

THE INDUSTRIAL REVOLUTION

The **Industrial Revolution** started in Britain about two hundred years ago. First of all steam engines powered by **coal** started to replace the work done by people and **horses**. Later **petrol**, **diesel** and **mains electricity** became available to power machines. Since then humans have used these fuels to **transform** the World.

It is hard to imagine that before:

1825 there were no **trains**

1886 there were no **cars**

1925 there was no **television** or **frozen** food

1977 there were no **personal computers**

1983 there were no hand held **mobile phones**

The modern World has become dependant on fossil fuel for doing just about everything!

HOWEVER

- ◆ building
- ◆ manufacturing
- ◆ transport
- ◆ communication
- ◆ heating
- ◆ cooking
- ◆ making plastics
- ◆ growing food

1. FOSSIL FUELS ARE RUNNING OUT!

Oil, coal and natural gas supplies are running out (*see fact sheet 2 for more information*). Every year the World's energy demand increases however its fossil fuel supply decreases.

2. FOSSIL FUELS CAUSE CLIMATE CHANGE!

Since the industrial revolution an estimated 400 billion tonnes of extra carbon has been released as carbon dioxide (CO₂) by burning fossil fuels. Scientists across the globe now agree that the World is getting warmer and that the **climate is changing**, not from natural causes, but from **human activities**. (*see fact sheet 3 for more information*)

ENERGY REVOLUTION TO ENERGY SOLUTION...

We need to:

- ◆ Save energy and be less wasteful
- ◆ Develop the use of renewable sources of energy

WHAT DO WE USE ENERGY FOR?

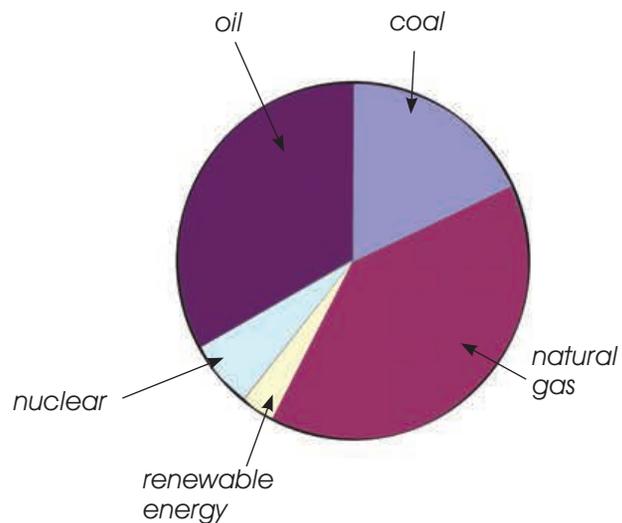
We use energy for:

- ◆ transport and driving machinery
- ◆ heating
- ◆ cooking
- ◆ generating electricity

WHERE DOES OUR ENERGY COME FROM?

Look at the pie chart.

Where does most of our energy come from at the moment?



RENEWABLE ENERGY

Renewable energy sources in the UK provide us with about 2% of our total energy (electricity, heat and transport) at the moment.

This pie chart shows how this is broken down between the 7 types of renewable energy.

Which type of renewable energy currently gives us the most energy?

