

DEALING IN DOUBT

The climate denial machine vs climate science

a brief history of attacks on climate science, climate scientists and the IPCC

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"Doubt is our product, since it is the best means of competing with the 'body of fact' [linking smoking with disease] that exists in the mind of the general public. It is also the means of establishing a controversy..."

Tobacco company Brown and Williamson internal document, 19691

"Skepticism is not believing what someone tells you, investigating all the information before coming to a conclusion. Skepticism is a good thing. Global warming skepticism is not that. It's the complete opposite of that. It's coming to a preconceived conclusion and cherry-picking the information that backs up your opinion. Global warming skepticism isn't skepticism at all."

-John Cook of Skepticalscience.com²

¹ http://tobaccodocuments.org/landman/332506.html

² http://news.discovery.com/earth/a-conversation-with-a-genuine-skeptic.html

















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INTRODUCTION

This report describes organized attacks on climate science, scientists and scientific institutions like the UN Intergovernmental Panel on Climate Change (the IPCC), that have gone on for more than 20 years. It sets out some of the key moments in this campaign of climate denial started by the fossil fuel industry, and traces them to their sources.

The tobacco industry's misinformation and PR campaign in the US against regulation reached a peak just as laws controlling tobacco were about to be introduced. Similarly, the campaign against climate change science – and scientists – has intensified as global policy on climate change has become more likely. This time though there is a difference. The corporate PR campaign has gone viral, spawning a denial movement that is distributed, decentralised and largely immune to reasoned response.

This report updates our March 2010 report¹, ahead of the forthcoming 2013 release of the IPCC's Fifth Assessment report.

The 2010 report was published just after the hysteria that greeted the release of climate scientists' personal email hacked or stolen from the University of East Anglia on the eve of the Copenhagen Climate Summit in late 2009. This scandal showed the depth and sophistication of the climate denial movement and the willingness of the media to amplify their message, despite its lack of evidence or scientific support – and to be distracted from the urgency of the issue by unfounded attacks on leading research scientists.

Since 2009, there have been nine separate investigations into this so-called "scandal," each of which have exonerated the scientists at the centre of the accusations. Yet that hasn't stopped the continued hysteria around the scandals. There have been two more attempts at a "climategate" type scandal, releasing more emails, with very little effect. Unfortunately, traditional media outlets failed to properly correct the misinformation they were so culpable in helping to spread.

With this new edition of Dealing In Doubt we:

- detail the ongoing attempts to attack the integrity of individual climate scientists and their work.
- look beyond the strategic parallels between the tobacco industry's campaign for "Sound Science" (where they labeled mainstream science as "junk") to the current climate denial campaign, to new research that has come to light revealing the deeper connections: the funding, personnel and institutions between the two policy fights.
- detail how some scientists are now fighting back and taking legal action.
- showcase the Heartland Institute as an example of how tobacco-friendly free market think tanks use a wide range of tactics to wage a campaign against the climate science.
- reveal the range of tricks used by the denier campaign, from "pal review" instead of peer review, to personal attacks on scientists through Freedom of Information requests, self-publishing books, and the general conspiratorial noise from the denial machine in the blogosphere.

The majority of the front groups or free market think tanks running campaigns against climate science continue to receive funding from big oil and energy interests.



















Since our first report, the massive campaign against climate science – and action on climate, funded by oil barons the **Koch Brothers** has come to light. And while fossil fuel companies like ExxonMobil, whose very products are causing global warming, continue to fund think tanks driving the campaigns, much of the foundation funding has now been driven underground, masked by a funding front-group called the Donors Trust – and its associate Donors Capital Fund, two "donor-advised" funds created to hide the real givers and thus shield them from negative exposure of their support for these campaigns.

Funding to the organizations that comprise the denial machine has risen during the Obama presidency, just as the urgency of climate solutions and promise of policy advances also rose.

"The side that has been issuing these attacks are extremely well-funded, well-organized. They have had an attack infrastructure of this sort for decades, developed it during the tobacco wars, they honed it further ... in further efforts to attack science that industry or other sceptical interests find inconvenient. So they have a very well honed, well-funded organized machine that they are bringing to bear in their attack now against climate science.

"It's literally like a marine in battle against a cub scout when it comes to the scientists defending themselves... We're not PR experts like they are, we're not lawyers and lobbyists like they are. We're scientists, trained to do science."—climate scientist Michael Mann: February 2010²

Meanwhile the consensus - and evidence - continues to grow

None of the climate denial machine's counter attack has changed the harsh reality, the scientific consensus, that climate change is underway and it is caused by humanity's pollution and other insults to the planet.

If there wasn't already enough proof in the years of replicated scientific evidence, a May 2013 <u>peer reviewed study</u>³ examined more than 11,000 climate change papers, and of the 4,000 papers that discussed whether climate change was caused by humans, 97 percent agreed. On the other hand, the percentage of papers challenging this consensus didn't move – it had flatlined. This corroborated a similar <u>finding</u> in 2010 from the Proceedings of the National Academy of Sciences (PNAS).

The IPCC scientific assessment is a rigorous and robust process, one of the biggest organized scientific endeavours in the world, involving thousands of scientists in hundreds of research institutes around the world, who assess and compile the findings of thousands of published and peer reviewed papers across a wide range of topics, from the measurement of shrinking ice caps to oceans, clouds, temperature records and observed impacts. It is also a human endeavour and therefore not perfect.

The very purpose of the IPCC itself, and its periodic assessments and reports, is to inform governments participating in the UNFCCC process of the latest science in order to evaluate policy measures. Science is indeed the engine that drives the policy train. Certainty adds urgency and should spur action. The coal, oil and gas industries have always recognized this and have therefore strived for uncertainty to slow policy advances.

One of the most fascinating aspects of the IPCC is that the work is done entirely voluntarily. For many of the scientists involved, it's the equivalent of having a second job, where you spend as much, if not more time on it as your primary job, *unpaid*.

^{2 &}lt;a href="http://www.pointofinquiry.org/michael_mann_unprecedented_attacks_on_climate_research/">http://www.pointofinquiry.org/michael_mann_unprecedented_attacks_on_climate_research/ interview with Chris Mooney, 26 February 2010

















Greenpeace has, and continues to have, confidence in the IPCC. There is no more reliable guide to – and summary of – the world's climate science than the IPCC reports. If anything, due to the long lead-in time for the IPCC reports, they err on the side of conservatism⁴. In late 2012, studies that compared the IPCC's predictions over 22 years of weather data showed that the organisation has consistently underplayed the intensity of global warming in its reports. The denier campaigns against the IPCC consistently accuse it of overplaying the science, but, if anything, it has underplayed it.

PART 1: A BRIEF HISTORY OF DENIAL

The 1990s: a network of denial is created

In the early 1990's, as governments began negotiating a global agreement to tackle climate change, a number of lobby groups were set up to prevent it.

These early groups included the Global Climate Coalition (GCC), the Climate Council and the Information Council on the Environment (ICE). The GCC <u>called itself</u> an "organisation of business trade associations and private companies established in 1989 to coordinate business participation in the scientific and policy debate on global climate change". Its <u>membership</u> was a list of the largest coal, oil and auto companies in the US – representing, it said, 230,000 companies and all companies that would stand to lose if they were held to account for the carbon they were pumping into the air for free.

The Climate Council staff included lobbyist heavyweight <u>Don Pearlman</u> a Washington, DC lawyer who became the right hand man of the Saudi, Kuwait and Russian governments⁵. (Pearlman died in 2005).

ICE was formed by a group of utility and coal companies: the National Coal Association, the Western Fuels
Association and the Edison Electric Institute⁶. In 1991, according to journalist Ross Gelbspan ICE:

"launched a blatantly misleading campaign on climate change that had been designed by a public relations firm...[that] clearly stated that the aim of the campaign was to 'reposition global warming as theory rather than fact'. Its plan specified that three of the so-called greenhouse sceptics – Robert Balling, Pat Michaels and S Fred Singer – should be placed in broadcast appearances, op-ed pages and newspaper interviews."⁷

ICE prepared a series of newspaper ads, one of them headlined "If the earth is getting warmer, why is Minneapolis getting colder?" Fox News anchors suggested that the massive snowstorms on the East Coast of the US in early 2010 called into question the scientific consensus on global warming, comments that climate scientists rejected.⁸ January 2010 turned out to be among the hottest on record.⁹

And the scientific evidence continues to mount. In August 2013, the US National Oceanic and Atmospheric Administration's <u>"State of the Climate" report,</u> drawing on contributions from 384 scientists from 52 countries, outlined the latest set of records.

⁴ http://www.scientificamerican.com/article.cfm?id=climate-science-predictions-prove-too-conservative

 $^{5\ \}underline{\text{http://www.greenpeace.org/usa/Global/usa/report/2009/10/don-pearlman-climate-council.pdf}}$

^{6 &}quot;Climate Cover Up" James Hoggan, Greystone books, 2009, page 32

^{7 &}quot;The Heat is On" - Ross Gelbspan, Addison-Wesley Publishing Co. Inc, 1997, page 34

⁸ http://mediamatters.org/research/200903030006

⁹ For an overview of January temperature reports see http://www.bbc.co.uk/blogs/paulhudson/2010/02/january-2010-warmest-on-record.shtml

















"Many of the events that made 2012 such an interesting year are part of the long-term trends we see in a changing and varying climate — carbon levels are climbing, sea levels are rising, Arctic sea ice is melting, and our planet as a whole is becoming a warmer place," said its press release.

This network was constructed using money provided by fossil fuel companies. But there were a few companies who were central to this campaign.

The funders:

ExxonMobil

When this report was first written, everybody focused on, at that point, the most obvious funder of the network of think tanks and front groups promoting climate denial: oil giant ExxonMobil, has spent \$27.4 million supporting the climate denial movement between 1998 and 2012 [Appendix II page 62].

In 2008, after years of adverse publicity about its funding policies, ExxonMobil stopped its funding nine key groups, claiming their:

"position on climate change diverted attention from the important discussion on how the world will secure the energy required for economic growth in an environmentally responsible manner." 10

Exxon slowly scaled back its funding to the denial machine from a peak of \$3.5 million in 2005 down to \$766,000 in 2012. Nonetheless, ExxonMobil continues to fund at least 12 groups campaigning against climate science, according to its own tax documents and corporate reports.

It should be noted that, due to the anonymity of Donors Trust, the decline in Exxon's direct funding of the denial machine doesn't necessarily mean there is not additional funding provided by the company's employees that is not transparently reported.

The Koch Brothers

In early 2010, a <u>Greenpeace investigation</u> revealed that it wasn't just ExxonMobil funding the climate denial machine. David and Charles Koch, of Koch Industries, who run the "biggest company you've never heard of," have, through their company and family foundations, funneled at least \$67 million or more into the denial machine since 1997. The Kochs' climate denial campaign is just part of a 40-plus year history of financing, influencing and, in some cases, leading a much broader conservative agenda.

The Koch focus has been on **fighting environmental regulation**, **opposing clean energy legislation**, and **easing limits on industrial pollution**.

This Koch money is routinely funneled through one of "charitable" foundations the Kochs have set up: the <u>Claude R. Lambe Charitable Foundation</u>; the <u>Charles G. Koch Charitable Foundation</u>; and the <u>David H. Koch Charitable Foundation</u> and the less-known Knowledge and Progress Fund, used only to funnel money to Donors.

Since our investigation, many different investigations have looked further into what has become known as "The Kochtopus" – a massive network of funding tentacles that has spread across the US, from state to Federal level, a multi-decadal campaign involving events from local legislation to national decisions on pipelines, from funding for tenured professors at Universities to the potential purchase of major newspapers.



10 http://www.exxonmobil.com/Corporate/files/Corporate/community_ccr_2007.pdf page 39 under heading "public policy research contributions".

















Perhaps most significantly, the Koch brothers set up Americans for Prosperity (with the tobacco industry – see The roots of climate denial), that masterminded the so-called grassroots "Tea Party" movement that has helped bring widespread climate denial into the heart of US republican politics.

Donors Trust & Donors Capital: The ATM of Climate Denial

In 2007, after <u>Greenpeace attempted</u>¹¹ to get a Vermont Court to release a list of clients funding climate denier <u>Patrick Michaels'</u> company, "New Hope,' the long-time denier made this comment in his [successful] affadavit¹² opposing the Greenpeace application:

"Large companies are understandably adverse to negative publicity. Thus, the global warming controversy has created an environment in which companies who wish to support New Hope's research and advocacy about global warming science are increasingly willing to do so only if their support remains confidential. For this reason, some companies that support New Hope financially do so on the understanding that their support will not be made public."

Only recently have the efforts of these big funders to hide that they're spending money on climate denial come to light. In January 2012, a detailed study of Heartland Institute and other think tanks found connections with two donor advised funds based in Alexandria, Virginia: Donors Trust and Donors Capital Fund, set up in 2002.¹³

After a climate scientist duped Heartland Institute into revealing its funders and plans in early 2012 (See case study, Part 2), one of the discoveries was a large anonymous donor. The detailed study plus newly-revealed internal plans were then combined to show Barre Seid¹⁴ as the major Heartland funder, using Donors.

Between them, from 2002 to 2011, Donors Trust and Donors Capital Fund provided \$146 million to more than 100 groups, most of them running climate denial campaigns and many of them active in climate denial since the 1990s.

The Koch Brothers and wealthy businessmen such as billionaire Barre Seid have funneled money through these trusts, on whose boards sit well-known players in the climate denial campaign. It's not just climate denial, but they also fight health care and other issues that could curtail corporate profit, under the banner of "freedom from Big Government".

In October 2012, PBS/Frontline's "Climate of Doubt" briefly mentioned Donors¹⁵.

In February 2013, <u>The Guardian exposed</u> these two organisations, ¹⁶ based on a <u>Greenpeace investigation</u> ¹⁷ on the Polluterwatch.com website and <u>first outlined</u> ¹⁸ on DeSmogBlog in 2012. Donors Trust and Donors Capital Fund don't reveal who their funders are, advertizing and guaranteeing anonymity for their donors, thus shielding the funders themselves from public anger.

Further stories revealed it wasn't just secret funders in the US financing climate denial – there was a <u>network</u> of wealthy <u>businesspeople</u> in the UK¹⁹ doing the same especially with the <u>Global Warming Policy Foundation</u> (GWPF), well-linked with related entities in the US and Canada.²⁰

- 11 http://www.greenpeace.org/usa/en/news-and-blogs/campaign-blog/rep-waxman-presses-for-inquiry-on-global-warm/blog/32679/
- 12 http://www.sourcewatch.org/images/7/74/GreenMtDoc521.pdf
- $13 \ \underline{\text{http://www.desmogblog.com/fake-science-fakexperts-funny-finances-free-tax}} \ Appendix \ I.$
- 14 http://www.desmogblog.com/2012/10/23/fakery-2-more-funny-finances-free-tax Appendix H.1.4-1
- 15 http://www.pbs.org/wgbh/pages/frontline/climate-of-doubt/ 47:00-48:33
- 16 http://www.theguardian.com/environment/2013/feb/14/funding-climate-change-denial-thinktanks-network
- 17 http://www.greenpeace.org/usa/Global/usa/planet3/PDFs/DonorsTrust.pdf
- 18 http://desmogblog.com/2012/10/25/key-findings-mashey-report-donors-trust
- 19 http://www.theguardian.com/environment/2013/feb/15/secret-funding-climate-sceptics-not-restricted-us
- 20 http://www.desmogblog.com/foia-facts-5-finds-friends-gwpf

















The Players

Climate denial's "continental army"

"There's really only about 25 of us doing this. A core group of skeptics. It's a ragtag bunch, very Continental Army."

-Steve Milloy talking to Popular Science, June, 201221.

The organizations funded by Exxon, the Kochs, Donors Trust and others support a central team of spokespeople and strategists who set out to misinform the world and deny the science of climate change. Their names frequently appear in the media challenging the science of global warming: Fred Singer, Sallie Baliunas, Willie Soon, Richard Lindzen, Patrick Michaels, Steve Milloy and many others.

Many forged a career out of denying environmental problems before climate change became a public policy issue. Together, they form a network that is still, 25 years later, challenging the climate science, no matter how much more work and how many thousands of scientific papers have been written since.



Steve Milloy

Although widely discredited, many of these same, media-savvy individuals continue to pollute the airways and travel all over the world casting doubt on well-established scientific facts.

Steve "The Junkman" Milloy, is the man who launched his corporate science denial career with The Advancement of Sound Science Coalition, a Phillip Morris-funded front group formed to fend off the growing scientific consensus of the links between secondhand tobacco smoke and health problems. But today there are many more such celebrity deniers.

We have attempted to identify "continental army" — Appendix I page 61 for the list of around 30 of the key players in the more than 20 year campaign and links to their updated profiles on_ <u>DeSmogBlog.com</u> or <u>Polluterwatch.com</u>

The think tanks

The denial machine today is run by a network of free market think thanks, largely based in the US, but with outposts around the globe.

In Part 2 of this report, we case study The Heartland Institute as an example of how these think tanks and front groups continue to operate with their corporate cash.

In Appendix II we set out a list of the free market think tanks currently being funded by Donors Trust and Donors Capital Fund, and a tally of ExxonMobil's funding. We have a full breakdown of the ExxonMobil funding and a pdf of Donors funding.

Another set of these groups could be seen in the membership of a coalition that has been around since the late 90's, set up and run by the Competitive Enterprise Institute, the Cooler Heads Coalition.

















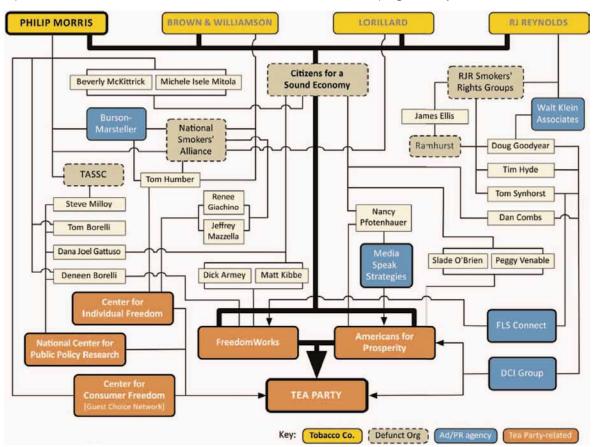
The roots of climate denial: borne out of Big Tobacco anti science campaigns

The fossil fuel companies were not the original architects of the blueprint for deflecting blame and denying responsibility

In March 2013 an academic study published in the journal Tobacco Control and funded by the National Cancer Institute at the National Council of Health <u>found</u> that the notorious US "grassroots" organisation at the centre of today's climate denial campaign and dysfunctional political system, the Tea Party, was started in 2002 by front groups closely who had been associated with – and funded – by Big Tobacco and the Koch Brothers since the early 1980's.

The reason? Big Tobacco was looking for support in its fight to stop regulation on secondhand smoke. This diagram from the study shows the web of groups set up by the tobacco industry and their staff people, many of whom ended up working for think thanks and front groups around today.

One key group set up by Phillip Morris and its PR firms APCO and Burson Marsteller was The Advancement of Sound Science Coalition (TASSC), set up in 1993 to "promote sound science". Steve Milloy, hired by Phillip Morris at TASSC in 1997, is still involved in climate denial campaigns today.



Caption: From Big Tobacco to the tea party. <u>Source:</u> 'To quarterback behind the scenes, third-party efforts: the tobacco industry and the Tea party'²²

Further investigation has revealed more links between Big Tobacco to climate denial than even this study showed.

















Take the efforts of Tom Borelli, who worked at Philip Morris throughout the 90's and into the 2000's, when he took up a job as a coal lobbyist at FreedomWorks. (CSE later split into two groups: Freedomworks and the Koch-funded Americans for Prosperity).

In the early 1990's, big tobacco had taken a major hit and its credibility was low. But the issue of second-hand smoke was hot and smoking bans were being actively discussed across the US: a major threat to the tobacco industry. Phillip Morris and its PR company APCO were setting up The Advancement of Sound Science Coalition in Europe.

One of the objectives suggested <u>in a memo</u> from APCO to Philip Morris's man in Europe, Matt Winakur, was to link tobacco science to more "politically correct" issues, such as global warming, to make the tobacco science look more mainstream.

The TASSC's draft "scientific principles" were "too vague", so APCO got Borelli to <u>"review and tighten"</u> them. As Borelli confirmed to his boss: "The principals [sic] are intended to be a basis for policymakers to evaluate scientific studies. The principles will also serve as a foundation for state legislative criteria to review the scientific basis for new regulations."

Climate and secondhandsmoke science denier Patrick Michaels pitched in to help with the final draft.

Borelli went on to set up both funding and PR links with the George C Marshall Institute and the Competitive Enterprise Institute for their reports and work on challenging the science of climate change.

















THE HISTORY OF ATTACKS ON THE IPCC

1990—The IPCC's First Assessment Report

During the final drafting of the <u>IPCC's First Scientific Assessment Report</u> in 1990, <u>Brian Flannery</u>, Exxon's Chief Scientific Advisor and climate lobbyist, took issue with the recommendation for 60 to 80 percent cuts in CO₂ emissions, in light of what he suggested were "uncertainties" about the behavior of carbon in the climate system.²³ (In keeping with UN rules, the IPCC grants industry association members like ExxonMobil "observer status" at its meetings, along with NGO's).

