Hampshire County Council
Improvement and Advisory Service

HIAS MOODLE OPEN RESOURCE

Climate Action Planning:

Climate Education and Green Careers: helping students to understand climate change and develop green skills.

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Final version

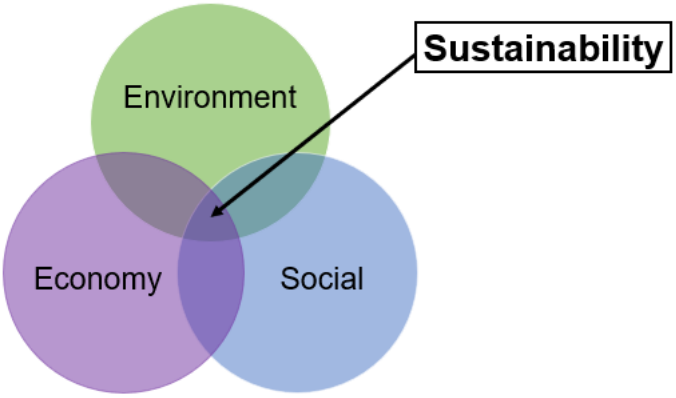
Overview

This document contains…
An introduction to climate action planning and guidance to help schools identify targeted areas for action in the climate education and green careers area of climate action planning.

Points to consider when using this resource
Information in this resource is current at time of publication but might be subject to change. This resource is one of four resources created for schools to support them in the four areas of climate action planning: decarbonisation, adaptation and resilience, encouraging biodiversity and climate education and green careers. Further resources will follow on the HIAS Climate Unity Moodle.

Sustainability and climate action

If something is sustainable, it can continue for a long period of time. A successful eco-system is sustainable – it manages and recycles resources effectively and is resilient against negative disturbances. Sustainability can be categorised into three spheres: social, economical and environmental sustainability and can be on a local, national and global scale. Some models also add a fourth area of human/cultural sustainability.



The three spheres of sustainability

If we are sustainable, we are meeting our current needs without compromising the ability of future generations to meet their own. Climate action is a critical part of this. Through taking steps to combat climate change, we are helping safeguard the planet for future generations so they can live in a sustainable, resilient environment.

Climate Action is one of the United Nations Sustainable Development Goals https://sdgs.un.org/ and is part of The 2030 Agenda of Sustainable Development https://sdgs.un.org/2030agenda adopted by all UN member states in 2015.

How does this link to schools?

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)

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.

The guidance breaks down the vision to provide five areas where schools and educators should focus:

1. Climate education – helping young people become global citizens by understanding climate change and appreciating nature.
2. Green skills and careers – teaching children the knowledge and skills for green jobs.
3. Educational estate and digital infrastructure – government to provide advice to support schools in achieving a green and sustainable education estate.
4. Operation and supply chains – coordination and leadership to introduce children and young people to more sustainable practices.
5. International – respond to international action and make a difference to young people all over the world.

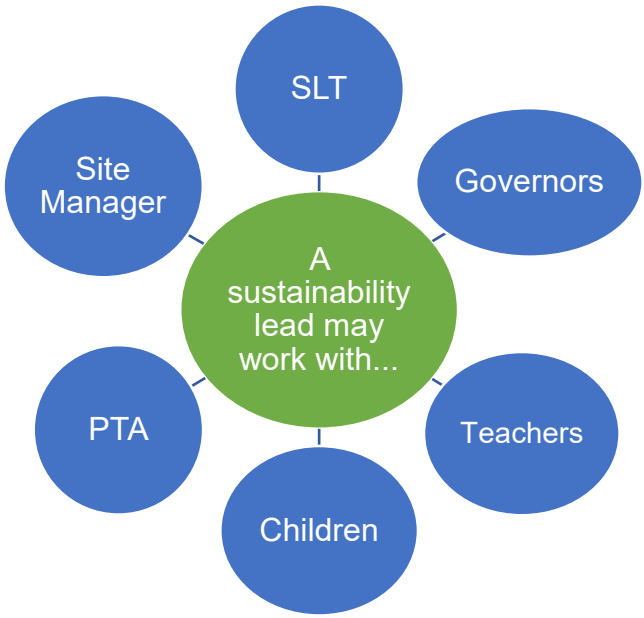
Source: Sustainability and climate change: a strategy for the education and children's services systems - GOV.UK (www.gov.uk/government/publications/sustainability-and-climate-change-strategy/sustainability-and-climate-change-a-strategy-for-the-education-and-childrens-services-systems).

This guidance is non-statutory but sets out a key initiative for all schools to have a nominated sustainability lead and a climate action plan in place for 2025.

What is a sustainability lead?

