

Renewable energy

By Lennart Kiil



The Horns Rev 1 offshore wind farm in the North Sea off Blåvandshuk, Denmark. It was built in 2002 and was then the largest offshore wind farm in the world.

Thomas Dahlstrøm Nielsen. [CC BY-SA 4.0. Wikimedia Commons](#).

Energy sources that renew naturally.

In terms of human time, renewable energy sources last forever. They are only limited by the amount of energy that can be extracted within a period of time.

Renewable energy can be generated from several sources including sunlight, wind, waves, tides, geothermal energy and [biomass](#).

Renewable energy accounts for approximately 18 percent (2006) of the global energy consumption.

In order to reduced the emissions of CO₂ and [mitigate global warming](#), investments in renewable energy technology and research are increasing, exceeding \$100 billion in 2007.

Wind and water power together with biomass have been used as renewable energy for centuries by humans, and are still the most important. However other sources are increasingly being utilized. Geothermal energy (heat from the interior of the Earth) and solar power is contributing significantly, while the utilization of wave energy is still mostly at an experimental stage.

Iceland has been using geothermal energy for hundreds of years in their hot water springs.

Several countries have policies that promote the use of renewable energy, and requirements on how much of total energy production must be renewable energy. The European Union has set a target of 20 percent renewable final energy (heat, electricity, biofuels), and specifically a 10 percent target for the biofuel share of transport energy by the year 2020.

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