

Engineering our climate

Lesson Plan: Lesson 2 - Is there a future in geo-engineering?

Lesson title: Is there a future in geo-engineering?	
Lesson aim: To understand the debate surrounding geo-engineering as a potential solution to global warming.	
Lesson objectives:	
<ul style="list-style-type: none"> To consider the range of views held on geo-engineering. To appreciate the difficulties of gaining global agreement on this issue. To justify possible views on geo-engineering from countries at varying levels of development. 	
Learning activities/tasks:	Time
<p>Starter: Welcome to International Convention on Climate Change with Geo-engineering as the hot topic for discussion. In small groups students are given brief country profiles based on UN data 2007. Students must decide: what the information tells them about the country, suggest priorities for the country (economic, social, environmental and political) and decide what else they would like to know in order to be a national representative at this convention? Define geo-engineering as a term.</p>	10mins
<p>Main activity: <i>International Convention on Climate Change</i></p> <p>Introduce idea of an international conference to discuss geo-engineering. Task sheet will help give structure and guidance for the debate. Four questions to respond to:</p> <ol style="list-style-type: none"> To what extent would you be prepared to invest in more research of geo-engineering techniques? What are the risks associated with geo-engineering for your country and are they too great? Should we be focusing on the challenge of mitigating carbon emissions? Does geo-engineering provide us with an easy option? <p>Watch clip from Engineering our climate 21st Century Challenge. Tom Clarke, Science Correspondent for Channel 4 News, chairs a discussion with Prof David Keith and Dr Paul Johnston on issues of geoengineering. First 7 minutes 30 seconds. Read views sheet on geo-engineering.</p>	15mins
<p>Using the country profile as background in small groups students decide:</p> <ul style="list-style-type: none"> What are your development priorities for the future? Focus on Global Warming: <ul style="list-style-type: none"> ➤ What are your intentions in the short term? ➤ What is your long term plan? ➤ Students then prepare responses to questions and should justify views. 	20mins
<p>Plenary: Students present views to international panel. As a group students then suggest what the future for geo-engineering should be. As country representatives and then as individuals. Compare any differences.</p>	15mins
Resources:	
<ul style="list-style-type: none"> Country profile data sheets Views on geo-engineering resource sheet Video clip Panel Discussion lead by Tom Clarke First 7 minutes 30 seconds Student task sheet 	