Although the consensus of opinion remained against him, Flannery continued to demand that the IPCC report's Executive Summary state that the range of model results were "quite scientifically uncertain"²⁴. He was unsuccessful: the summary concluded that greenhouse gas emissions at present rates would **certainly** lead to warming²⁵.

This statement made the IPCC report a direct threat to business as usual in the fossil fuel sector. Having failed to derail the IPCC from within, industry set out to discredit it. The attack focused on the IPCC's statement that it was "certain".

In February 1992, at a press conference in New York during the negotiations that led to the UN Framework Convention on Climate Change (UNFCCC), the GCC used Fred Singer to attack the IPCC science, <u>issuing a briefing</u> entitled "Stabilizing carbon dioxide emissions would have little environmental benefit," ²⁶ in which it cited denier <u>Professor Richard Lindzen</u> of the Massachusetts Institute of Technology

Singer is a <u>serial denier</u> and has published little, if any, peer reviewed climate science in the last 20 years.²⁷ He has <u>spoken out</u> as a scientific expert on subjects including secondhand smoke, acid rain, ozone depletion, nuclear energy, pesticides, and the environmental impacts of nuclear war. ²⁸ (see Appendix I: Climate denial's "continental army").

Throughout 1992 the GCC used well-known climate deniers like Patrick Michaels, Robert Balling²⁹ and Fred Singer (all of whom have been partly funded by either Exxon or other energy companies at one time or another) as 'experts' at press conferences in its attempts to undermine the credibility of accepted climate science and the findings of the IPCC.³⁰

The same year, Exxon's Flannery was quoted by the World Coal Institute in a briefing for climate negotiators: "because model-based projections are controversial, uncertain, and without confirmation, scientists are divided in their opinion about the likelihood and consequences of climate change."³¹

In 1994 The GCC continued the attack on the IPCC when it <u>hired a public relations firm</u> to take climate denier Dr. Sallie Baliunas³² on a media tour.



Patrick Michaels

- 23 Jeremy Leggett, The Carbon War: Global Warming and the End of the Oil Era (Routledge879, 2000), 2-3.
- 24 Jeremy Leggett, The Carbon War: Global Warming and the End of the Oil Era (Routledge879, 2000), page 3.
- 25 http://www.viswiki.com/en/IPCC_First_Assessment_Report
- 26 Jeremy Leggett, "A Catalogue of Carbon Club Manipulation, Distortion, Sabotage or Lying at the
- Climate Negotiations," available at http://www.guardian.co.uk/commentisfree/2006/apr/25/exxonmobilslonglivedemulatio
- 27 http://research.greenpeaceusa.org/?a=view&d=3164
- 28 http://research.greenpeaceusa.org/?a=view&d=3971
- 29 http://www.desmogblog.com/more-bumpf-on-balling and http://www.sourcewatch.org/index.php?title=Robert_C._Balling
- 30 See e.g. GCC press release: 'World's Energy Policy Should Not be Based on Feelings,' 27 February 1992. Held on file by Greenpeace US Research Unit.
- 31 "Ecoal," World Coal Institute briefing no. 7, INC 5, New York, April 1992.
- 32 http://www.desmogblog.com/sallie-baliunas ExxonSecrets map of her affiliations: http://www.exxonsecrets.org/index. php?mapid=1526

















Baliunas is an expert in astrophysics, not climate. She built her denial career downplaying the significance of the destruction of the ozone layer, publishing a report entitled "The Ozone Crisis" in 1994 for the George C Marshall Institute³³. Baliunas was, at the time, the chair of its Marshall Institute's Science Advisory Board while while its Board was chaired by pro-tobacco campaigner, now deceased Fred Seitz³⁴ (see Appendix I).

By the late-90's the GCC started to draw heavy criticism, and leading members like Ford Motor Company quit the coalition and distanced themselves from its agenda. It was at this point that companies like Exxon and Mobil (who eventually merge in 1999) turned to front groups and conservative think tanks that could continue the campaign on their behalf following the same evolution of tobacco companies in moving from obvious industry collectives to "independent" front groups.

1995 The Second Assessment Report (SAR)

When the IPCC released its Second Assessment Report (SAR) in 1995, it met a similarly aggressive response. Among the <u>key findings</u> of the IPCC was the acknowledgement of a "discernable" human impact on climate and a prediction that sea levels could rise 15 to 95 cm by 2100, in line with temperature increases ranging from 1 °C to 3.5 °C (1.8 °F to 6.5 °F)³⁵.

The SAR's Summary for Policymakers contained the conclusion that, "The balance of evidence suggests a discernible human influence on global climate." That one sentence set the deniers on fire. One called it the "most disturbing corruption of the peer-review process in 60 years." ³⁶

Charles DiBona, president of the American Petroleum Institute, called the report "inflammatory" ³⁷, while oil-producing countries such as Kuwait and Saudi Arabia tried to delay the report's release because of this "strong language", and argued against the use of the words "appreciable," "notable," "measurable," and "detectable" in place of "discernable." ³⁸

The attacks weren't restricted to the science or the report. In a sign of desperation, the deniers turned to ad hominem attacks on key scientists were added as part of an escalating strategy of increasingly underhanded and dirty tricks, a strategy that continues to this day (See case study, Part 2).

The GCC co-ordinated vicious personal attacks on Dr. Ben Santer, one of the key authors of the report. The aim was to discredit the process by which the IPCC worked. This began a campaign of attacks on scientists that continues to this day, some examples of which are outlined in Part 2 of this report.

<u>Fred Singer</u> meanwhile used the 1997 climate negotiations to launch an attack on the chair of the IPCC, Bert Bolin. Following a debate at the talks, Singer <u>fabricated quotes</u> from Bolin, attempting to suggest that he had changed his mind about climate change, saying: "Bolin remained adamant that there has been some human influence on climate, but conceded that "man-made increases in temperature are so small as to be barely detectable."³⁹

³³ The Ozone Crisis - http://www.atmos.washington.edu/~davidc/ATMS211/articles_optional/Baliunas94_ozone.pdf

³⁴ http://tobaccodocuments.org/pm/2023266534.html

³⁵ IPCC Summary for Policy Makers, Second Assessment Report http://www1.ipcc.ch/pdf/climate-changes-1995/spm-science-of-climate-changes.pdf

³⁶ Fred Pearce, "Climate change special: State of denial." New Scientist, November 4, 2006. http://www.newscientist.com/article/mg19225765.000-climate-change-special-state-of-denial.html (paywalled)

^{37 &}quot;Petroleum Group Disputes that Burning Fossil Fuels Warms Planet," Thomson Energy Report, 18 March 1996.

³⁸ ibid

³⁹ SEPP press release 23 June 1997 http://bit.ly/13X2TF6

















Bolin, the chair of both the World Meteorological Organization and the IPCC for nine years, was forced to release a press statement politely rejecting the allegations as "inaccurate and misleading". He said:

"Regarding Singer's self-congratulatory statement that the 'discussion appeared to go decidedly against Dr. Bolin's IPCC position,' I had rather the impression that Dr. Singer's views did not convince those present."40

"I find it most annoying that the account of the meeting in Stockholm has been presented in such a biased manner."41

1998: the American Petroleum Institute's secret plan

In early 1998, a small group sat down together at the American Petroleum Institute⁴² in the US to draw up a communications plan to challenge climate science. The group included representatives from Exxon, Chevron, Southern Company (a large US coal-burning utility), the American Petroleum Institute and people from a number of the front groups and conservative think tanks that are still campaigning against climate science today, including the George C Marshall Institute, Frontiers of Freedom, The Advancement of Sound Science Coalition and the Committee for a Constructive Tomorrow. All have received long-term funding from ExxonMobil and other big polluters⁴³.

The plan they drew up44 proposed:

"a national media relations programme to inform the media about uncertainties in climate science; to generate national, regional and local media on the scientific uncertainties and thereby educate and inform the public, stimulating them to raise questions with policymakers."

The plan would roll out up to and beyond the UNFCCC meeting (COP4) later that year in Buenos Aires. The plan's milestones were:

"Victory will be achieved when

- Average citizens understand (recognize) uncertainties in climate science; recognition of uncertainties becomes part of the 'conventional wisdom'
- Media "understands" (recognizes) uncertainties in climate science
- Those promoting the Kyoto treaty on the basis of extant science appear to be out of touch with reality."⁴⁵

Part of the strategy was to co-ordinate "a complete scientific critique of the IPCC research and its conclusions" and to enable decision makers to raise 'such serious questions about the Kyoto treaty's scientific underpinnings that American policy makers not only will refuse to endorse it, they will seek to prevent progress towards implementation at the Buenos Aires meeting in November, or through other ways" 46

⁴⁰ IPCC press release, GENEVA, 26 JUNE 1997, Climate Change: IPCC Chair Denies Attack on VP Gore, Environmentalists – available at http://www.heatisonline.org/contentserver/objecthandlers/index.cfm?id=3641&method=full

⁴¹ Ihid

⁴² http://www.exxonsecrets.org/html/orgfactsheet.php?id=11

⁴³ list of organizations here http://www.exxonsecrets.org/html/listorganizations.php – click on each to find separate list of ExxonMobil funding, and links to Exxon documents showing that finding.

⁴⁴ Memo about Global Science Communications Action plan, from Joe Walker, American Petroleum Institute, April 1998 http://research.greenpeaceusa.org/?a=view&d=4383

⁴⁵ ibid page 2

⁴⁶ Ibid, page 4

















This would be achieved by recruiting and training five 'independent' scientists – 'new faces... without a long history of visibility in the climate debate' to participate in media outreach. The API aimed to 'maximize the impact of scientific views consistent with ours, with Congress, the media and other key audiences' and admitted shamelessly that it would target teachers and students, in order to 'begin to erect a barrier against further efforts to impose Kyoto-like measures in the future.'47

Though this plan ended up being revealed on the front page of the New York Times, it is assumed that ExxonMobil and others went ahead with essentially the same game plan starting in 1998. The education section of it was taken up by various groups including the American Legislative Exchange Council (ALEC) – see part II of this report.

2001 – The Third Assessment Report (TAR)

In its <u>Third Assessment Report</u> released in 2001, the IPCC reported the consensus view on climate change, including these key findings:

"Globally, it is very likely that the 1990s was the warmest decade and 1998 the warmest year in the instrumental record, (1861–2000)⁴⁸" and

"[M]ost of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations⁴⁹" and

"Emissions of CO_2 due to fossil fuel burning are virtually certain to be the dominant influence on the trends in atmospheric CO_2 concentration during the 21st century⁵⁰."

As with the first Assessment Report, the IPCC had to contend with the fossil fuel lobby even as it was being written. In September 2001, the IPCC met in London to reach agreement on the final chapter and summary of the TAR. The IPCC's draft final report contained the following line: "The Earth's climate system has demonstrably changed on both global and regional scales since the pre-industrial era, with some of these changes attributable to human activities⁵¹."

At this meeting, ExxonMobil's Brian Flannery suggested an amendment deleting the clause: "with some of these changes attributable to human activities." The IPCC ignored Exxon and kept the clause ⁵².

American Petroleum Institute – contracted analysis of TAR

In the summer of 2001, prior to the release of the IPCC TAR working group reports, the American Petroleum Institute distributed an <u>internal memo</u>⁵³, authored by oil industry employee Lenny Bernstein that laid out the industry's primary talking points for attacking the conclusions of the international science body.

<u>Bernstein</u>⁵⁴ was well positioned to critique the Third Assessment Report, given that he was one of its lead authors. His analysis coached the API membership on how to attack the IPCC report, laying out many of the arguments that have been repeated since by deniers, industry and the Bush administration.

⁴⁷ ibid page 7

⁴⁸ IPCC Third Assessment Report Summary for policymakers page 4 http://www.grida.no/publications/other/ipcc_tar/

⁴⁹ IPCC Third Assessment Report Working Group 1 Summary for Policymakers page 10 http://www.grida.no/publications/other/ ipcc_tar/

⁵⁰ ibid page 12

⁵¹ IPCC Third Assessment Report Summary for policymakers page 3 http://www.grida.no/publications/other/ipcc_tar/

⁵² Report from Greenpeace participant at the meeting.

 $[\]underline{\text{http://georgewbush-whitehouse.archives.gov/ceq/foia_extreme.html}}\ \ \underline{\text{document entitled "extreme_weather_ceq_10.pdf"}}$

⁵⁴ http://www.exxonsecrets.org/html/personfactsheet.php?id=1012

















"The IPCC itself is made up of government representatives... The Summary for Policymakers... have a much more political flavour," he wrote. Never mind that the SPM is agreed by a consensus process that produces a very conservative outcome.

Above all, Bernstein stressed the "uncertainty" argument, asserting that climate deniers can maintain the appearance of an unsettled 'debate' on climate science by repeatedly referencing the 'considerable uncertainties' involved in this 'complex' area of study.

Bernstein <u>instructed the oil industry</u> to point out the "beneficial effects" of increasing CO₂ concentrations and rising temperatures, which have led to "longer growing seasons in Europe⁵⁵" and could "help feed a growing world population⁵⁶."

American Enterprise Institute attacks the TAR

In a now common tactic, early copies of the IPCC Third Assessment Report (TAR) were leaked long before they were finalized and published, creating an opportunity for an early counterattack by the denial industry. Kenneth Green at the American Enterprise Institute for Public Policy Research's⁵⁷ (\$3.615 million from ExxonMobil since 1998⁵⁸) was central to this strategy. Green wrote several articles over the year before the TAR was released, attacking the models and labeling the process political.⁵⁹

He <u>wrote in 2001</u> that "IPCC, a political organization, produces the policy guidance documents that dominate international policy discussions. The reports of the IPCC are portrayed as scientific documents. Yet IPCC reports are outlined by governmental representatives ... The process departs dramatically from standard scientific methodology and publishing procedures. Document architects only selectively include relevant studies. The peer review process is, at best, a fig leaf."⁶⁰

Green called the Summary for Policymakers a "derivative document" which condenses and expresses IPCC findings "in a language suitable for moderately educated readers." 61

Writing in his role as Director of Environmental Programs for another front group, the Reason Public Policy Institute⁶², Green summarized the key deniers' strategy to attack the IPCC in an October 2000 briefing report:⁶³ – attack the models, attack the objectivity, claim that the IPCC is "political" rather than "scientific, attack the data and attack the scientists.

⁵⁵ http://georgewbush-whitehouse.archives.gov/ceq/foia_extreme.html document entitled "extreme_weather_ceq_10.pdf" page 23

⁵⁶ http://georgewbush-whitehouse.archives.gov/ceq/foia_extreme.html document entitled "extreme_weather_ceq_10.pdf" page 2

⁵⁷ http://www.exxonsecrets.org/html/orgfactsheet.php?id=9

⁵⁸ http://www.exxonsecrets.org/html/orgfactsheet.php?id=9

⁵⁹ Kenneth Green, "Politics foils objective U.N. Climate Change Report – again," Tech Central Station, February 26, 2001. http://www.tcsdaily.com/printArticle.aspx?ID=022601F

⁶⁰ Kenneth Green, "Science Matters – Even for the Environment," Tech Central Station, February 5, 2001. http://www.ideasinactiontv.com/tcs_daily/2001/02/science-matters—even-for-the-environment.html

⁶¹ Kenneth Green, "Mopping up After a Leak: Setting the Record Straight on the "New" Findings of the Intergovernmental Panel on Climate Change (IPCC)," Reason Public Policy Institute, October 29 2000. http://www.rppi.org/ebrief105.html

⁶² Reason public policy institute and its sister organization Reason Foundation – details here http://www.exxonsecrets.org/html/ orgfactsheet.php?id=63

⁶³ Kenneth Green, "Mopping up After a Leak: Setting the Record Straight on the "New" Findings of the Intergovernmental Panel on Climate Change (IPCC)," Reason Public Policy Institute, October 29 2000. http://reason.org/news/show/e-brief-105

















Myron Ebell

<u>Green,</u> a visiting scholar at AEI, was a contributing author on Tech Central Station (\$95,000 from Exxon since 1998), but set up by Exxon's PR firm, DCI⁶⁴, the Executive Director of the Environmental Literacy Council, a group heavily funded by oil and other extractive industries⁶⁵ to infuse industry propaganda into classrooms), Chief Scientist at the <u>Fraser Institute</u>⁶⁶ (\$120,000 from Exxon since 2003) and Director of the Environmental Program at Reason Public Policy Institute. See <u>map</u>.

Green, is a widely-quoted 'independent' source on climate and energy in Washington.

More long time deniers attack the TAR

Green's attack blueprint was echoed by deniers in – and outside – the media.

"The Summary for Policymakers... represents a consensus of government representatives (many of whom are also their nations' Kyoto representatives), rather than of scientists. The resulting document has a strong tendency to disguise uncertainty, and conjures up some scary scenarios for which there is no evidence."— Richard Lindzen, op-ed, The Wall Street Journal, June 11, 2001.⁶⁷

The release of the Summary for Policy Makers "has everything to do with political spin and very little to do with climate science," said Myron Ebell, who runs the global warming program at the Competitive Enterprise Institute.

The 18-page summary, said Ebell, "is not a fair or accurate summary of the IPCC's full Third Assessment Report, which is over 1,000 pages long and which has not yet been released in final form." 68

2007 - the Fourth Assessment Report (AR4)

At the end of 2007, the IPCC released the final document in its fourth assessment (AR4): the <u>Synthesis</u> <u>report</u>. It confirmed and built on the previous reports, saying that the warming of the earth's climate systems was now "unequivocal"

"Most of the observed increase in global average temperatures since the mid-20th century is **very likely** due to the observed increase in anthropogenic GHG concentrations. It is likely that there has been significant anthropogenic warming over the past 50 years averaged over each continent (except Antarctica)⁷⁰.

It also noted:

"There is **high agreement** and **much evidence** that with current climate change mitigation policies and related sustainable development practices, global GHG emissions will continue to grow over the next few decades⁷¹."

It also outlined and updated its "reasons for concern⁷²" on the vulnerability of ecosystems to survive climate change, risks of extreme weather events, costs of impacts and sea level rise.

⁶⁴ http://www.exxonsecrets.org/html/orgfactsheet.php?id=112

⁶⁵ Funders List at http://www.enviroliteracy.org/article.php/701.html (API, Koch, XOM, GE, Georgia Pacific, International Paper, Weyerhaeuser, etc.) Reference now removed from that website

⁶⁶ http://www.exxonsecrets.org/html/orgfactsheet.php?id=107

http://www.desmogblog.com/fraser-institute-keeping-bad-company

http://sourcewatch.org/index.php?title=Fraser_Institute

⁶⁷ http://eaps.mit.edu/faculty/lindzen/OpEds/LindzenWSJ.pdf

⁶⁸ Latest IPCC Summary Politics, not Science, Says Analyst," THE ELECTRICITY DAILY, January 25, 2001

⁶⁹ IPCC AR4 Summary for Policymakers page 2. http://bit.ly/IZwL4

⁷⁰ ibid page 5

⁷¹ ibid page 7

⁷² ibid page 19

















Willie Soon's pre-emptive attack on the AR4 report

In 2003, as the IPCC was beginning its process, setting up its meetings to outline the chapters of the AR4, then Marshall Institute "senior scientist" Willie Soon⁷³ (employed at Harvard-*Smithsonian* Center for *Astrophysics*), was already on their case. He wrote to⁷⁴ several other career climate deniers, including Sallie Baliunas and Delaware climatologist David Legates, and two ExxonMobil employees and collaborators, to work out what they could do to undermine the report.

"I hope we can start discussing among ourselves to see what we can do to weaken the fourth assessment report or to re-direct attention back to science," he wrote.

It's worth noting here that while deniers try to argue that the science is wrong, that they are just questioning the science and NOT being political, in this case the AR4 report had yet to be written when the deniers were already conspiring to take it down.

The American Enterprise Institute Offers Cash To Trash IPCC

In July 2006, six months ahead of the AR4 release, American Enterprise Institute climate deniers were gathering forces to undermine it. In a <u>letter</u>⁷⁵ leaked to the <u>media</u>⁷⁶ the AEI was looking for accredited scientists who might be willing to "review" the upcoming Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change.⁷⁷

But their "review" had a pre-determined outcome. The AEI hoped to find a scientist – at a rate as high as \$10,000 for 10,000 words – whose review "thoughtfully explores the limitations of climate model outputs as they pertain to the development of climate policy."

The idea behind the recruitment drive seems to have been an effort to find academic scientists with a low-profile or non-existent record of talking to the press about global warming. That way, the AEI would be able to use an "unblemished" critic's credentials to support their arguments.

The story <u>hit the media</u> at the time of the AR4's first report release, in February 2007 ⁷⁸. Professor Steve Schroeder of Texas A&M University turned down the offer. He told the <u>Washington Post</u> ⁷⁹ that he "worried his contribution might have been published alongside 'off-the-wall ideas' questioning the existence of global warming."

