

Details of External Peer Review Panel Process for the review of EPA’s “Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances”

Panel Details:

The peer review was independently managed by a contractor to EPA. The contractor reviewed the public nominations received in response to a 21-day call for peer reviewer nominations that ended on February 15, 2022 [federalregister.gov/d/2022-01387] to ensure they had the types of disciplinary expertise listed in the notice. In addition, the contractor used traditional techniques (e.g., a literature search) to identify additional qualified candidates in the disciplines described below. The contractor then developed a list of 14 candidate reviewers. EPA invited public comment on all 14 candidates. The 21-day comment period closed December 1, 2022. After review and consideration of public comments received on the candidates, the contractor selected the final panel of 7 experts in a manner consistent with EPA's Peer Review Handbook 4th Edition, 2015 (EPA/100/B-15/001), based on the following factors:

1. Demonstrated expertise through relevant peer-reviewed publications in one or more of the following areas: environmental economics, climate science, integrated assessment modeling, and benefit-cost analysis;
2. Professional accomplishments and recognition by professional societies;
3. Demonstrated ability to work constructively and effectively in a committee setting;
4. Absence of conflicts of interest;
5. No appearance of partiality;
6. Willingness to commit adequate time for a thorough review of the draft report, including preparation of individual written comments that will be made publicly available; and
7. Availability to participate virtually in a public peer review meeting and to provide subsequent revised individual comments.

The contractor independently conducted a conflict of interest (COI) screening of the candidates to confirm that selected reviewers would have no COI in conducting this review. The contractor ensured that the peer reviewers did not participate in the development of the product being reviewed and are independent of EPA as required under OMB’s Final Information Quality Guidelines for Peer Review (p. 38).

The peer reviewers are listed below together with brief bio sketches and links to their CVs.

List of Peer Review Panel Members:

1. [Maureen Cropper](#) is a Distinguished University Professor in the Department of Economics at the University of Maryland. She is a Senior Fellow at Resources for the Future and a member of the National Academy of Sciences. In 2016-17, she co-chaired the National Academy of Sciences Committee on Assessing Approaches to Updating the Social Cost of Carbon. A member of the National Academy of Sciences, Dr. Cropper was Vice-Chair of the Committee that produced Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use. This study estimated the health impacts of each thermal power plant in the US in 2010, as well as producing life-cycle estimates of the health costs of alternate motor vehicle technologies. She is an author of the 2017 Lancet Commission report on Pollution and Health, which valued the productivity losses associated with exposure to household and ambient air pollution and estimated the welfare losses of premature mortality associated with air pollution for each of 194 countries. Dr. Cropper holds a Ph.D. in Economics from Cornell University. Professor Cropper's research has focused on valuing the health impacts and health benefits of environmental programs, especially programs to reduce air pollution.

2. [Karen Fisher-Vanden](#) is a Distinguished Professor of Environmental and Resource Economics and Public Policy in the Department of Agricultural Economics, Society and Education at the Pennsylvania State University. She is also Director for the Institute for Sustainable Agricultural, Food, and Environmental Science (SAFES) in the College of Agricultural Sciences at the Pennsylvania State University. She is President-elect of the Association of Environmental and Resource Economists (AERE) and was a Lead Author of the IPCC's Fifth Assessment Report Working Group III. Dr. Fisher-Vanden holds a Ph.D. from Harvard University. Dr. Fisher-Vanden's areas of research include economic and integrated assessment modeling for climate change impact and policy analysis; economic instruments for pollution control; and technology development in developing countries (in particular, China) and implications for energy use and carbon emissions. I am currently co-Director of the Program on Coupled Human and Earth Systems (PCHES), a large Cooperative Research Agreement with the US Department of Energy.

3. [Chris E. Forest](#) is Director of the Center for Earth System Modeling, Analysis, and Data, and a Professor of Climate Dynamics in the Department of Meteorology and Atmospheric Science, Department of Geosciences, at Pennsylvania State University. Dr. Forest also served as a Senior Research Fellow in Climate Dynamics for Project Drawdown, and an Associate Director of the Network for Sustainable Climate Risk Management (SCRiM). He has served on the Electorate Nominating Committee for the Atmospheric and Hydrospheric Sciences Section of the AAAS and is currently the Chair of the Topical Group for the Physics of Climate for the American Physical Society (APS GPC). He served as an IPCC AR5 lead author on the Evaluation of Climate Models chapter and on a report for the U.S. Climate Change Science Program examining the estimates of temperature trends in the

atmospheric and surface climate data. Dr. Forest holds a Ph.D. in Meteorology from Massachusetts Institute of Technology. " His research focuses on basic understanding of climate dynamics, quantifying uncertainty in climate predictions, and understanding how to use climate information for assessing climate risks.

