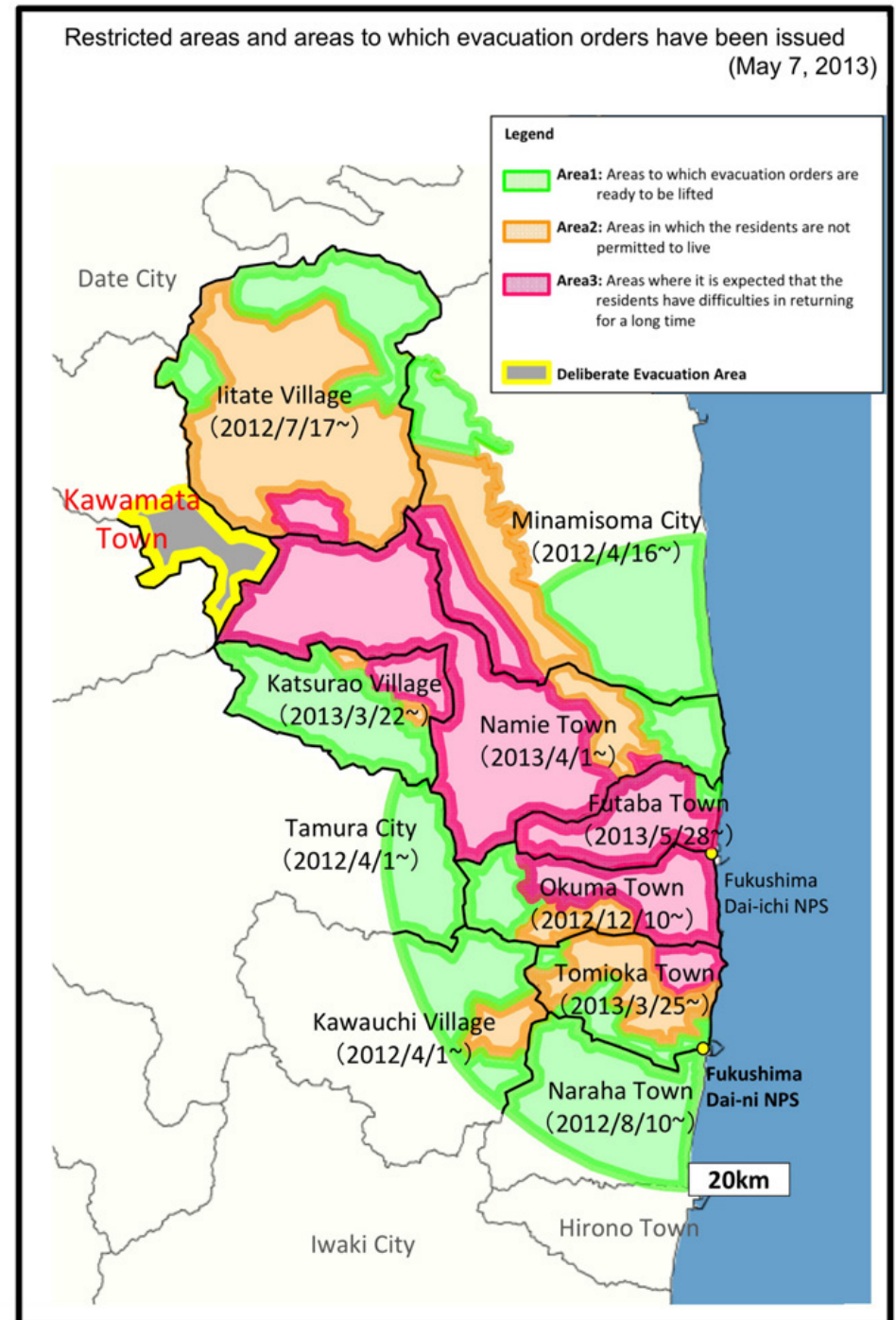
To keep the cores of the reactors from exploding, some steam pressure was released from reactors. And this steam was radioactive.



Like Chernobyl, the area around Fukushima
was evacuated.



Like Chernobyl,
Fukushima now
has its own
Exclusion Zone.



And Fukushima has also created its own ghost towns.







