

EPRI Social Cost of Greenhouse Gases Scientific Initiative

Understanding and Improving Estimates and Their Use



EPRI's Recent Public Comments Related to the Social Cost of Carbon and Other Greenhouse Gases

In its efforts to inform public discussion, EPRI occasionally submits public comments in response to requests for public input. The comments are technical in nature, designed to enhance technical understanding of a topic and raise technical issues for government and stakeholder consideration. Below we summarize recent social cost of greenhouse gas (SC-GHG) related public comments from EPRI. The comments aim to facilitate understanding and discussion of the many SC-GHG technical issues and inform the development of scientifically reliable estimates and applications.

[EPRI public comments on U.S. EPA proposed oil and gas methane rule and draft new SC-GHG estimation methodology \(Docket ID No. EPA-HQ-OAR-2021-0317\)](#)

On December 16th 2022, the U.S. EPA released a new proposed rule for the [Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review](#). [This rule followed closely on the heels of the](#) draft social cost of greenhouse gases (SC-GHG) estimation methodology that was released on November 11th, 2022 ([USEPA, 2022](#)).

This publication represents the public comments EPRI submitted.

EPRI's public comments are technical in nature and based on extensive EPRI SC-GHG related research and expertise covering SC-GHG estimation as well as application (i.e., use). The SC-GHGs are important metrics that are used in regulations and other federal decisions to assess policy proposals, justify actions, and set standards with significant financial and social implications. The U.S. Government SC-GHG estimates are also being considered by U.S. states and other countries. However, SC-GHG estimates are complex to calculate and use, requiring multi-century modeling of potential future global societies, climate change, sea level rise, and economic damages from climate change. EPRI's public comments identify critical technical issues that need to be addressed for reliable, robust, and stable estimates and use in the near-term with the interim estimation methodology and policy applications, as well as in the longer-run in terms of scientific challenges that need to be overcome and the type of scientific review of future methodologies needed for public confidence in the estimates and the use of those estimates.

EPRI has found that the methodology and estimates are not yet scientifically reliable and robust for policy use. The methodology contains multiple significant technical issues and does not satisfy the NASEM recommendations. This should be addressed before the estimates are deployed to inform policy, for this rule and otherwise. EPRI recommends an improved process, enhanced documentation, a revised methodology, and improved application of SC-GHGs. The draft methodology was unchanged following a public comment process. This methodology was finalized on March 8th, 2024.

Link to comments: <https://www.epri.com/research/products/000000003002026256>

EPRI Public Comments on SC-GHG Peer Review

On November 11th, 2022, The U.S. EPA released draft social cost of greenhouse gases (SC-GHG) estimation methodology ([USEPA, 2022](#)).

This publication represents the public comments EPRI submitted.

EPRI's public comments are technical in nature and based on extensive EPRI SC-GHG related research and expertise covering SC-GHG estimation as well as application (i.e., use). The SC-GHGs are important metrics that are used in regulations and other federal decisions to assess policy proposals, justify actions, and set standards with significant financial and social implications. The U.S. Government SC-GHG estimates are also being considered by U.S. states and other countries. However, SC-GHG estimates are complex to calculate and use, requiring multi-century modeling of potential future global societies, climate change, sea level rise, and economic damages from climate change. EPRI's public comments identify critical technical issues that need to be addressed for reliable, robust, and stable estimates and use in the near-term with the interim estimation methodology and policy applications, as well as in the longer-run in terms of scientific challenges that need to be overcome and the type of scientific review of future methodologies needed for public confidence in the estimates and the use of those estimates.

EPRI observes that EPA's proposed peer review and overall scientific process is insufficient to develop scientifically robust and reliable estimates and insufficient for the public to have confidence in the outcome.

Link to comments:

<https://www.epri.com/research/products/000000003002026087>

Improvements needed to EPA's SC-GHG peer review process and candidates for developing scientifically reliable estimates and public confidence in the outcome

EPRI's December 1, 2022 public comments on EPA's SC-GHG peer review process and candidates observes that EPA's proposed peer review and overall scientific process is insufficient to develop scientifically robust and reliable estimates and insufficient for the public to have confidence in the outcome. Based on EPRI's research and experience in this area, the process needs to:

1. Revise the peer review candidate selection process and list to ensure full and unbiased coverage of the core scientific disciplines underpinning the SC-GHG,
2. Expand the peer review process to a scientific review process appropriate for a regulatory methodology with significant implications,
3. Substantially increase opportunities for public engagement and input, and
4. Improve the overall scientific process for developing and using updated SC-GHG estimates.

See EPRI's public comments for discussion of each recommendation.

