

REQUEST FOR CORRECTION:

"A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate,"

Disseminated by the U.S. Department of Energy on July 29, 2025

Submitted August 15, 2025

H. Christopher Frey, Ph.D. (see Section 6.1 for Requester Identification)

Executive Summary

The U.S. Department of Energy's (DOE) report, "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate," disseminated on July 29 2025, although dated July 23, 2025, and written by five authors labeled as the "Climate Working Group" purports to offer a balanced scientific assessment of climate change.¹ However, a thorough independent review reveals that the report falls significantly short of federal information quality standards, particularly concerning objectivity, accuracy, and completeness, as mandated by the Information Quality Act (IQA) and associated Office of Management and Budget (OMB) and DOE guidelines.^{2,3,4}

Substantial concerns arise from the legal and procedural irregularities of the "Climate Working Group" (CWG) that authored the report. Evidence indicates non-compliance with the Federal Advisory Committee Act (FACA)^{5,6}, raising questions about the transparency and public accountability of the group's formation and operations. The internal peer-review process for this "highly influential scientific assessment"⁷ appears to have been insufficient, as indicated by external expert critiques.⁸ and by statements made by DOE, CWG authors, and third parties involved in organizing the report. For example, the preface of the report refers to "a team of anonymous DOE and national lab reviewers" (p. x). A co-author indicates that the review as by "eight scientists/administrators employed by the DOE."⁹ Such a review does not meet OMB Information Quality guidelines for a rigorous and transparent external independent scientific review.³ Furthermore, the report is further contaminated because it was organized in part by, or with the support of, the Cato institute,¹⁰ an external ideological and policy organization that is not a source of unbiased science that conforms with information quality requirements.

Scientifically, the DOE report exhibits a consistent pattern of selective data presentation, misrepresentation of scientific consensus, and overemphasis on natural variability or beneficial impacts, while frequently downplaying established risks and findings. This is evident in its unbalanced and misleading framing of carbon dioxide

(CO₂), its critiques of climate models, its assessment of extreme weather and sea level rise, its approach to climate change attribution, and its economic analyses of climate impacts and the Social Cost of Carbon (SCC). The report's misrepresentation of a key study on climate model performance⁸ and its flawed interpretation of agricultural impacts on the SCC represent significant breaches of information quality.

The report's dissemination by a federal agency confers an official imprimatur, implying governmental endorsement and reliability.⁸ This necessitates rigorous adherence to information quality standards to maintain public trust in government science and policy, especially when the report is cited by other agencies, such as the Environmental Protection Agency (EPA), to justify major regulatory changes.^{11,14} This review concludes with a formal request for correction, detailing specific instances of non-compliance and recommending actions to uphold the integrity of information disseminated by federal agencies.

1. Introduction and Purpose of this Review

1.1 Background: The U.S. Department of Energy's "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate"

On July 23, 2025, the U.S. Department of Energy (DOE) disseminated a report titled "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate".¹ The title page, as annotated in Figure 1, of the document explicitly states that "[t]his report is being disseminated by the Department of Energy." The term disseminated has specific meaning under OMB information quality guidelines, viz:³

““Dissemination” is defined to mean “agency initiated or sponsored distribution of information to the public.” As used in paragraph V.8, “agency INITIATED distribution of information to the public” refers to information that the agency disseminates, e.g., a risk assessment prepared by the agency to inform the agency’s formulation of possible regulatory or other action. In addition, if an agency, as an institution, disseminates information prepared by an outside party in a manner that reasonably suggests that the agency agrees with the information, this appearance of having the information represent agency views makes agency dissemination of the information subject to these guidelines.”

REQUEST FOR CORRECTION OF: "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate," Disseminated by the U.S. Department of Energy on July 29, 2025

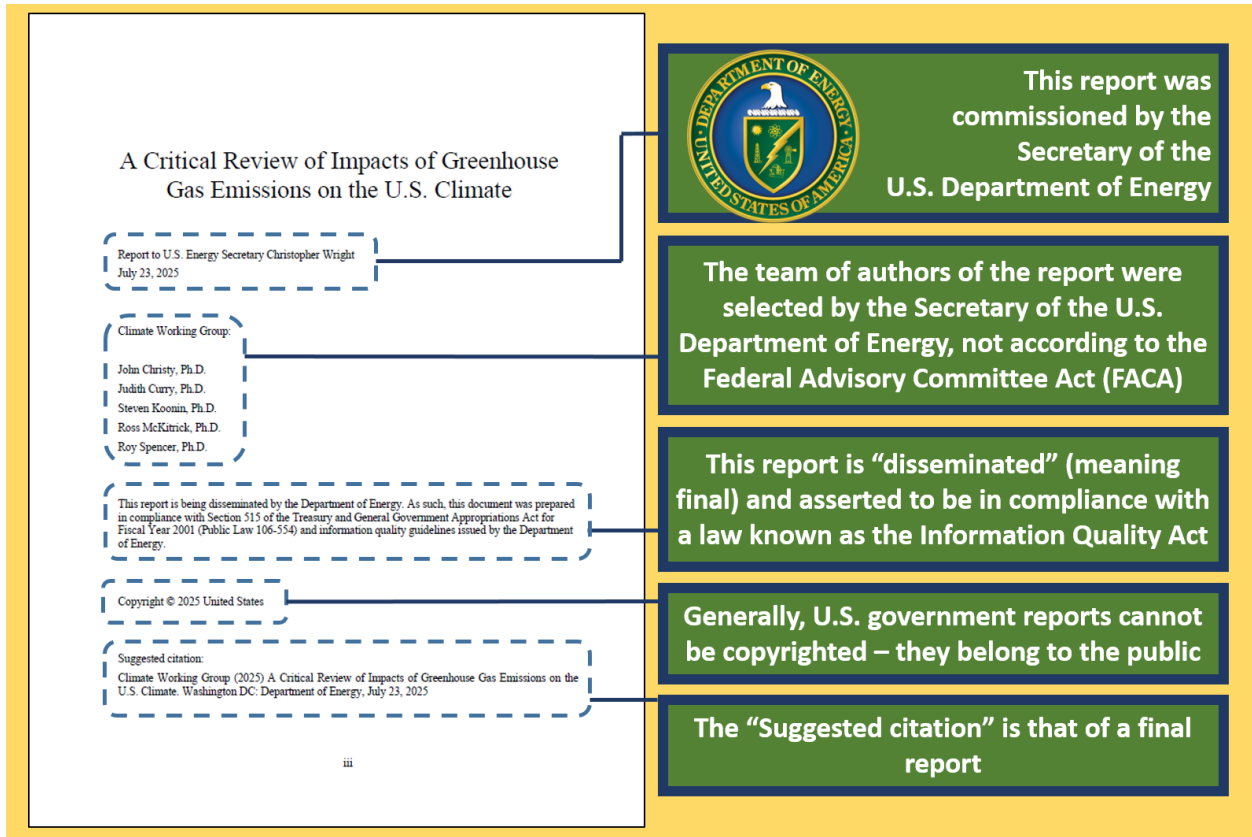


Figure 1. Annotations of the Title Page of the July 23, 2025 U.S. Department of Energy Report by the “Climate Working Group.”

The specific assertion that the DOE CWG report is “disseminated” means that it is not a “pre-dissemination” draft. However, DOE’s information quality guidance⁴ states that DOE complies with OMB’s Final Information Quality Bulletin for Peer Review.⁴ However, this has clearly not happened for the DOE CWG disseminated report.

For this reason alone, the DOE CWG report should be withdrawn. However, it cannot simply be withdrawn and reposted as a draft report for several reasons: (1) the authorship group was improperly appointed in contradiction to the Federal Advisory Committee Act; (2) the resulting unbalanced content is contrary to the requirements of the Information Quality Act, and (3) the failure of DOE to follow relevant processes and procedures for developing this report is also contrary to the Administrative Procedures Act.

DOE asserts on the inside title page of the report (see Figure 1) that it “was prepared in compliance with Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554) and information quality guidelines issued by the Department of Energy”.¹ This declaration implies the DOE’s commitment to federal standards for information quality. However, in actuality, DOE has failed to follow

federal standard for information quality.