The letter's authors were the AEI's chief climate lobbyists <u>Kenneth Green</u>⁸⁰ and <u>Steven F Hayward</u>⁸¹. Both have a long history of connections with a number of the front groups funded by industry. Hayward <u>is a Director</u> of Donors Capital Fund.⁸²

- 73 See Appendix I
- 74 http://bit.ly/19ur164 Greenpeace case study, Dr. Willie Soon, a Career Fueled by Big Oil and Coal
- 75 http://www.desmogblog.com/sites/beta.desmogblog.com/files/AEI.pdf
- 76 DeSmog Blog, AEI Seeks Scientists for Sale: \$10,000 to First Taker, Nov 9, 2006. http://www.desmogblog.com/aei-want-ad-seeks-scientists-for-sale-10-000-to-first-taker
- 77 Ibid (3).
- 78 http://environment.guardian.co.uk/climatechange/story/0,,2004397,00.html
- 79 http://www.washingtonpost.com/wp-dyn/content/article/2007/02/04/AR2007020401213.html
- 80 http://www.exxonsecrets.org/html/personfactsheet.php?id=511
- 81 see Appendix I page 61
- 82 http://www.donorscapitalfund.org/AboutUs/DirectorsOfficers.aspx

















Launch of the denier's 'independent' assessment

Three days after the first of the AR4's four reports was released in Paris in 2006, the Fraser Institute, a Canadian think tank, held a press conference in London, headed by its senior fellow, economist Ross McKitrick⁸³.

The Fraser Institute released its "Independent scientific assessment", a document whose layout bears a remarkable similarity to the IPCC documents. The Institute questions the models, and questions the conclusions of the IPC. The document, written mostly by S Fred Singer, was later to be called the "NIPCC" and taken up by the Heartland Institute (See case study, Part 2).

Unlike the IPCC, which receives funding only from the UN system and relies almost totally on voluntary input from the majority of those who work on it. The Fraser Institute's team of <u>"experts"</u> included several paid scientists with direct connections with industry front groups and conservative think tanks, none of whom appear to have published any peer-reviewed articles on global warming⁸⁴

...And the usual suspects join in

The AR4 flushed out the <u>denial "A list"</u> who have been campaigning to undermine the science of climate change since the early 1990's. Ardent attacks materialized from Fred Singer⁸⁵, Richard Lindzen, Patrick Michaels and <u>William O'Keefe</u> and organisations like the George C Marshall Institute, the Cato Institute (a think tank <u>founded by the Koch Brothers</u> and the Competitive Enterprise Institute.

S Fred Singer attacked the models, and the politics in an article in the New York Sun⁸⁶.

The Competitive Enterprise Institute returned to another familiar theme:

"The Summary for Policymakers is designed to be a propaganda document that will promote global warming alarmism. It is not written by the scientists who wrote the report, but by the governments that belong to the IPCC87," stated Marlo Lewis, a CEI lobbyist88.

The CEI had clearly been planning for the AR4 for some time. One of its key deniers, "senior fellow" and attorney Christopher Horner⁸⁹ (not a climate scientist), releasing his new book, "The Politically Incorrect Guide to Global Warming and Environmentalism" – an all out attack on climate science – at a <u>special event</u> at the Heritage Foundation on 15 February 2007,⁹⁰ halfway throughout the year of AR4 chapter releases.

See more of this story, "NIPCC: Climate change reconsidered" on The NIPCC – or "Climate Change Reconsidered" – or "Not the IPCC" under our Heartland Institute case study in Part 2 of this report.



Fred Singer

- 83 http://www.desmogblog.com/ross-mckitrick
- 84 http://www.realclimate.org/index.php/archives/2007/02/fraser-institute-fires-off-a-damp-squib/
- 85 See Appendix I page 61
- 86 "Not so dire after all" Op Ed, New York Sun, Feb 2 2007 page 8 http://www.nysun.com/opinion/not-so-dire-after-all/47920/
- 87 http://cei.org/gencon/003,05741.cfm
- 88 See Appendix I page 61
- 89 ibid
- 90 http://www.heritage.org/press/events/ev021507b.cfm

















Climategate: No Scandal behind these gates (updated 2013)

"The very fact that Climategate was newsworthy is evidence that reporters hold scientists to a much higher standard than they hold denialists, even if they won't admit it in their quest to report a controversy."—Mark Boslough⁹¹—Physicist at Sandia National Laboratories

In late 2009, just ahead of the crucial Copenhagen climate talks, hacked emails from the University of East Anglia's Climatic Research Unit (CRU) surfaced on the internet. These sparked a succession of climate stories that found willing homes in the media, with the UK media providing the staging ground. The denial machine repeated and publicized a succession of non-stories dug up in the stolen emails, convinced that they had found evidence of either global conspiracy or scientific failure.

As this <u>video</u>⁹² explains, nothing in the emails stolen from the CRU did anything to call into question any climate science. That didn't stop deniers alleging that the whole edifice of climate science was crashing down, they also claimed the leaks had brought to light a conspiracy of truly epic proportions – claims that some of the media were all too willing to repeat.

A total of nine investigations have now exonerated the scientists named in the so-called Climategate "scandal". Skeptical Science has the list.

Even the deniers themselves admitted that the hacked emails didn't bring the large body of climate science into doubt. When <u>questioned</u> by the UK House of Lords Science and Technology Committee on 1 March 2010⁹³, climate deniers <u>Lord Nigel Lawson</u> and <u>Benny Peiser</u>, of the newly-formed UK front group, the <u>Global Warming Policy Foundation</u>⁹⁴ both admitted that, at worst, <u>the emails revealed a problem</u> with the CRU's process, but didn't actually unravel any of the climate science.⁹⁵

Neither Peiser nor Lawson are climate scientists, something Peiser admitted to the Committee, yet they continued to use the emails to undermine the climate scientific consensus. Bob Ward of the London School of Economics pointed out an error on the foundation's website in a graph of 21st century temperature, but was never corrected.

"While it is a relatively small error, it is the kind of discrepancy that many sceptics would be seizing upon if it had been found on the website of the Climatic Research Unit" wrote Ward in a blog on the Guardian website⁹⁶.

On another occasion, former IPCC working group chair, Sir John Houghton, was misquoted by Benny Peiser in The Observer⁹⁷, who claimed Houghton had said: "Unless we announce disasters no one will listen." "[He] thereby attributed to me and the IPCC an attitude of hype and exaggeration. That quote from me is without foundation. I have never said it or written it," Houghton told the Observer⁹⁸.

⁹¹ http://www.csicop.org/si/show/mann_bites_dog_why_climategate_was_newsworthy/

⁹² http://www.youtube.com/watch?v=7nnVQ2fROOg&feature=player_embedded

^{93 &}lt;a href="http://www.parliament.uk/parliamentary_committees/science_technology/s_t_cru_inquiry.cfm">http://www.parliament.uk/parliamentary_committees/science_technology/s_t_cru_inquiry.cfm response to Q24: "Dr Peiser: Personally I do not think that the disclosure of these emails makes a big difference to the overall scientific debate..."

⁹⁴ both from the UK front group the Global Warming Policy Foundation – they refused to disclose their funding to the select committee. http://sourcewatch.org/index.php?title=Global_Warming_Policy_Foundation

⁹⁵ http://www.publications.parliament.uk/pa/cm200910/cmselect/cmsctech/uc387-i/uc38702.htm

⁹⁶ http://www.guardian.co.uk/environment/2010/mar/05/global-warming-thinktank-double-standards

⁹⁷ http://www.guardian.co.uk/commentisfree/2010/feb/07/robin-mckie-benny-peiser-climate

⁹⁸ http://www.guardian.co.uk/theobserver/2010/feb/14/climate-change-scepticism-robin-mckie



















One of the scientists at the centre of the emails, <u>Michael Mann</u>, was repeatedly cleared of the deniers' accusation 'falsifying data". For example, one international investigation by Penn State University where he is the Director of the Earth System Science Center in the Meteorology Department, found:

"The <u>internal inquiry</u> has found that Mann did not "participate in, directly or indirectly, any actions with an intent to suppress or to falsify data." ⁹⁹

He was also cleared by the National Science Foundation (NSF).¹⁰⁰

But that hasn't stopped the deniers from constantly referring to Mann and the accusations in the emails. The accusations continue to this day, and Mann is still fending off attacks through Freedom of Information requests for his communications and in court (See Part 2 of this report).

IPCC references challenged

From the leaked emails, the deniers then moved on to link the CRU's problems to their favourite target, the IPCC. The UK media led the charge, fed by the now lively UK denial community.

The accusations centred around three different references in the IPCC. These points have been thoroughly rebutted by climate scientists on the "<u>RealClimate</u>" blog. ¹⁰¹ In summary, two errors were found in the IPCC report, the third allegation having been thoroughly discounted.

The 2800-page AR4 report contains around 18,000 references. The two incorrect references identified have rightfully pointed to a need for the IPCC to review the way its processes work, a review that the IPCC has announced it is undertaking.

The IPCC's decision to undertake an <u>independent review</u> into its processes¹⁰², was a welcome move, but, as UN Secretary General Ban Ki-moon said when he announced the review:

"Let me be clear: the threat posed by climate change is real. Nothing that has been alleged or revealed in the media recently alters the fundamental scientific consensus on climate change. Nor does it diminish the unique importance of the IPCC's work." 103

The hacked emails helped the denial machine launch an all-out campaign in the UK and revitalized the old guard in United States: Marc Morano of CFACT, Fox News, Rush Limbaugh, and Senate climate denier, Republican James Inhofe¹⁰⁴.

Inhofe has attempted to use the hacked emails and IPCC references to run 'McCarthy-style' 'criminal investigations' on a list of seventeen of the world's top climate scientists and lead authors in the IPCC. He used the (non) scandals to question not only the IPCC's conclusions, but also to challenge the scientific basis of proposed new US EPA rules regulating greenhouse gas emissions¹⁰⁵.



Marc Morano



James Inhofe

99 http://www.research.psu.edu/orp/Findings_Mann_Inquiry.pdf

¹⁰⁰ http://www.nsf.gov/oig/search/A09120086.pdf

¹⁰¹ http://www.realclimate.org/index.php/archives/2010/02/ipcc-errors-facts-and-spin/

¹⁰² http://www.un.org/News/briefings/docs//2010/100310_IAC.doc.htm

¹⁰³ http://www.unmultimedia.org/radio/english/detail/92042.html

¹⁰⁴ http://www.opensecrets.org/industries/summary.php?ind=E01&cycle=All&recipdetail=M&sortorder=U

¹⁰⁵ http://www.climatesciencewatch.org/index.php/csw/details/sen_inhofe_inquisition_seeking_to_criminalize_climate_scientists/

















On February 16, 2010, the Competitive Enterprise Institute, along with Fred Singer, filed a lawsuit to the US EPA, 106 demanding that, on the basis of the hacked emails and so called "flawed datasets", the EPA drop all its proposed regulation on CO_2 and other greenhouse gases. It didn't, but continues, more than three years later to finalized these rules against heavy industry obstruction and objection.

November 2011, "Climategate 2.0"

Despite this comprehensive trouncing of their claims, the deniers tried a second round, calling it "Climategate 2.0", released just ahead of the Durban climate talks.

More than 39,000 emails¹⁰⁷ to and from the University of East Anglia were released, again with phrases taken out of context in an attempt to challenge the way some of the world's best climate scientists undertook their work. This time, the scientists were ready and rallied to defend their work. The "scandal" quickly died away.

March 2013, Climategate 3.0

The final attempt to revive Climategate took place in March 2013, when a character called "Mr. FOIA" released the final tranche of the hacked emails. He also, for the first time, posted his thoughts online. CFACT's Ron Arnold has them here. If Climategate 2.0 had received little coverage, this third effort barely registered.

What happened to the investigation?

The identity of the team that controlled, coordinated and timed the email releases has yet to come to light – and is now unlikely to.

In 2009, when the first Climategate release was launched the UK's Norfolk Constabulary, the police force nearest to the Climatic Research Unit at the East Anglia University, took up the investigation. They failed to find any evidence of who stole the emails, who hacked the CRU server to get them – or who coordinated their release via a Russian web server.

In 2012 the Norfolk Constabulary <u>announced</u> that they had closed the case, unsolved. Senior investigating officer, Detective Superintendent Julian Gregory, said:

" "Despite detailed and comprehensive enquiries, supported by experts in this field, the complex nature of this investigation means that we do not have a realistic prospect of identifying the offender or offenders and launching criminal proceedings within the time constraints imposed by law. The international dimension of investigating the World Wide Web especially has proved extremely challenging.

"However, as a result of our enquiries, we can say that the data breach was the result of a sophisticated and carefully orchestrated attack on the CRU's data files, carried out remotely via the internet. The offenders used methods common in unlawful internet activity to obstruct enquiries."

However, the investigation appeared to have slowed down well before this announcement. A freedom of Information request in 2011 showed that the police had spent <u>a total of £5,649.09</u> on the case in the previous year, with the last record of spending being in February 2011.

















The AR5, fifth assessment report: The cherry-picking begins

The IPCC process requires that draft versions of the report are circulated to reviewers. These are clearly unfinished work product and not meant for distribution.

In December, 2012, the first of the denier leaks of the AR5 report was posted on the internet by a blogger. It was picked up by two mouthpieces of the denial machine, bloggers Anthony Watts and James Delingpole, who claimed one particular sentence was proof the IPCC had finally decided the sun was influencing global warming.

Blaming the sun is a favourite memes of denier arguments, fueled by astrophysicist Willie Soon, and one that has been thoroughly discounted. The AR5 leaked draft had itself discounted the notion, but the bloggers had cherrypicked to the extreme.

In short, the deniers leaked half a paragraph and portrayed it as a new conclusion, completely ignoring the subsequent sentence that specifically ruled out their claim.

Scientist Steve Sherwood told DeSmogBlog¹⁰⁸:



Anthony Watts

"The single sentence that this guy pulls out is simply paraphrasing an argument that has been put forward by a few controversial papers ... purporting significant cosmic-ray influences on climate. Its existence in the draft is proof that we considered all peer-reviewed literature, including potentially important papers that deviate from the herd. The rest of the paragraph from which he has lifted this sentence, however, goes on to show that subsequent peer-reviewed literature has discredited the assumptions and/or methodology of those papers, and failed to find any effect."

Who's an "expert reviewer"?

The IPCC process is very open. Anyone can register as a reviewer, and submit comments on the drafts. But only the denial machine mechanics use this as a way of beefing up their credentials. One prime example is <u>Lord Christopher Monckton</u>, who often claims this title of "expert reviewer". In late 2012 he <u>also claimed</u> the title of an "appointed" expert reviewer for the forthcoming AR5 report.

The IPCC clarified the situation:109

"Anyone can register as an expert reviewer on the open online registration systems set up by the working groups. All registrants that provide the information requested and confirm their scientific expertise via a self-declaration of expertise are accepted for participation in the review. They are invited to list publications, but that is not a requirement and the section can be left blank when registering. There is no appointment."



Christopher Monkton

















THE DENIAL MACHINE GOES GLOBAL

The climate denial industry has expanded out of its hub in the United States into the international arena over the past 20 years. It remains a largely English-speaking network, centred around the US, but has also spread further into key countries targeted by the deniers and think tanks.

Australia: A climate denial front 'down under'

With a massive coal and mining industry backing him, Australian Prime Minister John Howard's government was the perfect breeding ground for climate denial. This was recognised by the Competitive Enterprise Institute (CEI) in 1996, which began strategising to develop the Australian arm of their campaign.

In November 1996 a strategy meeting was held at the CEI in Washington that would begin to cement the cross-pollination of people and ideas between Australia and the US¹¹⁰. At the meeting, RJ Smith from the CEI argued that it was clear that "Australia if possible would be a key player in this", so the CEI decided to hold a conference¹¹¹.

The CEI¹¹² is a Libertarian anti-regulation "free market" think tank based in the USA. For many years it has attacked global warming science and received more than \$2 million in funding from Exxon since 1998. The CEI coordinates the "Cooler Heads Coalition" and the website http://www.globalwarming.org. It is perhaps best known for its bizarre "CO₂ is life" advertisements¹¹³ in 2006. Shortly after these ads, ExxonMobil dropped its funding, under pressure from, among others, the UK Royal Society¹¹⁴.

Interviewed by Bob Burton in 1997 Smith said: "Early last winter, right after Tim Wirth of the US State Department announced they were going to call for mandatory controls in Kyoto, we said what do we do? How do we stop this?" The CEI's RJ Smith met Ray Evans of Australia's Western Mining Corporation (WMC), and the two began planning.

They held a conference in Washington in 1997, and several key deniers were in attendance, along with the Australians. According to <u>PR Watch</u> it "offered blanket dismissals of the scientific evidence for climate change and predicted staggering economic costs for any policies aimed at restricting emissions¹¹⁶." Australian Embassy Chief of Mission Paul O'Sullivan, gave the address.

In August 1997, the CEI and the anti-regulatory organization, Frontiers of Freedom sponsored another Australian conference, this time in Canberra, along with the Australian and New Zealand Chambers of Commerce and the WMC. Ray Evans and WMC's Managing Director Hugh Morgan played a significant role at the conference, and attendees included the Australian Deputy Prime Minister Tim Fischer and Environment Minister Robert Hill. Fisher <u>claimed</u> that tough emission reduction targets could put 90,000 jobs at risk in Australia and cost more than \$150 million¹¹⁷.

¹¹⁰ B. Burton (1997) "WMC's Campaign to Scuttle Binding Targets", Mining Monitor, Vol.2(4), December 1997, p1

¹¹¹ B. Burton (1997) "WMC's Campaign to Scuttle Binding Targets", Mining Monitor, Vol.2(4), December 1997, p1

¹¹² http://www.exxonsecrets.org/html/orgfactsheet.php

¹¹³ https://www.youtube.com/watch?v=7sGKvDNdJNA

^{114 &}lt;a href="http://royalsociety.org/Report_WF.aspx?pageid=8256&terms=ExxonMobil">http://royalsociety.org/Report_WF.aspx?pageid=8256&terms=ExxonMobil and http://www.guardian.co.uk/environment/2006/sep/20/oilandpetrol.business

¹¹⁵ B. Burton (1997) "WMC's Campaign to Scuttle Binding Targets", *Mining Monitor*, Vol.2(4), December 1997, p1; http://www.prwatch.org/prwissues/1997Q4/warming.html

^{116 &}lt;a href="http://www.prwatch.org/files/pdfs/prwatch/prwv4n4.pdf">http://www.prwatch.org/files/pdfs/prwatch/prwv4n4.pdf p7 Bob Burton: "Wise Guys Down Under: PR's Eco-front Moves on Australia"

















Speakers included American climate denier Patrick Michaels, climate denier politicians, <u>Rep. John Dingell</u>¹¹⁸, Senator Chuck Hagel and Richard Lawson (President and Chief Executive Officer of the US National Mining Association and present at the earlier CEI meeting).

According to RJ Smith from the CEI, the <u>purpose of the Canberra conference</u> was to "try and buck [Prime Minister John Howard] up a little more and let him know that there is support of the American people" for his government's obstructionist stance."¹¹⁹ Later that year, an Australian at the CEI, Hugh Morley, <u>noted on the CEI's website</u> that "If Australia sticks to its gun (sic), there might not be a Kyoto treaty after all¹²⁰."

2013 Australia update

Fast forward to today and Australian denial remains a major force, not least in response to the demise of Howard and moves by the Labor Government to introduce a carbon price, coupled with a massive growth in the coal sector, and a largely climate denying opposition.

A think tank that has been at the centre of Australian denial since the outset is the Institute of Public Affairs, a major sponsor to a Heartland Institute conference in Sydney in 2010. The IPA doesn't reveal its funding, but has admitted in the past that it comes from its corporate members. A recent story in The Age revealed that the IPA's anti-climate stance has lost it corporate membership in recent years, and the stated that the IPA has received funding through mining billionaire Gina Rinehart's organisation, ANDEV.

Some of Australia's key deniers enjoy international attention, not least <u>Bob Carter</u>, who is one of the lead authors of the Heartland Institute's NIPCC, and has admitted that he receives money from Heartland. Carter is associated with a number of international think tanks at the heart of the denial machine. Alongside Dr Carter is <u>Ian Plimer</u>, a geologist who is a director of several of Gina Rinehart's mining companies and who owns shares in a number of others.



Bob Carter

For a detailed compendium on Australian deniers and front groups, see "Doubting Australia"

In response to Australia moving forward on climate policy, a number of denier think tanks, blogs and organisations have sprung up, including the <u>Galileo Movement</u>, and the <u>Australian Climate Science Coalition</u> and blogs like <u>Australian Climate Madness</u>.

In 2009, one man, <u>Tim Andrews</u>, then of the <u>Australian Liberal Students Federation</u> went to the US to train with Grover Norquist's American's for Tax Reform and the Koch Foundation internship programme. He gained insights from Koch mastermind Rich Fink, and returned to Australia to set up, run or become heavily involved in, a veritable feast of think tanks and organisations, most of which aimed their wrath at the Australian Government's climate change programme, including <u>Menzies House</u>, the <u>Australian Taxpayers</u> <u>Alliance</u>, (ATA – formed in 2000) the <u>Australian Libertarian Society</u> and <u>StopGillardsClimateTax.com</u>

The Cato Institute's <u>Patrick Michaels</u> is on the advisory board of the ATA and was a science advisor to Stop Gillard's Climate Tax. The Galileo Movement lists a string of international deniers on their "<u>independent advisory panel</u>" including Michaels, Singer, Lindzen and Lord Monckton.

