

FT for schools: The Climate Game could would should activity sheet 13

A round-by-round geographical reflection on the best strategies to take and the obstacles to avoid by Stephen Schwab, author, and geography consultant.

Specification links

AQA A level 3.1.1 Water and carbon cycles. 3.1.1.4 Water, carbon, climate, and life on Earth.

AQA GCSE 3.1 Living with the physical environment. 3.1.1.4 Climate change.

Edexcel A level Topic 5: The Water Cycle and Water Insecurity. 5.6 Climate change may have significant impacts on the hydrological cycle globally and locally.

Edexcel GCSE Topic 2: Weather hazards and climate change.

OCR A level Topic 3.1 – Climate Change. 2. How and why has the era of industrialisation affected global climate?

OCR GCSE 2.3 Environmental threats to our Planet. 2.3.1 The climate has changed from the start of the Quaternary period.

WJEC A Level 4.5: Weather and Climate. 4.5.6 Impacts of human activities on the atmosphere at local and regional scales.

WJEC GCSE Section A Core Theme 5: Weather, Climate, and Ecosystems. 5.1.2 What are the causes of climate change?

Activity





First download and complete Activity sheet 12 on [The Climate Game](#). Now that you have familiarized yourself with the webtool complete the activity tasks below.

1. Choose your advisor.

FINANCIAL TIMES

Choose your adviser

Your adviser will use their specialist knowledge to help you cut emissions. Who do you pick?

 Gina Green Specialist skill Teen activist sparking behavioural change	 Waldo Watts Specialist skill Entrepreneur developing new technologies
 David Deals Specialist skill Businessman influencing global leaders	 Catalina Congress Specialist skill Politician driving policy change

2. Draw a 3-column table and add the title 'The FT Climate Game: decision-making'. Write 'What I decided to do', 'The reasons why', and 'The consequences' into the column headers.

An example of how to complete the table at the end of round 1 is shown below. You will need to use the end-of-round in-game summary and additional research for column 3.

The FT Climate Game: decision-making		
What you decided	The reasons why	The consequences
Coal makes up three-quarters of the CO ₂ produced by electricity. I will phase out coal plants in wealthy countries over 10 to 20 years.	This is a compromise between the low effort (2 pts) and the high effort options (10 pts). It is a realistic ambition to target coal power plants in wealthy countries as these nation-states have the ability to diversify power generation. For example, wealthy countries have already invested in renewable electricity production.	Removing coal as an energy source is central to the world economic transformation. Because coal is cheap and plentiful but is the most polluting fossil fuel. Whilst phasing out coal in wealthy countries is a worthy ambition it does not address growing demand elsewhere around the planet. For example, Asia accounts for three-fourths of global coal consumption today . This decision therefore jeopardises Net Zero by 2050.

3. Below are 3 cheat cards. Compare your round 1 table with cheat card 1. Repeat for rounds 2 and 3. When you have filled in your tables compare your performance with the cheat cards.

Cheat card 1
Round 1: 2022-2025

In the first round, you need to stop any new coal plants being built and close those in wealthy countries. Coal is incredibly carbon intensive, producing about twice as much carbon dioxide as natural gas per unit of energy.

Many of the technologies needed to decarbonise the global economy are not yet widely used, meaning investing in innovation is key. But watch out, two of the technologies available are far less effective than the others.

Methane emissions must also be tackled in the next decade if we are to have any hope of keeping global warming to 1.5°C. The gas has about 80 times the warming impact of carbon dioxide over a 20-year period.

Changing how we use land is also important. Most of us associate climate change with burning fossil fuels, but poor farming practices and deforestation hamper the ability of soils and trees to store carbon.

Cheat card 2
Round 2: 2026-2030

Shifting from fossil fuels to a cleaner economy requires huge public and private spending. Many people will be directly affected – either through changes to their industries or a rise in taxes – but the transition will also present new opportunities that you must capitalise on to stay in role.

Much of the discussion around climate change focuses on mitigation – limiting the temperature rise by slashing greenhouse gas emissions. However, building infrastructure to help people cope with the effects of climate change is vital too.

Passenger air travel needs to be capped at pre-pandemic levels, according to the International Energy Agency. This is a challenge given that only <4% of the global population at present flies and demand is ever increasing.

Like aviation, our homes contribute to climate change. This is down to heating and cooking systems that rely on fossil fuels, but also the emissions produced during construction and loss of heat through inefficiency.



Cheat card 3

Round 3: 2031-2050

Given the sweeping global powers that come with your role, much of the climate game is focused on top-down policy decisions, but the behaviour of your citizens must change too.

Those in wealthier countries need to limit their energy use. For example, by ditching tumble dryers and capping thermostats at 20°C.

A shift in diets is also needed: experts say we must consume more plant-based food, which generally uses less land and produces fewer greenhouse gas emissions per gramme of protein than meat.

A shift to green technology will mean an uptick in the number of critical minerals required for electric circuits and batteries, such as copper, lithium and cobalt.

Industry must also undergo a seismic change. The energy required to make materials crucial to developing economies, such as steel and cement, makes this tricky to decarbonise. Scaling up green hydrogen is a gamble worth taking, and carbon capture systems that suck in emissions produced by industrial plants are also important.

Extension task

Game changer

After completing Rounds 1 to 3 suggest ways in which The Climate Game could be improved to better represent the real world.

Are there any geographical challenges or issues that haven't been incorporated into the webtool?

Do you think any particular rounds are more important than others (and should be weighted differently)?

Are there any recent events or decisions that need to be included to update The Climate Game?

4. Your pathway to Net Zero is fraught with obstacles! Be careful when making big decisions. For example, setting a carbon price (effectively a tax for every tonne of carbon produced by the goods and services we make or buy) is important but don't set it too high – the 'gilets jaunes' protests in France reflect what could happen if you do.
5. To finish record in 2 paragraphs what went well in your path toward Net Zero and what did not go well. With hindsight would you change any of your decisions?
6. This information can then be used in paired discussions, group discussions or class discussions, with students able to write, think and talk like graphers.