Hampshire County Council
Improvement and Advisory Service

HIAS MOODLE OPEN RESOURCE

Geography

Sustainability

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Final version

Overview

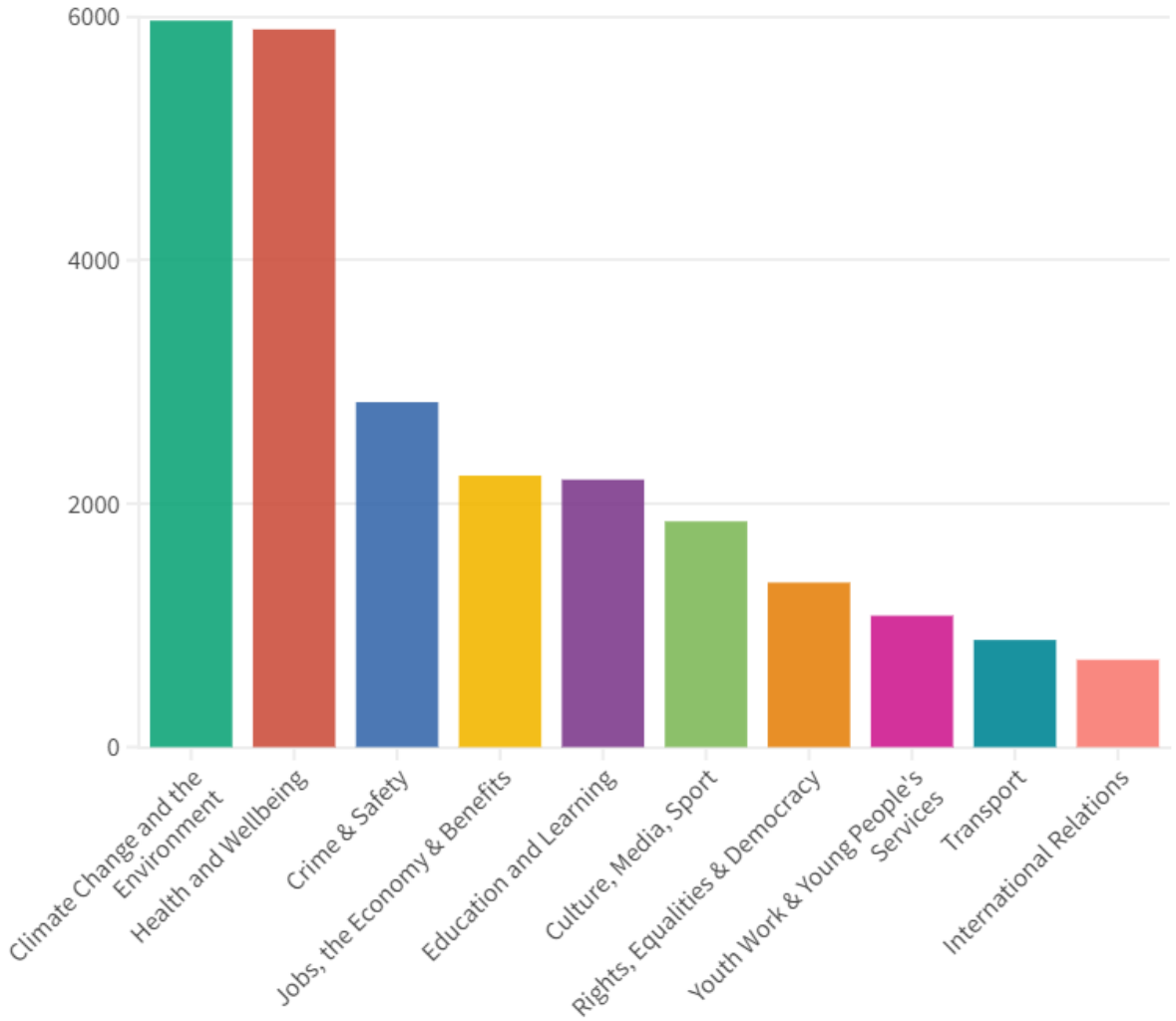
This document contains guidance to support further embedding climate education in the geography curriculum.