UK denier Lord Monckton¹²¹ has undertaken no less than three tours of the country, in 2010, 2011 and 2013. His 2010 tour was partly funded by coal billionaire Gina Rinehart, who, with the Association of Mining and

^{118 &}lt;a href="http://www.opensecrets.org/politicians/industries.php?cycle=Career&cid=N00001783&type=1">http://www.opensecrets.org/politicians/industries.php?cycle=Career&cid=N00001783&type=1 Dingell's top industry contributor is the electricity industry

¹¹⁹ B. Burton (1997) "WMC's Campaign to Scuttle Binding Targets", *Mining Monitor*, Vol.2(4), December 1997, p1 and http://www.prwatch.org/files/pdfs/prwatch/prwv4n4.pdf (page 7)

¹²⁰ http://cei.org/gencon/005,01305.cfm

¹²¹ See Appendix I page 61

















Exploration Companies, also funded <u>part of his 2011 tour</u>. In 2011, Monckton arrived in the country having to apologise to the Government's Climate Change advisor, Professor Ross Garnaut, for, in a US presentation, <u>labelling him a fascist</u> and linking his image with a swastika. Funding for his <u>2013 tour</u> was channelled through the newly established <u>Lord Monckton Foundation</u>, which doesn't list its funders. During the tour he launched a far right political party.

The country has been peppered with visits by other deniers, including <u>Czech President Vaclav Klaus</u>, (IPA-sponsored, 2011), UK Telegraph blogger <u>James Delingpole</u> (promoting his book, 2012), head of UK denier organisation the Global Warming Policy Foundation, <u>Lord Nigel Lawson</u>, 2011 (courtesy of right wing paper, The Spectator, edited by the IPA's Tom Switzer), and author of a book trashing the IPCC, <u>Donna Laframboise</u> (2012, courtesy of the IPA), the <u>Heartland Institute's Jay Lehr</u> (2009, Australia Climate Science coalition) and blogger <u>Anthony Watts</u> (2010, Climate Sceptics party).

Australian now has five minor political parties who include climate denial in their policy profiles: The Climate Sceptics Party, Rise Up Australia (launched with Lord Monckton in 2013, and whose leader, Daniel Nalliah, said the 2009 "Black Saturday" bushfires in Victoria were God's retribution for that State's abortion laws), One Nation, Democratic Labour Party (with one State Senator) and Family First.

Australia's media landscape has played a leading role in spreading misinformation on climate change, climate science, the role of climate scientists and the impacts of policies to reduce emissions.

In the Murdoch-owned News Ltd stable, influential political writer and prolific blogger Andrew Bolt liberally spreads climate science denial on his blog and in his syndicated column. He also regularly invites climate sceptics onto his Sunday morning television show The Bolt Report, where he regularly launches attacks on climate science.

News Ltd owns the vast bulk of the popular metropolitan press in Australia. Other News Ltd columnists sceptical of human-caused climate change include Janet Albrechtsen, Miranda Devine, Tim Blair, Piers Akerman and business editor Terry McCrann (who claims to reach a bigger audience than any other Australian columnist).

News Ltd's The Australian, the country's only national daily newspaper, regularly runs op-eds from climate science deniers, including Lord Monckton, Lord Lawson, Matt Ridley, James Delingpole, Bjorn Lomborg and Bob Carter and prints texts lifted directly from the Global Warming Policy Foundation website.

Editor of The Australian edition of The Spectator, Tom Switzer, is an IPA fellow.

An analysis of <u>The Australian's climate coverage</u> by academic Professor Robert Manne found that news stories arguing for action on climate change were outnumbered four-to-one by others rejecting action. In the opinion pages, climate sceptic writers outnumbered recognised climate science experts 10-to-one.

On radio, Sydney's most popular shock-jock Alan Jones of 4GB dismisses the science of human-caused climate change as "witchcraft". Jones is patron of the denial group the Galileo Movement.

New Zealand: deniers attempt to sue over temperature records

New Zealand has its own set of climate deniers, tied in with Australia and a global network, thanks to the <u>New Zealand Climate Science Coalition</u>¹²², started in 2005. On the NZCSC board of advisors is Australia's Bob Carter, one of the main authors of the Heartland Institute's so-called NIPCC.

















Bryan Leyland admitted he was <u>paid by the Heartland Institute</u>¹²³ to go to the climate talks in Bali in 2007, where he joined the Committee for a Constructive Tomorrow <u>team</u>¹²⁴ in trying to challenge the science (they were largely ignored).

In 2010, members of the NZCSC set up the NZ Climate Science Education trust to sue 125 the National Institute of Water and Atmosphere for their "series 7" set of temperature records, arguing along the same lines as many deniers to: that the stations where temperatures are taken were somehow not measuring temperatures accurately.

They <u>lost their case</u>¹²⁶ in the High Court. The judge, Justice Venning, was vitriolic in his judgment, dismissing Dunleavy's evidence about the climate science because he was unqualified to give such evidence:

"Section 25 could only apply if Mr Dunleavy was an expert in the particular area of the science of meteorology and/or climate. He is not. He has no applicable qualifications. His interest in the area does not sufficiently qualify him as an expert."

Scientist teaches climate denial at Auckland University

Chris de Freitas, who was the editor at Climate Research who published the critique of Michael Mann's Hockey Stick study, teaches a first year Geography class at Auckland University's school of environment.

In 2011 an investigation by the New Zealand Herald found that de Freitas was <u>teaching climate denial</u>¹²⁷ in his class, using graphs that had only previously been seen in presentations by Lord Christopher Monckton. The same investigation <u>found</u>¹²⁸ that he had provided similarly sceptic scientific information to students at the university's school of public health.

The UK's denial machine

Deniers in the UK have made repeated efforts over the years to undermine the scientific consensus and go after the scientists. Indeed, the whole "climategate" affair was focused on a UK university.

The links between UK and US climate denial go back to the early 90's, with the Atlas Economic Research Foundation, the UK branch of a US front group that funnels US money into the UK and across the world. For example, Atlas has received a combined total of more than \$600,000 from Donors Capital Fund and Donors Trust and more than \$1m from ExxonMobil 1998–2009.

Atlas was working to help the Institute of Economic Affairs (IEA), a leading UK conservative think tank. In 2001, Atlas UK <u>changed its name</u> to the <u>International Policy Network</u>, holding its first meetings at the IEA, and with its original address based at the IEA.

The IPN's <u>main directors</u> were Roger Bate and <u>Julian Morris</u>, who ran the <u>IEA's environment unit</u> for at least two years after the IPN was established. Chair of the board was Linda Whetsone who remains on the IEA board to this day.

Bate and Morris had previously campaigned in support of Genetically Engineered organisms and soon launched themselves into a "sound science" campaign and began questioning the science of global warming.

¹²³ http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10782486

¹²⁴ http://www.cfact.org/2007/12/27/special-report-from-un-climate-conference-in-bali/

¹²⁵ http://hot-topic.co.nz/when-asses-go-to-law/

¹²⁶ http://hot-topic.co.nz/cranks-lose-court-case-against-nz-temperature-record-niwa-awarded-costs/

http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10738739

¹²⁸ http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10738747

















In 1994 Bate co-founded the European Science and Environment Forum. This was exactly the same time Philip Morris was setting up The Advancement of Sound Science Coalition in Europe. TASSC Europe didn't eventuate, but ESEF was established at exactly the same time, working on the same issues. Bate was also connected with the US think tanks the Committee for a Constructive Tomorrow and the Competitive Enterprise Institute.

Morris has spoken at several Heartland Institute conferences and is an advisor to the <u>International Climate Science Coalition</u>. In the late <u>1990's he was a contributor</u> to the Competitive Enterprise Institute.

In 2001 the IPN <u>set up its North America branch</u>, and became the direct recipient of ExxonMobil Foundation contributions (\$390,000 between 2001 and 2006).

UK denial today

Today, the main denial organization in the UK is the Global Warming Policy Foundation. While the GWPF has always been very careful to avoid saying who its funders are, in March, 2012, <u>The Guardian revealed</u> one of its major funders was Australian financier, major Conservative Party funder – and <u>trustee of the IEA</u>, Michael Hintze.

Bloggers like <u>James Delingpole</u> (The Telegraph newspaper) lead UK denial, along with a handful of other media figures such as the Daily Mail's Melanie Phillips. A new voice of denial is Matt Ridley, a columnist for The Times, who has written two books for the Institute of Economic Affairs: <u>Down to Earth: A Contrarian View of Environmental Problems</u>, and <u>Down to Earth II: Combating Environmental Myths</u>. In 1995, the IEA <u>described</u> Ridley as, "one of a number of environmentalists who are seeking to counter the inaccurate and misleading opinions of 'mainstream environmentalism'."

Guardian columnist George Monbiot criticised Ridley's economic libertarian views in a <u>Guardian column in 2007</u>. In particular, Monbiot contrasted Ridley's libertarianism with his role at Northern Rock bank, which was rescued from collapse by government intervention.

Their efforts have been rejected by the UK's Secretary of State for Energy and Climate Change, Ed Davey, who slammed deniers and the media who gave them a platform, in a <u>June 2013 speech</u>:

"But some sections of the press are giving an uncritical campaigning platform to individuals and lobby groups who reject outright the fact that climate change is a result of human activity. Some who even deny the reality of climate change itself. This is not the serious science of challenging, checking and probing. This is destructive and loudly clamouring scepticism born of vested interest, nimbyism, publicity seeking contraversialism or sheer blinkered, dogmatic, political bloody-mindedness."

However, the Environment Secretary Owen Paterson's <u>views remain skeptical</u>, a reflection of a faction in the UK Conservative Party that perhaps listens to the GWPF's Lord Lawson.

Lastly, in the UK, there is the UK Independence Party's Lord Christopher Monckton, whose climate denial has gained him few ears in the UK. He spends some time each year taking his climate denial to the US and Australia, with a lot less focus in the UK.

















IPN and ATLAS take denial global

One prominent fellow of the International Policy Network was Kendra Okonski, who previously worked at the Competitive Enterprise Institute.

Okonski set up a number of front groups across the developing world, some of which are still operating. Okonski registered the websites for the following organizations:

IREN, Kenya

IPPA, Nigeria (the IEA's Linda Whetstone is on their board)

Liberty Institute, India (appears to be defunct as of around 2006)

The Alternate Solutions Institute, Pakistan

The Atlas Foundation for Economic Research is today still coordinating a <u>global network</u> of libertarian think tanks, most of who run campaigns based on "freedom".

But there appears to be little taste for climate denial in most developing countries, as they face the beginnings of the effects of climate change.

Denial in Eastern Europe

Climate denial is still alive and well in Eastern Europe, where the EU member states are fighting to protect their coal industry and are the laggards within the EU, holding it back from moving forward on climate action.

Eastern Europe's chief denier is Czech President <u>Vaclav Klaus</u>, who regularly travels around the world, entertained by various front groups and is often quoted by deniers like Christopher Monckton and Anthony Watts. He has also spoken at a number of Heartland Institue climate conferences.

In 2011, Poland's EU Budget Commissioner, Janusz Lewandowski, <u>told a Polish newspaper</u>: "The thesis that coal energy is the main cause of global warming is highly questionable.... Moreover, more and more, there is a question mark put over the whole 'global warming' as such."

Eastern Europe http://iopscience.iop.org/1748-9326/7/4/044005/article

















PART 2: DENIER TRICKS AND TACTICS

It is important to distinguish clearly between those scientists who have challenged the theories of global warming in good faith, seeking to put forward other possible explanations for our changing climate, and the efforts of the denier campaign to undermine the credibility of the scientific establishment.

Arguments about sunspots, the earth's rotation about the sun, the accuracy of temperature measurements, the likely severity of global warming and other theories have all played out over the last 20 years through the scientific literature. The IPCC's conclusions reflect the fact that the only remaining theory, supported by the evidence, is that global warming is caused by emissions of greenhouse gases, and that human activity is therefore responsible.

The IPCC consensus is now upwards of 95 percent certainty on this point, enough to convince the National Academies of Science across the world, all major scientific institutions and even the US military.

In contrast, a handful of scientists supported by the *denial machine* have sought to muddy the waters of the political debate through interventions in the academic literature. The denier campaign has consistently sought to present its publications and claims in the style of genuine science, tactics modeled after Big Tobacco.

This effort again is aimed at delaying action. Uncertainty and "doubt", especially in the media and minds of non-expert policymakers, is the objective.

Part 2 of this report documents instances of this, and we focus on the tricks pulled by one think tank, The Heartland Institute, as an example of the kinds of tactics used.

We look at examples of scientists who have come under sustained personal attack for nothing more than reporting their results, and the new campaign tactics that have sprung up since "Climategate" to intimidate leading scientists and discredit their work.

We also look at the effect of these campaigns, especially on the political system in the US, with the rise of the Tea Party.

Case study: The Heartland Institute: a clearing house of climate denial campaign tactics

If we were to focus on one think tank that has been a leader in the campaign against climate science in recent years, deploying the variety of tricks most other think tanks and individuals also use in climate denial campaigns, it would be the Heartland Institute.

The Heartland Institute is a Chicago-based "free market" think tank and 501(c)(3) non-profit organization that has become a hub for the network of individuals and organizations denying the scientific evidence for man-made climate change.

The Heartland Institute has received:

- at least \$676,500 from ExxonMobil since 1998, (but was dropped by Exxon in 2007)
- \$14,498,497 from the combination of the Donors Trust and Donors Capital Fund 2002–2011, including very large grants over the past five years.

















In the 1990s, the Heartland Institute worked with tobacco giant Philip Morris to question the science linking second-hand smoke to health risks, and lobbied against government public health reforms around tobacco. Philip Morris executive Roy Marden was on Heartland's board 129, it funded the think tank 130, and CEO Joseph Bast had been a long-time campaigner on the issue.

Bast set out his views on climate change in 2003, in a list of <u>"eight reasons why global warming is a scam"</u>, including statements like *"Most scientists do not believe human activities threaten to disrupt the Earth's climate"* and *"The IPCC did not prove that human activities are causing global warming,"* before moving on to say that *"Efforts to quickly reduce human greenhouse gas emissions would be costlyand would not stop Earth's climate from changing."*

Heartland continues to maintain a "Smoker's Lounge¹³¹" section of their website which brings together their policy studies, Op-Eds, essays, and other documents that purport to "[cut] through the propaganda and exaggeration of anti-smoking groups."



Joseph Bast

Heartland's internal workings exposed

In February 2012 a series of internal Heartland Institute documents <u>came to light</u>¹³² that exposed Heartland's inner workings.

These documents make it clear how Heartland funding increased rapidly as it became a hub organization of the climate denial machine. Heartland was heavily funded by <u>an "anonymous donor</u>" ¹³³, later found to be Barre Seid.

The documents also revealed:,

- Heartland was planning a roll-out¹³⁴ of climate denial education tools for schools across the US
- a <u>fundraising strategy</u>¹³⁵ that discussed plans to appeal to the Koch brothers for funding, as well as a major "anonymous donor" funding their campaigns [the Kochs later rejected this they weren't funding Heartland for climate denial, but to attack Obama's health care plans]
- Heartland was paying <u>climate denier scientists</u>¹³⁶ across the world to work on its "NIPCC"¹³⁷ The NIPCC or "Climate Change Reconsidered" or "Not the IPCC"
- Heartland <u>was also funding</u> one of the most vocal denial blogs: WattsUpWithThat. com's <u>Anthony Watts</u> for his work on temperature records.

Heartland did its best to deflect the leaked documents by <u>cooking up a "fakegate"</u>¹³⁸ scandal around the leaker, scientist Peter Gleick, who had been in a contentious 'discussion' with staff at Heartland and then duped them into emailing him their documents which he forwarded to bloggers. While Heartland <u>tried</u> <u>to argue</u>¹³⁹ that one of the documents was forged, <u>experts disagreed</u>.¹⁴⁰ Many of the facts present in the contested document are replicated in other internal Heartland documents.

- 129 http://www.legacy.library.ucsf.edu/tid/utg11b00/pdf
- 130 http://bit.ly/151oB7y
- 131 http://heartland.org/policy-documents/welcome-heartlands-smokers-lounge
- 132 http://www.desmogblog.com/heartland-institute-exposed-internal-documents-unmask-heart-climate-denial-machine
- 133 http://bit.ly/1ceX6MY
- 134 http://bit.ly/18QJi9w
- 135 http://bit.ly/1dNBhWH
- 136 http://bit.ly/15hQjfq
- 137 http://www.skepticalscience.com/news.php?n=1295
- 138 http://www.desmogblog.com/spinalysis-heartland-s-echo-chamber-shifts-target
- 139 http://www.desmogblog.com/it-s-bird-it-s-hockey-stick-it-s-faked-document
- 140 http://bit.ly/17elC1f

















Heartland's Fake Scientific Conferences and the Unabomber

Following on from the leak debacle, and in an effort to claim back some credibility, Heartland decided it would host another of the eight "scientific" conferences it has held since 2008 with the "anonymous donor's" money, the International Conference on Climate Change (ICCC). It was to be the eighth and final of these conferences and CEO Joseph Bast would, by the end of it, announce that he would hold no more, after the furore caused by his advertising campaign.

As part of the build-up to the conference, Heartland ran the first of what was to be a series of digital billboards that was to repel many of its corporate funders. Over a tagline of *I believe in global warming, do you?*" the billboard featured a photo of Ted Kaczynski, the "Unabomber" a recluse who had waged a 17-year mail bombing campaign across the US.

<u>Heartland's press release</u>¹⁴³ revealed its next billboards would feature Charles Manson and Fidel Castro and Bin Laden. Bast initially pumped up and tried to defend the billboards, but was later to drop them and <u>claim</u> they were an experiment. ¹⁴⁴

Bast never apologized. In the wake of the backlash around the billboard, Heartland's backers <u>dropped their funding</u>¹⁴⁵ in droves, <u>causing the closure</u>¹⁴⁶ and spinoff of an entire program, Heartland's <u>Center on Finance</u>, <u>Insurance and Real Estate</u>¹⁴⁷ in Washington.

The funders continued to drop out all year, culminating in pharmaceutical giant Pfizer in December, 2012, also walking away from Heartland 148. In total, Heartland didn't receive at least \$1.3 million of its prospective funding from corporations in 2013.

The Origin of the ICCC

March 2008 was the first of Heartland's "scientific" conferences, held in a Times Square hotel in New York for effect. They were offering \$1000 to anyone who wanted to speak at it.¹⁴⁹

The climate scientists at RealClimate, some of whom were invited, posted a blog entitled "What if you held a conference and no (real) scientists came?¹⁵⁰"

"Normal scientific conferences have the goal of discussing ideas and data in order to advance scientific understanding. Not this one. The organizers are surprisingly open about this in their invitation letter¹⁵¹ to prospective speakers, which states:

"The purpose of the conference is to generate international media attention to the fact that many scientists believe forecasts of rapid warming and catastrophic events are not supported by sound science, and that expensive campaigns to reduce greenhouse gas emissions are not necessary or cost-effective."

RealClimate concluded: "So this conference is not aimed at understanding, it is a PR event aimed at generating media reports."

- 141 http://climateconference.heartland.org/
- 142 http://en.wikipedia.org/wiki/Ted_Kaczynski
- 143 http://heartland.org/press-releases/2012/05/03/do-you-still-believe-global-warming-billboards-hit-chicago
- 144 http://heartland.org/press-releases/2012/05/04/heartland-institute-ends-experiment-unabomber-global-warming-billboard
- 145 http://www.theguardian.com/environment/2012/may/09/heartland-institute-donors-lost-unabomber-ad
- 146 http://heartland.org/press-releases/2012/05/11/heartland-institute-announces-plan-spin-insurance-project
- 147 http://articles.latimes.com/2012/may/09/local/la-me-gs-unabomber-billboard-continues-to-hurt-heartland-institute-20120509
- 148 http://thinkprogress.org/climate/2012/12/19/1362861/heeding-public-outrage-pfizer-drops-climate-denial-and-tobacco-front-group-heartland-institute/
- 149 http://www.realclimate.org/docs/Heartland.pdf
- 150 http://www.realclimate.org/index.php/archives/2008/01/what-if-you-held-a-conference-and-no-real-scientists-came/
- 151 http://www.realclimate.org/docs/Heartland.pdf

















The conference was attended by hundreds of people but, as Andrew Revkin noted in the New York Times 152: "The meeting was largely framed around science, but after the luncheon, when an organizer made an announcement asking all of the scientists in the large hall to move to the front for a group picture, 19 men did so."

The Times also pointed out that the keynote denier scientist participants were out of synch,

"One challenge they faced was that even within their own ranks, the group — among them government and university scientists, antiregulatory campaigners and Congressional staff members — displayed a dizzying range of ideas on what was, or was not, influencing climate."

ABC news's coverage¹⁵³ of the event included an interview with career climate denier Fred Singer, who admitted during the interview that he had once received an unsolicited grant from ExxonMobil for \$10,000. The story created a storm of rage from the denier blogosphere, with Heartland and the other sponsors of the conference putting enormous pressure on the broadcaster who refused to retract the story.

Heartland has now held eight conferences¹⁵⁴, in New York (1,2), Washington (3,6), Chicago (4,7), Sydney (5) and Munich(8) and dubbed 'Denial-Palooza' by Greenpeace. None of the speakers have come out with any conclusion other than the premise of the conference they set out to "prove" – that "global warming isn't a crisis/isn't happening." Heartland was found to have been funding related groups in New Zealand, Canada and likely Australia.¹⁵⁵

The NIPCC 156 - or "Climate Change Reconsidered" - or "Not the IPCC"

The "Non-Intergovernmental Panel on Climate Change" was a project begun in 2003 ahead of the AR4 by S Fred Singer and his organization, the Science and Environment Policy Project. The Heartland Institute jumped in soon after, and published the first iteration of this report, to very little media response, in Paris in April 2008¹⁵⁷, followed by a full version released at one of its conferences, in New York 2009.