<http://static4.businessinsider.com/image/4efcb08369beddd64d00005e/a-rare-look-inside-the-fukushima-evacuation-zone.jpg>



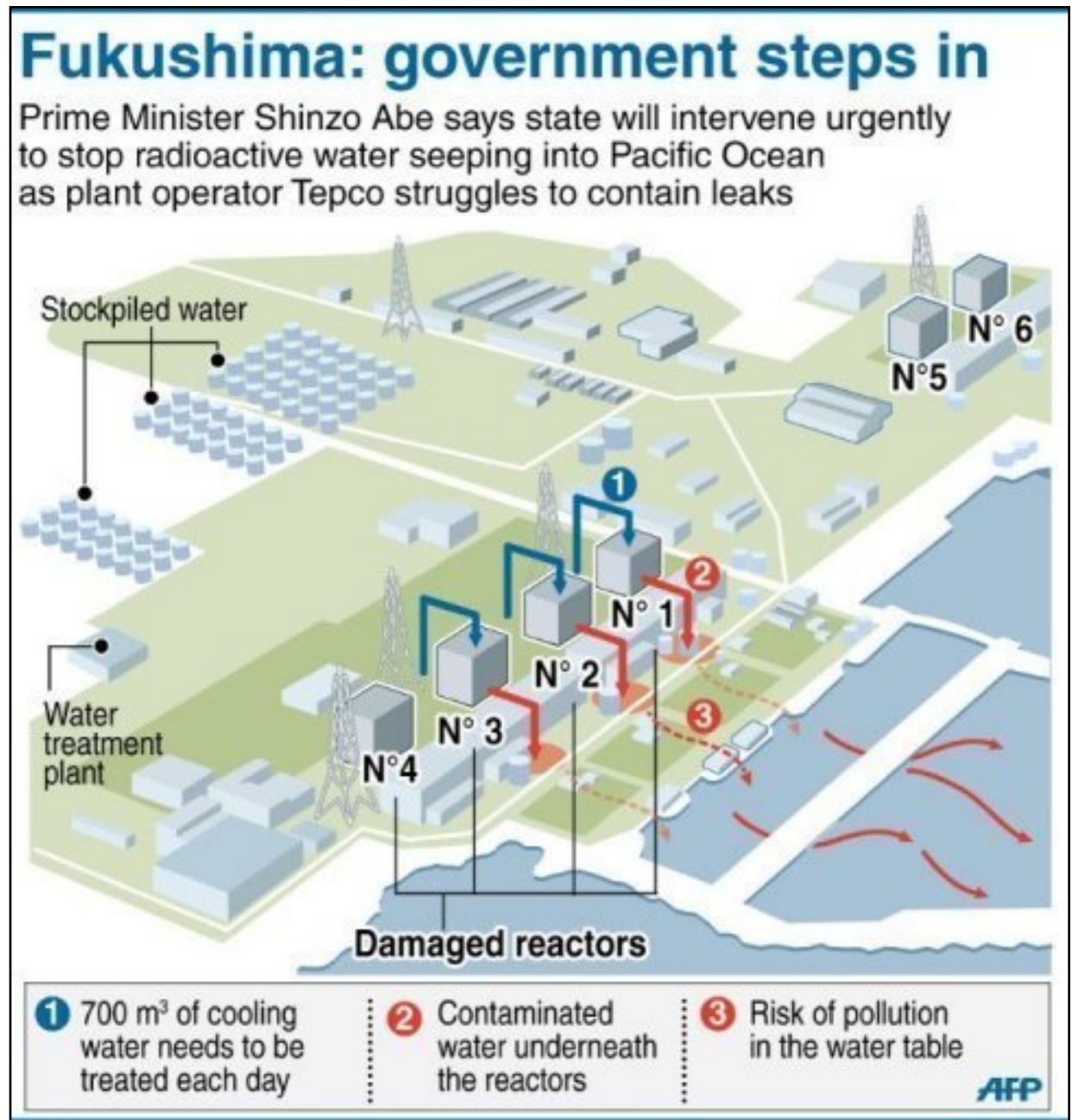
© Reuters



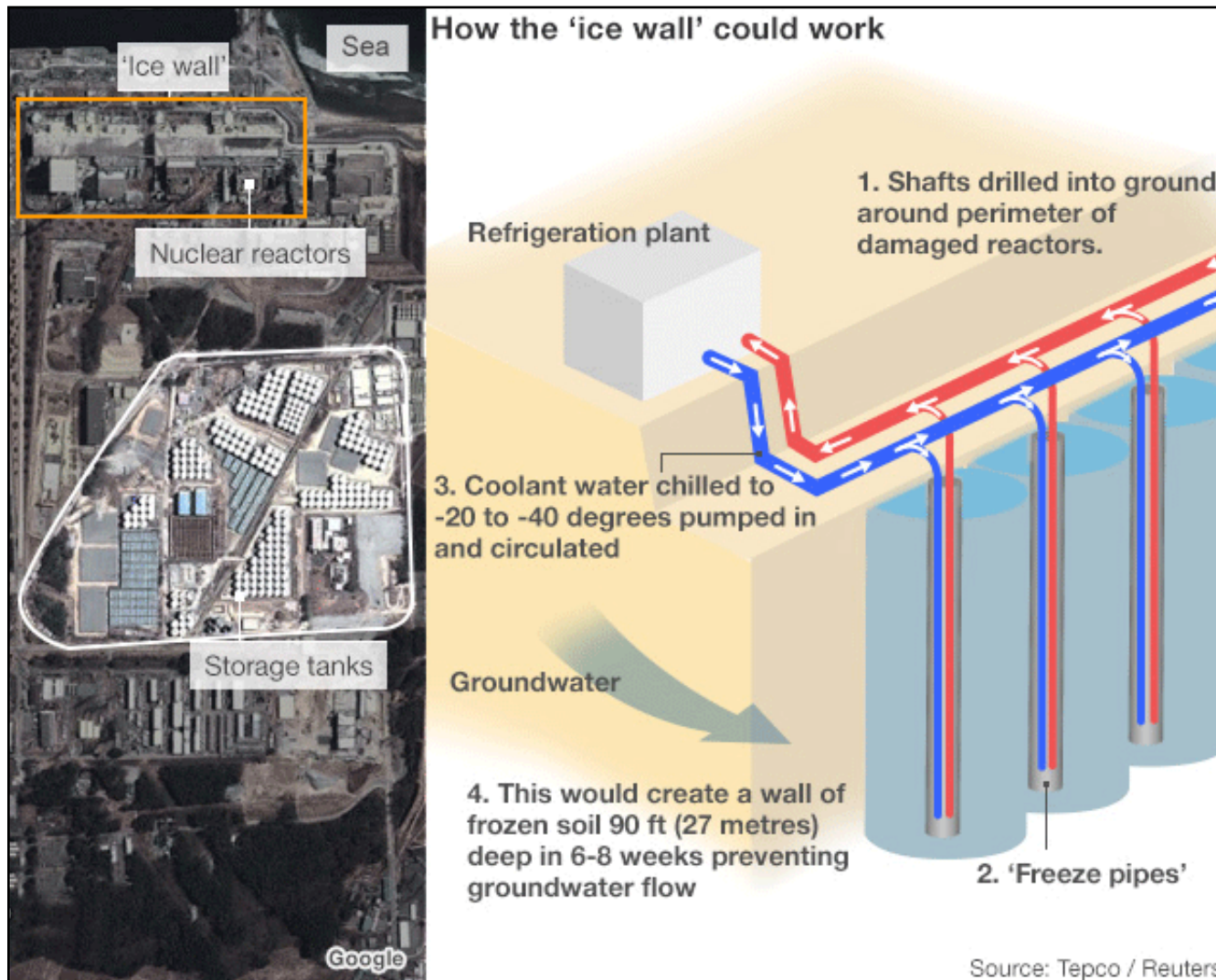
And there are those few people
who refuse to leave.



Japan still struggles to control radiation leaks from Fukushima, including constant leaks down into the ground out to the Pacific Ocean.



A current plan supported by scientists around the world is creating an “ice wall” to keep any more radioactive water from leaking into the ocean.



Japan has very limited fuel resources, which is why they use so much nuclear power. Is it realistic for them to stop building nuclear power plants?