Points to consider when using this resource
It was created during January 2025 and all website links were active at this time. The organisations signposted are national ones that teachers are likely to be familiar with such as the Geographical Association but it is always recommended to quality assure any online sources you use in the classroom with your colleagues.

Sustainability in Geography

Sustainability in Schools

In recent years, the growing concern over climate change has become a defining issue of our time. From unprecedented heatwaves and devastating wildfires to rising sea levels and severe storms, the impacts of a warming planet are becoming increasingly evident. The biggest ever standalone public opinion survey on climate change, the Peoples' Climate Vote 2024, shows 80 percent – or four out of five - people globally want their governments to take stronger action to tackle the climate crisis. (Source: United Nations Development Programme)
This heightened awareness is not just confined to scientists and environmentalists; it has permeated all sectors, including the education sector. School leaders and our students are increasingly alert to the need to support and promote climate education and to mitigate the impact our school buildings and community have on our environment. Earlier this year Hampshire's young people voted climate change and the environment as their top concern. More than 25,000 young people across Hampshire took part in 'Make Your Mark', the UK's biggest youth consultation.



The Make Your Mark 2024 Hampshire Survey Results
Source: Make Your Mark | Hampshire Youth Parliament (hampshireyp.org)

DFE Sustainability and Climate Change for Schools Guidance

The 2022 policy paper from the Department for Education (DfE) set an ambitious vision of the UK becoming the world's leading education sector in sustainability and climate change by 2030 (DfE, 2022) as outlined in below:

***Vision**: **the United Kingdom is the world-leading education sector in sustainability and climate change by 2030**.*
In England, we will achieve this through the following strategic aims:

1. *Excellence in education and skills for a changing world: preparing all young people for a world impacted by climate change through learning and practical experience.*
2. *Net zero: reducing direct and indirect emissions from education and care buildings, driving innovation to meet legislative targets and providing opportunities for children and young people to engage practically in the transition to net zero.*
3. *Resilience to climate change: adapting our education and care buildings and system to prepare for the effects of climate change.*
4. *A better environment for future generations: enhancing biodiversity, improving air quality and increasing access to, and connection with, nature in and around education and care settings.*

***Source:** Sustainability and climate change: a strategy for the education and children's services systems - GOV.UK (www.gov.uk)*

This guidance is not statutory. Instead, it set out a key initiative for all schools to have a **nominated sustainability lead and a climate action plan in place for 2025**. The guidance breaks down the vision to provide **five areas** where schools and educators should focus:

1. **Climate education**
2. Green skills and careers
3. Educational estate and digital infrastructure
4. Operation and supply chains
5. International

