

It's Time to Act on Global Warming

These 58 Heartland Institute "experts" believe global warming is not a crisis. Here is an overview of their credentials and views.



Visit desmog.com/heartland-58 for sources and more information.

? **Fact or Fiction?**
Extraordinary claims require extraordinary evidence. Everybody is entitled to an opinion, but scientific facts are discussed in the peer-reviewed literature. If the Heartland "experts" have convincing evidence of faults in current mainstream climate science, they should publish it in peer-reviewed journals. How many articles that cast doubt on the consensus were published by these "experts"? A red number indicates no climate-related publications whatsoever.

0 **Habibullo Abdussamatov, Dr. Sci.** **Russia**
Space researcher, thinks because "Mars is also warming", global warming on Earth is exclusively due to solar irradiance. Colleagues stated that his idea "doesn't make physical sense".

1 **J. Scott Armstrong, Ph.D.** **USA**
Industrial Engineer, Ph.D. in Management. Professor for Marketing. Does work on forecasting, and holds the opinion that experts are no better at forecasting than unaided college students.

0 **Jerry Arnett, M.D.** **USA**
A lung specialist. Before anti-climate, he was anti-anti-tobacco: "influential anti-tobacco activists [...] have unethically attacked the research of eminent scientists in order to further their ideological and political agendas."

0 **Ron Arnold** **USA**
Free-enterprise anti-environmentalist. Author of "Freezing in the Dark: Money, Power, Politics and The Vast Left Wing Conspiracy".

0 **Dennis Avery** **USA**
Studied agricultural economics. Supporter of biotechnology, pesticides, irradiation, factory farming and free trade. Thinks Earth is cooling.

2 **Tim Ball, Ph.D.** **Canada**
Former geography professor, former chairman of physics-denying fringe group PSI. Has been caught ballooning his credentials.

9 **Robert Balling, Ph.D.** **USA**
Professor of Geography, did some climatology. Received ExxonMobil & OPEC funding. Says that "elevated atmospheric CO₂ will produce biological miracles all over the world." In 2012 received US\$1,000 per month from the Heartland Institute.

0 **Joe Bastardi** **USA**
Weather forecaster. Said that CO₂ cannot cause global warming because it's heavier than air. Throws around thermodynamics memes he does not understand.

0 **E. Calvin Beisner, Ph.D.** **USA**
Ph.D. in Scottish History, Evangelical fundamentalist. Thinks God will not allow for catastrophic global warming to happen.

0 **Larry Bell** **USA**
Professor of architecture. Doesn't understand the basics of CO₂ concentration in the atmosphere. Doubts that CO₂ concentration actually rose from pre-industrial times.

0 **Christopher Booker** **United Kingdom**
English journalist. Also doubts link between second-hand smoke and cancer. Thinks asbestos is not a health issue.

0 **Robert L. Bradley, Jr.** **USA**
Ph.D. in political economy, worked for Enron. Says the world will never run out of fossil fuels, and that global warming will be beneficial.

0 **Barry Brill** **New Zealand**
Barrister and solicitor, former NZ Minister (Science, Technology, Energy). His group NZCSC has been accused of manipulating data to hide the warming trend in New Zealand.

1 **Robert M. Carter, Ph.D.** **Australia**
Former geology professor at James Cook University in Queensland. In 2012 was paid US\$1,667 per month by Heartland Institute, without voluntary public disclosure. Active in many other lobby groups.

0 **George Christensen, MP** **Australia**
National Party Federal MP. Thinks Heartland Institute reports come from "real climate scientists", as opposed to, well, real climate scientists.

0 **John Coleman** **USA**
Weather forecaster, degree in journalism. Gives antics such as "Isn't CO₂ the natural gas that we breathe out? Isn't it the gas that plants need to grow? Hasn't CO₂ always been in the atmosphere?"

0 **Walter Cunningham** **USA**
Former astronaut. Doesn't understand the very basics of how water vapor feedback works. Cites the Oregon Petition as evidence that there is no global warming.

0 **James Delingpole** **United Kingdom**
Journalist, degree in English Literature. Author of "Watermelons: How the Environmentalists are Killing the Planet, Destroying the Economy and Stealing Your Children's Future". Said "I feel a bit of an imposter talking about the science. I'm not a scientist, you may be aware. I read English Literature."

0 **Paul Driessen** **USA**
BA in geology. Author of "Eco-Imperialism: Green Power Black Death". Says closing coal plants would not give any benefits, with huge costs to society.

1 **Don Easterbrook, Ph.D.** **USA**
Former geology professor. Predicts global cooling. Unfazed by repeated pointing-out that his data contain gross errors.

