



THE SCEPTIC MEETS HIS MATCH

Joe Bast and his libertarian think tank are a major force among climate sceptics — but they just can't win the battle over science.

BY JEFF TOLLEFSON

Joe Bast considers himself an environmentalist. He and his wife Diane used to volunteer for the Sierra Club, one of the United States' largest environmental groups. The two built a geodesic dome in the Wisconsin countryside and once entertained the idea of abandoning the city to live off the land. But today Bast is on the other side of a cultural divide, fighting former colleagues, politicians and scientists on the battlefield of global warming.

As head of the Heartland Institute, a policy think tank with a free-market focus based in Chicago, Illinois, Bast has raised millions of dollars to mount a systematic attack on mainstream climate science. The organization provides fodder for politicians and conservative commentators bent on preventing government regulation of carbon emissions, and Heartland's climate conferences have become rallies for sceptics.

The Heartland Institute, and Bast's personal story, offer a window on the political upheaval taking place in the United States and how it is helping global-warming sceptics to win over some sectors of the public. The shift to the right that enabled conservative Republicans to take over the House of Representatives has killed prospects for comprehensive climate policy in the United States any time soon. Now President Barack Obama's administration is under pressure to scale back a host of regulations on climate, air quality and public health.

All of this contributed to a buoyant mood at Heartland's sixth International Climate Change Conference in Washington DC, which ran from 30 June to 1 July. Speakers presented a litany of accusations against mainstream climate scientists and the Intergovernmental Panel on Climate Change (IPCC). They questioned the validity of many elements of climate science, including the modern temperature

record, palaeoclimate reconstructions and simulations of future conditions.

Since they began in 2008, the conferences have become a prime networking opportunity for those who oppose political action relating to global warming. "For the first time you had this rag-tag army of global-warming sceptics come together to meet each other," says Marc Morano, a former spokesman for Capitol Hill's most renowned sceptic, Senator James Inhofe (Republican, Oklahoma).

At the conference, Bast was upbeat and claimed confidently that publications such as *Nature* and institutions such as the IPCC represent an increasingly entrenched minority. But he nonetheless hesitates when asked about the future. Sitting down for a quiet moment during the conference — because of stress-related health problems, he no longer manages the entire affair — Bast temporarily lets his guard down and acknowledges his

ILLUSTRATION BY BRIAN AGHAR

movement's failure to win over mainstream climate scientists. More than ever, they continue to warn about the dangers of human-driven global warming and they retain credibility in the public eye. And Bast points out that the government is still writing cheques that will keep the current research system running.

"We've won the public opinion debate, and we've won the political debate as well," Bast says. "But the scientific debate is a source of enormous frustration."

PARTY HEARTY

The 2010 election showed the surging appeal of Tea Party activism and its platform of limiting government spending and power, but Bast found his way to a libertarian philosophy long before that. After attending the University of Chicago, he co-founded the Heartland Institute in 1984 at the age of 26. Heartland's annual report says that corporations provided 34% of its US\$6.1-million budget in 2010, with the rest coming from individuals and conservative foundations — some of which have industry ties of their own.

In the past, Heartland has often been criticized for collecting money from tobacco and energy companies, but Bast says Heartland is advocating its own ideology, which generally opposes regulation. He is among the last public defenders of smoking and has argued that concerns about second-hand smoke are as bogus as those surrounding greenhouse gases.

Bast's assault on climate research takes two forms: challenging the credibility of the science, and disputing the claim that there is a scientific consensus on climate change. He does not necessarily deny that humans are having an influence on the climate, but he does question the forecasts of catastrophic impacts and the rationale for curbing carbon emissions.

Heartland plans to spend \$1.8 million on its climate programme this year. Of that, \$413,000 will go to supporting the Nongovernmental International Panel on Climate Change (NIPCC), a small group of sceptics who have set themselves up as a counterweight to the IPCC. Made up of Bast and a few dozen colleagues, the NIPCC mines the scientific literature for nuggets of contrary evidence and doubt — often the kind of uncertainties that scientists readily acknowledge in their publications. The NIPCC also ignores mountains of evidence about the adverse effects of global warming and instead strings together a confident story that makes rising carbon dioxide concentrations seem entirely beneficial.

The group published its first report, *Climate Change Reconsidered*, in 2009, following the release of an executive summary the previous year. Running to more than 800 pages, the report spans the full range of climate science, with a narrative summary of the peer-reviewed literature followed by a detailed list of references. The group plans to release a preliminary draft of its second report next month, and then

a final version in 2012 as a preemptive strike against the IPCC, which will begin rolling out its fifth assessment the following year.

