

## **OPERATION CLIMATE CONTROL**

Website for: <http://www.operationclimatecontrol.co.uk/content/>

**HIGHLIGHT:** An engaging game with emphasis more on policies that are needed to reduce the impacts of climate de-stabilization. Players must balance cost, demand and carbon dioxide reduction.

**General Description:** Players are challenged to choose from an array of options which become limited by available funds as the game progresses. Your score is calculated and displayed at the end. Short descriptions of the choices educate players before they choose. A series of questions and answers that relate to climate change in general are shown at the end of each segment. Also included is an opinion survey at the beginning and end.

**Age:** 13 and up.

**Number of Players:** Can be played as a team or individually.

**Cost:** Free to play on-line.

**Ease of Play:** Easy – moderate. It takes a few minutes to get used to the symbols and changes as you make selections, but it becomes easier once you play for a short while. Designed for a one hour class with 30 minutes of playing time.

**Format:** An on-line game that can be played by teams. Teachers can choose a password that students use to play a specific game. Each of the two segments is limited to 15 minutes. Designed for use in the classroom, this game focuses on England, but the information can be applied elsewhere as well.

**Strategy:** Balance realistic costs with generalized reductions in carbon emissions while meeting demand (e.g. transportation needs). You may choose to purchase new technologies or programs and may scrap/replace your choices when money becomes limiting or demand is not met.

**Scientific Validity:** Based on the IPCC reports and various United Kingdom documents.

**Educational Value:** Good. The game is based on real situations with real estimated costs. Participants learn to compare options based on the information provided.

Up to Date: Copyright 2007.

Strengths: Forces players to balance costs with demand (e.g. for electricity) and level of carbon reduction. A second level of the game takes place in the future (2050 or 2100) when it is more difficult to achieve balance. Good pictorial representation of choices and consequences keeps players involved. Excellent information is provided to teachers for use in the classroom.

Weaknesses: When played in February of 2010, game scenarios were limited to energy and transportation. Information regarding global climate change, actual levels of greenhouse gases and feedback loops are not covered well or are absent in the game. However, many of these topics are covered in links shown on the main page.

Focus: You can choose from two areas of focus; transportation and national energy supply.

TABLE OF GAME COMPONENTS

<b>Does the Game Educate about:</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
The long term time-frame of climate change		x	
Contributions from various greenhouse gasses		x	
The Need for Political Action		x	
Economics: Costs and Benefits	x		
Individual actions that you can take	x		
Visual impacts of climate change		x	
Global Consequences of climate change		x	Limited
Feedback loops		x	
New Technology to reduce climate change	x		
Climate computer models		x	
What we know from past climates		x	
Predicted increases in global warming		x	Some data is provided
Sources of greenhouse gasses	x		
Energy efficiency	x		
Global population increase		x	
Carbon offsets; Cap and Trade		x	
Examples of programs to reduce climate change	x		
How much greenhouse gas could be released		x	

