

# Year 7 Geography

## Summer 1: Resource Management

### Global distribution of resources

Human beings need food, water and energy to survive and to have a good well-being. When these resources are scarce, there are issues: poor health, conflict and poverty.

Key resources are **unevenly distributed** across the world. E.g. Africa has the highest levels of undernourishment and water scarcity.

### Food, water and energy in the UK

#### Food →

**1) The UK imports 40% of its food because demand for non-seasonal food has increased.**

*Impacts of importing food:*

- Positive: jobs are created in farming, packaging and transport
- Negative: locals lose land to grow crops for themselves, workers exposed to chemicals

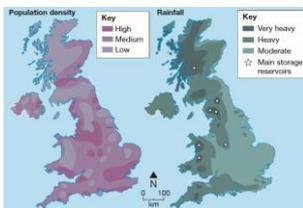
**2) The demand for organic produce has increased.**

*Impacts of organic produce:*

- Positive: grows crops without using chemicals
- Negative: Expensive

#### Water →

- The south and East of UK have a **water deficit**: low rainfall and high population density



- The north and west of the UK have a **water surplus**: plenty of rainfall and low population density
- **Water transfer schemes** transfer water from places of surplus to places of deficit

#### Energy →

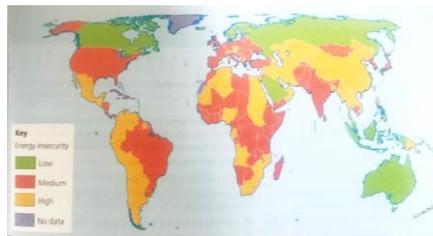
The UK's energy mix has changed in the last 30 years – use of coal and oil has fallen, renewables have increased.

- Non-renewable energy sources: coal, oil, natural gas, nuclear
- Renewable energy sources: solar, wind, tidal

### Importance of energy

Energy is used for: transport, producing food, manufacturing, lighting, heating, communication.

Many countries experience energy insecurity, including the UK. fossil fuels are running out.



### Impacts of energy

#### Insecurity:

- Countries have less money to spend on developing their country
- Risks are taken with environment (e.g. deforestation of tropical forests)

#### Rising global energy consumption is due to:

- Technology
- Affluence
- Population growth
- Economic growth

#### Factors that impact global energy supply:

- Geology → countries with right types of rocks have large reserves of fossil fuels (e.g. Nigeria)
- Climate → affects how much renewable energy can be made from sun and wind
- Technology → new technology can find new energy supplies
- Political factors → countries will choose to import from places that are not involved in wars

### Renewable energy sources

Energy Resource	Advantages	Disadvantages
Wind turbines	Clean and cheap to run	Expensive to set up and wind does not always blow
Tidal generators	Clean and cheap to run and produce a lot of electricity once running	Very expensive to set up and could be hazardous to local wildlife
Hydroelectric power stations	Clean and cheap to run	Expensive to set up and output could be affected by drought
Solar cells	Clean and cheap to run	Not always sunny and output does not always outweigh initial cost to set up

### How can you use less energy?

- At home: switch off lights; only use washing machine when there is a full load; wear warmer clothing indoors
- On transport: use public transport rather than private cars
- At school: avoid heating unused spaces e.g. corridors.

Key Word	Definition
Resource	A supply of something that has value or a purpose (e.g. food, water)
Scarcity	In short supply / a lack
Seasonal food	Food only available during the months that it grows
Carbon footprint	The amount of carbon dioxide produced by an activity
Import	Buying goods from other countries to sell
Water stress	When water demand is greater than supply (not enough water)
Energy mix	The combination of how energy is produced
Renewable energy	Energy sources that never run out (e.g. wind, sun)
Energy insecurity	A country having to rely on others to supply most of its energy
Energy gap	The difference between a country's rising demand for energy and its ability to produce that energy
Sustainable	Using natural resources so they support present and future generations
Greenhouse gas	Traps the heat in the atmosphere (e.g. carbon dioxide)
Food insecurity	Lack of access to enough safe and nutritious food

### What happened to the Aral Sea?

- The Aral Sea is located in the desert in Kazakhstan, Asia.
- Causes: climate change, major rivers diverted to water cotton farms.
- Effects: fishing industry has disappeared, salty water left behind, fish species extinct

### Food insecurity in the world

Causes: pests and diseases, technology, climate, conflict, water supply, poverty  
Effects: famine, deaths, people forced to move home in search of food

### Food Waste

- People buy too much food so excess is thrown away → consumers waste money on food → people can be educated about food storage