

## Nuclear Power Introduction

Nuclear Power is probably the least glamorous of the four alternative energy forms because of its reputation. Unlike solar power, where the primary barrier to use it are cost, the problem of pollution and possible ecological hazard remains at the forefront of most people's minds. Several key nuclear disasters have caused this impression in most of the world. The [nuclear power history](#) page starts with the invention of the steam engine which was really the basic mechanical setup that led to the invention of the automobile, and the nuclear power plant.

Ironically, the principles that underly the nuclear power process are almost exactly like the combustion process, and the steam engine that was used to power trains. A chemical procedure that is exothermic (producing heat) increases the temperature of some liquid until the liquid evaporates as a gas. This gas is then either directly or indirectly used to do work on a turbine that moves a generator. The [chemistry of nuclear power](#) involves the decomposition reaction of uranium. Because the physics of [turbines](#) and [generators](#) is discussed at other pages on this site, the physics of the intermediate steps involved after the nuclear reaction. Some physics words that are discussed at the previous heat help page are specific heat, enthalpy, the energy of systems, and entropy. The physics behind kinetic, potential, and mechanical energy are discussed at the [Heat](#) help page.

Nuclear power plants are not located according to specific attributes of geography, and are therefore found all over the world. Where are the most nuclear power plants, and what country uses nuclear power most exclusively? The maps for the [geography of nuclear power](#) shows where many nuclear power plants exist. Could nuclear power plants be strategically placed in locations where if disaster struck, the people closest to it would not be radioactively contaminated? Sounds like a wishful idea. This linked page reflects on why geography is unimportant when dealing with a nuclear power disaster, and why it is everyone's responsibility to keep nuclear power safe.

If nuclear power is so popular all around the world, where are the best sites to go to find out information in my neck of the woods? This site has a small collection of [nuclear power links](#) for many different countries that provide english web sites.