

Institute for Policy Integrity  
New York University School of Law



# Economists and Climate Change:

Consensus and Open Questions

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Media Resource Kit

Thanks so much for your interest in the Institute for Policy Integrity's latest project, Economists and Climate Change: Consensus and Open Questions. Enclosed here you will find the following resources:

**Backgrounder:** Why we took on this project.

**Fact Sheet #1:** Survey sample and methodology.

**Fact Sheet #2:** The survey findings with graphs.

**Survey Instrument:** A copy of the distributed questionnaire.

**Bios:** Info about some of the Policy Integrity team members.

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To schedule an interview with a member of the project team,  
contact Edna Ishayik at (212) 998-6085 or ednai@nyu.edu.

## Backgrounder

# Gauging Economists' Consensus

Costs have been a hot topic in the debate over climate legislation. There are many estimates—with widely varying ranges—of what the average American will pay under a cap-and-trade bill. Finding a cost-effective way to curb our greenhouse gas emissions would be a worthy debate, but too often decisionmakers question whether controlling carbon emissions is worthwhile at all.

There is not much controversy among expert economists on this topic: most agree that curbing emissions will generate economic benefits. A survey conducted by the Institute for Policy Integrity finds that a majority of the 144 top economists who responded to our questionnaire believe that global warming poses serious threats to our economy and that reducing our greenhouse gas emissions can help reduce the risks of major economic malfunction.

The consensus among these experts has long been understood in academic circles but has yet to make its way into the public discourse. Similarly, it was years before the climate change consensus in the scientific community was acknowledged.

Today, while scientists worry that global warming is occurring at faster clip than originally predicted, our political leaders are wringing their hands over what controlling our greenhouse gas emissions will cost. Lost in the debate is the broad agreement among expert economists that there is large economic cost to inaction.

To gauge the extent to which economists agree, Policy Integrity sent a survey to the 289 top experts who study these issues. Of the 144 that responded, 97% believe America should enter into an international treaty to reduce greenhouse gas emissions. Of that, 57% believe we should reduce emissions no matter what actions other nations take.

Combating climate change will not be free, but credible research shows that neither will it cause economic hardship for Americans—the [Congressional Budget Office](#) sites a cost of around 30 cents per day. Instead, the consensus among the expert economists we surveyed shows that inaction is what could leave the economy with an overwhelming tab.

# Fact Sheet #1

## The Participants: 144 Elite Economic Experts

The consensus among economists on the serious risks of climate change has long been understood within academic circles. But in the public discourse there has been much debate on whether our nation should invest in greenhouse gas controls.

To get a better sense of the breadth of the current consensus, the Institute for Policy Integrity surveyed a sample of expert economists on their climate change opinions.

### The Sample:

The survey sample includes economists whose research in the past fifteen years demonstrates expertise in this issue area. We compiled a list of 289 top economists who specialize in climate change—defined as every economist who published at least one article regarding climate change in one of the top twenty-five economic journals over the last fifteen years.

This represents the first time such a strict definition has been used to describe the universe for a poll of this type. Narrowing the pool to high quality experts ensures the results are a more precise reflection of cutting edge economic analysis.

If this survey were to be distributed among the thousands of American economists, results would likely be skewed by responder bias—only those with the strongest opinions would answer. By only inviting those with expertise on climate change, and thanks to the high response rate, results are more statistically valid and less sensitive to error.

Though the responses to the questionnaire were submitted anonymously, and not every economist responded, the caliber of expertise among the original pool ensures the high quality of the cumulative results.

Respondents to this survey have published work in highly prestigious peer-reviewed journals such as the *American Economic Review* or *Journal of Economic Literature*. These journals publish only the highest quality scholarship, including Nobel Prize winning work on the most important economic topics.

## Fact Sheet #2

# The Results: Consensus on Climate Action

### Economies at Risk:

When asked if anthropogenic climate change creates “significant risks to important sectors in the US and global economy,” 84% of expert economists respondents agree or strongly agree, 7.6% remained neutral, and 5.6% disagree or strongly disagree.

### Certain Sectors to be Hit:

Of the respondents, 86% agreed that climate change will negatively affect the U.S. agricultural sector.

### Climate Action Makes Economic Sense:

Nearly three quarters (73%) of respondents agree or strongly agree that uncertainty, given some risk aversion, increases the value of emissions control measures. Of the remaining respondents, 18% were neutral, 9% disagree or strongly disagree, and 1% had no opinion.

There was near unanimity (98%) that a price on carbon will increase incentives for efficiency and innovation (only 1% remained neutral and 1% disagreed).

### Strong Consensus for Auctions Under Cap-and-Trade:

Respondents agree at a rate of 81% that a cap-and-trade system should auction permits to polluters and only 9% prefer the United States to give them away for free.

### U.S. Should Proceed With A Global Treaty:

Most respondents said the United States should commit to emissions reductions through a global treaty (94.3% total) with 57% stating that the United States should commit to reductions “regardless of the actions other countries take.” Only 2% believe we should not enter a treaty under any circumstances.