The report's stated purpose, as articulated in the Secretary's Foreword, is to "encourage a more thoughtful and science-based conversation about climate change and energy" by providing "clarity and balance" through a "critical review" of existing literature and data.¹ It aims to present "evidence and perspectives that challenge the mainstream consensus". The report was authored by a "Climate Working Group" (CWG) comprising five authors: John Christy, Judith Curry, Steven Koonin, Ross McKittrick, and Roy Spencer, who were "assembled by Energy Secretary Chris Wright". The preface asserts that the authors agreed to undertake the work on the condition of "no editorial oversight by the Secretary, the Department of Energy, or any other government personnel," emphasizing their full independence. However, a Cato Institute blog asserts that a Cato Institute official "helped organize" this report.¹⁰

1.2 Mandate and Objectives of this Independent Assessment

This independent review and request for correction is undertaken to rigorously assess the aforementioned DOE report's adherence to federal information quality standards. The primary objectives of this assessment are multi-faceted. First, this assessment seeks to evaluate the report's compliance with the foundational principles of the Information Quality Act (IQA) and the more specific guidelines issued by the Office of Management and Budget (OMB) and the DOE itself.^{3,4} Second, the assessment aims to analyze the legal and procedural aspects surrounding the formation and operation of the "Climate Working Group" (CWG), particularly in the context of the Federal Advisory Committee Act (FACA)⁵ and the Administrative Procedures Act (APA).¹² Third, a detailed but merely illustrative scientific critique of the report's content was conducted to identify examples of specific shortcomings, misrepresentations, or omissions in its scientific claims. Finally, based on these findings, a request for correction is made, adhering precisely to the DOE's specified administrative process for such requests.¹³

1.3 Stakeholder Interest and the Importance of Federal Information Quality

The dissemination of scientific information by federal agencies carries a significant weight, as it lends an official "imprimatur" that implies governmental endorsement and reliability.³ This official stamp means that such information is often perceived by the public and policymakers as authoritative and trustworthy. Consequently, rigorous adherence to information quality standards is not merely a bureaucratic formality but a fundamental requirement for maintaining public trust in government science and its capacity to provide objective, evidence-based guidance.

The DOE report in question has garnered considerable attention and has already been cited by the EPA in a proposed rule to repeal greenhouse gas (GHG) emission standards.¹⁴ This direct use of the report to justify significant regulatory changes

underscores its influence on policy decisions and public perception. If a report disseminated by a federal agency is found to contain scientific misrepresentations, exhibit bias, or demonstrate procedural irregularities, it directly undermines the public's confidence in the integrity of government scientific endeavors and the policy-making process. Such a situation elevates the importance of strict IQA compliance beyond mere adherence to guidelines, making it a critical safeguard for informed governance and public accountability.

1.4 The Report's Dissemination Status: Refuting Potential Claims of a 'Draft' Document

It is possible that the Department of Energy (DOE) might attempt to claim that the "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate" report is merely a "draft" document and therefore not subject to the full requirements of the Information Quality Act (IQA). This argument is demonstrably false and inconsistent with the report's explicit statements and federal information quality guidelines.

Firstly, the report itself contains no labeling whatsoever indicating it is a "draft." Federal agencies are acutely aware of the need to clearly label draft documents to distinguish them from final, disseminated products. The absence of such a label is not a casual omission but a deliberate choice that signifies its final status.

Secondly, and most critically, as shown in Figure 1, the interior title page of the report explicitly states: "This report is being disseminated by the Department of Energy. As such, this document was prepared in compliance with Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554) and information quality guidelines issued by the Department of Energy". The term "disseminated" is central to the IQA's applicability. The IQA and OMB guidelines apply specifically to "information disseminated by Federal agencies".^{2,3} DOE's guidelines assert that "DOE has always maintained high standards of quality in the production of information disseminated to members of the public. As a source of scientific and statistical information on which members of the public and other government officials rely, DOE has long had procedures to assure adequate information quality."⁴ By explicitly stating that the report "is being disseminated" and was "prepared in compliance" with IQA, DOE has unequivocally declared it a final, disseminated product subject to all IQA requirements.

Furthermore, as shown in Figure 1, the report includes a "Suggested citation", that is itself framed as a final citation with no notation regarding being a "draft" document."

While a DOE news release mentioned "inviting feedback on this report by opening a public comment period" *after* its release¹⁵, this invitation for public comment does not

retroactively reclassify a "disseminated" and agency-posed IQA-compliant document as a draft. Public comment periods can be, and often are, opened for final reports to gather feedback for future revisions or related policy actions, without altering the initial dissemination status.

Therefore, any claim by DOE that this report is a draft is directly contradicted by the document's language and the established definitions and requirements of federal information quality guidelines. The public record of the report itself clearly demonstrates that this is a disseminated product; therefore, it is subject to the Information Quality Act.

2. The Federal Information Quality Framework: Requirements and Guidance

2.1 The Information Quality Act (IQA): Core Principles of Quality, Objectivity, Utility, and Integrity

The Information Quality Act (IQA), enacted as Section 515 of Public Law 106-554, mandates that all federal agencies "ensure and maximize the quality, objectivity, utility, and integrity of information disseminated by them".² These four core principles form the bedrock of federal information quality standards.

Quality is an overarching principle that encompasses the other three: objectivity, utility, and integrity.³ It signifies that the information must be fit for its intended use and meet established standards.

Objectivity is a critical component, requiring that disseminated information be "accurate, clear, complete, and unbiased both in presentation and substance".³ This means that data should be accompanied by "full, accurate, and transparent documentation," and all "error sources affecting its quality" must be disclosed.³ Furthermore, analytic results are expected to be generated using "sound statistical and research methods".³ For scientific information, objectivity also implies transparency regarding the information's origin and the reproducibility of its findings.³ The DOE report's stated goal to provide a "critical review" and "challenge the mainstream consensus"¹ creates an inherent tension with this standard. While critical inquiry is essential to scientific progress, when a government agency disseminates such a review, it must still present the information in a manner that is "unbiased both in presentation and substance." A review that selectively emphasizes dissenting views or downplays the broader scientific consensus, without offering a complete and balanced representation of the scientific literature, violates the objectivity standard. The authors' acknowledgment that they "chose to focus on topics that... are downplayed in, or absent from, recent assessment reports"¹ indicates a pre-determined selective focus rather than a comprehensive, unbiased assessment of the full body of scientific knowledge.

This selective approach is central to the challenges regarding the report's IQA compliance.

Utility dictates that information must be "useful to its intended users".³ Agencies are expected to continuously monitor information needs and either develop new sources or revise existing methods and products to ensure ongoing utility. This principle ensures that the information serves a practical purpose for the public.

Integrity refers to the security and trustworthiness of information. It requires that information be "protected from unauthorized access, corruption, or revision".³ This ensures that the information remains authentic and untampered from its creation through its dissemination.

2.2 Office of Management and Budget (OMB) Guidelines: Government-Wide Directives and Peer Review Standards

The Office of Management and Budget (OMB) plays a central role in implementing the IQA across the federal government. OMB issued government-wide guidelines in 2002 (67 F.R. 8452).³ These guidelines instruct agencies to "maximize the quality, objectivity, utility, and integrity of information disseminated to the public".

A key requirement is that agencies must conduct "pre-dissemination reviews of their information products".⁴ This means that quality, including objectivity, utility, and integrity, must be ensured at "every step of the development of information, including creation, collection, maintenance, and dissemination".¹

For scientific information, particularly "highly influential scientific information" or "influential scientific information," OMB's "Final Information Quality Bulletin for Peer Review" establishes stringent government-wide guidance.¹⁶ This bulletin emphasizes the importance of "meaningful peer review of science disseminated by the Federal Government". For influential information, peer review is specifically required to evaluate "the objectivity of the underlying data and the sensitivity of the agency's conclusions to analytic assumptions". The DOE report, having been cited by the EPA to support a major policy reversal¹⁴, clearly falls under the category of "highly influential scientific information". Critiques that the report "was rushed over four months, and would not pass muster in any traditional scientific peer review process"⁸ directly challenge the adequacy of the "internal peer-review period amongst DOE's scientific research community"¹⁷ under OMB's enhanced peer review standards. However, as noted elsewhere, DOE's internal review may have included administrators and may have been a clearance review, rather than a peer review. This suggests a systemic quality control issue, indicating that the review process may not have been sufficiently rigorous to identify and correct significant scientific shortcomings, thus failing to ensure the

objectivity and accuracy required by the IQA.²

2.3 Department of Energy (DOE) Information Quality Guidelines: Specific Policies and Administrative Mechanisms

In accordance with OMB directives, the Department of Energy (DOE) has issued its Information Quality Guidelines, with a final updated version in 2019.³ These guidelines reiterate DOE's commitment to providing information of the "highest quality," emphasizing the "maximizing the quality, objectivity, utility, and integrity" of all information disseminated to the public.

Crucially, DOE's guidelines also establish "administrative mechanisms for the public to seek and request administrative correction of disseminated information".¹³ The instructions for submitting such a request, as outlined by DOE and consistent with broader federal guidance³, require specific information from the requester:

- **Requester Identification:** The requester's name, mailing address, telephone number, e-mail address, and organizational affiliation (if any).
- **Detailed Description:** The exact name of the data collection or report, the disseminating office and author (if known), and a description of the specific item in question believed to be non-compliant or in need of correction.
- **Potential Impacts:** An explanation of the requester's interest in the information and how they are affected by the information in question.
- **Explanation of Non-adherence:** A specific explanation of the reasons the information does not adhere to the information quality guidelines or should be corrected, along with specific recommendations on what/how corrections should be made.
- **Supporting Documentary Evidence:** Provision of comparable data or research results to assist in evaluating the merits of the request.

