

**UK Geography – The Big Issues**  
**The environment - how should we seek to control traffic pollution?**

Video summary	Before watching the video	During the video
<p><b>Jack, a student from Gateshead on Tyneside, investigates solutions to traffic related air pollution, which is a particular problem in Newcastle.</b></p> <p>Jack wants to know if a congestion charge would solve the problem of air pollution and talks to people on both sides of the argument. He speaks to a local resident, an environmental researcher from the University of Newcastle who measures traffic pollution levels, a local GP, a local businessman and the Newcastle City Council’s Director of Public Health.</p> <p>After listening to the arguments, Jack makes up his mind on the best option.</p> <p>This clip is from the series <i>Geography: The Big Issues</i>.</p>	<p>Using a map of the UK, locate Newcastle and write a locational description of where it is. Use online mapping to explore the area further. Ask students to describe the landscape that they can see.</p> <p>Introduce key terms such as:</p> <ul style="list-style-type: none"> <li>• <b>Congestion charge:</b> A fee imposed on vehicles entering a designated area, particularly during peak traffic hours, aimed at reducing traffic congestion and improving air quality by encouraging alternative transportation methods.</li> <li>• <b>Nitrogen dioxide:</b> A greenhouse gas emitted by car exhausts.</li> <li>• <b>Air pollution:</b> Contamination of the indoor or outdoor environment that modifies the atmosphere. This could be through greenhouse gas emissions. Air pollution has a negative impact on human health, ecosystems and the environment.</li> </ul>	<p>You may wish to stop at relevant points during this short film to pose questions and check understanding or wait until the end. Useful questions might include:</p> <ul style="list-style-type: none"> <li>• Why is air pollution an issue?</li> <li>• What is a congestion charge?</li> <li>• How can air pollution be monitored?</li> <li>• Why is it important to try and reduce air pollution?</li> <li>• Why are there mixed views on the congestion charge?</li> <li>• Who is responsible for reducing the levels of air pollution?</li> <li>• What other solutions could there be to reducing air pollution?</li> </ul>

### After watching

Students could investigate the area around them to see whether air pollution is an issue locally. Websites such as <https://www.airqualityengland.co.uk/> provide real-time updates on air quality and this may be a useful place to start. This is also a great opportunity to discuss primary and secondary data. Students could also collect their own data on air quality by carrying out traffic surveys and using equipment to measure the air quality such as a PM10 monitor.

Students could also investigate what is being done locally to reduce air pollution, for example is the local council restricting traffic into the town centre or is public transport being widely advertised as an alternative. Students could also write to the local council or MP to find out what is being done and whether they believe air pollution to be an issue.

Curriculum notes	Where next?	Links
<p>All these short clips build on students' understanding of human and environmental interactions and provide opportunities to practice geographical skills such as enquiry, mapping and fieldwork. At KS3, students can learn more about how human and physical processes interact to influence and change landscapes, environments and the climate. At KS4, the film supports understanding about fluvial environments, flooding hazards and climate change, environmental management and fieldwork investigation. This clip could be used to support the delivery of geography to KS3 and KS4 students. The film might also be used for example, to contribute to case studies about human interactions on fluvial environments (CCEA), the topic of managing rivers, resources and or landscapes appears in OCR, Edexcel, AQA, WJEC KS4/GCSE in England and Wales, CCEA GCSE in Northern Ireland and SQA National 4/5 in Scotland.</p>	<p>Compare the air quality data to a location overseas, for example cities such as Lahore or Dhaka are well known for being congested and therefore having poor air quality.</p> <p>Students could research the data for those cities and find out what is happening to try and improve the air quality in those locations.</p>	<p><b>BBC:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Bitesize: What is air pollution?</a></li> <li>• <a href="#">Bitesize: Atmospheric pollutants</a></li> <li>• <a href="#">Bitesize: Management strategies/London congestion charge</a></li> <li>• <a href="#">Bitesize: Reducing traffic congestion</a></li> </ul>