<u>Skeptical science</u>¹⁵⁸ points out all the ways the NIPCC is different from the IPCC:

- Its purpose is not to give clarity on climate science, as the IPCC does, but to critique the IPCC, according to the Heartland leaked documents
- The scientists working for the NIPCC get paid; the IPCC scientists don't
- The NIPCC report only critiques papers published by deniers, whereas the IPCC critiques *all* papers, including those published by deniers.

One document in the Heartland leaks outlined the list of deniers being paid for their work on the NIPCC. They included Craig Idso, Fred Singer, Bob Carter, Willie Soon, Robert Balling and Joe D'Aleo.

2013 NIPCC in China - or: Let not the truth get in the way of a good story

In June 2013, Heartland announced it was to launch the new NIPCC in China, and, to great fanfare, that the report had been "published" by the prestigious Chinese Academy of Science. Except it hadn't. The CAS pointed this out very clearly in a series of press statements.

- 152 http://www.nytimes.com/2008/03/04/science/earth/04climate.html?_r=1
- 153 http://abcnews.go.com/Technology/GlobalWarming/story?id=4506059&page=1
- 154 http://climateconferences.heartland.org/
- 155 http://www.desmogblog.com/2012/10/23/fakery-2-more-funny-finances-free-tax
- 156 http://www.realclimate.org/docs/Heartland.pdf
- 157 https://www.youtube.com/watch?feature=related&hl=en-GB&v=5N9XIBIZxtw&gl=AU
- 158 http://www.skepticalscience.com/news.php?n=1295

















President Joe Bast was quoted in a Heartland release as saying "This is a historic moment in the global debate about global warming." Except it wasn't. Heartland quickly took the statements down off its website and walked back from its original statements, but not before some bloggers had saved the text. DeSmogBlog has the <u>full story</u>. 159

NIPCC "lead author" Craig Idso, Bob Carter and S Fred Singer went to China with Bast for an event, which gained little traction in China.

Heartland is now expected to launch its next iteration of the NIPCC in September 2013¹⁶⁰, ahead of the release of the IPCC's AR5 report.

Heartland, ALEC and the attack on science education

Also revealed in the 2012 leaks of internal Heartland Institute documents was a <u>fundraising document</u>¹⁶¹ outlining a strategy to get climate denial taught in the US K-12 classroom curricula. The person they wanted to pay \$100,000 to do this was US Department of Energy (DOE) official <u>David Wojick</u>¹⁶², a long-time climate denier who runs the Climatechangedebate.org listserve and used to work with the Greening Earth Society.



Craig Idso

The Heartland fundraising plan spelt out how:

"Principals and teachers are heavily biased toward the alarmist perspective."

The plan went on to say:

"Dr. Wojick proposes to begin work on "modules" for grades 10-12 on climate change ("whether humans are changing the climate is a major scientific controversy"), climate models ("models are used to explore various hypotheses about how climate works. Their reliability is controversial"), and air pollution ("whether CO_2 is a pollutant is controversial. It is the global food supply and natural emissions are 20 times higher than human emissions")

Heartland's documents list David Wojick's credentials: "a Ph.D in the philosophy of science and mathematical logic from the University of Pittsburgh, and a B.S. in civil engineering from Carnegie Tech." Wojick's does not carry any degrees in the natural sciences nor has he published any peer-reviewed research in the field of climate science, according to DeSmogBlog¹⁶³.

More on David Wojick's climate denial work for Heartland can be found in the Washington Post¹⁶⁴.

The American Legislative Exchange Council (ALEC) pushes US state laws mandating climate denial in schools:

The Heartland Institute's work to make US students doubt the scientific evidence of global warming has been ongoing for over a decade. In addition to mailing books and promotional material that dismiss climate change to teachers across the United States, Heartland has worked with the American Legislative Exchange Council (ALEC) to pass state laws that create additional barriers for teachers wishing to give their students an accurate overview of climate change.

¹⁵⁹ http://www.desmogblog.com/2013/06/18/heartland-institute-keystone-cops-climate-science-denial-strike-again

¹⁶⁰ http://blog.heartland.org/2013/07/september-release-planned-for-climate-change-reconsidered-ii/

¹⁶¹ http://www.polluterwatch.com/292934-1-15-2012-2012-fundraising-plan

¹⁶² http://www.sourcewatch.org/index.php?title=David_E._Wojick

¹⁶³ http://www.desmogblog.com/david-wojick

http://www.washingtonpost.com/blogs/wonkblog/post/will-your-kid-be-taught-that-climate-change-is-a-hoax/2012/02/22/glQAp6fFVR_blog.html

















ALEC's model state bill, the "Environmental Literacy Improvement Act," requires a false "balance" in deciding which textbooks and other materials can be used to teach students about climate change. The bill forces materials to be vetted by a "Council" of people who, most notably, are not allowed to have any credentials in "environmental science." See DeSmogBlog¹⁶⁵ and PolluterWatch¹⁶⁶ for more on the creation of ALEC's bill.

Between <u>ALEC and the Discovery Institute</u>¹⁶⁷ (which also promotes laws to deny evolution and include creationism in school curricula), at least 12 US states have seen legislative attempts to weaken the scientific rigor of climate change education.

At least <u>four states passed laws</u> (Tennessee, Texas, South Dakota, Louisiana) weakening teachers' ability to accurately present climate change science to their students.

One key denier links Heartland and ALEC: <u>Sandy Liddy Bourne</u>, the daughter of convicted Watergate co-conspirator, G. Gordon Liddy. Alexandra "Sandy" Liddy Bourne ran a now-defunct oil industry front group called the American Energy Freedom Center with former ExxonMobil lobbyist <u>Randy Randol</u>. Bourne was a Heartland <u>senior fellow</u> for environmental issues and formerly Heartland's vice president for policy and strategy. Prior to joining the Heartland Institute, Sandy Liddy Bourne was ALEC's <u>Director</u> of the Energy, Environment, Natural Resources and Agriculture Task Force for the from 1999–2004, before being <u>promoted</u> to Director of Legislation and Policy, where she oversaw all of ALEC's task forces and helped boost state enactment of ALEC's corporate bills from 11 percent to 20 percent of 50 states. In Bourne's time directing ALEC's environmental task force, the "<u>Environmental Literacy Improvement Act</u>" was created and approved by ALEC's board in June, 2000.

ALEC Funding:

ALEC has been around for 40 years, and claims that two thirds of all US state level political representatives are members, both Republican and Democrates. But it's not the politicians who fund ALEC, it's the corporations.

According to the <u>Center for Media and Democracy</u>¹⁶⁸, which runs the website <u>ALEC Exposed</u>¹⁶⁹, "<u>Almost 98% of ALEC's cash</u> ¹⁷⁰ is from sources other than legislative dues, such as corporations, trade associations, and foundations." Major foundations supporting ALEC include the Charles G. Koch Foundation, the Lynde & Harry Bradley Foundation, the Searle Freedom Trust and the Castle Rock Foundation.

ALEC's due-paying member companies involved in <u>ALEC's Energy, Environment and Agriculture task</u> <u>force</u>¹⁷¹ include major oil, gas, coal, nuclear and chemical interests such as Koch Industries, ExxonMobil, Chevron, BP, Shell, the American Petroleum Institute, Duke Energy, American Electric Power, Peabody Energy, the Edison Electric Institute, the American Coalition for Clean Coal Electricity, CropLife America, Dow Agrosciences, and the American Chemistry Council.

¹⁶⁵ http://www.desmogblog.com/alec-model-bill-behind-push-require-climate-denial-instruction-schools

¹⁶⁶ http://www.polluterwatch.com/blog/heartland-institute-and-alec-partner-pollute-classroom-science

¹⁶⁷ http://www.desmogblog.com/2013/02/28/not-smart-not-alec-either

¹⁶⁸ http://www.prwatch.org/news/2011/07/10887/cmd-special-report-alecs-funding-and-spending

¹⁶⁹ http://www.alecexposed.org

¹⁷⁰ http://www.guidestar.org/FinDocuments/2009/520/140/2009-520140979-064206f4-9.pdf

¹⁷¹ http://greenpeaceblogs.org/2012/05/10/whats-on-alecs-polluter-agenda-tomorrow/

















The State Policy Network: an Umbrella of Climate Change Denial

ALEC and the Heartland Institute are officially affiliated through an umbrella network of corporate-funded US front groups known as the State Policy Network, or SPN. SPN helps coordinate political issue campaigns and fundraising outreach between large companies and corporate foundations, SPN's 59¹⁷² state-based members¹⁷³ (like ALEC and Heartland), and its national affiliates, like the Koch Industries-affiliated Americans for Prosperity, the American Enterprise Institute and the Heritage Foundation. At least 34 Koch-funded SPN members and affiliates are involved in the multifaceted campaigns to create public doubt over climate change in the USA. From 2002–2010, SPN was the eighth-highest recipient from Donors.

More information on the State Policy Network:

PR Watch: A Reporters' Guide to the "State Policy Network" – the Right-Wing Think Tanks Spinning Disinformation and Pushing the ALEC Agenda in the States¹⁷⁴

The Nation: The Right Leans In

Mother Jones: The Right-Wing Network Behind the War on Unions 175

Attacks on scientists

Case Study: Bad science versus hockey sticks: Michael Mann

Michael Mann of Pennsylvania State University has been repeatedly singled out for harsh criticism by climate deniers ever since the 2001 IPCC Third Assessment highlighted Mann's graph of historic and prehistoric temperature records, famously dubbed the 'Hockey Stick' graph, which illustrates the temperature spike in the 20th century following 900 years of stable climate. The graph is easy to understand, and is a compelling piece of scientific evidence that the temperature changes currently underway are large, fast and significant historically.

In 2003, <u>Sallie Baliunas and Willie Soon</u> managed to get a <u>study published</u>¹⁷⁸ in "Climate Research¹⁷⁹" which challenged the Hockey Stick study. Mann, in an interview, said of the paper¹⁸⁰:

"It really was one of the poorest pieces of scholarship that any of us in the climate research community had ever seen... it was clear that there was an effort by some on the editorial board to compromise the PR (peer review) process and allow through this deeply, deeply flawed paper in the professional literature where it was immediately held up by those in Washington opposed to taking action against climate change ... as somehow being the dagger in the heart of the case for global warming, when in fact it was just an extremely bad study that never should have published"...

Mann and a dozen or so other scientists <u>refuted the Soon/Baliunas paper</u> in the American Geophysical Union's publication, EOS.



- 172 http://www.spn.org/about/page/background
- 173 http://www.sourcewatch.org/index.php/Portal:State_Policy_Network
- 174 http://www.prwatch.org/node/11909/
- 175 http://www.motherjones.com/politics/2011/04/state-policy-network-union-bargaining
- 176 http://www.grida.no/climate/ipcc_tar/wg1/005.htm
- 177 http://www.grida.no/climate/ipcc_tar/wg1/005.htm
- 178 http://www.int-res.com/articles/cr2003/23/c023p089.pdf
- 179 http://www.int-res.com/articles/cr2003/23/c023p089.pdf
- 180 http://www.pointofinquiry.org/michael_mann_unprecedented_attacks_on_climate_research/ interview with Chris Mooney, 26 February 2010

















Scientific American interviewed several experts whose work was also discussed by Soon and Baliunas:

"The fact that it has received any attention at all is a result, again in my view, of its utility to those groups who want the global warming issue to just go away," —said Tim Barnett, a marine physicist at the Scripps Institution of Oceanography

"The Soon et al. paper is so fundamentally misconceived and contains so many egregious errors that it would take weeks to list and explain them all." —Malcolm Hughes of the Laboratory of Tree-Ring Research at the University of Arizona.

After publication it seemed that plenty of people agreed. The journal's publisher Otto Kline, eventually stated 181 that "[the conclusions drawn] cannot be concluded convincingly from the evidence provided in the paper". 182 The paper was acknowledged to have been partly funded by the American Petroleum Institute 183. The journal's editor was New Zealand denier Chris de Freitas 184, who published the study despite at least one of the peer reviewers expressing concern at the paper 185. The ensuing debate over the peer review process caused three Climate Research editors to resign 186.

Other deniers such as Canadians Ross McKitrick and Stephen McIntyre also attempted to take down Mann's work. Mann's Hockey Stick has been replicated by a number of studies 187, and was included in the IPCC's AR4, which has now extended the timeframe back 1,300 years. RealClimate provides the complete details 188, but Mann sums up the key point:

"Our attackers never want to look at the big picture; they never want to look at the question of whether these critiques have any impact at all on the bottom line conclusions because they know that they don't. Even if they had been successful in taking down the Hockey Stick – which they haven't been – it still wouldn't amount to undermining the central case for the science¹⁸⁹."

The hockey stick argument put up by Soon/Baliunas and McIntyre remains a key mantra of denial arguments¹⁹⁰, despite the fact it has been repeatedly confirmed by numerous different studies.

Since the Soon/Baliunas paper, Mann has had to defend his work time and time again. In 2003, the leader of climate denial on the Hill in Washington and Chair of the Senate Environment and Public Works Committee, Sen James Inhofe (R-OK), called on Mann to appear in the first of many hearings¹⁹¹, to testify alongside Willie Soon. Inhofe, since he set foot in the house in 1989, has received \$1.5m from oil and gas interests during his political career. Koch Industries are his all time top contributors.

In 2005, <u>Congressman Joe Barton</u> <u>sent letters</u>¹⁹² to Mann and a handful of his colleagues, essentially demanding they supply "computer programs, scripts, notes, literally every document from our scientific careers" ¹⁹³ as well as data (which was already online and publicly available) so it could be discredited.

- 181 http://www.int-res.com/articles/misc/CREditorial.pdf
- 182 http://www.int-res.com/articles/misc/CREditorial.pdf
- 183 http://www.int-res.com/articles/cr2003/23/c023p089.pdf page 17 of study (page 10t climate research)
- http://www.exxonsecrets.org/html/personfactsheet.php?id=1271
- 185 http://www.sciam.com/article.cfm?articleID=000A0746-83A1-1EF7-A6B8809EC588EEDF
- 186 http://www.sgr.org.uk/climate/StormyTimes_NL28.htm
- 187 http://skepticalscience.com/broken-hockey-stick.htm
- 188 http://www.realclimate.org/index.php/archives/2005/02/dummies-guide-to-the-latest-hockey-stick-controversy/
- 189 http://www.pointofinquiry.org/michael_mann_unprecedented_attacks_on_climate_research/ interview with Chris Mooney, 26 February 2010
- $190 \hspace{0.1cm} \underline{\text{http://www.gpo.gov/fdsys/pkg/CHRG-108shrg92381/pdf/CHRG-108shrg92381.pdf}} \\$
- 191 ibic
- http://www.realclimate.org/index.php?p=172 See also http://www.washingtonpost.com/wp-dyn/content/article/2005/07/17/ AR2005071701056.html For a full summary of the furore see http://www.realclimate.org/index.php?p=109
- 193 comment from Mann to authors of this report.

















The American Association for the Advancement of Science (AAAS), publishers of the peer-reviewed journal *Science*, protested about the witch hunt in a June 2005 letter¹⁹⁴ to Barton:

"Your letters, however, in their request for highly detailed information regarding not only the scientists' recent studies but also their life's work, give the impression of a search for some basis on which to discredit these particular scientists and findings, rather than a search for understanding." 195

As The New Scientist reported in November 2006:

"Texas Republican Congressman Joe Barton196, chair of the House Committee on Energy and Commerce, ordered Mann to provide the committee with voluminous details of his working procedures, computer programs and past funding. Barton's demands were widely condemned by fellow scientists and on Capitol Hill. "There are people who believe that if they bring down Mike Mann, they can bring down the IPCC," said [Ben] Santer at the time. Mann's findings, which will be endorsed in the new IPCC report, have since been replicated by other studies." 197

Barton has received \$1.75 million from oil and gas interests in his political career 1998–2013.

Again, a house of cards approach by the deniers – try to discredit one scientist and one study and thereby cast doubt on the entire scientific consensus.

A Washington Post editorial titled "<u>Hunting Witches</u>" 198 accused Barton of "outrageous" behaviour, stating that, "The only conceivable purpose of these letters is harassment." Science writer Chris Mooney further details this "congressional inquisition" in a July 2005 article in <u>American Prospect</u> 199 entitled "Mann Hunt".

Mann was back before the House in a special <u>set of hearings</u>²⁰⁰ in July 2006 before the House Committee on Energy and Commerce's subcommittee on Oversight and Investigation, centered on George Mason University's Edward Wegman.

The "Wegman Report" as it became known, concluded that Mann's work was flawed. But Wegman was later <u>widely discredited</u>²⁰¹ for having allegedly plagiarized parts of the report, as well as deliberately cherry-picking computer simulation results to falsely argue that the scientist's algorithm automatically produced "hockey sticks".

He ended up <u>being under investigation</u>²⁰² by George Mason University for his work, which exonerated him for a few of the earliest complaints, ignored many more, <u>but found him at fault for a paper that had already been retracted for plagiarism</u>. Absurdly, part of the plagiarism in the Wegman Report was ruled not plagiarism, even though it was a longer version of the retracted paper.

But the attacks continued, with Sen James Inhofe (R-OK) giving a speech²⁰³ on the floor of the House in 2006.

See Climategate

- 194 http://www.aaas.org/news/releases/2005/0714letter.pdf
- 195 http://www.aaas.org/news/releases/2005/0714letter.pdf
- Barton's biggest contributor in his career has been the oil and gas industry, totaling nearly \$3.2 million http://www.opensecrets.crg/politicians/industries.php?cycle=Career&cid=N00005656&type=I
- 197 http://www.newscientist.com/article/mg19225765.000-climate-change-special-state-of-denial.html
- http://www.washingtonpost.com/wp-dyn/content/article/2005/07/22/AR2005072201658.html
- 199 http://www.prospect.org/web/page.ww?section=root&name=ViewWeb&articleId=9932
- 200 http://www.agiweb.org/gap/legis109/climate_hearings.html#july19_06
- 201 http://www.csicop.org/si/show/strange_problems_in_the_wegman_report/
- 202 http://www.desmogblog.com/hockey-stick-basher-wegman-under-investigation
- 203 http://www.epw.senate.gov/speechitem.cfm?party=rep&id=263759

















Mann fights back

After so many years of being attacked, Michael Mann has begun fighting back.

He is currently in the middle of two court cases: one against the Competitive Enterprise Institute and the National Journal Online – and one against Canadian scientist Tim Ball, both for defamation.

Mann's defamation case against the Competitive Enterprise Institute and the National Journal online came after a particularly vicious attack on his character by the think tank and the media outlet which together accused him of producing bogus work, of being a fraud, and likening and comparing him and his science to the actions of convicted Penn State child molester Jerry Sandusky. Skeptical Science https://pass.ps./pass.ps

Meanwhile, Mann is also <u>suing Canadian denier Tim Ball</u>²⁰⁶ and the think tank, The Frontier Center for Climate Policy. The case was filed in Canada's Supreme Court of British Colombia in March 2011. Ball also accused Mann of fraud after the Climategate emails.

In an interview, an anonymous questioner asked Ball: "Various government and academic agencies have whitewashed the Climategate scandal so far. Do you think anyone will be prosecuted for fraud?" Ball responds, "Michael Mann at Penn State should be in the State Pen, not Penn State."

At the time of writing, in August 2013, both court cases are ongoing.

Michael Mann has now written a book about the denier machine's ongoing campaign against his work: <u>"The Hockey Stick and the Climate Wars: Dispatches from the Front Lines."</u>

Other attacks on scientists

Dr Benjamin Santer

Dr Ben Santer of the Lawrence Livermore Laboratory in California was lead author of chapter 8 in the 1995 IPCC SAR report, the chapter that first confirmed the human impact on climate change. The policymakers summary contained the sentence "The balance of evidence suggests a discernible human influence on global climate", a sentence that placed Santer squarely in the sights of the deniers. In fact Santer didn't even write the sentence or come up with the word "discernible" – it was IPCC chair Bert Bolin. 209

Nevertheless, this marked the beginning of a long-running personal attack on Santer. He was falsely accused of "scientific cleansing", in a Global Climate Coalition (the industry coalition GCC) press release before the report was released. He was also accused of "political tampering" with the text of the summary for policymakers and of "research irregularities" in his own work.