A critical aspect of the DOE's correction request process is that "the burden of proof rests with the requester".¹³ This means that the request for correction must be exceptionally well-substantiated with clear evidence of non-compliance. However, the IQA and OMB guidelines also emphasize agency transparency, requiring documentation of methods, data sources, and review procedures.²⁻⁴ If the DOE report fails to provide sufficient transparency (e.g., regarding its peer review process or the handling of underlying data), it implicitly makes the requester's burden of proof more challenging, creating an imbalance. This highlights the importance of the report's internal documentation and adherence to transparency requirements to ensure a fair and effective correction process.

2.4 Legal Framework for Advisory Bodies: The Federal Advisory Committee Act (FACA) and Administrative Procedure Act (APA)

The establishment and operation of federal advisory bodies are governed by specific legal frameworks, primarily the Federal Advisory Committee Act (FACA) and, more broadly, the Administrative Procedure Act (APA).

The **Federal Advisory Committee Act (FACA)** (5 U.S.C. chapter 10) was enacted in 1972 to ensure transparency, public access, and balanced membership in advisory committees within the executive branch.⁵ FACA defines what constitutes a federal advisory committee and outlines general procedures for their operation. An "advisory committee" is broadly defined as any committee, board, commission, council, conference, panel, task force, or other similar group that is "established or utilized by the Federal Government" to obtain advice or recommendations.¹⁸ This definition is expansive and can include "ad hoc and informally established advisory groups".¹⁹ The purpose of FACA is to ensure that Congress and the public are kept informed about the number, purpose, membership, activities, and cost of advisory committees, thereby promoting public accountability and preventing undue influence.¹⁸ Key requirements under FACA include:⁶

- **Chartering:** Committees must have a formal charter filed with the General Services Administration (GSA).
- **Public Notice:** Advance public notice of committee meetings must be provided in the Federal Register.
- **Open Meetings:** Meetings are generally required to be open to the public, unless specific exemptions apply.
- **Public Access to Records:** Records, reports, and other documents made available to or prepared for the committee must be accessible to the public.
- **Balanced Membership:** Committees must be "fairly balanced in terms of the points of view represented and the functions to be performed". This is crucial for ensuring that the advice provided reflects a diverse range of expertise and perspectives. Processes for achieving balanced committees typically include a public nomination process announced in the federal register, a publicly posted list of candidates for a public comment period, and public announcement of the appointed members and the concurrent publication of a committee formation memo that explains how the appointments conform to existing and consistent policies and procedures.

The **Administrative Procedure Act (APA)** (5 U.S.C. § 551 et seq.) provides the overarching framework for federal agency rulemaking and adjudication.¹² While FACA specifically governs advisory committees, the APA's principles of transparency, public participation, and due process underpin the broader administrative context in which advisory committees operate. The APA details procedures for various types of rulemaking, including requirements for public notice and comment periods. If an agency relies on advice or information from an advisory committee in its rulemaking process, the committee's compliance with FACA becomes critical. Failure to comply with FACA

procedures, and failure to consistently and predictably follow relevant and established procedures, could render the committee's output legally vulnerable, potentially impacting the validity of any agency action, such as rulemaking, that relies upon it.

The DOE's "Climate Working Group" (CWG) was "assembled by Energy Secretary Chris Wright" and provided a "Report to U.S. Energy Secretary Christopher Wright".¹ The Secretary explicitly stated he "commissioned this report" and "asked a diverse team of independent experts to critically review". This clearly indicates that the CWG was *utilized* by a federal official to provide advice, bringing it squarely within FACA's definition of an "advisory committee".⁶ The absence of any mention of FACA compliance (e.g., charter, public meetings, or a transparent, balanced membership process) in the DOE report or related public statements represents a significant procedural and legal shortcoming. This is not merely a technicality; it directly impacts public accountability and transparency in government science, raising concerns about the potential for a "stealth advisory committee" to influence policy without adequate public scrutiny.

That the DOE CWG is comprised of authors who were not appointed under FACA nor under an appointment process for a federal advisory committee that takes into account the needs for scientific expertise and balance of view points is a fundamental violation not only of FACA but also translates into a report that lacks quality, objectivity, utility, and integrity under the IQA. The circumstances by which the "Climate Working Group" was appointed are therefore sufficient grounds for the need for DOE to withdraw the report.

3. Assessment of the Climate Working Group's Formation and Governance

3.1 The Appointment Process of the Climate Working Group Authors: Compliance with Legal and Procedural Norms

The DOE report identifies its authors as John Christy, Judith Curry, Steven Koonin, Ross McKittrick, and Roy Spencer.¹ Secretary Wright states in the foreword that he "commissioned this report" and "asked a diverse team of independent experts" to conduct the review. The preface further elaborates that the group was "assembled" by the Secretary in late March 2025 and agreed to write the report on the condition of "no editorial oversight by the Secretary, the Department of Energy, or any other government personnel," emphasizing their full independence.

There is no information publicly available DOE as to the scientific disciplines for which Climate Working Group members were sought, nor does it appear that the appointed CWG contains the breadth, depth, and diversity of expertise, experience, and scientific

perspectives that would be necessary for a credible and trustworthy critical review. This is not a comment about any individual member of the CWG; rather, it is an observation that no group of only five people could have the expertise needed to appropriately inform the scope of the critical review.

While the emphasis on the CWG's "independence" from editorial oversight is highlighted, this claim of independence is in tension with the requirements of FACA and IQA. If a group is "utilized" by a federal agency to provide advice, its independence from editorial control does not exempt it from FACA's transparency and balance requirements. Furthermore, if the selection process for these "independent experts" was not transparent or did not ensure a balanced representation of scientific disciplines, expertise, experience, perspectives, and view points, it could undermine the "objectivity" of the information disseminated, as required by the IQA.^{2,3,4} External critiques of the report explicitly state that the authors are "outliers in their arguments for climate change" and were "handpicked scientists with contrarian views".⁸ This perception of a pre-selected group with a particular viewpoint, rather than a broad, balanced representation of scientific expertise, raises questions about the quality and objectivity of the information produced and the fairness of the advisory process.

Beyond the general perception of a "handpicked" group, a closer examination reveals several ways in which the authors are not independent, leading to a lack of viewpoint diversity that constitutes an error relative to FACA and other applicable guidelines:

- **Lack of Independence from the Secretary's Viewpoint:** While the authors claim "no editorial oversight," the Secretary's foreword explicitly states the report's purpose is to "encourage a more thoughtful and science-based conversation about climate change and energy" by providing "clarity and balance" through a "critical review" of existing literature and data, and to present "evidence and perspectives that challenge the mainstream consensus".¹ Furthermore, the Secretary's Foreword undermines scientific neutrality by offering a strong policy context that motivated the commissioning of the report, i.e. that climate change "is not the greatest threat facing humanity" and "global energy poverty" is, requiring "expanding access to reliable, affordable energy." This framing, which indicates that predetermined policy outcomes, rather than the science, are key factors that led to the formation of the Climate Working Group and the preparation of its report, undermines any appearance that the CWG report could comport with the quality, objectivity, utility, and integrity required under the IQA or the need for balance of view points as needed under FACA. Moreover, this framing aligns with public positions of the selected authors, suggesting a pre-determined outcome rather than an open, unbiased inquiry. External experts have characterized the report as an attempt to "justify what is a scientifically unjustifiable failure to regulate fossil fuels" and a "law brief from attorneys defending their client, carbon dioxide".⁸ This strong alignment

between the Secretary's stated intent and the authors' known views undermines the claim of true independence.

- **Lack of Independence from Each Other's Viewpoints:** The selection of authors demonstrates overlap in research focus and conclusions, particularly concerning skepticism about mainstream climate science. For example, John Christy and Ross McKittrick have numerous co-authored publications, many of which are self-cited within the DOE report to support its claims.¹ Similarly, John Christy and Roy Spencer developed the first satellite-based technique for global temperature monitoring and have frequently co-authored research. This history of collaboration and shared conclusions, particularly on topics central to the report's arguments (e.g., climate model discrepancies, temperature trends), indicates a lack of diverse scientific perspectives within the group. While collaboration is normal in science, a committee formed to provide a "critical review" for a federal agency is expected to encompass a broader range of established scientific viewpoints to ensure objectivity and completeness. The authors incorporate much of their work into figures and tables throughout the report. The heavy reliance on their co-authored work as evidence within the report, rather than a broad-based review of the wider scientific literature, further highlights this internal lack of independence and potential for confirmation bias.
- **Lack of Independence from Ideological and Industrial Affiliations:** Ross McKittrick is a Senior Fellow of the Fraser Institute²⁰ and a member of the academic advisory council of the Global Warming Policy Foundation.²¹ Roy Spencer was a Visiting Fellow in The Heritage Foundation's Center for Energy, Climate, and Environment.²² Steven Koonin has served as Chief Scientist for British Petroleum and is a non-resident Senior Fellow at the American Enterprise Institute.²³ Ideological organizations typically have predetermined policy view. These affiliations create an appearance, if not actuality, of a loss of impartiality and potential conflicts of interest. This directly contravenes the spirit of FACA's "balanced membership" requirement, which aims to prevent undue influence and ensure that advice provided to the government reflects a diverse range of expertise and perspectives, free from ideological or financial biases. From a scientific perspective, a committee composed of authors with such a narrow range of viewpoints and extensive prior collaboration on the very topics they are tasked to "critically review" would not be considered a balanced or impartial scientific body.

