

Energy and Climate Change

Prior Learning:

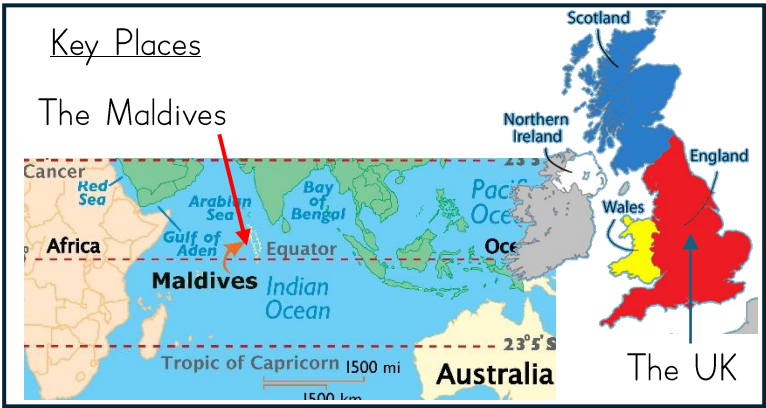
This unit builds on understanding of climate, water and natural resources. Through studying rivers, agriculture, biomes, the Mediterranean, deserts and drought in California, pupils learn how physical and human processes affect the environment.

Key Vocabulary

Renewable Energy	Energy from sources that are constantly renewed and will not run out in our lifetimes
Fossil fuels	Coal, oil and gas that release carbon dioxide when burned.
Greenhouse effect	The process by which gases in the atmosphere trap heat and keep the Earth warm.
Vulnerable	At risk of being harmed or damaged

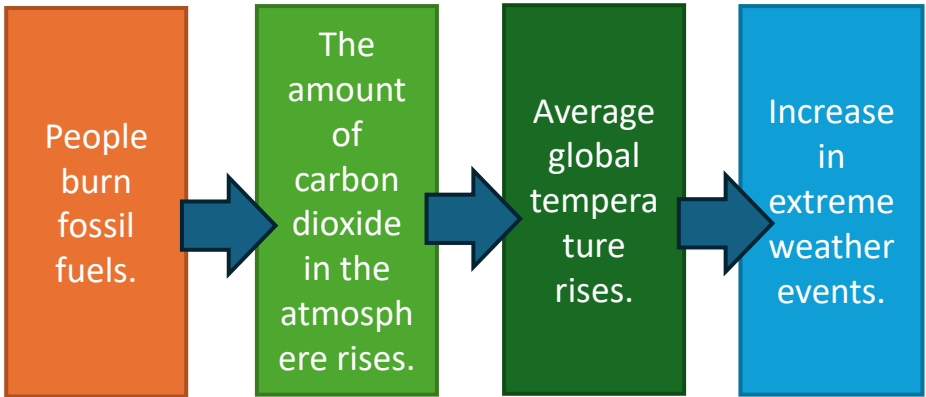
Key Places

The Maldives



Key Learning

- How does the UK generate its energy and what is the energy mix?
- How is wind power used to generate electricity in the UK?
- How does nuclear power work and what role does it play in the UK's energy mix?
- What are the main causes of climate change and how have human activities increased global temperatures?
- How is climate change changing our planet and who is most affected?
- How can people respond to climate change at different scales and what actions can be taken to make a difference?



The Big Question

How can people respond to climate change at different scales while meeting their energy needs?

Visual Vocabulary

	Energy mix is the combination of energy sources used by a country and the proportion supplied by each source.
	Net zero is when the amount of carbon released into the atmosphere is balanced by the amount removed
	Climate change is the long-term changes in the Earth's climate caused mainly by increased greenhouse gases from human activities.
	Planting large areas of trees to absorb carbon dioxide from the atmosphere is afforestation.

Cross Curricular Links

Mutual Respect & Empathy

- Maths - interpreting graphs and charts
- PSHE - global citizenship

Ethiopia

Prior Learning:

In Year 3, children learnt how rivers shape landscapes and influence where people live, work and settle. In Year 4, they explored how mountains affect climate, land use and human activity, and how population is distributed unevenly across the UK due to physical and human factors. In Year 5, children investigated how oceans influence climate, trade and human activity, and how people impact the environment

Key Vocabulary

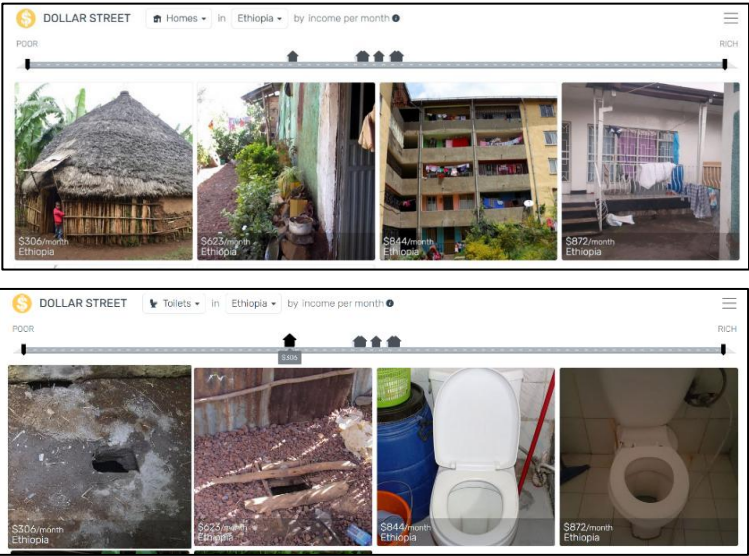
Biome	A large region with a particular climate, plants and animals
Hydro-electric power	Electricity generated using moving water
Climate change	Long-term changes to Earth's climate, causing impacts such as droughts, floods and rising temperatures



Key Learning

- How is Ethiopia geographically diverse?
- What is it like to live in Ethiopia today?
- What challenges do some people face in Ethiopia?
- How do climate, biomes and agriculture vary across Ethiopia?
- Is hydro-electric power the answer for Ethiopia?
- How vulnerable is Ethiopia to climate change?

How houses and homes can vary depending on income



The Big Question

To what extent is Ethiopia a diverse country?

Visual Vocabulary

	A rift valley is a long valley formed when the Earth's crust pulls apart.
	A drought is a long period with very little or no rainfall.
	A coffee plantation is a farm where coffee plants are grown.
	A hydro-electric dam is a structure built across a river to generate electricity.

Cross Curricular Links

Mutual Respect & Empathy

History - Medieval African kingdoms

RE - Islam units