Y4 Geography — We are Energy Policy Advisors

Key Knowledge

What I Should Already Know

- Land use patterns in the UK (Year 3)
- Settlements (Year 3)

What do Energy Policy Advisors do?

Energy Policy Advisors are an expert whose job is to give advice to a group of people when creating energy policies.

What energy does the UK use?

Hydro power

Solar power

Wind power

Nuclear power

Fossil fuels

Coal

Oil

Gas

Key Vocabulary

Word	Definition
Energy	The ability to do work
Windfarms	An area of land with a group of energy-producing wind turbines can be found.
Hydro-electric energy	Energy produced from water, usually using dams.
Solar energy	Energy produced from the sun, usually using solar panels.
Renewable energy	Renewable energy can be replaced at the same rate it is used. We use it again and again without it running out.
Non-renewable energy	Non-renewable energy takes a very, very long time to be replaced. If we keep using it, it will run out.
Fossil Fuels	A natural fuel that is made from natural materials such as coal or gas.
Geo-thermal energy	The thermal energy from the Earths crust.
Nuclear	Operated or powered by atomic energy
Coal	Black or brown rock which is made from plants and used as fuel
Gas	A substance which is made from decaying rocks under the ground which can be used to create fuel.
Dams	A barrier which stops or restricts water flow
Coastlines	The area where land meets the ocean
Petroleum	Also known as petrol, is an oil which is formed under the ground and can be used as fuel.

What is renewable and non-renewable energy?

Renewable energy: Renewable energy can be replaced at the same rate as it is used. We can use it again and again without it running out. Some types of renewable energy is hydro, solar and wind power.

Non-renewable energy: Non-renewable energy takes a very long time to be replaced. If we keep using it, it will run out. Some types of them are fossil fuels.

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How can we be sustainable with our energy?

The harm from fossil fuels are:

Fossil fuels can cause wars as they can only be found in certain places.

As the world's population grows fossil fuels are needed more, the price goes up and so does the price of other things such as food.

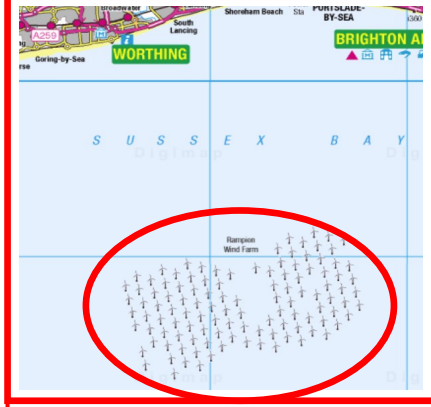
Fossil fuels also produce acidic gases when they burn, which can damage your lungs.

Fossil fuels have to be dug up and this can harm the environment.

When the prices go up for things such as food, poor people find it harder to live comfortably.

Countries may invade other countries to get access to their natural resources, such as oil.

The acidic gases that fossil fuels produce can cause acid rain, which harms wildlife.



Identifying Solar and Wind farms on a OS maps.

Energy use around the world:

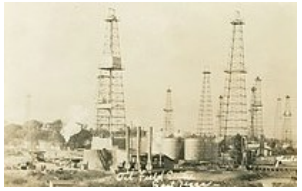
Iceland

Iceland doesn't burn any fossil fuels to get energy. They run on 100% renewable energy sources by using geothermal and hydropower.

Iceland is full of volcanoes! They can harness the energy from the volcanic activity to create renewable energy.

Iceland harnesses the energy from moving water from rivers to create renewable energy.

Texas oil fields



In Texas, there are large amounts of oil and gas under the ground. They then make oil wells and extract this to be used as fossil fuels. The oil that they extract cannot be replaced.