3.2 Public Participation in Candidate Selection: Adherence to Transparency Requirements

A key aspect of transparency for federal advisory bodies is the opportunity for public participation in their formation. The provided materials, including the DOE report itself and associated news releases, do not indicate any such public comment period for the selection of the CWG members. While the DOE news release states that the

Department is "inviting feedback on this report by opening a public comment period" *after* its dissemination¹⁷, this is distinct from providing public input on the composition of the advisory group itself.

The absence of a public comment opportunity on the selection of CWG members, particularly when coupled with the perception that the members were "handpicked" for their "contrarian views"⁸, strongly indicates a lack of transparency in the formation process. FACA committees typically require public notice of their establishment and membership, and often provide mechanisms for public input on such matters. The lack of such a process for the CWG directly contravenes the spirit of FACA, which aims to ensure public awareness and input regarding advisory bodies, thereby fostering public confidence in their impartiality and the advice they provide.

3.3 Legal Status of the Climate Working Group: Analysis under FACA and APA

Based on the definition and requirements of the Federal Advisory Committee Act (FACA), the Climate Working Group (CWG) appears to meet the criteria for being considered a federal advisory committee. FACA applies to any group that is "established or utilized by the Federal Government" to provide "advice or recommendations".^{5,6} The DOE report explicitly states that the CWG was "assembled" and "commissioned" by Energy Secretary Chris Wright, a high-ranking executive branch official, to produce a report providing "a critical review" of climate science relevant to energy policymaking.¹ This clearly indicates that the CWG was "utilized" by the Secretary to furnish expert advice.

Given this, the CWG should have been subject to FACA's mandatory requirements, and the absence of evidence for compliance raises significant concerns:

- **Chartering:** There is no indication in the provided materials that a formal charter for the CWG was filed, as required by FACA.^{5,6} A charter formally establishes the committee's purpose, scope, and membership.
- **Public Process for Membership:** A public call for nominations followed by a public posting of the list of candidates for public comment would be a typical practice under FACA, but there is no evidence that such a practice was followed in appointing the CWG.
- **Balanced Membership:** FACA requires advisory committees to be "fairly balanced in terms of the points of view represented and the functions to be performed".^{5,6} As detailed in Section 3.1, the selection of authors described by external experts as "outliers in their arguments for climate change" and "handpicked scientists with contrarian views"⁸, coupled with their extensive co-authorships and affiliations with ideologically aligned organizations, strongly suggests a lack of balance in representing the full spectrum of scientific opinion on climate change. This directly undermines a core FACA requirement designed to ensure that advice is

comprehensive and not skewed towards a particular perspective. From a scientific perspective, a committee composed of authors with such a narrow range of viewpoints and extensive prior collaboration on the very topics they are tasked to "critically review" would not be considered a balanced or impartial scientific body.

- **Public Meetings:** FACA generally mandates that advisory committee meetings be open to the public, with advance notice provided.^{5,6} There is no indication in the report or related public statements that the CWG's deliberations or meetings were open to the public. The preface states the authors worked "with full independence"¹, but this independence does not exempt them from public meeting requirements if they are a FACA committee.
- **Public Comment:** While public comment on the *report* was invited *after* its dissemination¹⁵, FACA often requires opportunities for public input during the committee's work, especially regarding its composition and scope. The lack of public input on candidate selection further highlights this deficit.

The purpose of FACA is to assure that special interest groups are not able to exercise undue influence in promoting their private concerns on matters in which they have vested interests, such as concerns related to ideological policy groups or regulated industries.

The failure of the CWG to comply with FACA's transparency and accountability mechanisms creates what can be termed a "poisoned fruit" problem or a "stealth advisory committee" problem. This scenario is one in which the government seeks unbalanced advice without the public scrutiny of the process, membership, or deliberations, and public participation that FACA was specifically enacted to ensure.^{5,6} This undermines the very purpose of FACA, which aimed to address "criticisms concerning the activities and influence of advisory committees" and "complaints over lack of adequate public information concerning their purposes, their membership, the course of their deliberations, and the extent of their influence".

Furthermore, if the CWG is indeed a FACA committee, its non-compliance could have implications under the Administrative Procedure Act (APA). The APA governs the procedures for federal agency rules.¹² If the DOE report, produced by a non-compliant FACA committee, is used to support agency rulemaking (as it has been by the EPA for its proposed repeal of GHG emission standards¹⁴), the validity of such rulemaking could be legally challenged. The procedural irregularities in the CWG's formation and operation thus extend beyond mere administrative oversight to potentially impact the legal robustness of subsequent policy actions.

4. Pre-Dissemination Review and Internal Quality Assurance of the DOE Report

4.1 DOE's Obligations for Pre-Dissemination Review of Scientific Information

The Department of Energy's Information Quality Guidelines, developed in accordance with OMB directives, explicitly state that "Information Quality is integral to every step of the development of information, from its creation through its collection, maintenance, and dissemination".^{2,3,4} Agencies are therefore expected to establish and implement "processes for reviewing the quality, including the objectivity, utility, and integrity, of information before it is disseminated". This pre-dissemination review is a critical safeguard to ensure that all information released to the public meets federal standards. For "highly influential scientific assessments," which this report clearly qualifies as given its use by the EPA to justify policy changes¹⁴, OMB guidelines specifically require enhanced peer review.^{3,16} This heightened standard is intended to ensure the utmost rigor and credibility for scientific information that can significantly impact public policy.

4.2 Examination of the "Internal Peer-Review Period" and Public Comment Invitation

The Secretary's Foreword in the DOE report states, "I've reviewed the report carefully, and I believe it faithfully represents the state of climate science today".¹ Additionally, a DOE news release indicated that the report completed "an internal peer-review period amongst DOE's scientific research community" and that DOE was "inviting feedback on this report by opening a public comment period" after its release.¹⁷

However, external experts have raised strong criticisms regarding the adequacy of this review process, particularly for a document of such purported influence and scope. Critics have asserted that the report "had five authors and was rushed over four months, and would not pass muster in any traditional scientific peer review process" and that "the lack of peer review in the administration's report led to conclusions that deviated, sometimes wildly, from the scientific literature".⁸ One climate scientist explicitly stated that the document "cherrypicks the literature to pretend to create a new review," and that "the lack of peer review makes the report 'obviously not as robust' as reports from the IPCC or the US national climate assessment".⁸

These critiques suggest that while an "internal peer-review period" may have occurred¹⁷, it was insufficient for a document of this nature and influence. From the description of the internal review by one of the authors,⁹ it was not actually a peer review but an internal agency clearance review conducted in part by "administrators". For a highly influential scientific information product, such as one to be used by another federal agency to inform a national regulatory decision, a rigorous and robust external review by independent scientific experts is needed.^{3,16}

OMB's peer review bulletin emphasizes "meaningful peer review".^{3,16} A review process described as "rushed" and one that "would not pass muster in any traditional scientific

peer review process"⁸ fails to meet the spirit and likely the letter of OMB's guidelines for "highly influential scientific assessments." The fact that the report's conclusions are perceived to "deviate, sometimes wildly, from the scientific literature"⁸ strongly indicates that the internal review either lacked the necessary expertise, independence, or rigor to identify and correct significant scientific shortcomings. This failure in the pre-dissemination review process directly impacts the report's ability to ensure objectivity and accuracy, as required by the IQA.²

5. Detailed Analysis of Scientific Shortcomings and Non-Adherence to Information Quality Guidelines

5.1 Overall Objectivity and Presentation Bias

The DOE report explicitly positions itself as a "critical review" intended to "challenge the mainstream consensus" on climate change.¹ While intellectual critique is vital in science, this framing, while transparent about its intent, inherently introduces a pervasive bias that affects the report's presentation and evaluation of scientific evidence. External experts have criticized this approach, stating that the report "challenges the scientific consensus," is "chock-full of climate misinformation," and represents an attempt to "replace legitimate science with pseudoscience".⁸ It has been characterized as "cherrypick[ing] data points that suit their narrative and exclud[ing] the vast majority of the scientific literature that does not".⁸

Others have characterized the CWG report as a "red team" critique²⁴ that is one half of a debate. That the report represents a "red team" in what some posit as a debate between red and blue teams indicates that the CWG report is unbalanced. Science is not about debates, but about hypothesis testing and evidence-based inference. The CWG report fails to be scientific because of the cherrypicking, misinformation, and misemphasis on uncertainties.

