

The UK Energy Mix

1. In the 1950s, almost all of the heating and electricity in the UK was generated by burning coal.

a. Which of the following explains why coal was used so extensively at the time?

The UK had to import all of the coal it used and this made it expensive

The UK has large deposits of coal so it was extremely cheap and easy to get

Scientists thought that burning coal was leading to climate change

b. Two developments took place which meant that coal use dropped sharply.

State the two developments in the space below.

c. Generating electricity by burning gas has several advantages compared to burning coal.

Complete the following paragraph using the words below.

coal

switched on

carbon dioxide

climate change

start-up

Generating electricity by burning gas generates less _____ than burning coal.

This means that burning gas contributes less to _____. Gas-fired power stations can

also be _____ very rapidly when demand for electricity is high. This is called a short

_____ time. _____ power stations have a very long start-up time.

2. In the 1970s, scientists began to suspect that burning fossil fuels contributes to climate change.

a. Fossil fuels were still used extensively to provide energy in the UK. This is due to economic factors. Explain what is meant by economic factors.

b. Describe a disadvantage of using wind power to generate electricity.

c. In the future, renewables will provide most of our electricity along with nuclear and gas-fired power stations. Describe the role of the nuclear power stations and gas-fired power stations in this system.

Nuclear power stations

Gas-fired power stations