



OUR MAIN FORMS OF FUEL ARE:

OIL



COAL



NATURAL GAS



Together they are called

FOSSIL FUELS

WHAT DO WE USE FOSSIL FUELS FOR?

- ◆ **Petrol** and **diesel** are made from **oil**
- ◆ Petrol and diesel are used to power cars, lorries, trains and aeroplanes and to heat our homes and workplaces
- ◆ **Coal** and **Natural Gas** are used for heating and are also burnt in power stations to generate electricity
- ◆ **Oil** is used to make all our plastics



CARBON DIOXIDE

When fuels are burnt, carbon changes into the gas **carbon dioxide** (CO₂). Humans have been burning such huge quantities of these fuels that we have actually **changed** the amount of carbon dioxide in the **World's atmosphere**.

Carbon dioxide is a **greenhouse gas** which means that it traps heat from the sun. By increasing the amount of carbon dioxide in the World, humans are actually making the **World warmer**.

See the CLIMATE CHANGE fact sheet for more information.

When and how were fossil fuels made? Turn over to find out!

WHERE DO FOSSIL FUELS COME FROM?

About **3 hundred million** years ago, the World was covered in vast areas of swamp-land and large areas of warm, shallow seas.

The swamp forests were made of giant leafy fern-like trees. The seas were full of tiny plants and animals (plankton). When the swamp plants and animals died their remains sank to the bottom of the swamps and seas and formed **layers of remains** – like peat in a peat bog.

These layers were gradually covered in **sediment** (sand, mud and other bits). Gradually over millions of years, these plant and animal remains became part of the underlying rocks of the Earth.

As millions more years passed, the **rocks** were **moved, folded, squashed** and **heated** to very high temperatures, under the surface of the Earth.

The animal and plant remains were eventually turned into **coal, oil** and **natural gas**.

The period of geological time when many of our fossil fuels were made is called the **Carboniferous Period**. It started about 360 million years ago and lasted about 70 million years.

North Sea oil is younger. It was made in the Jurassic period which was 50 to 200 million years ago, during the age of the dinosaurs.

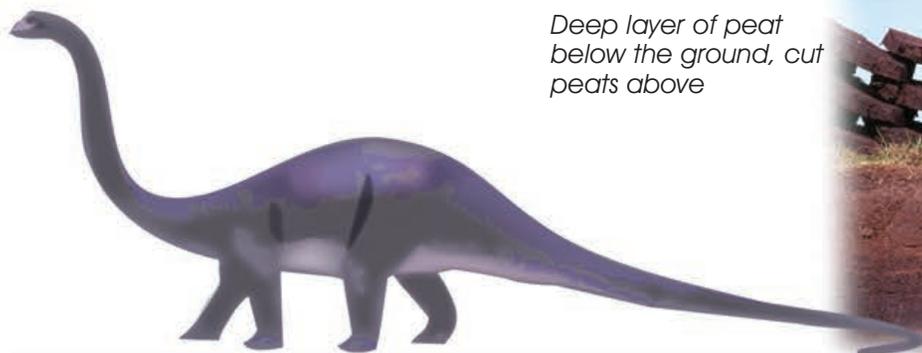


ARE FOSSIL FUELS STILL BEING MADE?

Yes, but they take millions of years to form. Fossil fuels started in places like **peat bogs** and **muddy swamps**. In these places there is not enough **oxygen** to **decompose** the **dead** plants.

Therefore layers of dead remains pile up, many metres thick. The **carbon** is no longer recycled, it is **trapped!**

Peat bogs can help to take **carbon dioxide** out of the atmosphere and **lock** it away as **carbon**.



Deep layer of peat below the ground, cut peats above



photo: HLE