²⁰⁴ http://www.skepticalscience.com/mann-fights-back.html

^{205 &}lt;a href="http://thinkprogress.org/climate/2013/07/20/2332511/dc-court-bluntly-affirms-michael-manns-right-to-proceed-in-defamation-lawsuit-against-national-review-and-cei/">http://thinkprogress.org/climate/2013/07/20/2332511/dc-court-bluntly-affirms-michael-manns-right-to-proceed-in-defamation-lawsuit-against-national-review-and-cei/

²⁰⁶ http://www.desmogblog.com/michael-mann-suing-tim-ball-libel

²⁰⁷ http://amzn.to/151ybXX

²⁰⁸ Summary for policymakers, Working Group 1, IPCC Second Assessment Report http://www1.ipcc.ch/ipccreports/assessments-reports.htm

²⁰⁹ http://www.realclimate.org/index.php/archives/2010/02/close-encounters-of-the-absurd-kind/

















Commenting on the "scientific cleansing" charge Santer said

"The GCC accused me of 'scientific cleansing' at a time when 'ethnic cleansing' was being committed in Bosnia. My paternal grandparents died in concentration camps during the Second World War. They were subjects of Hitler's 'ethnic cleansing.' So maybe you can understand why the 'scientific cleansing' charge was so abhorrent."²¹⁰

In a June 12, 1996 Wall Street Journal Op Ed, <u>Fred Seitz</u>²¹¹ of the <u>George C Marshall institute</u>²¹² and long-time tobacco apologist, accused Santer of working to "deceive policy makers and the public into believing that the scientific evidence shows human activities are causing global warming."²¹³

Santer stated in an <u>August 2006 interview</u> with the journal Environmental Science and Technology: "I'd guess that about a year of my life was spent defending that scientific conclusion and my own personal scientific reputation... I was a messenger bearing news that some very powerful people did not want to hear. So they went after the messenger. They were very good at it.²¹⁴"

<u>A scientist interviewed</u> about the targeting of Santer by deniers said it was "one of the most vicious attacks I have ever seen on the integrity of a scientist." ²¹⁵

Santer has now detailed the full story on the <u>RealClimate</u>²¹⁶ blog, in response to the whole episode being (again inaccurately) repeated in <u>The Guardian</u>²¹⁷.

Dr Kevin Trenberth

Five years later the Third Assessment report triggered a new round of personal attacks. This time Kevin Trenberth, the head of climate analysis at the National Center for Atmospheric Research was the target.

Trenberth was one of the ten most cited authors of studies about global warming in the ten years to 2001.²¹⁸

He has been repeatedly attacked for a <u>study he co-authored</u>²¹⁹ asserting that global warming has intensified storms and hurricanes, particularly evidenced by the 2005 Atlantic hurricane season (famous for the devastation of New Orleans by Hurricane Katrina).

Meteorologist denier William Gray²²⁰ described Trenberth as having "sold his soul to the devil,"²²¹ and Senator James Inhofe launched an investigation into Trenberth's employer after the release of the study linking increased storm intensity to global warming.²²²

Trenberth hit back, saying: "The attacks on me are clearly designed to get me fired or to resign." 223

- 210 PAUL D. THACKER, American Chemical Society, The Many travails of Ben Santer, page 5837, available at, http://pubs.acs.org/doi/pdf/10.1021/es063000t
- 211 http://www.sourcewatch.org/index.php?title=Fred_Seitz
- 212 Marshall Institute was one of the first front groups, set up by Seitz. http://www.sourcewatch.org/index.php?title=George_C._Marshall_Institute
- 213 http://www.sepp.org/Archive/controv/ipcccont/Item05.htm
- 214 PAUL D. THACKER, American Chemical Society, The Many travails of Ben Santer, page 5837, available at, http://pubs.acs.org/doi/pdf/10.1021/es063000t
- 215 PAUL D. THACKER, American Chemical Society, The Many travails of Ben Santer, page 5834, available at, http://pubs.acs.org/doi/pdf/10.1021/es063000t
- 216 http://www.realclimate.org/index.php/archives/2010/02/close-encounters-of-the-absurd-kind/#more-3041
- 217 http://www.guardian.co.uk/environment/2010/feb/09/ipcc-report-author-data-openness
- 218 http://esi-topics.com/gwarm/authors/b1a.html
- 219 http://www.ucar.edu/news/releases/2006/hurricanes.shtml
- 220 http://sourcewatch.org/index.php?title=William_Gray and http://www.exxonsecrets.org/html/personfactsheet.php?id=370
- 221 http://www.rockymountainnews.com/drmn/local/article/0,1299,DRMN_15_5094006,00.html
- 222 Fred Pearce, "Climate change special: State of denial." New Scientist, November 4, 2006. http://environment.newscientist.com/ article/dn10445
- 223 Fred Pearce, "Climate change special: State of denial." New Scientist, November 4, 2006. http://environment.newscientist.com/ article/dn10445

















Fred Singer also joined the fray, saying Trenberth was "out of his specialty"²²⁴, an interesting accusation coming from Singer, who has purported, at various times, to be a scientific expert on everything from secondhandcigarette smoke, to the ozone layer, nuclear energy and the climate.

Using Freedom of Information to attack scientists

Freedom of Information Act (FOIA) requests have long formed the backbone of climate accountability research. FOIA and State Public Records Act requests have been used by NGOs, authors, academics and reporters, to investigate interactions between Government and fossil fuel industry interests long before the so-called "Climategate" attack was launched.

Such inquiries have netted evidence of Exxon representative <u>asking in early 2001</u> for the for the ouster of then IPCC Chairman Robert Watson²²⁵ and, more recently, a FOIA to the Smithsonian Institute revealed that Dr. Soon has received well over \$1 million in corporate funding for his work over past decade. ²²⁶

The scientists targeted at East Anglia University were contesting a <u>broad Freedom of Information request</u> that may have been the origin of the gathered emails that were eventually stolen.

Since Climategate, there has been a notable increase in the use of Freedom of Information requests in the United States in attempts to seize scientists' raw data and professional correspondence. The climate deniers came home to pursue the other end of the conversations revealed by the Climategate hackers.

They now request emails that scientists send to each other when they're working, sharing parcels of data analysis, emails that push and challenge both method and conclusions, part of the robust cut and thrust of scientific endeavour.

The deniers then go through these emails to cherrypick phrases and information to twist and used against scientists, in attempts to drum up media scandals and slow down the scientists. It has to be noted that the scientists they target are those who are authors of papers that "prove" the science of global warming, or the human footprint: scientists of great repute who have done groundbreaking work that furthers our understanding of the climate science.

This freedom of information strategy is possibly also a way to waste scientists' time and intimidate them from participating in normal scientific practice.

<u>The American Tradition Institute (ATI)</u>²²⁷ was set up to specifically focus on FOIA US Freedom of Information Act legislation) cases. <u>Christopher Horner</u>, of the Competitive Enterprise Institute, is an ATI senior fellow who "provides strategic and legal counsel to ATI on cases involving Freedom of Information Act (FOIA) filings..."

The ATI <u>has its roots in 228</u> fossil fuel funded think tanks and oil magnates. A Southern Studies investigation found that "ATI has connections with the Koch brothers, Art Pope and other conservative donors seeking to expand their political influence."

The ATI vs Mann and UVA

The group began with attempting to get hold of, through FOIA, all of Dr Michael Mann's emails when he was at the University of Virginia (UVA). By May, 2011, when UVA was slow in responding, the ATI joined with a Republican member of Virginia's House of Representatives, Robert Marshall, to sue the UVA through

- 224 http://naturalscience.com/ns/letters/ns_let06.html
- 225 http://www.slate.com/articles/news_and_politics/chatterbox/2002/04/did_exxon_mobil_get_bush_to_oust_the_global_warming_chief.html
- 226 http://www.theguardian.com/environment/2011/jun/28/climate-change-sceptic-willie-soon
- 227 http://www.atinstitute.org/
- 228 http://www.southernstudies.org/2011/10/special-investigation-whos-behind-the-information-attacks-on-climate-scientists.html

















the courts for Mann's records. The University's argument that correspondence between Mann and other scientists should not be released to the likes of the ATI convinced a Virginia State judge, who <u>ruled against</u> the move²²⁹ in September 2012.

As Mann wrote on his <u>facebook page</u>:²³⁰ "This finding is a potentially important precedent, as ATI and other industry-backed front groups continue to press their attacks on climate scientists through the abuse of public records and FOIA laws and the issuing of frivolous and vexatious demands for internal scholarly deliberations and personal correspondences."

The ATI case followed <u>an attempt</u> by Republican and Virginia State Attorney General Ken Cuccinelli to use his office to pressure UVA to release Mann's emails. The UVA spent close to \$600,000 defending Mann's right to his email correspondence, and, in March 2012, <u>won the case</u>²³¹ at the State Supreme Court. Cuccinelli is currently running for Governor of Virginia.

ATI vs James Hansen and NASA

The ATI then turned its sights to another of their favourite targets, NASA's James Hansen. The whole story <u>is told by Joe Romm</u> at Think Progress, showing that one result of these requests was to distract these scientists from their research.

<u>Hansen:</u> "I am now inundated with broad FOIA (Freedom of Information Act) requests for my correspondence, with substantial impact on my time and on others in my office. I believe these to be fishing expeditions, aimed at finding some statement(s), likely to be taken out of context, which they would attempt to use to discredit climate science."

ATI vs climate scientists and journalists

The ATI has now set its sights on trying to get emails²³² between climate scientists and journalists.

ATI and the EPA

The Competitive Enterprise Institute, Horner's home organisation – and the ATI – have <u>now filed FOIA</u> <u>requests</u>²³³ with the EPA in an attempt to get former Administrator Lisa Jackson's and current Administrator Gina McCarthy's text and Instant Messaging records.

Milloy is also working for ATI²³⁴ attacking EPA

FOI in Australia

The use of Freedom of Information has not been restricted to the US. The same tactics are also being used in Australia.

In 2011, a number of stories²³⁵ were published outlining death threats against Australian climate scientists.

One blogger, Simon Turnill, set about trying to find out the details of those threats through a FOI request to the Australian National University.

- 229 http://bit.ly/16NGMNQ
- 230 https://www.facebook.com/MichaelMannScientist/posts/276915652419089
- 231 http://www.washingtonpost.com/local/dc-politics/va-supreme-court-rejects-cuccinellis-bid-for-u-va-documents/2012/03/02/glQAmo8inR_story.html
- 232 http://www.theguardian.com/environment/2012/jul/10/american-tradition-institute-climate-science
- 233 http://www.reuters.com/article/2013/04/02/idUSnMKW103a+70+MKW20130402
- 234 http://epahumantesting.files.wordpress.com/2012/09/2012-09-21-complaint-as-filed.pdf
- 235 http://www.abc.net.au/unleashed/2754194.html

















When those emails, released under FOI, showed abuse – but no specific death threats, bloggers and the Murdoch-owned *The Australian* newspaper rushed to claim that scientists were fabricating claims they were getting death threats. Other Murdoch columnists picked it up in Australia, with one calling it a "mini climategate" 236. The story was picked up by the denier blogs, including Antony Watts 237 and James Delingpole 238.

Yet the FOI request was only for a specific 6-month period for a list of six academics at ANU. Most of the examples quoted had been from other scientists from different universities at other times.

Conspiracy of doubt

University of Western Australia's Professor of Psychology Stephan Lewandowsky conducted a survey to find out about conspiracy theories. The results, now published in the journal <u>Psychological Science</u>, ²³⁹ found that people who rejected the science of human-caused climate change were also likely to endorse various conspiracy theories, such as NASA faking moon landings and plots to kill Princess Diana.

The deniers rejected the findings outright, and invented a range of conspiracies about how Lewandowsky had fabricated his results. Blogger Simon Turnill again filed a wide-ranging FOI request to find out.

The resulting emails released to Turnill <u>showed no such conspiracy</u>. ²⁴⁰ Lewandowsky went on to <u>write</u> <u>another paper</u>. about the conspiracy theories invented by the deniers about his paper about conspiracy theories, a paper the deniers have been fighting to stop the publication of ever since.

Personal attacks and death threats

One particularly nasty outcome of the front-group-led denial campaign has been the abuse of climate scientists. The Scientific American²⁴², George Monbiot in the Guardian²⁴³ and Clive Hamilton blogging on Australia's ABC website²⁴⁴ have all written recently about the storm of abuse climate scientists have received.

The target of climate denier attacks for some years, Kevin Trenberth, told Scientific American:

"In science there's a whole lot of facts and basic information on the nature of climate change, but it's not being treated that way. It's being treated as opinion²⁴⁵."

The Guardian reported an uptick of abusive emails to climate scientists after the Climategate attack:

"Professor <u>Stephen Schneider</u>, a climatologist based at Stanford University in California, whose name features in the UEA emails, says he has received "hundreds" of violently abusive emails since last November. The peak came in December during the <u>Copenhagen climate change summit</u>, he said, but the number has picked up again in recent days since he co-authored a scientific paper last month which showed that <u>97%–98%</u> of climate scientists agree that mankind's carbon emissions are causing global temperatures to increase."²⁴⁶

- 236 http://bit.ly/17exNLB
- 237 http://bit.lv/1dlBLED
- 238 http://bit.ly/16NHQRE
- 239 http://pss.sagepub.com/content/24/5/622.abstract
- 240 http://www.desmogblog.com/2012/12/06/freedom-information-laws-used-climate-sceptics-rifle-through-scientists-daily-emails
- $\underline{\text{241 http://green.blogs.nytimes.com/2013/02/21/unlocking-the-conspiracy-mindset/?_r=0}\\$
- 242 http://www.scientificamerican.com/article.cfm?id=climate-cyber-bullying&page=2
- 243 http://www.guardian.co.uk/environment/georgemonbiot/2010/jan/27/james-delingpole-climate-change-denial
- 244 http://www.abc.net.au/unleashed/stories/s2826189.htm
- 245 http://www.scientificamerican.com/article.cfm?id=climate-cyber-bullying&page=2
- 246 http://www.theguardian.com/environment/2010/jul/05/hate-mail-climategate

















<u>Clive Hamilton:</u> "In recent months, each time they enter the public debate through a newspaper article or radio interview these scientists are immediately subjected to a torrent of aggressive, abusive and, at times, threatening emails. Apart from the volume and viciousness of the emails, the campaign has two features – it is mostly anonymous and it appears to be orchestrated,"²⁴⁷.

Hamilton authored "Scorcher – the dirty politics of climate change²⁴⁸" a book where he outlines the decadelong, coal-industry funded campaign in Australia to deny climate science and its close relationship with then Prime Minister and climate denier John Howard who refused to ratify the Kyoto Protocol.

He tells of a respected climate scientist, <u>Professor David Karoly</u> at the University of Melbourne, who received these emails:

"It is probably not to (sic) extreme to suggest that your actions (deceitful) were so criminal to be compared with Hitler, Stalin and Pol Pot. It is called treason and genocide" and "Oh, as a scientist, you have destroyed peoples trust in my profession. You are a criminal. Lest we forget."²⁴⁹

Comments across the blogosphere follow a similar vein, such as this, posted on a Chicago Tribune blog explaining the robustness of the climate science conclusions:

"Global warming is a genocidalist scam to kill us all by 2050. There is no scientific basis for climate science, there is no such thing as radiative forcing. This hoax is bringing down the US Government and the rest because we see by their going along with this \$45 trillion scam, they are just lining their own pockets. Both the Clintons and Obamas are personally involved in this mass murder ring worse than Hitler's Nazi Germany, in fact this plan is Nazi in origin, like the original Green Movement.²⁵⁰" – Stan Lippmann (03/03/2010, 4:30 AM)

Climate scientists are used to robust debate through the peer review process with challenges coming from new research that proves or disproves their research. But when they are faced with a barrage of abuse from non-scientists, fed by the denial industry, it's much more difficult for them to deal with. This is made worse because like most practicing academics the contact details of climate scientists are almost always publically listed on university websites.

As (the late) Dr. Schneider <u>pointed out to the Guardian</u> in 2010, this pressure is not an insignificant pressure on the scientists lives:

Schneider described his attackers as "cowards" and said he had observed an "immediate, noticeable rise" in emails whenever climate scientists were attacked by prominent right-wing US commentators, such as Glenn Beck and Rush Limbaugh.

"[The senders] are not courageous people," said Schneider. "Where are they getting their information from? They just listen to assertions made on blogs and rightwing talkshows. It's pathetic."

Schneider said the FBI had taken an interest earlier this year when his name appeared on a "death list" on a neo-Nazi website alongside other climate scientists with apparent Jewish ancestry. But, to date, no action has been taken.

"The effect on me has been tremendous," said Schneider. "Some of these people are mentally imbalanced. They are invariably gun-toting rightwingers. What do I do? Learn to shoot a Magnum? Wear a

²⁴⁷ http://www.abc.net.au/unleashed/stories/s2826189.htm

²⁴⁸ http://www.clivehamilton.net.au/cms/index.php?page=scorcher

²⁴⁹ http://www.abc.net.au/unleashed/stories/s2826189.htm

²⁵⁰ http://www.chicagotribune.com/news/ct-met-0228-climate-science-questions-20100302,0,4670437,full.story

















bullet-proof jacket? I have now had extra alarms fitted at my home and my address is unlisted. I get scared that we're now in a new Weimar republic where people are prepared to listen to what amounts to Hitlerian lies about climate scientists." ²⁵¹

Attacks on the consensus

In 2004, Naomi Oreskes published a <u>study in Science</u>²⁵² that reviewed 928 papers published on climate change between 1993 and 2003, looking for any evidence that the papers might conclude that climate change was what the denial machine claims: a "natural occurrence".

She found no such evidence.

This analysis shows that scientists publishing in the peer-reviewed literature agree with IPCC, the National Academy of Sciences, and the public statements of their professional societies. Politicians, economists, journalists, and others may have the impression of confusion, disagreement, or discord among climate scientists, but that impression is incorrect.

Oreskes then became the target of denier fury.

In 2005, the UK Global Warming Policy Foundation's <u>Benny Peiser</u>, not a scientist, claimed to have analysed Oreskes' work, and sent <u>his analysis</u>²⁵³ to Science Web to publish as a "letter". It wasn't published. Peiser <u>later admitted</u>²⁵⁴ he didn't check the same abstracts that Oreskes used in her study.

"Which is why I no longer maintain this particular criticism. In addition, some of the abstracts that I included in the 34 "reject or doubt" category are very ambiguous and should not have been included."

In 2007, the Science and Public Policy Institute published <u>an "open letter"</u>²⁵⁵ from UK endocrinologist Mr. Klaus-Martin Schulte, who had submitted a paper taking down Oreskes' paper to a journal renowned for publishing denier papers. The SPPI's Lord Christopher Monckton weighed in with <u>his own essay</u>²⁵⁶ (one of many "papers" Monckton claims he has had "published"), quoting Schulte's "soon to be published" work. The pre-publication noise was deafening.

But even the editor of the "Energy and Environment" journal, <u>Sonja Boehmer-Christiansen</u> (herself well-linked with the denial machine)²⁵⁷, decided not to publish the paper, claiming it was a <u>"bit patchy and nothing new."</u>²⁵⁸

Oreskes went on to write a book, "Merchants of Doubt"²⁵⁹ that chronicles the beginnings of climate denial. The media attention she has gained²⁶⁰ has made her an ongoing a target for the denial machine, the latest being called "The Queen of Climate Smear"²⁶¹ on an Australian blog in 2013 (cross-posted²⁶² by The Heartland Institute).

- 251 http://www.theguardian.com/environment/2010/jul/05/hate-mail-climategate
- 252 http://www.sciencemag.org/content/306/5702/1686.full
- 253 http://web.archive.org/web/20050507004218/http://www.staff.livim.ac.uk/spsbpeis/Scienceletter.htm
- 254 http://www.abc.net.au/mediawatch/transcripts/s1777013.htm
- 255 http://bit.ly/147f3aX
- 256 http://scienceandpublicpolicy.org/images/stories/papers/monckton/consensus.pdf
- 257 http://www.desmogblog.com/node/1281
- 258 http://www.desmogblog.com/schultes-analysis-not-published-not-going-to-be
- 259 http://amzn.to/15vkbck
- 260 http://edition.cnn.com/2010/OPINION/06/07/oreskes.climate.change/index.html
- 261 http://joannenova.com.au/2012/08/oreskes-big-money-no-evidence-skeptics-merchant-of-doubt/
- 262 http://heartland.org/policy-documents/oreskes-queen-climate-smear-ignores-big-money-has-no-evidence-throws-names

















2013 consensus study shows 97% agree on human-caused climate change

In 2013 a new peer reviewed study was published in Environmental Research Letters²⁶³, looked at more than 4,000 abstracts by more than 10,000 scientists that stated a position on human-caused global warming. 97 percent of the papers, and 98 percent of the scientists endorsed the consensus. See also the consensus project.²⁶⁴

Anthony Watts led the attacks, calling the paper "fuzzy math" 265 and "an epic lie of all proportions". Heartland's James Taylor said in Forbes magazine the "alarmists" had been "caught doctoring" 266 their science.



Jailles Taylor

²⁶³ http://www.skepticalscience.com/docs/Cook_2013_consensus.pdf

²⁶⁴ http://theconsensusproject.com/

http://wattsupwiththat.com/2013/05/14/fuzzy-math-in-a-new-soon-to-be-published-paper-john-cook-claims-consensus-on-32-6-of-scientific-papers-that-endorse-agw/

















Faking It

2012: "Pal review" replaces "peer review"

One of the key tests of modern science is the ability for a paper to pass "peer review" where experts review the work of other experts in their area. This is what rigorous scientific "debate" looks like. It is through these peer to peer checks and balances that science moves forward and traditionally happens through peer-reviewed journals rather than in the media, where deniers like to debate.

A conspiracy theory regularly put forward by climate deniers is that climate scientists get their "pals" to do the peer review so that they can get published. Of course scientists will know many of the other scientists working in the same field – they are all experts. But they're also the biggest critics of their own work and strive to improve or strengthen the work of others. The editors of such journals also rarely tell the authors just who the reviewers are.

In 2012, researcher and blogger John Mashey undertook a <u>detailed investigation</u>²⁶⁷ turning this particular denier spotlight back on themselves.

Mashey looked at a run of climate denier papers published in one journal, "Climate Research" by one editor, New Zealander Chris de Freitas, from 1996 to 2003. De Freitas published the Soon/Baliunas paper that tried to take down Dr Michael Mann's "Hockey Stick" paper, leading to the resignation of a number of editors in protest at what they saw as a flawed peer review process.