A particularly strong critique, likening the report to a "law brief from attorneys defending their client, carbon dioxide," suggests that its goal is "not to weigh the evidence fairly but to build the strongest possible case for CO₂'s innocence".⁸ This characterization implies that the document is not a neutral scientific assessment but rather an advocacy piece designed to support a pre-determined policy outcome, such as the repeal of greenhouse gas regulations.²⁵ Such an approach directly violates the IQA's fundamental requirement for information to be "unbiased both in presentation and substance".³ The consistent pattern of selective emphasis and omission throughout the report undermines its claim to objectivity and raises serious questions about its adherence to federal information quality standards.

5.2 Mischaracterization of Carbon Dioxide and its Environmental Impacts

5.2.1 CO₂ as a "Pollutant": Scientific vs. Legal Definitions and Omissions

The report acknowledges the Supreme Court's 2007 ruling in *Mass. v. EPA* that greenhouse gases, including CO₂, are indeed "pollutants" subject to regulation under the Clean Air Act.¹

While it is technically true that CO₂ is not classified as a "criteria air pollutant" (like sulfur dioxide or particulate matter) that directly impacts local air quality or human health at ambient concentrations, the report's framing downplays or omits the primary reason CO₂ is legally deemed a pollutant: its role as a powerful greenhouse gas that alters the Earth's energy balance and drives global warming. By focusing exclusively on local air quality and direct human toxicity, the report creates a misleading context for CO₂'s regulatory status. The relevant context for CO₂ as a pollutant is its global warming potential and its systemic impact on the climate, not its immediate local effects. This selective contextualization violates the IQA's requirement for information to be "accurate, clear, complete, and unbiased both in presentation and substance," and to be presented "within its proper context".¹

5.2.2 Ocean Alkalinity and Coral Reefs: Selective Data Presentation and Downplaying Risks

The report addresses changes in ocean chemistry, asserting that "ocean acidification" is a "misnomer" because the oceans are not expected to become acidic, preferring the term "ocean neutralization". It claims that "ocean biota appear to be resilient to natural long-term changes in ocean pH" and cites the "recent rebound of the Great Barrier Reef" (GBR) as evidence, further suggesting "publication bias" exaggerates negative impacts.

While the term "acidification" refers to a decrease in pH (making it less alkaline, not necessarily acidic), the report downplays the established scientific concern about the *rate* of this change, which is largely unprecedented in recent geological history, and its significant impact on calcifying marine organisms. The report selectively highlights the GBR's "rebound" but fails to provide a complete picture by omitting recent widespread mass bleaching events that have severely impacted the reef.⁸ The historical fact that "most ocean life evolved when the oceans were mildly acidic"⁸ is presented without acknowledging that the modern rate of pH change is far more rapid than past natural fluctuations, posing a unique challenge to adaptation for marine life. The assertion of "publication bias" is also presented without sufficient context of the overall body of evidence supporting the detrimental effects of ocean pH changes. This selective presentation of data and omission of crucial contextual information violate the IQA's requirements for completeness, accuracy, and unbiased presentation.¹

It is not obvious that the members of the Climate Working Group have sufficient relevant

scientific training and expertise to make inferences about effects of climate change on oceanic systems. None of them are physical, chemical, biological, or geological oceanographers or marine biologists. The CWG lacks a sufficient balance of breadth, depth, and diversity of scientific expertise, experience, and perspectives to advise the federal government and the public on these matters.

5.2.3 Global Greening: Overemphasis on Benefits and Understated Nuances

The report prominently features "global greening" as an "important positive effect of promoting plant growth" due to CO₂ fertilization, which it claims enhances agricultural yields. It suggests that IPCC reports have "only minimally discussed" this phenomenon.

While CO₂ fertilization is a recognized scientific effect that can enhance plant growth, the report overemphasizes its benefits while downplaying or omitting potential negative consequences and complexities. These include issues such as nutrient dilution in crops⁸ and the combined effects of rising temperatures and extreme weather events (like heat and drought) that can counteract CO₂'s benefits.⁸ A climate scientist explicitly noted that the report's claim that "crops will flourish with extra carbon dioxide is countered by his work, which shows that rising temperatures and drought will negatively impact crop yields".⁸ Furthermore, the report's assertion that IPCC "minimally discussed" greening is contradicted by its citations of AR6 acknowledgments of the phenomenon, albeit with varying confidence in the magnitude of the trend. This selective emphasis on benefits without a comprehensive discussion of trade-offs or a balanced representation of the scientific literature contributes to a biased presentation, violating the IQA's requirements for completeness and objectivity.

It is not obvious that the members of the Climate Working Group have sufficient relevant scientific training and expertise to make inferences about effects of climate change on plant growth and agriculture. None of them are in relevant fields such as botany, horticulture, agronomy, agricultural engineering, soil science, entomology, zoology, ecology or related fields. The CWG lacks a sufficient balance of breadth, depth, and diversity of expertise, experience, and perspectives to advise the federal government and the public on these matters.

5.3 Climate Model Performance and Climate Sensitivity: Misleading Interpretations

5.3.1 Equilibrium and Transient Climate Sensitivity: Selective Use of Data-Driven Estimates

The report discusses Equilibrium Climate Sensitivity (ECS) and Transient Climate Response (TCR), fundamental metrics for quantifying the climate's response to increased CO₂. It notes that CMIP6 models show a wide and growing spread in ECS

values (1.8 to 5.7°C) and claims that models generally "run 'hot'". The report emphasizes data-driven ECS estimates as yielding a "lower and narrower range", highlighting the work of Lewis (2022, 2023, 2025) which suggests lower ECS values than those assessed by IPCC AR6. The report also discusses the "pattern effect," arguing against its implications for understating future warming.

While scientific deliberation on ECS values and climate model performance is legitimate and ongoing, the report consistently selects and emphasizes studies and interpretations that support lower climate sensitivity and the notion of model overestimation, while downplaying or omitting counterarguments or the broader scientific consensus. For instance, it cites Mauritsen and Roeckner (2020) regarding model tuning, but that paper also discusses "excessive aerosol cooling in early historical warming in a majority of the models", which is a different aspect of model performance often leading to underestimation of past warming. The report's selective focus on lower ECS estimates, without a balanced presentation of the full range of evidence and the complexities of climate feedbacks, compromises its objectivity.

It is not obvious that the members of the Climate Working Group have sufficient relevant scientific training and expertise to make inferences about effects of climate change on plant growth and agriculture. None of them are experts in relevant fields such as botany, horticulture, agronomy, agricultural engineering, soil science, entomology, zoology, ecology or related fields. The CWG lacks a sufficient balance of breadth, depth, and diversity of scientific expertise, experience, and perspectives to advise the federal government and the public on these matters

5.3.2 Model-Observation Discrepancies: Exaggerated Claims and Misrepresentation of Literature

The report asserts that climate models exhibit "warming biases in many aspects of their reproduction of the past several decades". It claims models produce "too much warming at the surface," "too much warming in the lower- and mid-troposphere," and "too much amplification of warming aloft". It also alleges discrepancies in stratospheric cooling, snow cover, hemispheric albedo, and U.S. Corn Belt temperatures.

A critical instance of non-adherence to information quality guidelines lies in the report's use and interpretation of Figure 3.2.1, which is sourced from Hausfather et al. (2019). The report uses this figure and accompanying text (page 16) to claim that "IPCC emission projections have tended to overstate actual subsequent emissions... observed atmospheric CO₂ concentrations tracked the low end of the SRES range and also of subsequent IPCC scenario ranges". This phrasing is used to imply that climate models (and their associated emission scenarios) have consistently overestimated observed warming. However, Zeke Hausfather, the lead author of the original 2019 paper, has

publicly stated that the DOE report "misuses a chart from his 2019 study to claim that climate models have overestimated observations, while his paper actually showed the models have performed well".⁸ Hausfather further clarified that the DOE authors "appear to have discarded the whole paper as not fitting their narrative, and instead picked a single figure that was in the supplementary materials to cast doubt on models when the whole paper actually confirmed how well they have performed in the years after they were published". This constitutes a direct misrepresentation of a cited source, violating the IQA's core requirements for accuracy, objectivity, and the use of sound methods.