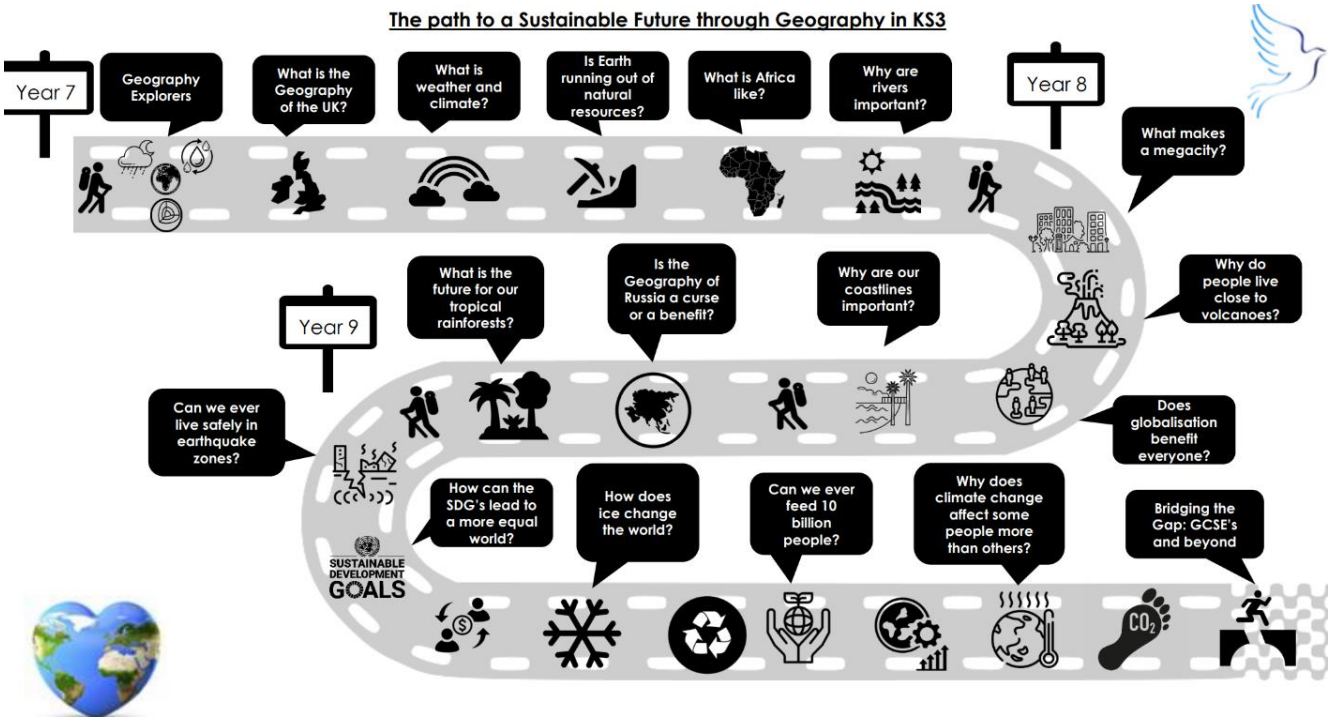
Climate Education in Geography

Climate education is significant aspect of geography. Whether it is investigating climate mitigation and adaptation at GCSE or pupils exploring school environmental issues such as litter around the school site our subject is well placed to support students in developing their understanding of climate issues and actions. Given this the recommended first step will be to conduct an audit, identifying where and how climate education is taught across the curriculum. Do you have sustainability as one of the 'golden threads' of your curriculum and can you identify it in each topic/theme? Due to the interconnections of our subject with sustainability subject leaders are likely to find significant chunks of the curriculum directly connect our students with environmental issues, therefore it is important to consider is this spread evenly across year groups and the school year. Next consider progression, are there opportunities for pupils to build on their climate knowledge across KS3 and KS4? Have you linked to KS5 and planned for the building steps to link to sustainable geography at A Level? As part of this audit process conference pupils, what do they recognise as climate education in geography? For example, can they make connections with studying the management of weather hazards as learning about sustainability?

KS3 Curriculum Map Examples

There are two examples of curriculum maps below. The first was shared in the spring 2022 geography update magazine, where the then head of department at The Vyne School reflected on designing a key stage 3 curriculum with sustainability as a golden thread. In the

article the leader described their intention for pupil learning to include: "*An understanding of the term **sustainable development** and what it means to be sustainable. Our students know the original Bruntland definition from 1987 and are able to consider the three pillars of sustainability when making geographical decisions. In year 7, for example, we assess the sustainability of a range of energy sources, during year 8 we consider the sustainability of coastal management strategies and in year 9, students assess the sustainability of local businesses and their current actions towards this goal.*"



The 2nd example has been created by Microsoft Co-Pilot. It adheres to the national curriculum and was asked to ensure that there is progression in complexity of sustainability education over the three years:

