

IS NUCLEAR POWER A BETTER OPTION FOR ENERGY THAN FOSSIL FUELS?

THIS ACTIVITY SHOULD TAKE ABOUT 90 MINUTES. IF LEARNERS ARE ABLE TO REVIEW MEDIA PRIOR TO THE LESSON, ACTIVITY TIME SHOULD BE 45 TO 60 MINUTES.

INVESTIGATE

Read, watch, and listen to the three media resources on the Thinkalong module. Learners can use the Investigate graphic organizer to summarize each piece of media and record new information. Below are summaries of the three pieces of media curated in the Thinkalong module.

NUCLEAR POWER WAS SUPPOSED TO SOLVE CLIMATE CHANGE... WHAT HAPPENED?

Hot Mess | April 27, 2018 | Video

4:41 minutes

Splitting the atom once promised to be the carbon-free energy source of the future. But today, nuclear power plants are aging and retiring worldwide. What happened?

- Nuclear power is a weather-independent energy source that works with the existing power grid. Despite this, nuclear power is on the decline around the world.
- Globally, nuclear generates 11% of power and 20% of energy in the United States.
- Large nuclear catastrophes, like the 2011 Fukushima meltdown in Japan, have prompted a number of other countries like Germany, Italy, and China to shut down or stop building reactors.
- Despite high profile accidents like Chernobyl and Three Mile Island, nuclear power generation causes less illness and death than all other fuel-based energy – by a lot.
- Nuclear is expensive and can't keep up with cheaper energies, like natural gas.
- One big problem with nuclear energy is environmental impact. Nuclear power generates dangerous waste, and mining uranium for energy disproportionately impacts marginalized communities, especially indigenous peoples like the Navajo Nation.

COULD NUCLEAR POWER PLAY A MAJOR ROLE IN REVERSING CLIMATE CHANGE?

Marketplace | November 9, 2018 | Audio

5:19 minutes

Marketplace explores the economic barriers to nuclear power in the U.S. and around the world.

- Jacopo Buongiorno from MIT says that even with the high-profile accidents like Chernobyl, Three Mile Island, and Fukushima, the biggest problem for nuclear power is cost, especially paying to construct facilities.
- Buongiorno's study finds there are ways to reduce construction costs – build standardized plants, use advanced concrete technologies, and use modular construction. He says that if plants were compensated for the amount of carbon they're not putting into the atmosphere, they would be profitable.
- When addressing nuclear waste, Buongiorno says that waste is relatively small compared to the energy, but countries like Sweden have had success with long-term, safe repositories for radioactive waste.

Using public media — video, audio and digital reports — about newsworthy topics, these classroom-based exercises help learners to think critically about media messages, develop informed opinions, and practice how to take a stand.

HOW THE DREAM OF AMERICA'S 'NUCLEAR RENAISSANCE' FIZZLED

NPR | August 6, 2017 | Audio

3:14 minutes

A decade ago, utility executives and policymakers believed the future of nuclear energy was bright, but now, after one nuclear expansion program shut down, is the future of nuclear fizzling out?

- Two utilities companies decided not to build a new nuclear power station in South Carolina, one of the first new reactors in the United States in thirty years.
- The earlier generation of nuclear power stations are nearing the end of their run, which means they're close to being shut down in the coming years.
- Both the global financial crisis of the late 2000s and fracking for natural gas have changed energy needs, and renewable energy, like wind and solar are getting more competitive.
- Companies that make reactors, like the bankrupt Westinghouse, are struggling, making it hard to build new facilities.

KEY WORDS

Look out for these important keywords in the news stories. Discuss the definitions with your learners and see how they affect the understanding of the story.

- Nuclear
- Reactor
- Utilities

CONTEMPLATE

Learners will use media literacy questions to critically engage with news by thinking about its purpose, searching for bias and discussing missing perspectives. They will answer the 5 Key Questions of Media Literacy created by the Center for Media Literacy, which are:

1. Who created this message?
2. What creative techniques are used to attract my attention?
3. How might different people understand this message differently than me?
4. What values, lifestyles and points of view are represented in, or omitted from, this message?
5. Why is this message being sent?

A graphic organizer is included in this guide and the Thinkalong website to help learners answer these five questions about each piece of media.

DEBATE

Use the debate tool on the module webpage to help form evidence-based responses to the debate question.

Thinkalong is designed to help learners engage with real issues that are relevant to their lives. [Structured discussions](#) allow learners to practice their critical thinking skills through evidence-based debate with their peers. Discussions are designed to take about 30 minutes. Educators are encouraged to modify aspects that work best for their learners.

To encourage civil discourse, please review the [Code of Conduct](#) with your learners.

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