EPRI Public Comments on Federal Acquisition Regulation ANOPR: Minimizing the Risk of Climate Change in Federal Acquisitions

Link: <https://www.epri.com/research/products/000000003002023465>

On January 13, 2022, EPRI submitted public comments on the Biden Administration's advance notice of proposed rulemaking (ANOPR) for considering greenhouse gas (GHG) emissions and the social cost of carbon in federal procurement ([*Federal Acquisition Regulation: Minimizing the Risk of Climate Change in Federal Acquisitions*](#), FAR Case 2021-016). The ANOPR was published by the Department of Defense (DoD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA). This publication represents EPRI's public comments.

EPRI's comments discuss important technical issues associated with potential procurement consideration of GHGs, including the risk of pricing GHGs more than once and the economic inefficiency of procurement as an emissions reduction policy instrument. The public comments are grounded by EPRI's research, including its social cost of greenhouse gases (SC-GHG) and climate-related risk research, and touch on a variety of critical issues for industry and society that are relevant beyond the context of the ANOPR, including technically grounded use of SC-GHG estimates, GHG accounting and decision consideration, climate-related risk assessment, and GHG goal setting.

EPRI Public Comments on the Biden Administration's Interim Social Cost of Carbon, Methane, and Nitrous Oxide Estimates and Technical Document

Link: <https://www.epri.com/research/products/000000003002022316>

On February 26th, 2021, the Biden Administration published "interim" social cost of greenhouse gas (SC-GHG) estimates for carbon dioxide, methane, and nitrous oxide ([link](#)). In early May, the Administration requested public comment on the "interim" estimates and technical document, with comments due June 21st, 2021 ([link](#)). This publication represents the public comments EPRI submitted.

EPRI's public comments are technical in nature and based on extensive EPRI SC-GHG related research and expertise covering SC-GHG estimation as well as application (i.e., use). The SC-GHGs are important metrics that are used in regulations and other federal decisions to assess policy

proposals, justify actions, and set standards with significant financial and social implications. The U.S. Government SC-GHG estimates are also being considered by U.S. states and other countries. However, SC-GHG estimates are complex to calculate and use, requiring multi-century modeling of potential future global societies, climate change, sea level rise, and economic damages from climate change. EPRI's public comments identify critical technical issues that need to be addressed for reliable, robust, and stable estimates and use in the near-term with the interim estimation methodology and policy applications, as well as in the longer-run in terms of scientific challenges that need to be overcome and the type of scientific review of future methodologies needed for public confidence in the estimates and the use of those estimates.

The Biden Administration has also requested "final" SC-GHG estimates by January 2022. EPRI's comments identifying scientific challenges, and the opportunities for addressing them, inform that process as well. In general, EPRI's comments stress the importance of putting science first and developing SC-GHG estimates as robust scientific metrics that can meaningfully inform decisions and instill public confidence in the insights generated.

EPRI Public Comments on New York State Department of Environmental Conservation's Proposal "Establishing a Value of Carbon: Guidelines for Use by State Agencies"

Link: <https://www.epri.com/research/products/00000003002020249>

This publication includes EPRI's public comments submitted to the New York State Department of Environmental Conservation (DEC) in November 2020 in response to DEC's request for comment on their proposal [Establishing a Value of Carbon: Guidelines for Use by State Agencies](#). Among other things, DEC proposed specific social cost of carbon (SCC) values, as well as values for other greenhouse gases (GHGs), as estimates that can be used to evaluate the economic climate benefits of reducing a unit of carbon dioxide and other emissions. The Electric Power Research Institute (EPRI) has produced an extensive body of research surrounding SCC estimation and its use, insights from which have directly informed recommendations by the National Academy of Science, Engineering and Medicine SCC Committee, and have contributed to the SCC academic literature base for over a decade. These analyses, including in-depth assessment of the inner workings of the modeling framework developed by the U.S. Government's Interagency Working Group on Social Cost of Greenhouse Gases for valuing carbon dioxide and other GHGs, serve as the basis for EPRI's comments on DEC's proposal. EPRI's comments outline concerns with the SCC modeling approach used by DEC, and with the discount rates proposed, as well as identifies technical carbon value application issues for DEC to consider. EPRI recommends that DEC reconsider their proposed SCC estimates and offers DEC improved SCC estimates with greater scientific reliability, or EPRI recommends that DEC use marginal cost estimates as an alternative. EPRI also recommends that DEC provide guidance on carbon value application issues and recognize fundamental technical challenges in considering future updates to SCC estimates. In addition to the recommendations, EPRI's detailed comments provide technical discussion of research supporting these recommendations.