

Climate Change *Our Responsibility*

2008 26 minutes

Program Synopsis

This program explores the nature of climate change and investigates whether or not climate change is anthropogenic (caused by humans). Opinions from both sides of this debate are included alongside clear explanations of the various types of evidence that are being cited in this crucial debate. Suggestions are then made as to the most effective way of reducing human impact on climate change, regardless of the argument over the exact causes.

Related Programs

- The Greenhouse Effect Climate Change and Global Warming
- Global Warming Taking Action in Castlemaine
- Going Carbon Neutral The Ashton Hayes Example

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Climate Change: Our Responsibility

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Introduction

The issue of climate change (more commonly referred to as "global warming" is surely the most important environmental debate currently raging around the world. Rarely has a clear understanding of such an issue had such importance for students; many of them are acutely aware of the significance of the debate for their own communities and lifestyles. Much of what they know about climate change comes from the media, some who treat the subject as of little importance and others "hype" the issue at almost every opportunity. This program is a contribution to this debate and should open the way for informed and intelligent debate amongst students as regards this key issue.

Program Rationale

The aim of this program is to encourage students to consider the evidence for and against anthropogenic climate change and to appreciate the complexity of the argument that is raging about climate change. Students should be encouraged to discuss the issues raised in this film, carry out further research and then reach their own conclusions on this crucial issue.

Program Timeline

- 00:00:00 Introduction
- 00:03:00 Chapter 1 Understanding the green house effect
- 00:06:10 Chapter 2 How responsible are we?
- 00:09:22 Chapter 3 How responsible are we? Part2
- 00:15:45 Chapter 4 The global impact of climate change
- 00:19:00 Chapter 5 Responses to climate change
- 00:23:40 Credits
- 00:25:27 End Program

Useful Resources

Books and Other Print Resources

- The Rough Guide to Climate Change Robert Henson place text here
- The Atlas of Climate Change Kirstin Dow
- The Economics of Climate Change The Stern Review

Internet Resources:

- <u>http://royalsociety.org/</u>
- http://www.globalwarming.org/
- http://news.bbc.co.uk/1/hi/sci/tech/portal/climate_change/default.stm

Classroom I D E O

Program Worksheet

Before the Program

- 1. In groups of three or four, construct a large, clearly labelled diagram to explain "the greenhouse effect". After five minutes, present your diagrams to the other groups and explain how the greenhouse effect operates.
- 2. Use the excellent animated guide to the greenhouse effect that is on the BBC website to consolidate your understanding: http://news.bbc.co.uk/1/shared/spl/hi/sci_nat/04/climate_change/html/greenhouse.stm
- 3. In pairs, draw up a table of evidence that you think suggests that human activity is making the world's climate warmer. Where has this evidence come from? How trustworthy is this source? Your table might look a little like this:

Evidence	Source of evidence	How trustworthy?
 Sea levels are rising around the world 	 I saw a TV program about the impact of sea level rise on the Maldives 	 It was on the television; surely it would not be allowed on if it were not true?



During the Program

1. Before the film starts, draw up a table on a large sheet of paper. The table should have 2 headings: climate change **is** anthropogenic and climate change **is not** anthropogenic. As you watch the film and are presented with different pieces of evidence, decide which column you think you should write them in. Does this table help you to reach your own conclusion on this key issue?

Climate Change is Anthropogenic	Climate Change is not Anthropogenic

2. The introduction of the film refers to changes on the weather. Think back over the last year and make a quick list of any extreme or unusual weather you have experienced.

3. Use the section on the greenhouse effect to check that you clearly understand why the greenhouse effect helps to keep the planet alive.

Classroom VIDEO)

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4. Nic Frances from Cool NRG accuses those who deny that humans are not contributing to global climate change of "crimes against humanity". How do you respond to this statement? Write your immediate reaction down; you can reflect on it after seeing the rest of the film.

5. What are the two major problems that Andrew Bolt has with the idea that global climate change is anthropogenic?

<u>a)</u>

b)

Classroom IDEO

After the Program

- 1. In the program, mention was made of **carbon sequestration**. What does this mean? Use the following websites to produce a one page newsletter about carbon sequestration, including examples of sequestration in action from around the world:
 - a. <u>http://www.energy.gov/sciencetech/carbonsequestration.htm</u> The US department of energy website on sequestration
 - b. <u>http://news.bbc.co.uk/1/hi/in_depth/sci_tech/2002/leicester_2002/2248707.stm</u> A success story about carbon burial from the UK. Could this work elsewhere?
 - c. <u>http://news.mongabay.com/2007/0215-new_scientist.html</u> The world's largest carbon burial experiment in Australia.
- 2. Conduct a survey of the ways in which your national newspapers covers the topic of climate change/global warming. Visit the websites of three or four major newspapers and use their search engine to discover stories on "global warming" or "climate change". How do these papers cover this issue? What sort of headlines do they use? Are they scientific? Alarmist? Sceptical? What impact do you think the nature of these stories might have on their readers? Are there differences in the way in which the newspapers cover the story?
- 3. Conduct an energy audit of your classroom or school. What improvements could be made to reduce energy use and carbon dioxide emissions? Work in small groups to draw up an action plan for your school. Set targets and then action it!!
- 4. Use all of the evidence you have acquired in watching this program along with the other resources referred to, on these notes and any other information you can find. Create a PowerPoint presentation on whether or not you think global climate change is anthropogenic. Present the PowerPoint to your class and be prepared to justify your own personal opinion.