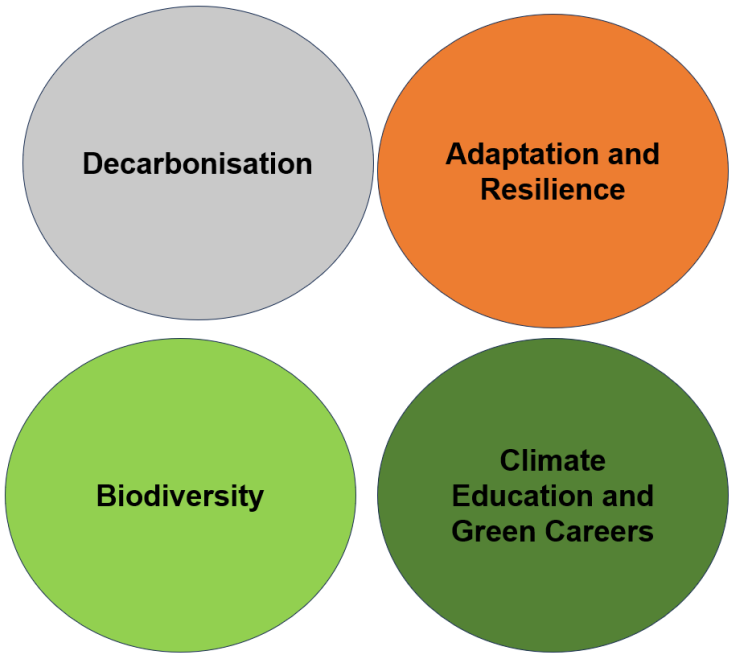
A sustainability lead is a co-ordinator and facilitator. They are a champion for climate action in the school and work with school leaders and stakeholders to create, develop and implement a climate action plan. Sustainability leads could be senior and middle leaders, teachers, estate managers or governors. There can also be more than one sustainability lead within a school as long as this is supportive of the implementation and impact of the climate action plan.

The climate action plan will involve a range of initiatives, and its successful implementation will require the active support of various stakeholders across the school community. Each stakeholder brings unique perspectives, skills, and experiences that can enrich the planning process and strengthen outcomes. Establishing a sustainability working group is an effective way to harness this collective expertise and foster collaboration toward shared environmental goals.



What is climate action planning?

A climate action plan is a document that helps schools outline actions to reduce their environmental impact and adapt to climate change. Climate action plans should cover the four following areas:



Source: Sustainability leadership and climate action plans in education - GOV.UK (www.gov.uk/guidance/sustainability-leadership-and-climate-action-plans-in-education)

This resource focuses on the **climate education and green careers** aspect of climate action planning. It includes guiding questions to help settings assess their current carbon footprint and identify potential future actions to include in their climate action plans. Additionally, it offers useful links and contacts to further support schools during the climate action planning process.

There is currently no statutory template for a climate action plan. However, it may be helpful to structure it similarly to other strategic documents. The plan should include clearly defined, measurable actions, each with a specific timeframe. You may also wish to identify the staff members responsible for supporting and monitoring the successful implementation of each action. Organisations such as Let's Go Zero and Climate Ambassadors offer free templates schools may wish to use. Both organisations are funded by the DfE and have worked with many schools across Hampshire.

What are green skills?

Green skills are the knowledge, values, behaviours and skills needed to help us tackle the environmental challenges our world is facing. They help create a sustainable society by building resource-efficiency. These skills link to all four areas of climate action planning as shown by the following table.

Climate Action Planning Area	Possible skills students could acquire during the implementation of climate action plans:
Decarbonisation	resource-efficiency, problem-solving, responsibility, being a role-model.
Adaptation and Resilience	problem solving and risk-assessing, understand own needs and the needs of others, perseverance and resilience.
Biodiversity	positive attitudes towards nature, caring for plants and animals, knowledge about plants and animals, respect and kindness, patience and empathy.
Climate Education and Green Careers	knowledge of sustainability and climate change, investigative skills, problem solving, respect and tolerance, foresight, advocacy, communication.

Climate education in the curriculum

When we think of sustainability and climate education, we may first consider the disciplines of science and geography as they closely link to investigating and understanding the world around us. However, sustainability and climate education can occur in many subjects of the National Curriculum as the table below demonstrates. Consider sustainability and climate education as a thread to run through your curriculum, planning for links to the topic where appropriate in long-term planning.

Subject	Knowledge and skills that could link to sustainability and climate education in primary and/or secondary curriculums
English	• Extended writing and persuasive writing on topics relating to sustainability and climate change. • Reading fiction and non-fiction texts relating to climate change.
Maths	• Data handling, interpretation and reasoning. • Exploring and understanding shape, position and direction. • Algebraic equations and problem-solving.
Science	• Working scientifically. • Climate (including weather) and the water cycle. • Plants. • The impact of greenhouse gases on climate. • Animals and habitats. • Material properties. • Resource and waste management. • Earth and Space (including energy and the universe). • Global warming and greenhouse gases. • Waves (physics).

