

Debunking the Heartland Institute's Efforts to Deny Climate Science

A Message from the National Center for Science Education

The Heartland Institute's Nongovernmental International Panel on Climate Change (NIPCC) recently conducted a mass mailing to K-12 and college teachers promoting its new "Climate Change Reconsidered" report. The unsolicited package of material (right) was sent to the work addresses of educators in late October 2013.

The NIPCC's report is meant to look like an authoritative counterpoint to information from the Intergovernmental Panel on Climate Change (IPCC).

It's not hard to distinguish the real thing from the ringer.

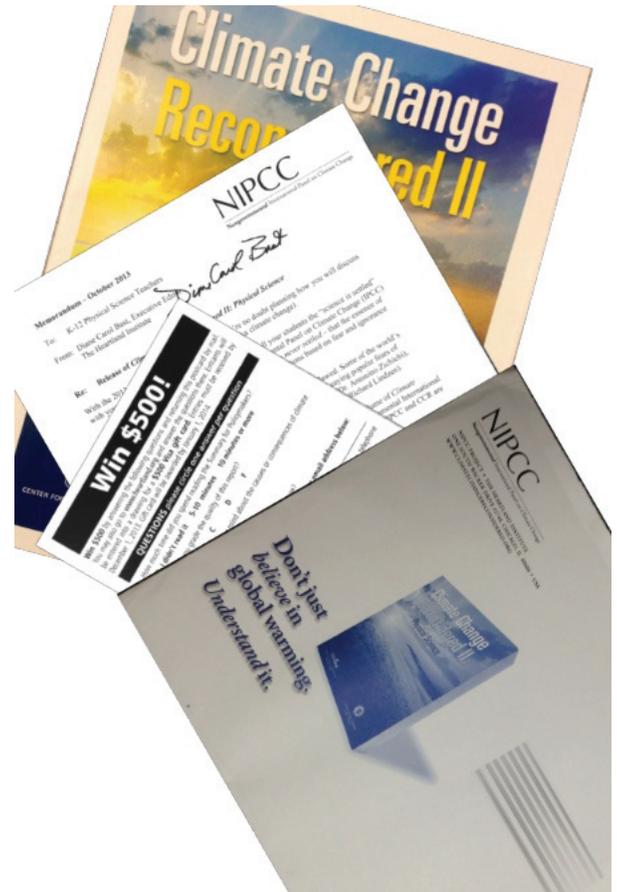
On the one hand, the IPCC is the leading international body for the assessment of climate change. Its mission is to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socioeconomic impacts. Every five to six years, the IPCC issues what are called Assessment Reports that provide definitive updates on climate change.

The reports are based on tens of thousands of scientific papers assembled by thousands of scientists, engineers and other experts from around the world who volunteer their time. In September 2013, the organization released the first of four reports that constitute the Fifth Assessment Report on climate change.

On the other hand, the Heartland Institute is a partisan think tank that sponsors the NIPCC. The NIPCC's latest report evaluated fewer than 100 scientific papers, many of which were written by NIPCC members.

The Heartland Institute has focused on fighting government regulation of tobacco and fossil fuels. It has received funding from a range of organizations and foundations, including a reported \$13 million from the secretive Donors Trust, which pools and distributes money to Heartland and other groups involved with fostering doubt and confusion about climate science. In the past, Heartland has campaigned to downplay

threats posed by second-hand smoke, acid rain, and ozone depletion, as well as against the Endangered Species Act. It is infamous for its billboard experiment (left) comparing climate change "believers" to the Unabomber.



With its mailing, Heartland is encouraging teachers to use NIPCC in the classroom, as if it were a scientifically credible rival of the IPCC. That wouldn't be a good idea. The table below summarizes some of the differences between the NIPCC and the IPCC.

	IPCC	NIPCC
Purpose	Provide world governments with balanced assessments of climate change based on the best science available	Criticize the IPCC
Scope of work	Assessments include all scientific literature related to climate change	Assessments include mostly scientific literature that questions climate change, much of it written by NIPCC members
Number of scientific papers cited	9,200	72
Number of pages	2,500	993
Number of authors	209	49
Number of editors	2	59
Compensation to authors	volunteer	paid
Representative funding sources	United Nations Environmental Program, World Meteorological Organization, world governments	ExxonMobil, American Petroleum Institute, Donors Trust, Charles G. Koch Charitable Foundation

The table compares the Heartland Institute's NIPCC's *Climate Change Reconsidered II, Physical Science* with the IPCC's Working Group I Contribution to the Fifth Assessment Report (IPCC). The IPCC will issue three additional reports in 2014 as part of the Fifth Assessment, which will roughly triple the number of scientific papers reviewed, number of pages, number of authors, and number of reviewers for the IPCC column. Reference for the NIPCC funding sources: http://www.ucsusa.org/assets/documents/global_warming/Fossil-Fuel-Industry-Funders-of-Climate-Contrarian-Groups-2001-2011.pdf

The NIPCC's package was sent in a large envelope with an official-looking "NIPCC – Nongovernmental International Panel of Climate Change" logo in the upper left corner and the phrase below: "Don't believe in global warming. Understand it." Included in the package is a cover letter that asks teachers:

Will you tell your students the "science is settled" on global warming, as the United Nations' Intergovernmental Panel on Climate Change (IPCC) claims it is? Or will you explain to them that real science is never settled—that the essence of science is skepticism ... ?

Science thrives on skepticism, which is why the IPCC's Assessment Reports include literature from scientists who are skeptical of various aspects of climate change. But it is misleading for the NIPCC to claim that science is never settled. As the National Center for Science Education's Steve Newton writes in his analysis (<http://ncse.com/blog/2013/10/alternative-reality-heartland-institute-s-nipcc-report-0015140>) of the NIPCC package:

Teachers should also inform students that there are many topics in science on which the major issues are settled. We know that living things use cells; scientists call this cell theory. We know that viruses and bacteria cause disease; scientists call this germ theory. We know that organisms descend with modification from common ancestors; scientists call this the theory of evolution. And we also know that factors such as anthropogenic carbon dioxide affect climate on a global scale; scientists call this climate change.

The NIPCC's primary goal is to convey that there is a scientific debate about climate change. **There is not.** At least three studies have shown that upward of 97% of climate scientists have concluded that human activity is warming the world's climate system. For details on these studies, see the Consensus Project (<http://theconsensusproject.com/>).

For further information on climate change denial's assault on science education, and advice and support when coping with such assaults, get in touch with the National Center for Science Education, which defends the teaching of evolution and climate science: (510) 601-7203 or 800-290-6006, <http://ncse.com>.