

HYDROELECTRIC ENERGY

Hydroelectric energy or Hydro Power is made by moving water. Hydro comes from the Greek word for water. Hydroelectric energy has been in use for thousands of years. Ancient Romans built turbines, which are wheels turned by flowing water. Roman turbines were not used for electricity, but for grinding grains to make flour and breads.

To harness energy from flowing water, the water must be controlled. A large reservoir is created, usually by damming a river to create an artificial lake, or reservoir. Water is channelled through tunnels in the dam. The energy of water flowing through the dam's tunnels causes turbines to turn. The turbines make generators move. Generators are machines that produce electricity. Engineers control the amount of water let through the dam. The process used to control this flow of water is called the intake system. When a lot of energy is needed, most of the tunnels to the turbines are open, and millions of gallons of water flow through them. When less energy is needed, engineers slow down the intake system by closing some of the tunnels.

A renewable source of energy is one that will not run out. Renewable energy comes from various natural sources, like wind, sunlight, rain, tides, and geothermal energy (the heat produced inside the Earth). Reservoirs created by dams can provide large, safe recreational space for a community. Boaters and water skiers can enjoy the lake. Hydroelectricity relies on water, which is a clean, renewable energy source.

~ Aakar Gupta, 10B