0 **Myron Ebell** **USA**
M.Sc. in Political Theory. Long-time recipient of Exxon money, in 2004 earned US\$82,000 as Competitive Enterprise Institute's Director of Global Warming.

0 **Indur Goklany, Ph.D.** **USA**
Ph.D. in Electrical Engineering. Involved in various pro-market think tanks. In 2012, received US\$1,000 per month from Heartland Institute. Promotes DDT.

0 **Fred Goldberg, Ph.D.** **Sweden**
Ph.D. in welding technology. Thinks there is not enough CO₂ in the atmosphere, because 100 ppm more would make plants thrive.

0 **Stanley Goldenberg** **USA**
Meteorologist, working on hurricanes. Thinks Arctic sea ice is increasing.

0 **Steve Goreham** **USA**
M.Sc. Electrical Engineering. Believes "global warming is natural and cars are innocent". Author of "The Mad, Mad, Mad World of Climatism", distributed by the Heartland Institute. Contributes to conservative websites such as "Big Government".

0 **Tom Harris** **Canada**
B.Eng. (thermofluids). Former lobbyist. Has been shown to cherry-pick his data in order to gain results he likes. Nevertheless, Carlton University let him deliver a climate change course, which was ripped to pieces by the Committee for the Advancement of Scientific Skepticism (CASS).

0 **Howard Hayden, Ph.D.** **USA**
Ph.D. in Physics (ionic & atomic collisions). Has predicted cooling. Assumes the recent warming is nothing out of the ordinary.

0 **Roger Helmer, MEP** **United Kingdom**
M.A. in Mathematics. Doesn't understand how CO₂ can drive warming, with warming at the same time driving CO₂ release.

3 **Craig Idso, Ph.D.** **USA**
Ph.D. in Geography. In 2012, received US\$11,600 per month from Heartland Institute. Worked for Peabody Energy, "the world's largest private-sector coal company". States that elevated CO₂-levels are "a boon for the biosphere".

0 **Richard A. Keen, Ph.D.** **USA**
Ph.D. Geography / Climatology. Meteorology instructor. Says he did "some climate modeling when I was young and less wise". Cherry-picks cooling out of global temperature data.

0 **Madhav Khandekar** **Canada**
Ph.D. in Meteorology, retired Environment Canada scientist. In 2012 received US\$1,000 per month from Heartland Institute. Says "There is no correlation between CO₂ and temperature at all."

1 **William Kininmonth** **Australia**
Retired meteorologist. Now runs the "Climate Research Institute" from his home.

0 **David W. Kreutzer, Ph.D.** **USA**
Ph.D. in Economics. Senior Policy Analyst for the conservative / free-trade think tank The Heritage Foundation.

0 **Hon. Vaclav Klaus, Ph.D.** **Czech Republic**
Former President of the Czech Republic. Economist and free-trade fundamentalist. Said "the climate change debate is basically not about science; it is about ideology."

3 **David Legates, Ph.D.** **USA**
Ph.D. in Climatology. Has done a study funded by Koch Industries, was asked to step down as State Climatologist, presumably because of ties to Willie Soon.

0 **Jay Lehr, Ph.D.** **USA**
Economist, may have expertise in groundwater hydrology. Science director of the Heartland Institute, which received almost US\$800,000 from ExxonMobil since 1998. Also big on "smoker's rights", thanks to US\$190,000 from Philip Morris.

0 **Marlo Lewis, Ph.D.** **USA**
Ph.D. in Government. Senior Fellow at Competitive Enterprise Institute, which also defends mountaintop removal mining.

8 **Richard Lindzen, Ph.D.** **USA**
MIT professor emeritus of Meteorology. Committed to low 2xCO₂ climate sensitivity with negligible impacts 25 years ago and never changed his mind, likewise on secondhand smoke. Charged US\$2,500 per day for consulting for fossil energy companies.

0 **Craig Loehle, Ph.D.** **USA**
Ph.D. in Mathematical Ecology. Attributes about 40% of recent warming to human activity. Only received US\$125 per month from the Heartland Institute in 2012.

0 **Anthony Lupo, Ph.D.** **USA**
Professor of Atmospheric Science. In 2012 received US\$750 per month from the Heartland Institute. Says "anyone who denies [that temperature has risen over the past 30 years] isn't a very good scientist", and that there is no way to attribute this to human activities.

0 **Jennifer Marohasy, Ph.D.** **Australia**
Biologist, formerly member of corporate-funded, right-wing free-trade think tank Institute of Public Affairs. Close ties to Robert Carter.

