

Text 1: Nuclear power

Nuclear power is a form of alternative energy derived from controlled use of energy produced in nuclear reactions. Nuclear fuel, most often uranium or plutonium, is used in a reactor to produce these reactions. The heat this generates is used to heat water and turn it into steam, which then powers electric turbines. As they turn round, these turbines generate electricity. The first nuclear reactor was built in 1941 by Enrico Fermi, and the first nuclear power plant was established in Obninsk, near Moscow in Russia.



Although nuclear power is a form of energy that produces little greenhouse gas, nuclear reactions can be unstable. There have been a number of disasters involving nuclear reactors, such as at Chernobyl in 1986 and Fukushima in 2011. Nuclear reactions also produce radioactive waste which can harm the environment if not stored safely.

Text 2: Wind power

Wind power works by converting the energy in wind into electricity. This is done using large windmills that turn when the wind blows at them. When the blades of the windmill turn, they move a turbine that turns a magnet inside a coil of wire. This generates electricity as the magnet makes electrons move in the wires.



Wind power is a form of renewable energy that produces virtually no greenhouse gases. Some people who live close to wind farm have claimed they have experienced negative effects from the noise made by the windmills, but usually research has not supported this viewpoint.

Text 3: Hydroelectric power

Hydroelectricity is electricity produced by the movement of water. Huge dams are built to block rivers and collect water. This water is then released and forced through shafts that lead to a turbine. As the water turns this turbine, electricity is made. Hydroelectricity is much friendlier to the environment than fossil fuels like coal or oil, and is very easy to produce quickly. The way the water can be 'let go' means that the electricity can be made in a short space of time.



Despite the advantages of hydroelectric power, the building of these huge dams can cause damage to the environment. Because the natural flow of water is stopped, large areas can be flooded, affecting the people and wildlife that live there.

	Nuclear power	Wind power	Hydroelectric power
What is it?			
What are the advantages?			
What are the disadvantages?			