

MINING, ENERGY AND INDUSTRY

Renewable energy

Santillana

The development of renewable energies

Technologies have been developed to obtain energy from more environmentally-friendly sources, such as the Sun, the heat from inside the Earth, the wind and the tides.

In the 1970s, these energy sources were considered to be alternatives to conventional fuels and uranium.

By 2050, two thirds of electricity is expected to come from renewable sources, and the use of renewable energy is likely to go on increasing.

The main types of renewable energy resources

- **Hydroelectric energy** uses the force of falling water to generate electricity at hydroelectric power stations. It is the most widely used renewable energy.
- **Wind energy** uses the power of the wind to produce electricity using wind turbines installed on windfarms.
- **Solar energy** uses the energy from the Sun to heat water (central heating) or produce electricity using solar panels.
- **Biomass energy** is produced by transforming organic materials, such as forestry and agricultural waste, into energy. This energy is then used for heating or to produce electricity.
- **Geothermal energy** uses the heat from the Earth to power heating and hot water in homes and has several industrial uses. It also produces electrical energy that can be used for different purposes.
- **Tidal energy** obtains the energy from the sea movement or the difference in temperature between deep and surface water is transformed into electricity.