

Disadvantages of Nuclear Energy

Nuclear Power Plants use controlled nuclear fission of uranium atoms to create heat. This heat is then used to turn water into steam, which in turn powers electrical generators. Today, approximately 20% of the electricity produced in the United States is generated using nuclear energy, but nuclear power has some definite disadvantages.

Although low in greenhouse gas emissions, mining and refining uranium does have a significant environmental impact. Transporting nuclear fuel opens up the possibility of pollution from accidents and spills. Also, spent fuel is not easily disposed of, as it is radioactive and therefore harmful to living organisms.

A nuclear power plant produces 20 metric tons of nuclear fuel a year—along with a lot of radioactive waste. Taking into account how many power plant there are on Earth, that's 2,000 metric tons of fuel and its associated radioactive waste. This waste is also so hot that it destroy any container it is put into. What happens to all this waste? It takes many years for nuclear waste to decay to radioactive levels that are safe. It can take even low-level radioactive waste centuries to reach safe levels.

Nuclear power plants can also have accidents. For example, on April 26th, 1986, the nuclear plant at Chernobyl in Ukraine released radioactive materials the effects of which can still be seen there in humans and the ecology today.

in Ukraine was the worst nuclear accident in the history. Its harmful effects on humans and ecology can still be seen today. In 2011, in Fukushima, Japan, a tsunami followed by an earthquake caused another nuclear accident and raised environmental concerns.