Beyond this specific misrepresentation, the report's discussion of other model discrepancies also exhibits a pattern of biased presentation:

- **Tropospheric Warming:** The report claims "every model overpredicted the average observed warming trend over 1979-2014" in the troposphere. While the IPCC acknowledges some discrepancy in the tropical troposphere, it notes complexities in deconvolving influences. The report's strong phrasing ("every model overpredicted") presents a more definitive conclusion than is often found in nuanced scientific discourse.
- **Stratospheric Cooling:** The report states that stratospheric warming since 2000 is "contrary to model projections" and "not apparently consistent with the anthropogenic fingerprint". While Philipona et al. (2018) indeed reported this, the report omits that Santer et al. (2023) used updated data to show that a cooling trend has *not* re-emerged in the lower stratosphere, presenting a more complex picture. The report's framing implies a fundamental model flaw without fully acknowledging the latest nuanced findings.
- **Snow Cover:** The report claims Northern Hemisphere winter snow cover is "not decreasing", contrasting with model projections. While it cites the Rutgers Snow Lab data, it acknowledges conflicting observational products in the IPCC assessment, yet still emphasizes the "mismatch."
- **Hemispheric Albedo:** The report highlights that most CMIP6 models "do not reproduce the small observed asymmetry" in hemispheric albedo, suggesting a fundamental model flaw.
- **U.S. Corn Belt:** The report claims models "warm far too rapidly compared to observations" in the U.S. Corn Belt, presenting this as a key regional discrepancy and citing a statement that "the current generation of models is not fit for purpose" for regional output.

While some model-observation discrepancies are acknowledged in the scientific literature, the report consistently emphasizes these discrepancies to cast doubt on models' overall reliability without providing a balanced assessment of where models perform well or the complexities involved. This contributes to a biased presentation, violating IQA objectivity.

Climate modeling is not well represented among the author team. The CWG lacks a sufficient balance of breadth, depth, and diversity of scientific expertise, experience, and perspectives to advise the federal government and the public on these matters

5.4 Trends in Extreme Weather Events: Incomplete Data and Flawed Attribution

The report broadly claims that "most types of extreme weather exhibit no statistically significant long-term trends over the available historical record". It specifically asserts that "claims of increased frequency or intensity of hurricanes, tornadoes, floods, and droughts are not supported by U.S. historical data". The report frequently highlights the "perils of short data records" in assessing extreme events.

5.4.1 Hurricanes and Tropical Cyclones: Selective Historical Baselines and Natural Variability

The report states that a "reliable" subset of U.S. hurricane landfall data since 1900 "shows no trend in the frequency of U.S. landfall events". It emphasizes "substantial year-to-year and decadal variability" linked to the Atlantic Multidecadal Oscillation (AMO). While acknowledging a "slight but insignificant increase in the number of major hurricanes" globally, it claims lack of a clear trend in overall frequency.

However, the report's conclusion of "no trend" is an oversimplification that omits crucial nuances. The IPCC AR6, cited within the report, states it is "likely that the global proportion of major (Category 3–5) tropical cyclone occurrence has increased over the last four decades". NOAA data indicates that "cyclone intensity has risen noticeably over the past 30 years" and that "eight of the 10 most active years since 1950 have occurred since the mid-1990s" in terms of the Accumulated Cyclone Energy (ACE) Index.²⁶ While landfalling hurricanes are highly variable, focusing solely on frequency of landfalls and downplaying intensity trends or global patterns presents an incomplete and potentially misleading picture. The report's Table 6.2.1, which lists strongest U.S. landfalling hurricanes, shows multiple Category 4/5 storms (150+ mph) in recent years (Charley 2004, Laura 2020, Ida 2021, Ian 2022), indicating that extreme intensity events are not absent from the modern era. This selective emphasis and omission violate the IQA's completeness and objectivity standards.

5.4.2 Temperature Extremes and Heatwaves: Omission of Long-Term Context and Adaptation Success

The report acknowledges that AR6 reported increasing trends in heatwave frequency and intensity after 1950. However, it heavily emphasizes that U.S. heatwave activity peaked in the 1930s, citing NCA4. The report concludes that the U.S. climate has become "less extreme over time (milder) when measured by the range between warm season maxima and cold season minima". It also criticizes NCA5's use of urban

heatwave data (Figure 6.3.7) as "misleading" due to urbanization bias and the choice of a cool starting date (1960s).

While the exceptional heat of the 1930s is a historical fact, and urbanization can indeed bias temperature records, the report's strong dismissal of recent heatwave trends and its broad claim that the U.S. climate is "less prone to extremes" are not fully supported by a complete and balanced view of the data. The report's Figure 6.3.5 shows upward trends in the number of days at or above 95°F in three western U.S. regions, indicating significant regional increases in extreme heat. The report's selective interpretation and dismissal of official government indicators (like Figure 6.3.7) as "misleading" without providing sufficient counter-evidence for the broader context or acknowledging regional variations contributes to a biased presentation. This violates the IQA's requirements for completeness and objectivity.

5.4.3 Precipitation, Floods, and Droughts: Regional Heterogeneity and Data Limitations

The report asserts that analysis of long-term, nationwide historical records for extreme short-duration rainfall events "does not support the claim that extreme short-duration rainfall events are becoming more frequent or intense" when time series are extended. It notes "mixed" trends for floods across the U.S. and claims "no evidence of increasing meteorological drought frequency or intensity in the U.S. or globally over recent decades".

These conclusions often contrast with assessments from the IPCC and NCA. AR6, for instance, assesses with "high confidence" that the "frequency and intensity of heavy precipitation events have increased since the 1950s over most land area". Similarly, while the report cites Kogan et al. (2020) for global drought not intensifying, AR6 states with "medium confidence" that "increasing trends in agricultural and ecological droughts have been observed on all continents". While the report acknowledges regional variations, its overall summary tends to minimize observed increases and presents a more definitive "no trend" conclusion than is supported by the broader scientific literature. This selective emphasis violates the IQA's objectivity standard.

5.4.4 Wildfires: Understated Climate Influence and Overemphasis on Forest Management

The report states that global wildfire activity, as measured by the European Space Agency, shows a "downward trend in the 21st century". For the U.S., it claims that the number of fires is not increasing since 1985, and the area burned increased only until about 2007. The report heavily emphasizes forest management practices as a strong factor influencing wildfire activity.

While forest management practices, such as fire suppression policies, undeniably play a role in wildfire dynamics, the report's framing minimizes the significant influence of climate change. It understates the role of hotter, drier conditions, increased fuel aridity, and longer fire seasons in exacerbating wildfire intensity and frequency in many vulnerable regions, a factor acknowledged by the IPCC. The global declining trend in burned area cited by the report is often attributed to land-use change and agricultural expansion, which reduces available burnable area, rather than necessarily a reduction in climate-driven fire risk in natural ecosystems. By focusing primarily on declining global trends and forest management, the report presents an incomplete picture that downplays the climate change signal in wildfire activity, particularly in regions where it is a significant and growing concern. This selective emphasis violates the IQA's completeness and objectivity standards.

5.5 Sea Level Rise: Downplaying Acceleration and Local Drivers

The report acknowledges that global sea level has risen approximately 8 inches since 1900. However, it claims that "U.S. tide gauge measurements in aggregate show no obvious acceleration in sea level rise beyond the historical average rate". It places significant emphasis on local land subsidence (sinking) as the "dominant driver" in high-impact U.S. coastal areas, such as Galveston, New Orleans, and the Chesapeake Bay regions.

5.5.1 Global and U.S. Sea Level Trends: Selective Interpretation of Tide Gauge Data

The report highlights the importance of local subsidence, providing Table 7.1 to demonstrate that "more than half of the measured relative sea level rise is attributed to land sinking" in specific U.S. locations like San Francisco, Galveston, and Grand Isle. It asserts that problems in the San Francisco Bay area, including threats to the airport, are caused "primarily by soil compaction in landfill zones...not by the slow creep of global sea level rise".

While local subsidence is indeed a crucial factor contributing to relative sea level rise in many coastal areas, the report's framing often implies it is the *sole* or *overwhelming* driver, thereby downplaying the accelerating global mean sea level rise and its climate-driven components. NOAA explicitly states that global mean sea level rise is "accelerating in recent decades" and projects significant acceleration for U.S. coasts. For instance, NOAA predicts that by 2050, sea level at The Battery in Manhattan will have risen "one foot... more than twice the current rate and about three times the average rate over the past century". Crucially, the report's Figure 7.6, depicting the 30-year trailing trend of sea level rise at The Battery, clearly shows a sharp upward acceleration. This direct contradiction between the report's textual claim of "no obvious acceleration" and its visual evidence represents a factual inaccuracy and a biased

presentation. Such selective emphasis on local factors while downplaying or misrepresenting the observed global acceleration and the climate-driven contribution to overall sea level rise violates the IQA's requirements for accuracy, clarity, and objectivity.