### Who Pays?

A strong majority of the respondents (about 92%) agreed that most of the burdens of climate change will fall on our children and grandchildren.

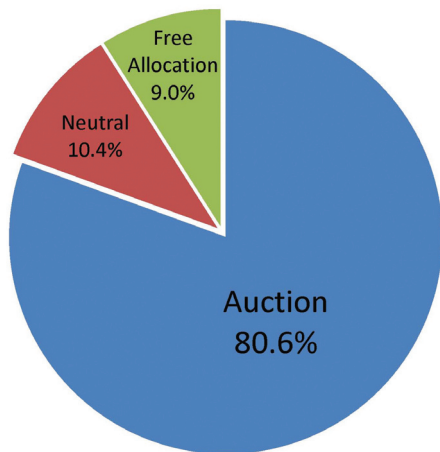
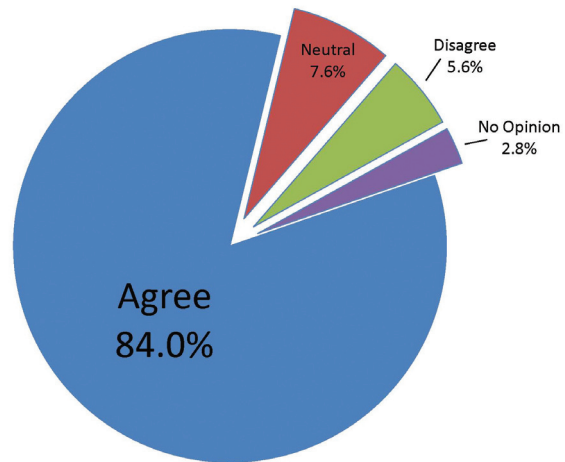
### Disagreement on Some of the Details:

The experts surveyed did not agree on everything. When asked about the specific value of the harm to the economy of greenhouse gases, or what percent of total harm would occur domestically, there was a wide range of estimates, indicating that there is no clear consensus on these questions.

## Highlighted Results Charts

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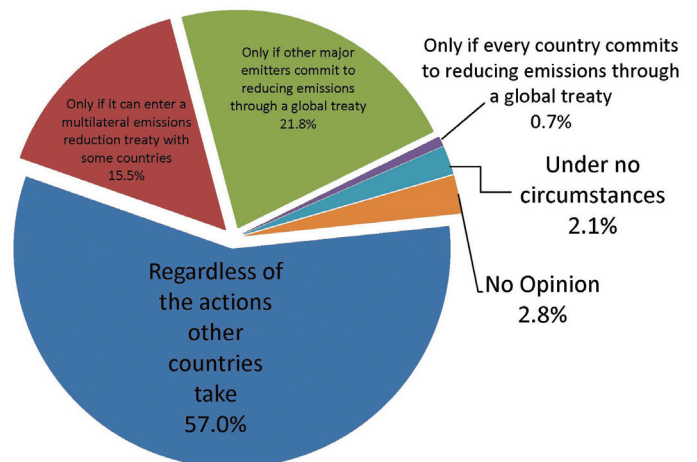


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## Economist Survey

*Below is the text of the survey used to query top American economists on climate change issues.*

The Institute for Policy Integrity at NYU School of Law is conducting a survey to examine the opinions of economists on climate change policy and uncertainty. This survey is only being sent to economists who published a climate change related article (broadly defined) in a top economic journal in the past 15 years. The survey consists of 12 multiple choice questions and takes less than five minutes to fill out. The aggregate results of this survey will be distributed to media members who report on climate change issues, but individual responses will be confidential.

Thanks for your participation.

### Climate Change Risks

1. The environmental effects of greenhouse gas emissions, as described by leading scientific experts, create significant risks to important sectors of the United States and global economy.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- No Opinion

2. The following domestic economic sectors are likely to be negatively affected by climate change (*check all that apply*):

- Agriculture
- Mining
- Fishing
- Forestry
- Real Estate
- Insurance

3. Most of the environmental and economic effects of greenhouse gas emissions will be felt by future generations.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- No Opinion

4. Uncertainty associated with the environmental and economic effects of greenhouse gas emissions increases the value of emission controls, assuming some level of risk-aversion.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- No Opinion

## Greenhouse Gas Control Mechanisms

5. Between market based mechanisms, such as a carbon tax or cap-and-trade system, and command-and-control regulations such as performance standards, which is preferable as a tool to reduce greenhouse gas emissions?

- Strongly Prefer Market-Based
- Prefer Market-Based
- Neutral
- Prefer Command-and-Control
- Strongly Prefer Command-and-Control
- No Opinion

6. Under a cap-and-trade system, is it preferable to auction permits and use the revenue to reduce inefficient taxes or compensate consumers, or to distribute allowances for free to regulated emitters?

