

## Full details

All details held on the selected case study are shown below.

Went live on	Title	Reference
3 Jun 2011	The 4 degree map - taking climate change science to Copenhagen and over 10 million people worldwide	SID0331

### Synopsis

Science from NERC's QUEST programme underpinned the '4 degree map' campaign tool that reached over 10 million people in the run-up to the 2009 Copenhagen climate negotiations.

### Description

NERC's QUEST research programme was one of the Met Office Hadley Centre's partners in producing the '4 degree map' campaign tool in the run up to the 2009 Copenhagen climate negotiations.

The map was distributed as a poster and as an interactive digital map. It has reached over 10 million people and has helped rally government and individual support for action on climate change.

The map outlines potential climate impacts from a 'business as usual' scenario where average global temperatures are allowed to rise by 4 degrees Celsius above the pre-industrial average. Without action, that could happen within 100 years.

The research shows that with a 4 degree Celsius rise, land will heat up more quickly than the sea, and high latitudes, particularly the Arctic, will change most. A large proportion of the world's population would suffer severe water shortages, falls in agricultural productivity, sea-level rise, and more extreme temperatures, bringing both drought and fire.

Much of the science behind the map came from QUEST's Global Scale Impacts (GSI) project, led by researchers at the Walker Institute (at the University of Reading). QUEST GSI investigated the world's vulnerability to varying climate change scenarios.

It also contributed information about effects on agriculture, sea-level rise and water scarcity through the DECC/Defra-funded AVOID programme, designed to advise the UK government on how to avert dangerous climate change.

AVOID, led by the Met Office in a consortium with the Walker Institute, the Tyndall Centre and the Grantham Institute (at Imperial College, London), synthesised scientific advice for UK policymakers, including the latest studies from QUEST, in the run up to the Copenhagen negotiations.

The UK's Foreign and Commonwealth Offices around the world orchestrated the map's release, handing it over personally to leaders as senior as Prime Minister Rudd of Australia and President Calderón of Mexico. The campaign resulted in international press coverage in papers with a combined circulation of over 10 million.

Within the UK, the map and its high profile launch by the Foreign Secretary, Climate and Energy Secretary and the Government's Chief Scientist, drew coverage including BBC Newsnight and Channel 4 News. Various outlets hosted the map, and www.guardian.co.uk alone clocked more than 80,000 visitors to its page. Widespread linking and blogging led over 60,000 visitors to the campaign web hub www.actoncopenhagen.gov.uk within a week.

The map continues to attract attention, and is now available in 10 languages and as a layer on Google Earth, with embedded videos by climate scientists (find it in the 'Outreach' section of the Earth Gallery.)

### References and links

#### Hyperlinks

1. [DECC - Act on Copenhagen](#)
2. [QUEST - GSI](#)
3. [University of Reading - QUEST GSI project page](#)
4. [You Tube - Play list for 4 degree map embedded videos](#)

### Impacts

#### Actual impacts

Policy

#### Impact evidence

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	coverage including BBC Newsnight and Channel 4 News. Various outlets hosted the map, and the Guardian.co.uk alone clocked over 80,000 visitors to its page. Widespread linking and blogging led over 60,000 visitors to the campaign web hub <a href="http://www.actoncopenhagen.gov.uk">www.actoncopenhagen.gov.uk</a> within a week.
<b>Key outputs</b>	Policy change

<b>Research and funding</b>	
<b>Funding type</b>	Research Programme
<b>Funding partners</b>	<i>£ Unknown</i> Dept of Environment, Food and Rural Affairs
	<i>£ Unknown</i> Met Office
	<i>£ Unknown</i> Other public sector - Foreign and Commonwealth Office
	<i>£ Unknown</i> Department of Energy and Climate Change

<b>Classification</b>	
<b>Science themes</b>	Climate system, Earth systems science
<b>Science areas</b>	Atmospheric, Freshwater, Marine, Terrestrial, Polar
<b>Policy areas</b>	Agriculture, food and fisheries, Climate/environmental change and impacts, Land use, Natural resources, Water
<b>Keywords</b>	Climate models, Climate predictions