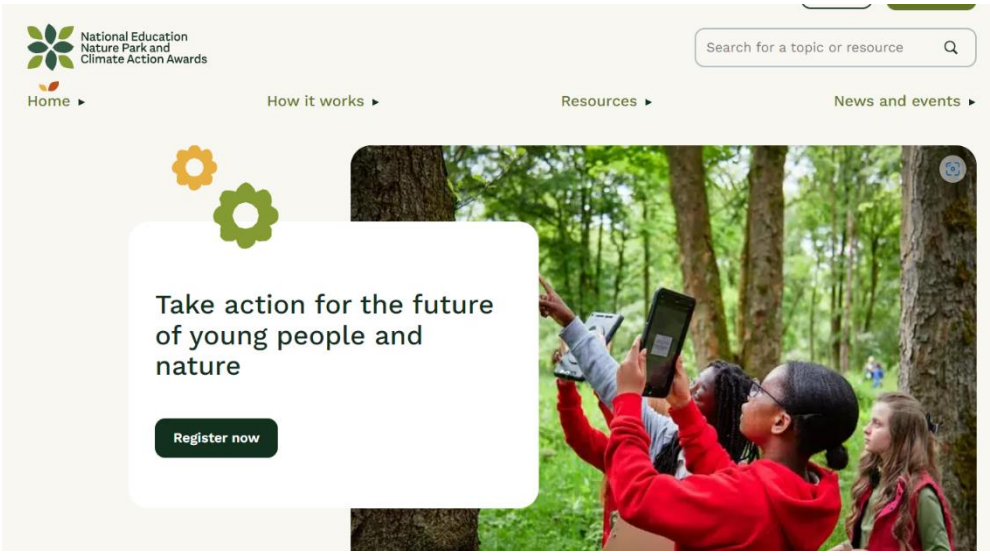
Year 7	Year 8	Year 9
Introduction to our local geography Map skills, using atlases, compass directions, grid references during a fieldwork enquiry of the school site 'What is the best place in school to eat lunch outside?' **Weather and Climate**: Understanding weather patterns, climate zones, and introducing the impact of climate change through extreme weather examples.	**Ecosystems**: Types of ecosystems, biodiversity, and the importance of conservation. Fieldwork enquiry to a National Park **Climate Change**: Causes, effects, and mitigation strategies for climate change.	**Sustainable management** of natural resources, including water, and food. **Resource management local fieldwork** investigation – decision making the site for a solar wind farm **Weather Hazards**: Types of weather hazards, their causes, and management strategies.
Rivers and Water Cycle: Processes of the water cycle, river features, and	**Tectonic Activity**: Plate tectonics, earthquakes, volcanoes, and their impacts on people and places	**Urban Challenges**: Issues facing urban areas, including housing, transport,

management of river environments. **Coasts and Fieldwork**: Coastal processes, landforms, and the impact of human activity on coastal areas.	**Mountains:** glaciated landscapes and the impact of tourism on upland environments	and sustainability – fieldwork to local High Street
Population and Urbanisation: Population distribution, urban growth, and sustainable cities.	**Economic Development and Globalisation** **Development**: Indicators of development, global inequalities, and sustainable development goals.	**Sustainability and Future Challenges** **Climate Action**: Exploring international agreements, policies, and actions to combat climate change. **Coasts under threat**: Revisit coastal processes and investigate the sustainability of coastal management around the UK

The wealth of climate education resources:
Once you have conducted your audit and identified opportunities to explore climate education and build in further progression of knowledge over time the sheer volume of organisations offering teaching resources could seem quite daunting. The following organisations are well worth considering as a place to start, especially as they integrate climate enquiry with fieldwork:

1. **National Education Nature Park**

To support climate education in schools the DfE has supported the development of the **National Education Nature Park**. Home | Education Nature Park This website DfE provides free access to high-quality curriculum resources through the National Education Nature Park online hub led by organisations such as the Natural History Museum. One of the most useful aspects of the website is how it provides free resources, support, and guidance for teachers to integrate climate and nature into learning. One geography leader in Hampshire trialed some of the teaching activities during 2024 and praised the ease of use and positive feedback from students who engaged in learning in the school grounds in a way they hadn't before.



2. Geographical Association (GA)

There is a raft of resources to support environmental education in geography on the GA's website. Some of the best free to access links can be found via their pages on supporting new geography teachers as they curate a range of lesson ideas and links: Teaching about the environment - Geographical Association. Another helpful aspect of the website is their support for green careers week. This takes place every November and their page for the 2024 even highlights the range of geographical careers that focus on sustainability as well as including resources such as the dilemma of dam building: Green Careers Week 2024 - Geographical Association