- Strongly Prefer Free Allocation
- Prefer Free Allocation
- Neutral
- Prefer Auctioning
- Strongly Prefer Auctioning
- No Opinion

7. Placing a “price on carbon” through a tax or cap-and-trade system will increase incentives for energy efficiency and the development of lower-carbon energy production.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- No Opinion

## Estimated Harms of Climate Change

8. The global “social cost of carbon” per metric ton—i.e. the net present value of the marginal impact over time caused by the emission today of one ton of carbon dioxide-equivalent greenhouse gasses—is most likely:  
*(enter any \$ value positive or negative equal to the cost of one ton carbon dioxide equivalent)*
9. What percentage of benefits from reduced greenhouse gas emissions will accrue to the United States?  
*(please enter a percentage)*
10. How should the benefits to future generations be evaluated?
- By discounting them at a constant discount rate
  - By using alternative discounting methodologies (such as hyperbolic discounting)
  - By reference to moral inquiries unrelated to discounting
  - No opinion
11. If benefits to future generation are to be discounted, the appropriate discount rate used when calculating the social cost of carbon is: *(please enter a percentage)*

## Treaty Negotiations

12. The US government should commit to reducing greenhouse gas emissions:
- Regardless of the actions other countries take
  - Only if it can enter a multilateral emissions reduction treaty with some countries
  - Only if other major emitters commit to reducing emissions through a global treaty
  - Only if every country commits to reducing emissions through a global treaty
  - Under no circumstances
  - No Opinion

## Richard L. Revesz

Dean of NYU School of Law and expert on the economics of environmental regulation and policy.



Dean Richard L. Revesz noticed a recurring problem at EPA meetings on the economics of environmental regulation—a lot of empty chairs. While industry was always present to push their view, green groups were no-shows. From his vantage point on an agency advisory panel during the Clinton administration, Dean Revesz watched environmental groups throw key battles because they weren't prepared to use economics to make their case—though in many instances, the numbers were on their side.

A former law clerk to Justice Thurgood Marshall, Revesz has had a distinguished decades-long career as a legal academic, leading to his appointment as dean of New York University School of Law in 2002. He has published more than 50 articles and books on environmental and administrative law and his work has helped set the agenda for contemporary environmental law scholars. Dean Revesz has been a leading legal academic voice on issues such as federalism and environmental regulation, the valuation of human life, and the use of cost-benefit analysis.

But the empty seats in that EPA hearing room showed Dean Revesz a real world application for his scholarly work. The intersection of economics and the environment has been a one-way street for decades. Because green groups had largely excused themselves from economic discussions, the ground had been ceded to industry forces. Dean Revesz's academic research told him that if environmentalists engaged more fully in economic analysis, industry would be met with a formidable challenge since, often, the data works out in favor of protecting the environment.

In his book, *Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health* (Oxford University Press, 2008) co-authored with Michael A. Livermore, Revesz argues that economics can be used to shape regulations that create a clean environment—without harming our economy. He co-founded the Institute for Policy Integrity in July 2008 to show non-profits that they can harness economics to strengthen environmental protections that also protect a thriving economy.

## Michael A. Livermore

Expert on the economics of environmental regulation and policy.



Michael A. Livermore is known for his thoughtful and refreshingly pragmatic approach to environmental and health issues, advocating for strong regulations that also make economic sense. Livermore began his career working for the New York Public Interest Research Group (NYPIRG). Working his way up to environmental campaigns director, he established himself as a leading voice of the state's environmental community. But he also saw firsthand that environmental groups were losing key battles because they weren't prepared to respond to industry's cost-benefit arguments.

After graduating *magna cum laude* from New York University School of Law where he published scholarship on regulatory issues, he collaborated with Richard L. Revesz, the dean of NYU Law, on *Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health* (Oxford University Press, 2008). Praised as “an important book” and “essential reading for the thinking environmentalist,” the book argues that properly conducted cost benefit analysis can be used to shape regulations that will create a clean environment—and a thriving economy.

He is now executive director of the Institute for Policy Integrity, a think tank and advocacy center he and Revesz founded at NYU Law in July 2008 to improve the quality of government decision-making. IPI conducts research and advocates for a wide variety of environmental, public health and safety reforms, from adding green standards in the stimulus bill to conducting an unbiased economic analysis of offshore oil drilling. Recently, IPI conducted a detailed legal analysis on EPA's next steps for regulating greenhouse gases.

Livermore's views on regulatory policy have been featured in *BusinessWeek*, *Forbes*, The Diane Rehm Show, *The Wall Street Journal*, *The Washington Post*, *The New Republic*, *Grist* and *Time*.

## J. Scott Holladay

Economics expert on government regulation and policy.



J. Scott Holladay joined Policy Integrity in August 2009 as an economics fellow. He earned his Ph.D. in Economics at the University of Colorado, where his dissertation focused on the environmental impacts of international trade. He has studied the economics of government policy for the past eight years. Before graduate school he served as a research assistant at the Institute for International Economics in Washington D.C. studying the economic impacts of international trade policy. Holladay has also worked with the National Center for Atmospheric Research and the Homeland Security Institute.

Some of Holladay's past projects have included assessing the impact of climate change on Pacific Island Nations, estimating the costs of complying with proposed Homeland Security regulations and developing pricing models for electric power markets. He is originally from Knoxville, Tennessee.

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