4. [Catherine L. Kling](#) is a Tisch University Professor in the Dyson School of Applied Economics and Management and Faculty Director at the Atkinson Center for a Sustainable Future at Cornell University. Dr. Kling is past Director of the Center for Agricultural and Rural Development at Iowa State University where she also held the President's Chair in Environmental Economics. She was elected to the National Academy of Sciences in 2015. Dr. Kling chairs the Water Science and Technology Board of the National Academy of Sciences and has been a member of six National Research Council studies. She is an elected Fellow of the Association of Environmental and Resources Economists, the Agricultural & Applied Economics Association, and a University Fellow at Resources for the Future. She served for ten years on EPA's Science Advisory Board. She holds a Ph.D. in Economics from the University of Maryland. Dr. Kling's research interests include the economic valuation of ecosystem services and integrated assessment modeling for water quality modeling.

5. [Michael Oppenheimer](#) is the Albert G. Milbank Professor of Geosciences and International Affairs at Princeton University and Director of the Center for Policy Research on Energy and the Environment at Princeton's School of Public and International Affairs. Previously, Dr. Oppenheimer worked for the Environmental Defense Fund, where he served as chief scientist and manager of the Climate and Air Program. Oppenheimer has been an author of reports of the Intergovernmental Panel on Climate Change (IPCC), which won the Nobel Peace Prize in 2007, since its First Assessment Report (1990). He served most recently as a coordinating lead author on IPCC's Special Report on Oceans, Cryosphere and Climate Change, published in September 2019, and now serves as a Review Editor of its Sixth Assessment Report, to be published February 2022. Oppenheimer is coeditor-in-chief of the journal Climatic Change. He is a science advisor to the Environmental Defense Fund and member of the board of directors of two other NGOs, Climate Central and the Climate Science Legal Defense Fund. Dr. Oppenheimer holds a Ph.D. from the University of Chicago in chemical physics. Dr. Oppenheimer's current research focuses on sea level rise, migration, and other impacts of climate change from the perspectives of science, adaptation, and risk. Much of his work has centered on defining the concept of "dangerous" climate change, a key aspect of the UN Framework Convention on Climate Change and the Paris Agreement.

6. [Wolfram Schlenker](#) is Vice Dean of the School of International and Public Affairs, Professor of International and Public Affairs, and Co-Director of the Center for Environmental Economics and Policy at Columbia University. He is a Research Associate at the National Bureau of Economic Research and currently serves on the Board of Reviewing Editors at Science. He holds a Ph.D. in Agricultural and

Resource Economics from the University of California, Berkeley. Dr. Schlenker studies the effect of weather and climate on agricultural yields and migration, how climate trends and the US biofuel mandate influences agricultural commodity prices, and how pollution impacts both agricultural yields and human morbidity. He is the Vice Dean of the School of International and Public Affairs. He co-directs the Center on Environmental Economics and Policy (CEEP) with Professor Douglas Almond.

7. [Gernot Wagner](#) is a visiting Associate Professor at Columbia Business School in Spring 2022, and a Kleinman Center Visiting Scholar at the University of Pennsylvania in 2021-2022. He is a Clinical Associate Professor in the Department of Environmental Studies and an Associated Clinical Professor in the Robert F. Wagner Graduate School of Public Service at New York University. Prior to joining Columbia as senior lecturer, Dr. Wagner taught at NYU, Harvard, and Columbia. He was the founding executive director of Harvard's Solar Geoengineering Research Program, and served as economist at the Environmental Defense Fund, most recently as lead senior economist and member of its Leadership Council. He has been a term member of the Council on Foreign Relations, is a Senior Fellow at the Jain Family Institute and is on the board of CarbonPlan.org. Dr. Wagner holds a Ph.D. in political economy and government from Harvard. His research focuses on climate risks and climate policy.

How can I find out more information?

More information about the technical report is available at: www.epa.gov/environmental-economics/scghg.