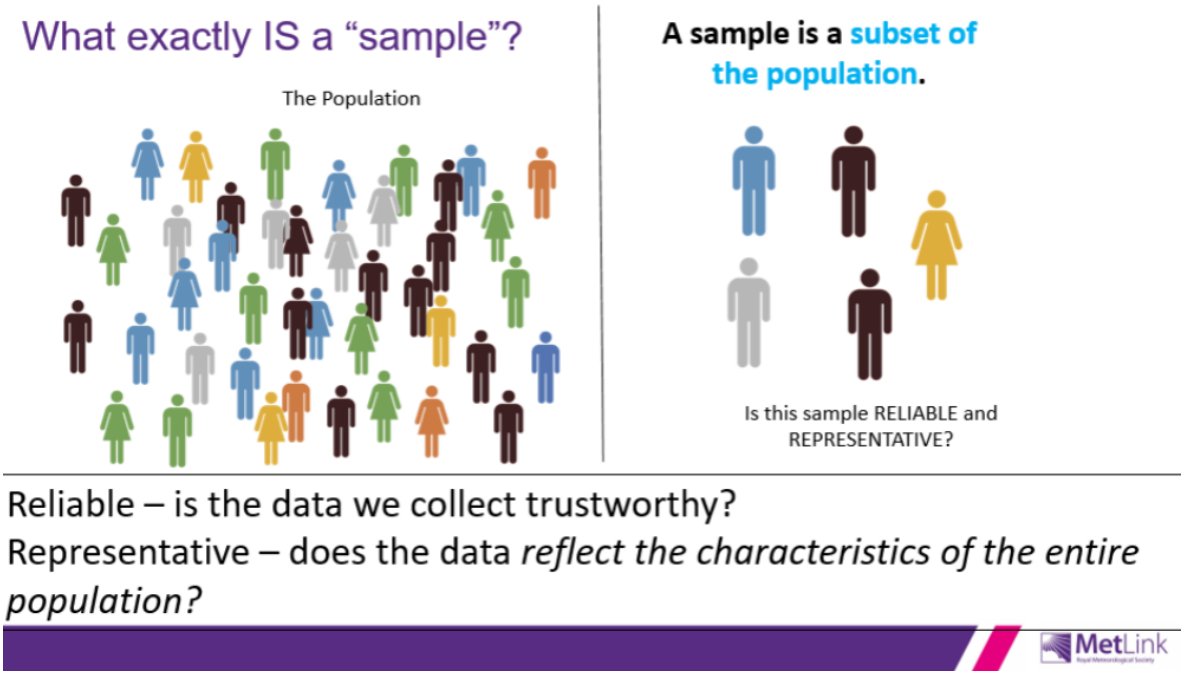
How can a water company balance the needs of different interest groups and the environment?

Introduction and Overview

A town announces ambitious plans for expansion and development, but a new dam will be required to ensure a safe, secure water supply. Where should the new dam go? How can the water company balance the needs of different interest groups and the environment?

3. Royal Meteorological Society

The RMS has teamed with the Fieldstudies Council creating a fieldwork investigation into extreme weather around the school site. It is fully resourced with all needed lesson materials and supports quality fieldwork for example teaching pupils about the different types of data sampling. The resources are curated here MetLink - Royal Meteorological Society Extreme Heat Fieldwork and Adaptation - and can also be found on the GA's festival of fieldwork pages.

