

Transforming Energy

We and the world we live in are full of energy which can be transformed to good use for us and the natural world.

FIRE is a traditional means of transformation into energy, producing heat and light. It can be used for cooking, melting, warming and burning liquids and solid substances. Solar panels can transform light from the fire of the sun into energy, to light and heat a house and to power batteries.

WIND can be transformed into energy, this has happened for hundreds of years. It was used to grind corn in windmills. How it works is that the sun heats our atmosphere unevenly, so some patches of air rise; other air blows in to replace them and that creates wind. The energy of the wind can be used in wind farms by building a tall tower, with a large propeller on the top. The wind blows the propeller round, which turns a generator to produce electricity.

WATER can also be transformed into energy. Watermills used water power to grind corn into flour. Wind can transform waves at sea making them higher and these can be used to create energy. Water can be used to make hydro-electricity from rivers and streams in England and Wales and on a large scale in the Highlands of Scotland.

SUN - All sources of energy above are dependent upon the transforming energy of the sun. Fire ultimately comes from the sun. The coal or wood used to produce fire has first of all been grown through the heat of the sun.

The energy of sun, wind and water can be transformed and used as sources of renewable, clean and earth friendly energy.