Mashey selected a group of 14 climate deniers, none of whom had had papers published in Climate Research prior to De Freitas' editorship. From 1996–2003, 17 papers from this group of deniers were published in Climate Research, with 14, all but three of them edited by de Freitas.

For example, Patrick Michaels was an author of seven of the papers, accounting for half of his total peer-reviewed publications during this timeframe. Skeptical science has the full story.²⁶⁸

2012: Fake a Government report

The Koch-funded Cato Institute and <u>Patrick Michaels</u> went to new lengths in 2012 when they faked a US Government climate report.

In 2009, the White House <u>released a report</u>²⁶⁹ on the impacts of climate change on the US, entitled "Global Climate Change Impacts in the United States" that set out the predicted impacts of climate change across the US.









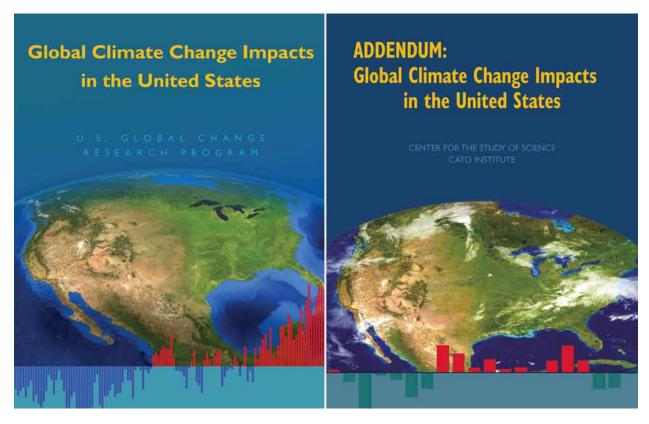








In October 2012, Patrick Michaels, with the Cato Institute, released a report with an identical front page, with one word added: Addendum: "Addendum: Global Climate Change Impacts in the United States". The report was deliberately designed to confuse policymakers and was used 270 in a Congressional presentation by denier John Christy the following month.



Greenpeace <u>outlines the links</u>²⁷¹ between Cato, the Koch brothers and Patrick Michaels' place in the denial machine.

ClimateScienceWatch looks at the errors²⁷² in the report.

Media matters has a great summary²⁷³ of how Patrick Michaels has consistently gotten the science wrong.

Fake A Counter Consensus

At a meeting of ExxonMobil shareholders in May 2000, then ExxonMobil Chairman and Chief Executive Lee Raymond aggressively questioned the scientific consensus by citing <u>a petition</u> signed by '17,000 scientists' that dismissed warnings of human-induced global warming²⁷⁴.

- 270 http://1.usa.gov/15l6zMO
- 271 http://bit.ly/1do5ltl
- 272 http://www.climatesciencewatch.org/2012/10/24/brief-cato-institutes-addendum/
- 273 http://mediamatters.org/research/2013/07/10/patrick-michaels-catos-climate-expert-has-histo/194800
- 274 http://www.oism.org/pproject/

















Doubts about the petition's credibility were quick to surface when it turned out that the signatures included those of the Spice Girls. The petition effort was also rebuffed by the National Academy of Sciences:

"The NAS Council would like to make it clear that this petition has nothing to do with the National Academy of Sciences" said the NAS statement, which also noted that

"The petition was mailed with an op-ed article from The Wall Street Journal and a manuscript in a format that is nearly identical to that of scientific articles published in the Proceedings of the National Academy of Sciences".

In reality the petition was prepared by the so-called <u>Oregon Institute of Science and Medicine</u>, a tiny outfit in Texas, with the ExxonMobil-backed George C Marshall Institute. Three climate scientists <u>roundly rebutted</u> ²⁷⁶ the accompanying paper.

This tactic was recycled in June 2007, the Heartland Institute and Hudson Institute published an article by Denis Avery, entitled "500 Scientists Whose Research Contradicts Man-Made Global Warming Scares" as part of a campaign to publicise a book written by Fred Singer and Avery. The appendix included a long list of scientists' research they claimed supported Singer and Avery's allegation that global warming wasn't happening – or wasn't a crisis. When blogger Kevin Grandia and others at DeSmogBlog contacted a number of the scientists listed, and outraged climate scientists wrote back arguing their work did NOT support the contention.

"I am very shocked to see my name in the list of "500 Scientists with Documented Doubts of Man-Made Global Warming Scares". Because none of my research publications has ever indicated that the global warming is not as a consequence of anthropogenic greenhouse gases, I view that the inclusion of my name in such list without my permission or consensus has damaged my professional reputation as an atmospheric scientist.²⁷⁷"—Dr. Ming Cai, Associate Professor, Department of Meteorology, Florida State University.

"They have taken our ice core research in Wyoming and twisted it to meet their own agenda. This is not science" 278. —Dr. Paul F. Schuster, Hydrologist, US Geological Survey.

Of those scientists who contacted DeSmogBlog, none could see how their research contributing to the IPCC effort could have supported Singer and Avery's claims.

Fake science and polar bears

In March 2007, the journal "Ecological Complexity" published a "Viewpoint" article entitled "Polar bears of western Hudson Bay and climate change: Are warming spring air temperatures the "ultimate" survival control factor?" positing that polar bears were not under threat from global warming and that Arctic sea ice decline was less severe than stated in recent peer-reviewed literature²⁷⁹.

Ecological Complexity publishes peer-reviewed research, but "viewpoints" aren't subject to such review. Because the peer-reviewed and non peer-review reports look almost identical in format it would be almost impossible for a lay reader to tell the difference.

²⁷⁵ http://144.16.65.194/hpg/envis/doc97html/globalssi422.html

²⁷⁶ http://naturalscience.com/ns/forum/forum01b.html

²⁷⁷ http://www.desmogblog.com/500-scientists-with-documented-doubts-about-the-heartland-institute

²⁷⁸ http://www.desmogblog.com/500-scientists-with-documented-doubts-about-the-heartland-institute

²⁷⁹ Ecological Complexity, vol 4 issue 3 pages 73-84

















The authors included several scientists well connected with the denial industry: Sallie Baliunas, Willie Soon, David Legates²⁸⁰ and Tim Ball²⁸¹.

They argued that scientific modelling showing polar bear populations were threatened by climate change could not be trusted. They went on to question not only the climate science showing that the Arctic was warming and sea ice was decreasing, but also tried to show that things like tourism were a much bigger threat to polar bears than the disappearance of their habitat²⁸².

The article landed around the time that the US Government was making decisions on whether to list the polar bear as an endangered species, a decision which could have had large knock-on effects in terms of American climate legislation and the oil industry's exploration of the Arctic for oil. It was widely quoted in submissions by Sarah Palin, then Governor of Alaska's office in her (unsuccessful) submission challenging the listing of the polar bear under the ESA.

Willie Soon acknowledges in the article²⁸³ that the research was partly sponsored (for Willie Soon's work) by ExxonMobil, the American Petroleum Institute and the Charles G. Koch Charitable Foundation (the Koch Brothers have the largest privately-owned oil trading, refining and pipeline company in the US and regularly fund climate denial organizations). Nor has he or his funders stated on the record the remit for this research project.

In 2011, a <u>Greenpeace investigation</u> found that Soon has received more than \$1m over the past decade or so from fossil fuel companies – and, from 2002–2011, none of his research was funded from sources other than fossil fuel companies. In 2011 he received \$64,000 from Donors Trust.

One scientist noted when the Ecological Complexity article was published that the references cited in the 'viewpoint' paper stopped in 2002, after which the Arctic experienced four very warm years. Months after the piece was published, leading polar bear experts, Stirling and Derocher, published a critical response:

"[the authors] ...suggest that factors other than climate warming are responsible for a decline in the polar bear population of Western Hudson Bay... In our examination of their alternative explanations, and the data available to evaluate each, we found little support for any," they said²⁸⁴.

The denier authors then of course got the chance to respond to Stirling and Derocher in the journal, giving them additional undeserved credibility.²⁸⁵ But that's how science is debated.

Unlike Soon and Baliunas's article which was conveniently published just ahead of the US Government's decision on whether to list polar bears as endangered because of global warming, Stirling and Derocher's paper couldn't be taken into account by the decision makers.

The Viewpoint article prompted <u>a letter to ExxonMobil</u> from Brad Miller, Chair of the US House Sub Committee on Investigations and Oversight, which raised a key question about Exxon's funding:

²⁸⁰ http://www.desmogblog.com/david-legates

²⁸¹ http://www.desmogblog.com/climate-change-denier-research-old

²⁸² Ecological Complexity vol 4 issue 3 – page 82: conclusions http://www.sciencedirect.com/science/article/pii/ \$1476945X07000219

²⁸³ ibid: page 83 – acknowledgements

²⁸⁴ Ecological Complexity Vol 5 issue 3, September 2008 pp 193 -201 http://www.sciencedirect.com/science/article/pii/S1476945X08000032



















"To people outside the scientific community, one PhD may seem like another. Certainly Exxon knows better, however. Yet according to Dr Soon, an astrophysicist by profession, ExxonMobil funded the development of his "opinions" on global warming and its potential impact on polar bear populations. The Congress and the Public have a right to know why ExxonMobil is funding a scientist whose writing is outside his area of expertise to create the impression that expert scientists have conducted vigorous, peer reviewed work that says the problems with polar bears [and climate change] are unproven or unserious.²⁸⁶"

Can't publish a peer-reviewed article? Self-publish a book.

"[Books] are clearly a vital weapon in the conservative movement's war on climate science, and one of the key means by which it diffuses climate change denial throughout American society and into other nations." – Dr Riley Dunlap, Oklahoma State University

In the absence of their ability to publish real science in peer reviewed scientific journals, (not least because so many of the climate denial scientists are not actual climate scientists and the lobbyists are not experts) one common tactic over the years has been to write a book. These books are often self-published and printed up by the think tanks and front groups themselves, such as the Competitive Enterprise Institute or the Cato Institute.

If one goes online to Amazon and looks up UK blogger <u>James Delingpole's</u> book, "<u>Watermelons: The Green Movement's True Colors</u>²⁸⁷" and look at the "Customers who bought this book also bought.." section and it's filled with the latest books on the global warming "hoax."

As outlined on DesmogBlog, two behavioural scientists, Dr Riley Dunlap, of Oklahoma State University, and Peter Jacques, of the University of Central Florida, researched the publication of books by deniers and published their study²⁸⁸ in the journal American Behavioural Scientist. They concluded:

"The general lack of peer-review allows authors or editors of denial books to make inaccurate assertions that misrepresent the current state of climate science. Like the vast range of other non-peer-reviewed material produced by the denial community, book authors can make whatever claims they wish, no matter how scientifically unfounded."

















Fake – or outdated – qualifications

There's a growing list of claims made by deniers to make their qualifications look more than what they actually are, or to claim expertise in an area they've never trained for. Here's a snapshot.

Willie Soon

Claim: "Mr. Soon, a natural scientist at Harvard, is an expert on mercury and public health issues." (Wall Street Journal, May 25 2011)²⁸⁹

Fact: Dr Wei Hock (Willie) Soon is an astrophysicist at the Harvard Smithsonian School of Astrophics, which is not Harvard University per se. He is trained in neither public health nor a qualified expert on mercury.

Claim: Sea level rise expert

Fact: no evidence of qualifications in this area, confirmed by his own biography.²⁹⁰

Tim Ball (Canada)

<u>Claim:</u> Professor of Climatology (of 28 years, or 32 years), Winnipeg University

<u>Fact:</u> He was Professor of Geography at Winnipeg University for 8 years, with various associate professorships and lecturing postitions before that. Winnipeg University didn't have a Department of Climatology²⁹¹.

Claim: "One of the first Climatology PhD's in the world"

Fact: Actual qualifications: PhD in Geographical History, not climatology. When he gained his "entry level" PhD, there were already qualified PhD's in climatology.

Lord Christopher Monckton, Viscount of Brenchley

<u>Claim</u>²⁹²: General expertise in climate science, including publishing a peer reviewed paper in American Physical Society Newsletters.

Fact: The paper published was a "letter" in a journal that didn't undertake the peer review process. At the <u>top of Monckton's article</u>,²⁹³ the editors posted this statement: "The following article has not undergone any scientific peer review, since that is not normal procedure for American Physical Society newsletters."

Claim: Member of the UK House of Lords

Fact: While Monckton is entitled to use the title "Lord", he inherited the title after 1999 when UK legislation removed the right for inherited Lords to automatically take up a seat in the House of Lords. In 2010, the Clerk of the House wrote to Monckton²⁹⁴ asking him to desist from claiming membership.

Claim: Qualifications in Mathematics

Fact: He did a course in Mathematics at university.

Claim: An IPCC "expert reviewer"

Facts: Anyone can register themselves to be an "expert reviewer" for the IPCC – it is a self-designated title. Monckton's criticisms of the reports were rejected by the actual experts.

289 http://online.wsj.com/article/SB10001424052748703421204576329420414284558.html

- 290 http://bit.ly/1fmy7XC
- 291 http://www.desmogblog.com/sites/beta.desmogblog.com/files/Johnson statement of defence.pdf
- 292 http://www.wnd.com/files/2012/11/monckton_affidavit.pdf
- 293 http://www.aps.org/units/fps/newsletters/200807/monckton.cfm
- 294 http://www.parliament.uk/business/news/2011/july/letter-to-viscount-monckton/



















Bob Carter

Claim: Adjunct Professor of Geology at James Cook University in Australia,

Fact: He lost this title in January 2013. At the time of writing he is still listed as such on a number of denier websites, such as the <u>Global Warming Policy Foundation</u>.²⁹⁵ The Heartland Institute <u>did so in July 2013</u>²⁹⁶, but after publicity on the issue, changed the citation.

Claim: Research Professor at the University of Adelaide

Fact: While he was a visiting professor at the University of Adelaide only until 2005, many sites <u>still describe</u> <u>him</u>²⁹⁷ as a "Research Professor at the University of Adelaide."

S. Fred Singer

Former **space scientist** (a rocket scientist) and government administrator.

Retired, 1994

Expertise claimed:

- <u>questioned the link</u> between passive smoking and cancer (authored report)
- argues that there's no link between CFCs and ozone depletion
- questioned the science of acid rain
- and nuclear energy



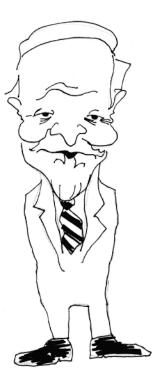
Willie Soon



Christopher Monckton







S. Fred Singer

²⁹⁵ http://pages.citebite.com/o2h0l2p5h5eik

²⁹⁶ http://bit.ly/190Dq1l

²⁹⁷ http://pages.citebite.com/s1u9g6m4v3bqr

















Climate denial and US politics The political effect of climate denial

2001 - 2008 The Bush White House

The eight years of the Bush White House was a key opportunity for the climate deniers.

During the 2000 presidential campaign debates, George W. Bush <u>declared</u> that global warming was "an issue that we need to take very seriously," 298. He promised to sign up to the Kyoto Protocol, but backed off that promise soon after coming into power.

In early 2001, communications expert Frank Luntz, had written the following advice on climate change:

"The scientific debate [on climate change] remains open. Voters believe that there is no consensus about global warming within the scientific community. Should the public come to believe the scientific issues are settled, their views about global warming will change accordingly. Therefore, you need to continue to make the lack of scientific certainty a primary issue in the debate..."²⁹⁹

This became the guiding strategy of the White House and the Republican Party for the remainder of the administration. In 2003 the advice in the Luntz memo was circulated to all Republicans on the Hill by the GOP press office. Interestingly, the wordsmith Frank Luntz has since changed his mind on global warming and now believes it's caused by human activities³⁰⁰.

Deniers placed in key positions

During the Bush years, the denier industry enjoyed easy access to the White House, principally via former employees of the American Petroleum Institute (API), on whose board Lee Raymond, Exxon CEO sat until 2005 when he retired.

In early 2001 <u>lawyer Phil Cooney</u>³⁰¹ left his 15-year stint at the API (where he was "climate team leader") to take up a position as chief of staff at Bush's White House Council on Environmental Quality (CEQ), where he advised the President on global warming policy and science. In 2005, it was revealed that he had been watering down scientific reports.³⁰² He resigned soon after and went to work for Exxon.

At the API, Cooney's boss for many years had been William O'Keefe, former chair of the Global Climate Coalition (GCC). O'Keefe had left the API to concentrate on running his front group the George C. Marshall Institute. From 2001–2005 he was employed by ExxonMobil to lobby the Executive Office of the President, the White House and Senate on climate change³⁰³. Perhaps coincidentally, ExxonMobil dropped O'Keefe's lobby contract at the same time Phil Cooney left the CEQ to work for Exxon.

A memo obtained by the <u>National Resource Defence Council</u> (NRDC) under the Freedom of Information Act showed Exxon lobbyist Randy Randol suggesting replacements the Bush Administration could make to the IPCC membership, "to assure none of the Clinton/Gore proponents are involved in any decisional activities." ³⁰⁴ The suggested recruits included John Christy and Richard Lindzen. ³⁰⁵

- 298 Commission on Presidential Debates, Transcript of the 2nd Gore Bush Presidential Debate, October 11, 2000. http://www.debates.org/pages/trans2000b.html
- 299 http://www.ewg.org/files/LuntzResearch_environment.pdf
- 300 http://news.bbc.co.uk/2/hi/programmes/panorama/5005994.stm
- 301 http://www.sourcewatch.org/index.php?title=Philip_A._Cooney
- 302 http://www.nytimes.com/2005/06/08/politics/08climate.html?_r=1 and http://www.nytimes.com/2005/06/15/science/14cnd-climate.html?scp=1&sq=cooney%20exxon&st=cse
- 303 For example http://soprweb.senate.gov/index.cfm?event=getFilingDetails&filingID=0f80378e-d779-4ba5-87b2-8bd4d9f8b5f7 is one of his filings with the US lobby registration system.
- 304 http://www.nrdc.org/media/pressreleases/020403.asp Page 5 of the .pdf
- 305 Ibid. at page 5

















It also recommended the Administration employ Dr Harlan Watson. The Bush Administration subsequently did appoint Harlan Watson to head both its UNFCCC and IPCC delegations.³⁰⁶

Bush administration forces out IPCC chair Robert Watson

The same memo that recommended Harlan Watson contained a direct request:

"Can [IPCC Chair Dr Robert] Watson be replaced now at the request of the US?

Subsequently, there was launched a successful effort to oust then IPCC Chair Dr Robert Watson. Watson, an atmospheric scientist, had been at the forefront of the climate issue for over 20 years, coordinating international science and reaction to the ozone hole crisis, then global warming. He had served as Chair of the IPCC between 1996–2002.

In April 2002, the Bush Administration opposed Watson's re-appointment, instead successfully backing IPCC vice-chairman Rajendra Pachauri, to replace him.

Robert Watson himself commented: "So those who say I'm an advocate don't want to hear the message that indeed the earth is warming; that most of the warming of the last 50 years is attributable to human activities; that carbon dioxide is the key human-induced greenhouse gas and that most of it comes from fossil fuels. There are some people who clearly don't want to hear that message, but that is the message of the IPCC...³⁰⁷"

Fred Singer made an oblique reference to Watson's demise after the AR4 was published, saying "Compared to earlier reports, the "Fourth Assessment" is really quite sober, perhaps because a real scientist, less given to ideology, heads the effort." 308

2013: Republican denial

Polling in the US has consistently showed a lower level of concern about climate change compared with the rest of the world.

A Pew Global poll³⁰⁹ in June 2013 found that "Concern about global climate change is particularly prevalent in Latin America, Europe, sub-Saharan Africa, and the Asian/Pacific region, but majorities in Lebanon, Tunisia and Canada also say climate change is a major threat to their countries. *In contrast, Americans are relatively unconcerned about global climate change.*"

While there has been no conclusive research to show that this is due to climate denial campaigns, a closer inspection of the research is revealing.

The polling in the US consistently shows a party political divide on concern about global warming. And a June 2013 study published in the journal "Public understanding of science³¹⁰" concluded that a key link between climate change denial and conservative outlets like Fox News and Rush Limbaugh was an inherent distrust of scientists³¹¹.

³⁰⁶ Ibid. At page 5

³⁰⁷ Salon.com, "Watson, Come Here, I Want to Fire You: Angry at His Predictions of Global Warming, the Bush Administration and the Energy Industry Strive to Unseat a Prominent Scientist," by Damien Cave, Salon.com April 5, 2002 http://www.salon.com/technology/feature/2002/04/05/global_warming/index.html

^{308 &}quot;Not so dire after all" Op Ed, New York Sun, Feb 2 2007 page 8 also available at http://www.sepp.org "The week that was" February 2007

³⁰⁹ http://www.pewglobal.org/2013/06/24/climate-change-and-financial-instability-seen-as-top-global-threats/

³¹⁰ http://sciencepolicy.colorado.edu/about_us/meet_us/max_boykoff/readings/hmielowski_2013.pdf

³¹¹ http://www.huffingtonpost.com/2013/08/06/fox-news-climate-change_n_3714802.html

















"Conservative media use decreases trust in scientists which, in turn, decreases certainty that global warming is happening," stated the authors.

But nowhere is the denial in the US more prevalent than in its leadership.

The Washington Post <u>noted</u> that the Republican election platform had almost no mention of climate change, a marked contrast to its 2008 election platform for the McCain-Palin ticket.

