

Opinion & Analysis

Science in thrall to ideology keeps bogus debate alive



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The hijacking of global warming science was vividly outlined in a lecture at Trinity College last night

THIS GENERATION has altered the composition of the atmosphere on a global scale through . . . a steady increase in carbon dioxide from the burning of fossil fuels." If you were to guess which leading US politician made this statement to Congress, who would you go for: Al Gore? Bill Clinton? Jimmy Carter? It was in fact president Lyndon B Johnson – in 1965.

Yet four decades later, in late 2007, US vice-president Dick Cheney was able to claim with a straight face that "there does not appear to be a scientific consensus" that climate change is caused by human activity.

The story of how the science of global warming has been hijacked and politicised was outlined at a lecture in Trinity College Dublin last night by Prof Naomi Oreskes of the University of California, San Diego.

By the time Lyndon Johnson issued his warning, the science of global warming had been long understood. In the 1890s, Swedish scientist Svante Arrhenius calculated that a doubling of atmospheric CO₂ would lead to global temperature increases of 5-6 degrees. Over 100 years later, the Intergovernmental Panel on Climate Change (IPCC) has borne out the uncanny accuracy of his calculations.

In 1957, US scientists Roger Revelle and Hans Suess warned that human-generated greenhouse gases could destabilise the climate, with profound consequences.

The following year another scientist, Charles Keeling, began systematically measuring atmospheric CO₂ levels. Within just seven years, Keeling had pinpointed a steady, year-on-year increase in CO₂. In early 1965, the US president's Science Advisory Committee stated: "By the year 2000 there will be about 25 per cent more CO₂ in our atmosphere than at present and this will modify the heat balance of the atmosphere to such an extent that marked changes in climate, not controllable through local or even national efforts, could occur."

Keeling's famously meticulous scientific technique proved to be rock solid. In the 50 years since observations began, atmospheric CO₂ levels have climbed relentlessly to almost exactly where they were predicted to be today. "In those days, politicians actually listened to science," Prof Oreskes wryly observed.

The evidence continued to build during the 1970s, when US president Jimmy Carter commissioned major studies to examine the likely impact of increasing US coal usage in

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the wake of the oil shocks. In 1979, the Jason Committee reported that at then-current rates of fossil fuel burning, atmospheric CO₂ levels would have doubled by 2035, and this would "perturb . . . [the] climate by altering the radiative properties of the atmosphere".

When some of the most senior politicians in the US continue to this day to peddle energy industry-sponsored untruths, "it provides political oxygen to a fire that should have gone out long ago", Prof Oreskes told me. The fire in question is the bogus debate on the

causes and consequences of global warming.

Prof Oreskes traces the start of the war against climate science in the US as coinciding with the end of the cold war in the late 1980s. A right-wing think tank known as the Marshall Institute was set up in 1984 to attack scientists opposed to Ronald Reagan's Star Wars missile system. As the cold war ended, the institute found a new enemy, this time training its attack upon the science of global warming. In 1990, it claimed there was "little or no evidence warming was occurring or would any time soon".

As evidence supporting the science of global warming became firmer during the 1990s, attacks from the Marshall Institute and other right-wing groups intensified.

Why would some highly qualified scientists attack science itself? The reason is ideology. They are "market fundamentalists, with an unwavering faith in markets to solve all problems and intractable hostility to all forms of government regulation, seeing it as a form of creeping communism," Prof Oreskes says.

For example, physicist and climate sceptic Fred Singer testified to Congress in October 1995 that there was no scientific consensus linking CFCs to the ozone hole. Three weeks

later, the scientists whose work led to the detection of this hole won the Nobel Prize for Chemistry. Dr Singer (who was in the pay of the tobacco industry) testified there was no evidence linking second-hand tobacco smoking and cancer. He has been proven utterly wrong on both counts. Yet the same Dr Singer was again quoted in recent weeks as being part of a "growing challenge to the prevailing view on climate change".

Today, a small but well-financed and vocal cabal of climate sceptics still pursue what has become known as the "tobacco strategy". First, you claim the science is uncertain; next, you allege that concerns are exaggerated. Then, you suggest that "technology" will solve the problem, arguing against any government interference in terms of regulation. The aim is to protect the most polluting industries by confusing the public about the science.

What distinguishes sceptical scientists is that they "did not make political argument on political grounds, they instead disguised a political debate as a scientific one", says Prof Oreskes.

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