9 **Patrick Michaels, Ph.D.** **USA**
Former professor of Environmental Science. Says "40 percent" of his funding comes from the oil industry. Also former member scientist of defunct pro-tobacco organization "The Advancement of Sound Science Coalition", funded by Philip Morris.

1 **Christopher Monckton** **United Kingdom**
Degree in Classics and diploma in journalism. The peacock of climate science denial. Gifted speaker and debater with shoddy "facts". Threatens lawsuits and demands resignations when cornered. Birther conspiratorist and (former?) claimant of a cure for AIDS, Multiple Sclerosis, and the flu.

0 **Patrick Moore, Ph.D.** **Canada**
Ph.D. in Ecology. Not a founding member of Greenpeace, but often claims so, to make his transformation from environmental activist to nuclear power / mining / logging shill more dramatic.

0 **Marita Noon** **USA**
Heartland Institute Policy Advisor. Wrote "On the contrary, the data don't support the claims made by climate scientists—but they just keep making them. Apparently they believe the "big lie" propaganda technique used so effectively by Adolf Hitler."

0 **Joanne Nova** **Australia**
B.Sc. in Microbiology. Published the often-debunked "Skeptics Handbook". Cooperates with "rocket scientist" climate denier David Evans (her husband), of "Force X" fame.

0 **Ian Plimer, Ph.D.** **Australia**
Ph.D. in Geology. Former professor of Mining Geology. Director of Queensland Coal Investments. Published the "anti-warmist manual" "How to Get Expelled From School", which numerous sources found to be scientifically inaccurate, containing flawed diagrams, and sloppily edited.

0 **Harrison Schmitt, Ph.D.** **USA**
Ph.D. in Geology. Another former astronaut! Also associated with doubting the link between air pollution and asthma, and the impacts of mercury pollution. Called climate change "a stalking horse for National Socialism."

0 **S. Fred Singer, Ph.D.** **USA**
Former space scientist. The doyen of science denial. He has been on the wrong side of science for decades: formerly tobacco and ozone, acid rain, DDT and asbestos, now climate. Has been receiving US\$5,000 per month from the Heartland Institute in 2012. Lied to IRS about by claiming chairman Fred Seitz as chairman after his death.

10 **Willie Soon, Ph.D.** **USA**
Ph.D. in Aerospace Engineering. Astronomer since 1992. Every grant he received at least between 2002 and 2013 has been from oil or coal interests. Published a deeply flawed paper on climate in 2003, leading to the resignation of several editors.

1 **Roy Spencer, Ph.D.** **USA**
One of the few real climate scientists on this list. Also Christian / free-trade fundamentalist and creationist. Said "I view my job a little like a legislator, supported by the taxpayer, to protect the interests of the taxpayer and to minimize the role of government."

0 **Brian Sussman** **USA**
TV weatherman. Birther conspiratorist. "For many decades, communists, socialists and the global elite have tossed a dizzying array of predicaments into American culture; that [CO₂] emissions [...] are ruining the planet, is their greatest assertion yet."

0 **George H. Taylor, CCM** **USA**
M.S. in Meteorology. Claimed to be Oregon State Climatologist, but wasn't. Supplemented government salary with oil money.

0 **James M. Taylor** **USA**
Lawyer (but "successfully completed Ivy League atmospheric science courses"). Senior Fellow at Heartland Institute, edits their "Environment and Climate News". Writes a climate science denial column in Forbes. Thinks that more snow means global cooling.

0 **David Tuerck, Ph.D.** **USA**
Ph.D. in Economics. Executive Director of the neoliberal Beacon Hill Institute at Suffolk University, in the business of discrediting renewable energy. Says "Scientific questions are above my pay grade ... I'm not in the business of asking whether the earth is warming."

0 **Paul E. Waggoner, Ph.D.** **USA**
Former director of The Connecticut Agricultural Experiment Station. Did some work on plant adaptation to climate change in the 1980s.

0 **Anthony Watts** **USA**
Former weatherman, now runs the famously popular climate science denial blog WUWT. Did a huge study to prove temperature measurements are wrong. When the results actually indicated increased warming, he disregarded this. In 2011, Watts received US\$88,000 for a project through the Heartland Institute.

0 **Thomas Wismuller** **USA**
Majored in Sociology and Political Science, worked as a weather forecaster for the Royal Netherlands Meteorological Institute. Like almost all people on this list, published no peer-reviewed science papers on climate science.

Fact Challenge



We challenge the so-called "skeptics" to come up with facts instead of smoke and mirrors.

Learn more about global warming by visiting these websites:
skepticalscience.com
mooe-list.com/tags/climate-change
desmoglob.com