5.5.2 Projected Sea Level Rise: Dismissal of Higher-End Scenarios

The report claims "deep uncertainty surrounding projections of sea level rise to 2100" due to uncertainties in ice sheet instabilities, particularly for higher emissions scenarios. It characterizes NOAA's projection of a one-foot rise at The Battery in Manhattan by 2050 as "remarkable" and "locked in" (meaning it will happen regardless of future emissions).

While uncertainties in ice sheet dynamics indeed contribute to the range of sea level rise projections, the report's framing tends to dismiss higher-end projections or the potential for significant ice sheet contributions, which remain a major concern in mainstream climate science. The report frames its assertion of the "locked-in" nature of NOAA's NYC projection as "remarkable", implying it is an overstatement, rather than a consequence of past emissions and the thermal inertia of the ocean, which commits to future warming and expansion even if emissions were to cease immediately. This approach of emphasizing uncertainty to dismiss projections that do not align with its narrative, rather than providing a balanced assessment of the full range of scientific possibilities, violates the IQA's objectivity standard.

5.6 Climate Change Attribution: Methodological Flaws and Understated Uncertainty

The report acknowledges the complexity of climate change attribution, citing the IPCC's caution that it "inherently uncertain and ultimately depend[s] on expert judgement". It critiques optimal fingerprinting as "inherently unreliable" and "biased" and suggests that natural climate variability, including solar activity and ocean oscillations, may be underestimated.

5.6.1 Natural Climate Variability: Underestimation of Solar and Ocean Oscillation Impacts

The report argues that the IPCC's consensus statements on solar forcing were "formulated prematurely through the suppression of dissenting scientific opinions". It claims that some reconstructions of Total Solar Irradiance (TSI) variability "can explain more than 70 percent of the temperature variability since preindustrial times". Furthermore, it asserts that when the Great Pacific Climate Shift is accounted for, "40 percent or more of the warming in the second half of the 20th century is attributed to natural internal variability".

While solar variability and large-scale ocean oscillations (like AMO and PDO) are recognized as important factors in climate variability, the report significantly overstates the scientific consensus on their contribution to recent global warming. The IPCC's assessment of solar forcing is based on a broad review of literature, not "suppression". While some studies, often from a minority viewpoint, suggest a larger solar influence, this is not the prevailing scientific consensus. Similarly, while ocean oscillations clearly modulate regional temperatures and can influence decadal warming rates, their *net global* warming contribution over multi-decadal periods is generally considered small by the IPCC. The report's selective emphasis on studies that support a dominant role for natural variability, without adequately representing the broader scientific consensus or the limitations of these alternative analyses, violates the IQA's objectivity and sound methods principles.

5.6.2 Optimal Fingerprinting and Time Series Methods: Unacknowledged Biases and Limitations

The report presents a detailed critique of optimal fingerprinting, a primary statistical tool used by the IPCC for attribution. It argues that the method "violates the Gauss-Markov conditions, leading to potentially biased and inconsistent fingerprinting coefficients," and that Total Least Squares (TLS) estimates, often used in this method, "have a large positive bias". It cites a series of papers by McKittrick (2021, 2022, 2023, 2025), one of the report's authors, for these critiques. The report also discusses time series analysis methods, including "Granger causality," and highlights a finding from Vostok ice core data that temperature Granger-causes CO₂ but not the reverse, implying CO₂ is not the primary driver on those timescales.

While methodological debates are a natural part of scientific advancement, the report presents these critiques as definitive flaws that "undermin[e] the reliability of the method" without fully acknowledging counterarguments or the broader acceptance of optimal fingerprinting within the climate science community. The selective emphasis on the Vostok ice core data to suggest CO₂ is not a primary driver ignores the different timescales and complex feedback mechanisms involved in modern warming, where CO₂ acts as a primary forcing. This one-sided and strong critique of established methodologies, without a balanced discussion of their strengths, limitations, or the broader scientific context, violates the IQA's objectivity standard.

5.6.3 Extreme Event Attribution: Critiques of Rapid Attribution Claims (e.g., 2021 PNW Heatwave)

The report touches upon the field of extreme event attribution (EEA), particularly focusing on World Weather Attribution (WWA). It criticizes WWA for "extensive promotion of non-peer-reviewed findings," "shaping analyses to serve litigation," and "methodological challenges". The 2021 Western North America heatwave is presented

as a case study, with the report highlighting conflicting attribution claims and arguing that WWA's estimates of rarity are "not accurate". It quotes studies suggesting the heatwave was "virtually impossible *with* climate change" and that its occurrence was "bad luck".

While WWA's methodology and rapid attribution claims are indeed subject to ongoing scientific deliberation, the report's framing is overly critical and dismissive, potentially mischaracterizing and overstating the "perils of hasty attribution claims" to undermine the entire field of EEA. It selectively highlights studies that found the PNW heatwave "virtually impossible *with* climate change", which is itself a strong and controversial claim within the scientific community. By presenting a highly critical and potentially biased view of a developing scientific field, without a balanced discussion of its advancements, the range of findings, or the complexities involved, the report violates the IQA's objectivity standard.

5.7 Economic Impacts and the Social Cost of Carbon: Biased Assumptions and Omissions

The report argues that the economic impacts of climate change on growth are "negligible", citing early work by Schelling (1992) and the IPCC AR5. It suggests that aggressive abatement policies are "too expensive". The report also critically examines the Social Cost of Carbon (SCC), claiming it is "not intrinsically informative" and "highly uncertain", and posits the possibility of "low or negative SCC" values.

5.7.1 Economic Growth and Climate Change: Selective Interpretation of Econometric Studies

The report cites econometric studies that found "warming increases growth in rich countries and poor countries alike" (Zhao et al. 2018) or "no effect on growth" (Greßer et al. 2021) or even a "net economic benefit for the U.S." (Mohaddes et al. 2023). It uses Figure 11.2, from a 2023 CEA-OMB report, to show only "a few percent impact for a few degrees of warming" on U.S. GDP.

While there is indeed ongoing deliberation on the precise economic impacts of climate change, the report selectively emphasizes studies that find minimal or even beneficial effects, often without fully acknowledging the range of findings or the complexities of economic modeling. For example, it critiques Dell et al. (2012) for suggesting negative impacts in poor countries, citing subsequent critiques. However, it does not offer a balanced view of the broader literature that still finds negative impacts, especially in vulnerable regions, or the nuances of how different methodologies and assumptions lead to varying results. This selective presentation of evidence, aimed at minimizing perceived economic damages, violates the IQA's objectivity and completeness standards.

5.7.2 Social Cost of Carbon (SCC) Estimation: Sensitivity to Assumptions and Lack of Transparency

The report asserts that the Social Cost of Carbon (SCC) is "not estimated in the way other economic statistics are estimated," and that "many components of the SCC are unknown and rely on judgment and opinion". It claims that the EPA's 5-fold increase in SCC in 2023 was "not because new data had been collected or better mathematical methods had been invented, but because new assumptions had been used", but fails to note that assumptions were changed in the first Trump administration. A critical claim is that the portion of EPA's SCC revision attributable to agricultural yield losses was "unwarranted". This assertion is based on McKittrick (2025), a self-citation to one of the report authors, which purportedly showed that after recovering missing data from Moore et al. (2017), "projected crop yield losses disappeared and turned into gains at all warming levels".

This strong claim regarding agricultural impacts is a major violation of information quality. While McKittrick (2025) re-analyzed the Moore et al. (2017) dataset, presenting it as definitive evidence of agricultural *gains* at all warming levels is an oversimplification and a selective presentation of evidence. The broader scientific literature, including studies cited within the report (e.g., Ebi et al. 2021, Köhler et al. 2019, Ziska 2022), acknowledges complexities such as nutrient dilution and the negative impacts of extreme heat and drought on crops. Bob Kopp, a climate scientist, explicitly stated that the report's claim that "crops will flourish with extra carbon dioxide is countered by his work, which shows that rising temperatures and drought will negatively impact crop yields". The report's strong conclusion of universal "gains" based on a single re-analysis, while downplaying the broader scientific uncertainty and the range of findings on agricultural damages, violates the IQA's accuracy, objectivity, and completeness standards.

5.7.3 Tipping Points: Dismissal of Potential High-Impact Outcomes

The report discusses "tipping points," defining them in two ways: abrupt changes in response to external forcing and bifurcations arising from internal dynamics of nonlinear systems. It largely dismisses their significance for SCC calculations, stating that when considered, they "added about 25 percent to the estimate, mainly associated with thawing permafrost and release of methane hydrates", but that this scenario is considered "very unlikely" by the IPCC. The report emphasizes that natural variability has produced similar shifts in the past.

