

# Fukushima

In this lesson, we will learn what has been happening in Fukushima since March 11th, 2011. On March 11th, 2011, due to power loss caused by the great east japan earthquake and tsunami, the Fukushima Daiichi nuclear power plant experienced three core-melt down accidents and three hydrogen explosions. As a result, radioactive materials and radiation were released to the environment, contaminating land, air and water. Even now, many people (around 30,000 people) who lived in close to the Fukushima Daiichi nuclear plant can't return their hometown. In addition, it will take at least 40 years or more to decommission the clipped reactors and there is nuclear plan what to do with melted fuel and other radioactive waste.

## OBJECTIVES

1. Discuss what occurred in the Fukushima Daiichi nuclear power plant
2. Articulate what would happen if radioactive material is released to the environment
3. Criticize the danger of using nuclear power
4. Diagnose the status of nuclear power in the world
5. Recommend a safe way to use nuclear power

## DISCUSSION QUESTIONS

1. How many countries have nuclear power plants now and how many countries have plans to introduce nuclear power? And which countries rely on nuclear power most?
2. Should do we use nuclear power or not? Why?
3. Are there good ways to dispose nuclear waste?
4. Do you think there are alternative energy sources which can replace nuclear energy?

## ACTIVITIES

1. Learn about the Fukushima Daiichi nuclear power plant Accident: <https://www.world-nuclear.org/information-library/safety-and-security/safety-of-plants/fukushima-daiichi-accident.aspx>
2. Learn the mechanism and structure of nuclear power plants:
3. Learn which areas have allowed people to enter (Evacuation Designated Zone)  
<https://www.pref.fukushima.lg.jp/site/portal-english/en03-08.html>
4. Learn what problems remain even after years of the Fukushima Daiichi nuclear power plant Accident <https://www.dw.com/en/fukushima-how-the-ocean-became-a-dumping-ground-for-radioactive-waste/a-52710277>
5. Pro-and Con views on nuclear power  
<https://www.greenamerica.org/fight-dirty-energy/amazon-build-cleaner-cloud/10-reasons-oppose-nuclear-energy#:~:text=Nuclear%20power%20plants%20are%20a,the%20atmosphere%20and%20surrounding%20region.>

## OTHER RESOURCES

[https://www3.nhk.or.jp/nhkworld/en/news/backstories/125/?cid=wohk-gg-us-dsa\\_site\\_en](https://www3.nhk.or.jp/nhkworld/en/news/backstories/125/?cid=wohk-gg-us-dsa_site_en)

<https://www.world-nuclear.org/information-library/safety-and-security/safety-of-plants/fukushima-daiichi-accident.aspx>

<https://www.iaea.org/newscenter/focus/fukushima>

<https://www.cnet.com/news/inside-fukushima-daiichi-nuclear-power-station-nuclear-reactor-meltdown/>