Post elections, the results were clear. According to the <u>Center for American Progress</u>³¹⁵, "almost 55 percent — 127 members — of the current Republican caucus in the House of Representatives deny the basic tenets of climate science. 65 percent (30 members) of the Senate Republican caucus also deny climate change."

But this strategy may be beginning to backfire. In July 2012 <u>a poll</u> by the League of Conservation Voters found 80 percent support among under 35 year olds for President Obama's climate policies. But even among the minority who were unfavorable to Obama, 56 percent supporting climate action and just 38 percent opposed.

And in the wake of Hurricane Sandy, and widespread droughts, floods and wildfires across the US, that, in turn, led to a rise in public concern, the White House itself has finally begun to take notice. ³¹⁶

In May 2013, the National Journal's Coral Davenport reported what she called "The coming GOP civil war on climate change," 317

"Already, deep fissures are emerging between, on one side, a base of ideological voters and lawmakers with strong ties to powerful tea-party groups and super PACs funded by the fossil-fuel industry who see climate change as a false threat concocted by liberals to justify greater government control; and on the other side, a quiet group of moderates, younger voters, and leading conservative intellectuals who fear that if Republicans continue to dismiss or deny climate change, the party will become irrelevant."

³¹² http://www.nytimes.com/2012/09/14/us/politics/fossil-fuel-industry-opens-wallet-to-defeat-obama.html

³¹³ http://www.bloomberg.com/news/2012-10-17/is-obama-really-waging-a-war-on-coal-.html

³¹⁴ http://www.climatesilence.org/

³¹⁵ http://thinkprogress.org/climate/2013/06/26/2202141/the-anti-science-climate-denier-caucus-113th-congress-edition/

³¹⁶ http://www.nationaljournal.com/magazine/why-it-finally-makes-political-sense-to-talk-about-climate-change-20130725

³¹⁷ http://www.nationaljournal.com/magazine/the-coming-gop-civil-war-over-climate-change-20130509

















CONCLUSION

Climate change is happening now, is caused by human-induced pollution from industrial activities and will have catastrophic consequences, three assertions that are backed by the most rigorous scientific undertaking in history.

They are backed by repeated analysis of published science confirming the consensus, and will be reinforced by the IPCC's AR5 Fifth Assessment reports, along with the <u>US National Climate Assessment</u> (NCA) in early 2014.

Each of these reports brings new urgency to the climate crisis, more clarity to the scientific consensus and also brings another counter-attack from the climate denial machine.

Attacks on the IPCC AR5 and the US National Climate Assessment are already underway, well before they are published.

The history of the US National Climate Assessment's publication is significant. This report is required by US law under the Global Change Research Act of 1990 to be delivered every four years. The Clinton Administration published the first report in 2000. The second was published in the spring of 2009 in the early Obama Administration. That's a nine-year gap in an Assessment that was supposed to be published every four years, to keep the American people and government informed about the impacts of climate change.

The nine-year hiatus was the result of the massive pressure brought to bear on the Bush White House by the same cogs in the climate denial machine that we outline in this report, oiled by fossil fuel interests. A flurry of emails discovered by FOIA request between some of the key players here and the White House's man Phillip Cooney, who came from American Petroleum Institute and later went to work for ExxonMobil are testament to that.

This briefing outlines the lengths to which the fossil fuel industry has been willing to go to prevent the scientific conclusions from being accepted – or from even being published at all.

It provides just a flavor – a few examples of some of the more virulent attacks aimed at undermining public confidence in climate science, all aimed at preventing government action to fight the climate crisis. All of which means, the correct response to attacks on climate science is scepticism.

One episode not covered in this report was the odd play by coal interests in the 1990s, the <u>Greening Earth Society</u>, wherein they published a <u>lavish media packet</u>, videos, booklets and spokespeople like Patrick Michaels promoting the notion that global warming is in fact a good thing, and would lead to a "greening of planet earth", including increased agricultural production.

This recent history, as well as the prior history of denial by the tobacco companies and chemical, asbestos and other manufacturing industries, is important to remember because, like the other industries that came before it, the fossil fuel industry has never admitted that it was misguided or wrong in its early efforts to delay the policy reaction to the climate crisis. To this day, it continues to obstruct solutions.

The individuals, organizations and corporate interests who comprise the 'climate denial machine' have caused harm and have slowed our response time. As a result, we will all ultimately pay a much higher cost as we deal with the impacts, both economic and ecological.

Eventually these interests will be held accountable for their actions.

















RESOURCES

Blogs covering the Denial machine:

DeSmogBlog – a Canadian blog exposing climate denier junk science and business links http://www.desmogblog.com

Polluterwatch – Greenpeace US's website about the big polluters and their campaigns against climate science, regulation – and against renewable energy. http://www.polluterwatch.com

The Guardian Environment blogs, namely:

- Planet Oz by Graham Readfearn http://www.theguardian.com/environment/planet-oz
- Climate Consensus, the 97% by John Abraham and Dana Nuccitelli http://www.theguardian.com/environment/climate-consensus-97-per-cent

Climate Progress – A. U.S blog run by Joe Romm that covers developments in climate science and politics. http://climateprogress.org/

ALEC Exposed – a wiki on Sourcewatch that exposes the work of the American Legislative Exchange Council, stateside, across the US. http://www.alecexposed.org

Climate Science Watch – Former "gagged" US climate scientist Rick Piltz follows the abuse of climate science at http://climatesciencewatch.org/

Hot Topic - New Zealand blog on climate science and denial arguments http://www.hot-topic.co.nz

On climate science

Skeptical Science – An Australian blog by John Cook that answers the main denier arguments. http://www.skepticalscience.com/

RealClimate blog – a blog by climate scientists discussing science in a very scientific way. http://www.realclimate.org

Skeptical science – blog by John Cook, that answers the main denier arguments. http://www.skepticalscience.com/

Grist "how to talk to a climate sceptic" http://www.grist.org/article/series/skeptics/

Books:

Naomi Oreskes, "Merchants of doubt", Bloomsbury Press 2010.

James Hoggan's "Climate Cover Up" Greystone books 2009

The late Stephen H Schneider <u>"Science as a Contact Sport"</u> (intro by Tim Flannery) – a scientist's account of years of denier attacks. Random House, 2009

Michael Mann's "<u>The Hockey Stick and the Climate Wars</u> – dispatches from the front lines" – an account of the denial machine's ten-year war against one scientist.

APPENDIX I: CLIMATE DENIAL'S "CONTINENTAL ARMY"

"There's really only about 25 of us doing this. A core group of skeptics. It's a ragtag bunch, very Continental Army." — Steve Milloy talking to Popular Science, June, 2012.

Steve <u>The Junkman</u> Milloy, arguably one of the very first global warming deniers, first shot to fame through his challenges to the links between tobacco science and health problems when he was paid by Phillip Morris to direct the front group it set up in 1997 to defend the science of second hand smoke: The Advancement of Sound Science Coalition (TASSC). He then turned to denial of climate change, and has been at the heart of that campaign ever since.

Milloy has claimed the campaign is driven by a small group of about 25 people. So who might this "Continental Army" of about 25 people be? We've found 31. Of course there are more who have come and gone, but this gives a fairly comprehensive picture.

Individuals associated with think tanks

<u>Joseph Bast</u>, Heartland Institute

Craig Rucker <u>Committee for a Constructive Tomorrow</u>

Constructive Tomorrow

Sandy Liddy Bourne (Heartland, Steven F Hayward (DCF, Power Line

American Energy Freedom Center, blog)

ALEC) Nigel Lawson Global Warming Policy

Myron Ebell (CEI) Foundation

Christopher Horner (CEI and American Benny Peiser, Global Warming Policy

Tradition Institute) Foundation

Marlo Lewis (CEI Paul Driessen, CFACT

Fred Smith (CEI)

Bob Ferguson, Science and Public

Policy Institute

The Echo Chamber

Along with the think tanks pushing climate denial, there's a large "echo chamber" in the blogosphere, largely led by a small band of bloggers. They have a larger echo chamber in the form of conservative media such as Fox News, Rush Limbaugh et al.

Anthony Watts: Wattsupwiththat.com Marc Morano climatedepot.com

Steve McIntyre ClimateAudit

James Delingpole, The Daily Telegraph (UK)

Steve Milloy JunkScience.com

Andrew Bolt Australian Murdoch columnist

The "Scientists"

S Fred Singer (SEPP)

Richard S Lindzen

Patrick Michaels (Cato)

Willie Soon (and Sallie Baliunas) Smithsonian Institute for Astrophysics

David Legates State Climatologist for Delaware

John Christy

Craig Idso - Center for the Studey of Carbon Dioxide & Global Change

Roy Spencer

Bob Carter (former JCU, Australia, now ex JCU)

<u>Ian Plimer</u>

Tim Ball

Special category: non scientists who pretend to have expertise

Lord Christopher Monckton

















APPENDIX II: THINK TANKS WORKING ON CLIMATE DENIAL - FUNDING

1. Think tanks with funding from Donors Capital Fund 2002–2011.

total: \$107,889,251

Source: http://dynamodata.fdncenter.org/

DCF	Acton Institute	\$2,365,609
DCF	Alabama Institute	\$800,000
DCF	Alaska Policy Forum	\$197,000
DCF	American Conservative Union Foundation	\$10,000
DCF	American Council on Science and Health	\$89,500
DCF	American Enterprise Institute	\$19,645,204
DCF	American Legislative Exchange Council	\$20,000
DCF	Americans for Limited Govt Res. Fdn	\$3,450,000
DCF	Americans for Prosperity Foundation	\$1,328,000
DCF	America's Future Foundation	\$218,000
DCF	America's Majority Foundation	\$50,000
DCF	Atlas Economic Research Foundation	\$333,000
DCF	Ayn Rand Institute	\$75,000
DCF	Beacon Center of Tennessee	\$305,000
DCF	Beacon Hill Institute	\$82,000
DCF	Capital Research Center	\$26,000
DCF	Cascade Policy Institute	\$1,253,600
DCF	Cato Institute	\$1,186,034
DCF	Center for Independent Thought	\$600,000
DCF	Center for Study of CO, and Global Change	\$154,400
DCF	Claremont Institute	\$33,911
DCF	Committee for a Constructive Tomorrow	\$325,000
DCF	Commonwealth Foundation for Public Policy Alternative	\$1,292,800
DCF	Competitive Enterprise Institute	\$695,279
DCF	Donors Trust	\$1,078,500
DCF	Drexel University*	\$14,250
DCF	Ethan Allen Institute	\$298,500
DCF	Federalist Society	\$8,820,963
DCF	Focus on the Family	\$200
DCF	Free to Choose Network, Inc.	\$1,188,328
DCF	Freedom Foundation	\$871,818
DCF	Freedom Foundation (Evergreen Freedom Fdn)	\$1,183,984
DCF	Freedom Works Foundation	\$12,000
DCF	Frontiers of Freedom	\$50,000
DCF	Georgia Public Policy Foundation	\$531,500
DCF	GMU Foundation Law and Econ Center	\$1,170,000
DCF	Goldwater Institute	\$303,000
DCF	Grassroots Institute of Hawaii	\$777,500
DCF	Heartland Institute	\$13,965,247
DCF	Heritage Foundation	\$59,000
DCF	Hudson Institute	\$5,010,000
DCF	Illinois Policy Institute	\$1,394,500
DCF	Independence Institute	\$1,525,000
DCF	Institute for Humane Studies	\$2,743,262

















DCF	Institute for Justice	\$572,000
DCF	Institute for Religion and Democracy	\$2,340,000
DCF	International Policy Network US, Inc.	\$181,500
DCF	James Madison Institute for Public Policy	\$180,000
DCF	John Locke Foundation	\$840,600
DCF	Judicial Watch	\$25,000
DCF	Landmark Legal Foundation	\$5,000
DCF	Leadership Institute	\$278,000
DCF	Mackinac Center for Public Policy	\$398,000
DCF	Maine Heritage Policy Center	\$346,400
DCF	Manhattan Institute	\$841,770
DCF	Maryland Public Policy Institute	\$611,000
DCF	Media Research Center	\$436,520
DCF	Mercatus Center at George Mason University	\$909,000
DCF	Montana Policy Institute	\$1,001,933
DCF	Mountain States Legal Foundation	\$26,500
DCF	National Center for Policy Analysis	\$490,000
DCF	National Center for Public Policy Research, Inc.	\$6,000
DCF	National Legal & Policy Center	\$1,500
DCF	National Right to Work Legal Defense Foundation, Inc.	\$16,000
DCF	National Taxpayers Union	\$715,500
DCF	Nevada Policy Research Institute	\$1,262,432
DCF	NFIB Legal Foundation	\$53,500
DCF	North Dakota Policy Foundation	\$375,000
DCF	Oklahoma Council of Public Affairs	\$730,617
DCF	Oregon Better Government Project	\$195,000
DCF	Pacific Legal Foundation	\$23,000
DCF	Pacific Research Institute for Public Policy	\$1,058,001
DCF	Palmer R Chitester Fund	\$0
DCF	Philanthropy Roundtable	\$1,731,660
DCF	Platte Institute for Economic Research	\$565,531
DCF	Public Interest Institute	\$198,459
DCF	Reason Foundation	\$413,693
DCF	Rio Grande Foundation	\$749,500
DCF	State Policy Network	\$9,386,601
DCF	Students for Liberty	\$125,412
DCF	Sutherland Institute	\$556,000
DCF	Tennessee Center for Policy Research	\$165,000
DCF	Texas Public Policy Foundation	\$2,492,008
DCF	Thomas Jefferson Institute	\$214,450
DCF	Virginia Institute for Public Policy	\$403,500
DCF	Washington Legal Foundation	\$51,000
DCF	Washington Policy Center	\$543,275
DCF	Wyoming Liberty Group	\$485,000
DCF	Young America's Foundation	\$355,500

















2. Think tanks with funding from Donors Trust 2002–2011

total: \$41,001,117

Source: http://dynamodata.fdncenter.org

	Organisation	Totals
DT	Acton Institute	\$188,900
DT	American Council on Science & Health	\$99,008
DT	American Enterprise Institute	\$195,750
DT	American friends of IEA	\$204,650
DT	American Legislative Exchange Council	\$25,000
DT	Americans for Limited Government Research Foundation	\$500,000
DT	Americans for Prosperity Foundation	\$10,913,961
DT	Americans for Tax Reform Foundation	\$172,100
DT	America's Majority Foundation	\$65,600
	Ashbrook (John M) Center for Public Affairs, Ashland	
DT	University	\$10,000
DT	Atlas Economic Research Foundation	\$366,000
DT	Beacon Center of Tennessee	\$32,750
DT	Capital Research Center	\$50,500
DT	Cato Institute	\$349,173
DT	Center for Independent Thought	\$40,000
DT	Citizens Economic Research Foundation	\$6,000
DT	Claremont Institute	\$42,250
DT	Committee for a Constructive Tomorrow	\$3,840,178
DT	Commonwealth Foundation for Public Policy Alternatives	\$180,500
DT	Competitive Enterprise Institute	\$587,400
DT	Discovery Institute	\$1,049,500
DT	Donors Capital Fund	\$1,962,103
DT	E Pluribus Unum Films	\$42,000
DT	Empower Texans Foundation	\$370,000
DT	Federalist Society	\$1,933,500
DT	Foundation for Rational Economics &Education	\$5,650
DT	Foundation for Research on Econ & Environment (FREE)	\$29,000
DT	Free to Choose Network, Inc	\$155,000
DT	Freedom Alliance	\$1,000
DT	Freedom Foundation (Evergreen Freedom fdn)	\$27,825
DT	FreedomWorks Foundation	\$850,423
DT	frontiers of Freedom Institute	\$7,500
DT	GMU Foundation (Econ)	\$1,000
DT	GMU Foundation (Law & Econ Center)	\$80,000
DT	Goldwater Institute	\$3,050
DT	Grassroots Institute of Hawaii	\$172,800
DT	Harvard-Smithsonian Center or Astrophysics	\$50,000
DT	Heartland Institute	\$531,250
DT	Heritage Foundation	\$282,765
DT	Hudson Institute	\$212,000

















DT	Illinois Policy Institute	\$501,207
DT	Independence Institute	\$202,000
DT	Independent Institute	\$6,500
DT	Independent Women's Forum	\$3,387,604
DT	Institute for Energy Research	\$715,000
DT	Institute for Humane Studies	\$606,900
DT	Institute for Justice	\$65,500
DT	Institute of World Politics	\$471,000
DT	International Policy Network US, inc	\$215,420
DT	John Locke Foundation	\$150
DT	Judicial Watch	\$7,500
DT	Landmark Legal Foundation	\$113,100
DT	Leadership Institute	\$86,600
DT	Ludwig Von Mises Institute	\$18,600
DT	Mackinac Center for Public Policy	\$7,600
DT	Manhattan Institute for Policy Research	\$575,500
DT	Media Research Center	\$365,750
DT	Mercatus Center, GMU	\$1,350,650
DT	Montana Policy Institute	\$50,000
DT	Mountain States Legal Foundation	\$36,050
DT	National Center for Policy Analysis	\$57,150
DT	National Center for Public Policy Research, Inc	\$53,500
DT	National Legal & Policy Center	\$44,850
DT	National Review Institute	\$166,500
DT	National Right to Work Foundation	\$178,250
DT	National Taxpayers Union Foundation	\$697,350
DT	NFIB Legal Foundation	\$2,040,000
DT	Pacific Legal Foundation	\$6,600
DT	Pacific Research Institute for Public Policy	\$329,000
DT	Philanthropy Roundtable	\$90,900
DT	Public Interest Institute	\$7,500
DT	Reason Foundation	\$422,600
DT	Rio Grande Foundation	\$7,500
DT	State Policy Network	\$672,450
DT	Student for Liberty	\$15,000
DT	Sutherland Institute	\$827,500
DT	Texas Public Policy Foundation	\$138,750
DT	The James Partnership	\$791,500
DT	Thomas Jefferson Institute	\$5,000
DT	Virginia Institute for Public Policy	\$14,000
DT	Washington Legal Foundation	\$7,500
DT	Washington Policy Center	\$2,000
DT	Wyoming Liberty Group	\$6,000
DT	Young America's Foundation	\$1,000

3. Think tanks with funding from ExxonMobil

Greenpeace Research Department

Exxonsecrets.Org

June 2013

Sources:

ExxonMobil Annual Worldwide Giving Reports And ExxonMobil Foundation IRS 990s

ORGANIZATION	Total 1998-2012
Acton Institute	365,000
Advancement of Sound Science Center	50,000
AEI American Enterprise Institute	3,125,000
ALEC American Legislative Exchange Council	1,619,700
American Conservative Union Foundation	90,000
American Council for Capital Formation Center for Policy Research	1,674,523
American Council on Science and Health	165,000
American Spectator Foundation	115,000
Annapolis Center	1,153,500
Atlas Economic Research Foundation	1,082,500
Capital Research Center (Greenwatch)	265,000
Cato Institute	125,000
CEI Competitive Enterprise Institute	2,005,000
Center for a New Europe-USA	170,000
Center for American and International Law (formerly called the Southwestern Legal Foundation)	383,650
Center for Defense of Free Enterprise	230,000
Center for the Study of CO ₂ and Global Change	100,000
CFACT Committee for a Constructive Tomorrow	582,000
Chemical Education Foundation	155,000
Citizens for a Sound Economy (FreedomWorks)	380,250
Communications Institute	515,000
Congress of Racial Equality	325,000
Consumer Alert	70,000
Environmental Literacy Council	100,000
Federal Focus	125,000
Federalist Society	195,000
Fraser Institute, Canada	120,000
Free Enterprise Action Institute	50,000
Free Enterprise Education Institute	80,000
FREE Foundation for Research on Economics and the Environment	450,000
Frontiers of Freedom	1,272,000
George C. Marshall Institute	865,000
George Mason Univ. Law and Economics Center	385,000
Heartland Institute	676,500

ORGANIZATION	Total 1998-2012
Heritage Foundation	780,000
Hoover Institution	295,000
Independent Institute	85,000
Independent Women's Forum	50,000
Institute for Energy Research	337,000
Institute for Senior Studies	30,000
Institute for Study of Earth and Man	76,500
International Policy Network - North America	390,000
International Republican Institute	115,000
Landmark Legal Foundation	90,000
Lexington Institute	10,000
Lindenwood University, St. Charles, Missouri	40,000
Manhattan Institute	635,000
Media Institute	120,000
Media Research Center (Cybercast News Service formerly Conservative News)	362,500
Mercatus Center, George Mason University	330,000
Mountain States Legal Foundation	40,000
National Association of Neighborhoods	225,000
National Black Chamber of Commerce	825,000
National Center for Policy Analysis	645,900
National Center for Public Policy Research	445,000
National Legal Center for the Public Interest	216,500
National Taxpayers Union Foundation	550,000
Pacific Legal Foundation	255,000
Pacific Research Institute for Public Policy	665,000
PERC Property and Environment Research Center (formerly Political Economy Research Center)	155,000
Reason Foundation / Reason Public Policy Institute	321,000
Regulatory Checkbook	50,000
Science and Environmental Policy Project	20,000
Smithsonian Astrophysical Observatory	417,212
Tech Central Science Foundation	95,000
Texas Public Policy Foundation	80,000
Washington Legal Foundation	375,000
TOTAL 1998-2012	27,424,735