

Transport Lesson 1 | Lesson Outline

Learning intention:

To understand why additional electricity generation is needed for the UK to achieve its green transport goals.



Resources Introductory Video – Sustainable Transport (3mins 53secs) Worksheet 1 – Poster Research Computers with internet access	
Hook into the lesson	<p>Play Introductory Video – Sustainable Transport.</p> <p>The video introduces the topic of transport and the technologies that will be used to reduce emissions from transport. In particular, electric and hydrogen vehicles are discussed. The video asks the following question, giving opportunity to pause and discuss (or pupils can write individual answers):</p> <ul style="list-style-type: none"> Can you think of types of transport that don't release as many greenhouse gases as petrol and diesel cars? (1min 31secs)
Activity	<p>Give pupils Worksheet 1 – Poster Research.</p> <p>Pupils will answer prompt questions on electric and hydrogen vehicles. They will then create a poster that demonstrates the need for more electricity generation to power both hydrogen and electric vehicles.</p> <p>Introductory Video – Sustainable Transport answers several of the prompt questions, so replaying for the pupils is recommended. Independent research is also encouraged, using websites such as:</p> <p>Glasgow Science Centre's http://ourfuture.energy (supported by OPITO) http://bbc.co.uk/bitesize/subjects/zx394xs</p>
Plenary	<p>Lead a class discussion on our transport future using the following questions.</p> <p>Q: Apart from switching to using electric cars, what other steps could people take to reduce our travel carbon dioxide emissions?</p> <p>A: Taking public transport, walking and cycling, taking fewer flights, car sharing, and renting cars instead of buying.</p> <p>Q: Have a think about your daily life. How often do you take journeys in a car that could easily have been walked?</p> <p>A: Explore pupil experiences.</p> <p>Q: Why would it be a good idea to switch to walking for those short journeys?</p> <p>A: Walking is good for your physical and mental health. Using a petrol or diesel car contributes to air pollution, climate change, and increased traffic.</p>