

Top Economists Recommend Climate Engineering

Copenhagen Consensus on Climate Findings:

Expert Panel of Nobel Laureates Outline Best and Worst Responses to Global Warming

WASHINGTON, DC (Friday September 4, 2009) – After deliberations into the best responses to global warming, an Expert Panel of five top economists including three Nobel Laureates concluded that greater resources should be spent on research into climate engineering and green energy.

The Expert Panel’s findings highlight the problems with the current political focus on carbon taxes, and underscore the vast promise shown by alternative responses to global warming.

The Expert Panel scrutinized 21 ground-breaking research papers by top climate economists that analyzed the costs and benefits of different responses to global warming, ranging from a focus on black carbon mitigation to climate engineering and varying levels of carbon taxes. Based on an analysis of the new research, they created a prioritized list (overleaf) that outlines the best and worst ways to respond to climate change.

The Expert Panel concluded that the most effective use of resources would be to invest immediately in researching marine cloud whitening technology (where boats spray seawater droplets into clouds above the sea to make them reflect more sunlight back into space, reducing warming).

Climate engineering could provide a cheap, effective and rapid response to global warming. Remarkably, research considered by the Expert Panel, written by lead author Dr Eric Bickel, suggests that a total of about \$9 billion spent developing marine cloud whitening technology might be able to cancel out this entire century's global warming.

Expert Panel member and Nobel Laureate economist Thomas Schelling said, “We found that climate engineering has great promise. Even if one approaches it from a skeptical viewpoint, it is important to invest in research to identify the limitations and risks of this technology sooner rather than later.”

The Expert Panel found that there is a compelling case for greater research and development into developing green energy technology. They considered a paper by economists Professor Chris Green and Isabel Galiana of McGill University showing that non-fossil energy sources will – based on today’s availability—get us less than halfway toward a path of stable carbon emissions by 2050, and only a tiny fraction of the way towards stabilization by 2100. There is a need for a technology revolution, which has not yet even started.

The Expert Panel found that high carbon taxes would be an expensive, ineffective way to reduce the suffering from global warming.

Research from Professor Richard SJ Tol showed that a high, global CO2 tax starting at \$68 would reduce world GDP by a staggering 12.9% in 2100—the equivalent of \$40 trillion a year – many times the expected damage of global warming.

"I hope that the Copenhagen Consensus on Climate will contribute to discussion about global warming policy by helping highlight some of the best policy responses to global warming," said Finn Kydland, Nobel Laureate in Economics "It is important to look at the most effective ways to address the climate challenge."

The Copenhagen Consensus on Climate was convened by the think-tank Copenhagen Consensus Center, whose director is Bjorn Lomborg.

"I think it's greatly encouraging that the Expert Panel has identified so many promising responses to global warming, and I hope that their findings are seriously considered by policy-makers. Their work also makes it clear that current carbon taxes and cap-and-trade policies are very poor answers to global warming. We need to re-think our priorities to best respond to this challenge," Bjorn Lomborg said.

The Expert Consensus:

RATING		SOLUTION	CATEGORY
"Very Good"	1	Marine Cloud Whitening Research	Climate Engineering
	2	Energy R&D	Technology
	3	Stratospheric Aerosol Insertion Research	Climate Engineering
	4	Carbon Storage Research	Technology
"Good"	5	Planning for Adaptation	Adaptation
	6	Research into Air Capture	Climate Engineering
"Fair"	7	Technology Transfers	Technology Transfers
	8	Expand and Protect Forests	Forestry
	9	Stoves in Developing Nations	Cut Black Carbon
"Poor"	10	Methane Reduction Portfolio	Cut Methane
	11	Diesel Vehicle Emissions	Cut Black Carbon
	12	\$20 OECD Carbon Tax	Cut Carbon
"Very Poor"	13	\$0.50 Global CO ₂ Tax	Cut Carbon
	14	\$3 Global CO ₂ Tax	Cut Carbon
	15	\$68 Global CO ₂ Tax	Cut Carbon

Interviews

Bjorn Lomborg and Expert Panel member Finn Kydland are available in Washington DC and New York for interviews, September 3 and 4.

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Background Information

What the New Research Examined

The groundbreaking research papers look at the following eight topics:

Climate Engineering • Carbon Mitigation • Forestry • Black Carbon Mitigation • Methane Mitigation
• Adaptation • Research and Development • Technology Transfers

All of the research is available at www.fixtheclimate.com

The Expert Panel

The Expert Panel that gathered at Georgetown University to consider the research comprised:

- Finn E Kydland, Nobel Laureate
- Thomas C Schelling, Nobel Laureate
- Vernon L Smith, Nobel Laureate
- Nancy L Stokey, Frederick Henry Prince Distinguished Service Professor of Economics at the University of Chicago
- Jagdish Bhagwati, University Professor at Columbia University

Copenhagen Consensus Center

The Copenhagen Consensus Center is a think-tank based in Denmark that informs governments, philanthropists and the public about the best ways to spend aid and development money. The Center commissions research that identifies the best spending priorities in any given area. The Center promotes the use of fact-based economic science – especially the principle of prioritization – to make sure that with limited resources, we achieve the most ‘good’ for people and the planet.

Bjorn Lomborg, Director, Copenhagen Consensus Center

Bjorn Lomborg, the director of the Copenhagen Consensus Center, is a global opinion leader. He is the author of *Cool It* and *The Skeptical Environmentalist*. He was named one of the 75 most influential people of the 21st Century by *Esquire* magazine, one of the 50 people who could save the planet by the *Guardian*, one of the top 100 public intellectuals by *Foreign Policy*, and one of the world’s 100 most influential people by *Time*. He is the former director of Denmark’s Environmental Assessment Institute, and an adjunct professor at Copenhagen Business School.