Geography	• Fieldwork – gathering, interpreting and presenting data. • Climate (including weather) and the water cycle. • Tectonic hazards (volcanic eruptions include emissions of greenhouse gases). • Sustainability as an impact of economic development. • The distribution of natural resources and climate change's impact on these resources. • The sources and impact of emissions during place and case studies (including local area). • The change in climate from the Ice Age to the present.
Computing	• Digital literacy. • Using computing software to design posters to spread to message about climate change. • Using computing in data analysis and interpretation. • Using technology sustainably to reduce emissions.

Design and Technology	• Sustainable design practices:
	  ○ understanding the environmental impact of different materials
	  ○ using renewable and recyclable materials
	  ○ considering the life cycle of materials.
	• Sustainable manufacturing processes.
	• Designing and creating resources to improve sustainability on the school site or at home, eg bird feeders, upcycled furniture, solar powered or LED lamps.
	• Designing and creating resources to help students stay cool and dry during extreme weather.
	• Considering sustainability in product evaluations.

History	• Considering how technology and industry has changed over time and the impact this has had on our climate. • Consider how climate impacted historic settlements where appropriate. • Explore how past cultures have learnt to live sustainably with nature and have worked to overcome environmental problems.
Art	• Using art to communicate about climate change and empower people to make a difference. • Using renewable and recyclable materials in art. • Exploring climate and heatwaves using warm colours. • Studies of artists that capture climate change or create through sustainable practices.
PHSE/Citizenship	• Caring for living things. • How nature can be good for our heath. • Being responsible and making sustainable choices. • Keeping ourselves healthy during a heatwave. • How everyday choices can affect the environment.
Music	• Creating instruments out of recycled materials. • Exploring climate through sound. • Sing and compose songs to about climate change and empower people to make a difference.
Religious Education	• Consider what stewardship means to different religions. • Explore different religions' spiritual connection to nature.

A table showing examples of how areas of some National Curriculum links can link to sustainability and climate education.

The final report of the National Curriculum and Assessment Review mentions climate education and sustainability as one of the areas that stakeholders mentioned in the reports' Call for Evidence. The report recommends that climate education and sustainability are featured more strongly in the science and geography curriculums and that sustainability is emphasised in the design and technology curriculum. The report also stresses the importance of effective pedagogical strategies to help students engage with these issues in meaningful ways. In addition, it proposes that climate education should be included as a topic within the citizenship curriculum https://assets.publishing.service.gov.uk/media/690b96bbc22e4ed8b051854d/Curriculum_and_Assessment_Review_final_report_-_Building_a_world-class_curriculum_for_all.pdf.

The Climate Unity Moodle

The Climate Unity Moodle is free to access and contains resources to support schools in climate action planning and climate education including resources and guidance from subject advisers. https://re.hias.hants.gov.uk/course/view.php?id=128

The Moodle also contains information about the annual Virtual Climate Unity Conference and Climate Unity Art Projects. Both provide students with exciting and engaging opportunities for climate education.

Climate anxiety

Climate anxiety is the fear or worry about climate change and its impacts. Providing accurate and evidence-based education on climate change helps ensure students receive information from reliable sources rather than misinformation. Encouraging a sense of agency through practical actions and solutions can reduce eco-anxiety by helping students feel empowered to make a difference. It is important that students understand they are not solely responsible for solving climate challenges. School staff should lead by example and act as advocates for sustainable practices. Educators should remain attentive to signs of climate anxiety, create a supportive learning environment, and listen to students' concerns while promoting constructive dialogue.

Green careers

Green careers are jobs that contribute to protecting the environment, reducing carbon emissions, and promoting sustainability. These roles exist across many sectors, including renewable energy, sustainable construction, conservation, waste management, and environmental education. Green careers focus on creating solutions to climate challenges and supporting the transition to a low-carbon economy, offering opportunities for innovation and long-term impact. It is likely that most future careers will require green skills in the future in response to climate change. Green careers could include smart-meter installers, rangers, environmental scientists and engineers.

Linking careers to curriculum learning is one of the benchmarks listed in Gatsby career guidance www.gatsby.org.uk/education/activity/good-career-guidance/. Green careers can be introduced to students through the curriculum and can help improve student's disciplinary knowledge of different subjects. The Geographical Association has created a guide to green skills and green careers and it provides useful links and case studies to support the introduction of green careers in the classroom https://geography.org.uk/green-skills/.

Climate Unity

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

htlcdev@hants.gov.uk

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Keep up-to-date with our learning opportunities for each subject through our Upcoming Course pages linked below. To browse the full catalogue of learning offers, visit our new Learning Zone. Full details of how to access the site to make a booking are provided here.

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- Geography
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- History
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