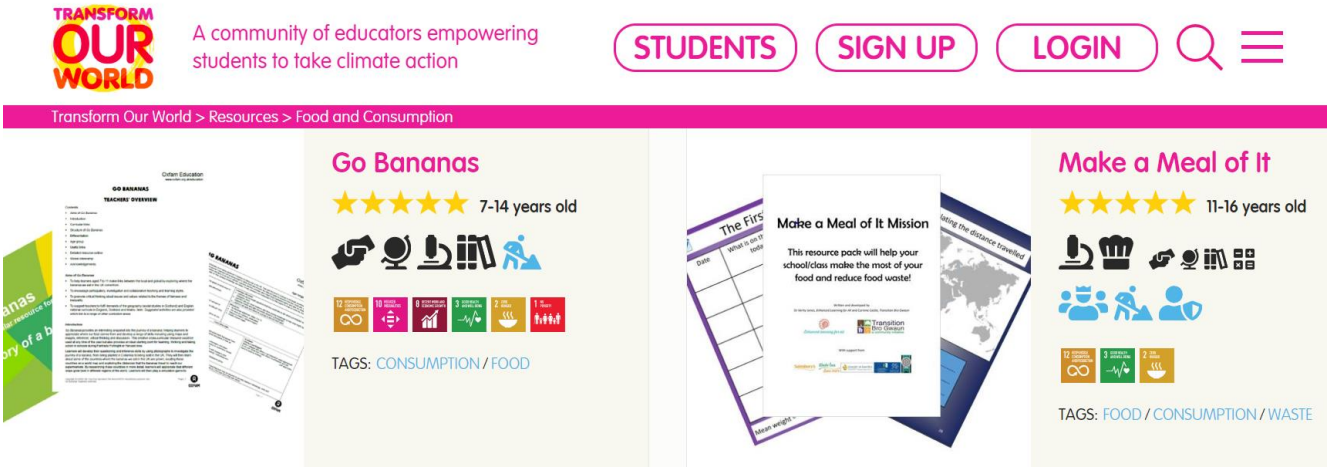


4. 39 Ways to Save the Planet

The **Royal Geographical Society** worked with **BBC Radio 4** to provide resources to support the book and radio series 39 Ways to Save the Planet. You can find all the materials here 39 Ways to Save the Planet - RGS including super rice, sublime seagrass and zero carbon farming to provide pupils with real life examples of sustainable solutions to reduce our carbon footprint. The curate radio show episodes, which explore a solution at a time are here: BBC Radio 4 - 39 Ways to Save the Planet

5. Transform Our World

This online hub offers support for teachers and students to support developing climate action plans and teaching about environmental concerns. In the resources section Transform Our World: Top Resources lesson ideas and materials are organised according to their links to the sustainable development goals. There is also a feature to help you create the schools action plan for sustainable development which could be useful to explore with student groups, such as the school council or an environmental focus group.



HIAS resources:

Don't forget to take a look on the HIAS Moodle pages for further guidance and lesson inspiration. There is a dedicated page called Climate Unity where you can find further links to resources as well as access all the previous Hampshire wide climate themed events for students such as the annual conference. Course: Climate Unity

"Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing."

Arundhati Roy (Indian Author and Man Booker Prize winner)

In this area you can find resources to support your teaching about the Climate Crisis. Materials will be added to over time here and are especially suitable for KS2 and KS3, but many will also be adaptable for younger children as well as for older young people.

You will also find bespoke resources on the Geography Moodle which will be added to over 2025. For example take a look at a guided reading activity on an extreme weather event; The

Californian wildfires:

1. Where are these fires?

5. EXPAND - why is it hard for eldery residents to evacuate?

6. How long is California's wildfire season now?

2. How many people are missing?

3. How many have been evacuated?

4. What was it like for the residents who managed to escape?

California fires: At least 42 die in state's deadliest wildfire

At least 228 people are missing as the wildfires continue to rage in northern California towns like Paradise. Nearly 7,200 structures have been destroyed, and another 15,500 are at risk. More than 300,000 locals have been forced to flee their homes across California.

Sorrell Bobrink, a Paradise resident who managed to drive away with her child said: "I had to drive through the fire - it was awful. It was probably the most awful experience I will have in my life."

"It was traumatising, we will be traumatised for a long time. My whole community was traumatised - I can't watch the videos anymore because I actually went through it."

Many of the victims are believed to be elderly residents or people with mobility issues who would find evacuating more difficult.

Why are the fires so bad?

Historically, California's "wildfire season" started in summer and ran into early autumn but experts have warned that the risk is now year-round.

The California Electricity commission is investigating what sparked the latest blazes - amid reports electrical companies may have suffered malfunctions near the sources shortly before the fires began.

Low humidity, warm Santa Ana winds and dry ground after a rain-free month have produced a prime fire-spreading environment.

The state's 40 million-strong population also helps explain the fires' deadliness. That number is almost double what it was in the 1970s, and people are living closer to at-risk forest areas.

And then there is climate change. Recent years have produced record-breaking temperatures, earlier springs and less reliable rainfall.

7. Why are the electrical companies blamed for sparking the blazes?

8. Why has the 40 million-strong population increased the first risk?

9. Why has climate change increased the risk of wildfires?

CHALLENGE TASK: research and find out what Santa Ana winds are

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For further details on the full range of services available please contact us using the following email:

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