Jay Gulledge, senior scientist at the Pew Center on Global Climate Change in Washington DC, says that Bast, Heartland and the NIPCC all approach scientific data as attorneys, simply trying to sow doubt and justify political inaction. Other climate scientists agree. Gavin Schmidt of NASA's Goddard Institute for Space Studies in New York says the NIPCC homes in on scientific findings it likes and

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then blows them out of proportion.

The last NIPCC report, for example, highlighted a 1999 NASA study¹ that proposed how a negative feedback mechanism over the tropics keeps sea-surface temperatures from exceeding 30°C. The NIPCC extrapolated to say: "If confirmed, this could totally compensate for the warming influence of all anthropogenic CO₂ emissions experienced to date as well as all those that are anticipated to occur in the future." The author of the study, Yogesh Sud of NASA's Goddard Space Flight Center in Greenbelt, Maryland, says that the NIPCC "totally misinterpreted my paper".

Those tactics are not limited to the NIPCC report. Heartland is still circulating a 2007 pamphlet claiming strong disagreement among climate scientists regarding the strength of the scientific case for global warming. The pamphlet cites data from a 2003 online survey² by climate scientist Hans von Storch and sociologist Dennis Bray, both affiliated with the Helmholtz Centre for Materials and Coastal Research in Geesthacht, Germany. In the survey, nearly 56% of climate scientists agreed that human activity is causing climate change, 14% were unsure and 30% disagreed. "The survey clearly shows that the debate over why the climate is changing is still underway, with nearly half of the climate scientists disagreeing with what is often claimed to be the 'consensus view'", the pamphlet states.

"We printed 500,000 copies and sent one to every important person in the United States," Bast says, including policy-makers, teachers and business leaders.

But Bast dismisses the findings of a follow-up survey by Bray and von Storch³, which found that more than 85% of the responding scientists agreed that human activity is behind climate change.

When the NIPCC released its last report, most scientists paid no attention or rejected it entirely. Michael Mann, a palaeoclimate researcher at Pennsylvania State University in University Park, says the report "is nothing but a mix of myths, half-truths,

cherry-picked distortions, and regurgitated climate-change-denial talking points."

Environmental-policy specialist Roger Pielke Jr at the University of Colorado in Boulder calls it "a big fat bowl of cherries" selectively picked to support the idea that global warming is not a problem. And although Pielke sees the NIPCC as largely irrelevant, he argues that the IPCC has opened the door to such counter-efforts because its most recent assessment did not reflect the extent of the ongoing debates and uncertainties. By failing to be as comprehensive as it could have been, the IPCC "ceded that territory to its critics", he says.

WAITING FOR THE FALL

Bast happily acknowledges hand-picking data to support his position, but argues that scientists on the other side do the same thing when they are building a case for global warming. He also says it is only natural that a libertarian like him would decide to question the scientific foundation for climate change. Getting serious about global warming means implementing government regulation, going after industry, raising taxes, interfering in markets — all anathema to a conservative agenda. "The left has no reason to look under the hood of global warming," he says. "The right does, and that's what happened."

William O'Keefe, chief executive of the conservative George C. Marshall Institute in Arlington, Virginia, says that more than any other organization, Heartland has kept the focus on the weaknesses in science. But O'Keefe is careful when he talks about what is driving climate politics currently. "I don't think anyone should run to the head of the line in saying they brought the climate legislation to a halt," he says. "I think it was the economy, and when the economy does finally get on a sustainable growth path there will be a willingness to go back and revisit that discussion."

Bast seems to believe that the foundation supporting climate science is collapsing, but with a little prodding, he will talk about his fears, too. Harking back, Bast says he racked up frequent-flier miles throughout the 1990s fending off large government subsidies for sports stadiums all around the country. By the time he made the rounds once, the whole debate would start again. In the end, the stadium projects went forward with taxpayers' money.

"They wore me down," says Bast, "and the same thing may happen with climate change." ■ [SEE EDITORIAL P.423](#)

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go.nature.com/a2eebt

1. Sud, Y. et al. *Geophys. Res. Lett.* **26**, 1019–1022 (1999).
2. Bray, D. & von Storch, H. *The Perspectives of Climate Scientists on Global Climate Change*, GKSS Report (2007).
3. Bray, D. & von Storch, H. *ClSci2008: A Survey of the Perspectives of Climate Scientists Concerning Climate Science and Climate Change*, GKSS Report (2010).