

Problems Caused By Burning Fossil Fuels

Fossil fuels consist of deposits of once living organisms. Fossil fuels principally consist of carbon and hydrogen bonds. There are three types of fossil fuels which can all be used for energy provision; coal, oil and natural gas. **Coal** is a solid fossil fuel formed over millions of years by decay of land vegetation.

Oil is a liquid fossil fuel that is formed from the remains of marine microorganisms deposited on the sea floor. After millions of years the deposits end up in rock and sediment where oil is trapped in small spaces. Oil is the most widely used fossil fuel. **Natural gas** is a gaseous fossil fuel that is versatile, abundant and relatively clean compared to coal and oil. Like oil, it is formed from the remains of marine microorganisms. Energy gained from burning fossil fuels is converted to electricity and heat in commercial **power plants**. When fossil fuels are burned carbon and hydrogen react with oxygen in air to carbon dioxide (CO_2) and water (H_2O).

Both sources and sinks of fossil fuels are limiting in their use. Sources are deep earth layers and sinks are for example air and water, which absorb fossil fuel waste products. Burning fossil fuels is responsible for **environmental issues** that are high on the political agenda these days. Examples are greenhouse gas accumulation, acidification, air pollution, water pollution, damage to land surface and ground-level ozone. These environmental problems are caused by release of pollutants that are naturally present in fossil fuel structures, such as sulphur and nitrogen. The largest emissions are caused by coal combustion. We use fossil fuels; because they are cheaper than any type of reasonable alternative we now know.