While the science of tipping points is evolving and uncertainties exist, the report's framing minimizes their potential for high-impact, low-likelihood events that could significantly alter risk assessments. The report's focus on past natural variability does not negate the risk of human-induced tipping points, particularly given the

unprecedented rate of current climate change. The IPCC AR6 states that there is "medium confidence" that there will not be an abrupt collapse of the Atlantic Meridional Overturning Circulation before 2100, but also notes "limited evidence for low-likelihood, high-impact outcomes... that would strongly increase ice loss from the Antarctic Ice Sheet for centuries under high GHG emissions scenarios". The report's selective emphasis on arguments that minimize the severity of future climate change impacts, rather than providing a balanced assessment of the range of scientific possibilities and potential risks, violates the IQA's completeness and objectivity standards.

5.8 Global Climate Impacts of U.S. Emissions Policies: Misleading Scale Arguments

The report argues that "U.S. policy actions are expected to have undetectably small direct impacts on the global climate and any effects will emerge only with long delays". It uses a case study of U.S. motor vehicle emissions, asserting that even eliminating *all* such emissions would only "retard the accumulation of CO₂ in the atmosphere by a year or two over a century" and reduce the overall warming trend by "at most about 3 percent," which it claims would be "far below the limits of measurability".

This argument fundamentally misrepresents the nature of global climate action. Climate change is a collective action problem, where the sum of individual national efforts contributes to the global outcome. Policy effectiveness is influenced by contributions to global aggregate emissions reductions and their projected climate outcomes, as well as the signaling effect on other nations to undertake similar actions. Presenting this argument without addressing the broader policy context, the mechanisms of international climate action, or the long-term cumulative effects of sustained reductions renders the information incomplete and potentially biased, undermining its utility for policymakers. This violates the IQA's objectivity and completeness standards.

6. Request for Correction

This request for correction is submitted under the U.S. Department of Energy's (DOE) Information Quality Guidelines, pursuant to Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554) and Office of Management and Budget (OMB) guidelines. The information requiring correction is contained within the report titled:

Report Name: "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate"

Disseminating Office: United States Department of Energy

Author: Climate Working Group (John Christy, Ph.D.; Judith Curry, Ph.D.; Steven Koonin, Ph.D.; Ross McKittrick, Ph.D.; Roy Spencer, Ph.D.)

Date of Issuance: July 23, 2025

The following specific aspects of the report are inconsistent with the Information Quality

Act and associated OMB and DOE guidance, violating principles of quality, objectivity, utility, and integrity, particularly concerning accuracy, clarity, completeness, and unbiased presentation.

6.1 Requester Identification

H. Christopher Frey, Ph.D.
Futrell Distinguished University Professor of Environmental Engineering
Department of Civil, Construction, and Environmental Engineering
Campus Box 7908
North Carolina State University
Raleigh, NC 27695-7908



See also **Section 6.3 Potential Impacts of the Alleged Errors on the Requester.**

6.2 Detailed Description of Information Requiring Correction

The basis for this request correction is inclusive of information presented in Sections 1, 2, 3, 4, and 5 of this report. Additional illustrative specific examples and findings are given here to sufficiently demonstrate the need not merely for correction of the report, but for DOE to withdraw the report.

6.2.1 Misrepresentation of Climate Model Performance (Figure 3.2.1 and associated text, page 16):

- **Specific Item:** Figure 3.2.1, sourced from Hausfather et al. (2019), and the accompanying text on page 16 stating, "Comparisons of past scenario groups against observations show that IPCC emission projections have tended to overstate actual subsequent emissions... observed atmospheric CO2 concentrations tracked the low end of the SRES range and also of subsequent IPCC scenario ranges".
- **Explanation of Non-adherence:** This figure and text are used to imply that climate models (and their associated emission scenarios) have consistently overestimated observed warming. However, the original Hausfather et al. (2019) paper explicitly concluded that "climate models published over the past five decades were skillful in predicting subsequent GMST changes, with most models examined showing warming consistent with observations, particularly when mismatches between model-projected and observationally-estimated forcings were taken into account." The lead author, Zeke Hausfather, has publicly stated that the DOE report "misuses a chart from his 2019 study to claim that climate models have overestimated observations, while his paper actually showed the models have performed well".⁸ This constitutes a direct misrepresentation of a cited source, violating the IQA's

requirements for accuracy, objectivity, and sound methods.

- **Recommendation:** Remove Figure 3.2.1 and revise the accompanying text to accurately reflect the conclusions of Hausfather et al. (2019), or provide a balanced summary of the literature on climate model performance, including studies that find models to be skillful.

6.2.2 Selective Omission and Misleading Framing of Ocean Alkalinity and Coral Reef Health (Section 2.2, pages 6-10):

- **Specific Item:** The characterization of "ocean acidification" as a "misnomer" (page 6), the emphasis on the Great Barrier Reef's "rebound" (page 7), and the claim of "publication bias" (page 9), while omitting or downplaying the broader scientific consensus on the rapid rate of ocean pH decrease and its widespread negative impacts on marine ecosystems.
- **Explanation of Non-adherence:** While the oceans remain alkaline, the term "acidification" accurately describes the decrease in pH, which is a significant concern due to its unprecedented rate in recent geological history. The report selectively highlights the Great Barrier Reef's rebound but fails to provide a complete picture by omitting recent widespread mass bleaching events.⁸ The critique of "publication bias" is presented without sufficient context of the overall body of evidence. This violates the IQA's requirements for completeness, accuracy, and unbiased presentation.
- **Recommendation:** Revise Section 2.2 to provide a more balanced and complete scientific assessment of ocean pH changes, including the rate of change, its established impacts on marine calcifiers, and a comprehensive overview of coral reef health that includes recent bleaching events.

6.2.3 Misleading Interpretation and Selective Omission of U.S. Heatwave Data (Section 6.3, pages 52-60, particularly Figure 6.3.7):

- **Specific Item:** The dismissal of Figure 6.3.7 (page 59), showing increasing urban heatwaves, as "misleading" due to starting date and urbanization bias, while the report's Figure 6.3.5 (page 57) shows upward trends in 95°F+ days in three Western U.S. regions.
- **Explanation of Non-adherence:** While urbanization effects and starting dates can influence trends, the report's strong dismissal of Figure 6.3.7 as "misleading" and its general conclusion that the U.S. climate has become "less prone to extremes" are not fully supported by a complete and balanced view of the data. The report's data (Figure 6.3.5) shows significant regional increases in extreme heat, which contradicts the overarching narrative of a "less extreme" climate. This selective interpretation and dismissal of relevant data violate the IQA's requirements for objectivity and completeness.

- **Recommendation:** Revise Section 6.3 to provide a more nuanced and complete discussion of U.S. heatwave trends, acknowledging regional variations and the complexities of urbanization effects, rather than broadly dismissing data that indicates increasing heat extremes.

6.2.4 Misrepresentation of Agricultural Impact Research and Omission of Nuances (Section 9.1, pages 104-107, particularly Figure 9.2):

- **Specific Item:** The claim that McKittrick (2025) showed that, after recovering missing data, "projected crop yield losses disappeared and turned into gains at all warming levels" (page 107), and the associated Figure 9.2. This is used to argue that "the portion of the EPA's SCC revision attributable to agricultural yield losses was unwarranted" (page 122).
- **Explanation of Non-adherence:** The report presents McKittrick (2025) as definitive evidence that climate warming will lead to agricultural *gains*, thereby implying an invalidation of EPA's SCC estimates. However, this is a highly specific interpretation of a single re-analysis. The broader scientific literature, including studies cited within the report (e.g., Ebi et al. 2021, Köhler et al. 2019, Ziska 2022), acknowledges complexities such as nutrient dilution and the negative impacts of extreme heat and drought on crops. Bob Kopp, a climate scientist, explicitly states that the report's claim that "crops will flourish with extra carbon dioxide is countered by his work, which shows that rising temperatures and drought will negatively impact crop yields".⁸ The report's strong conclusion of universal "gains" based on a single re-analysis, while downplaying the broader scientific uncertainty and the range of findings on agricultural damages, violates the IQA's accuracy, objectivity, and completeness.
- **Recommendation:** Revise Section 9.1 to present a more balanced and comprehensive assessment of climate change impacts on agriculture, acknowledging both CO₂ fertilization benefits and potential negative impacts (e.g., from extreme heat, drought, nutrient dilution), and reflecting the full range of scientific findings rather than relying on a single study's re-analysis to draw sweeping conclusions.

6.2.5 Oversimplification and Omission of Key Hurricane Trend Data (Section 6.2, pages 48-52, particularly Figure 6.2.3):

- **Specific Item:** The statement on page 48 that "A subset of the best-track data corresponding to hurricanes that have directly impacted the United States since 1900 is considered to be reliable, and shows no trend in the frequency of U.S. landfall events". Figure 6.2.3 (page 51) is presented to support "no statistically significant trend since 1920."
- **Explanation of Non-adherence:** While U.S. landfalls are highly variable, the

report's conclusion of "no trend" is an oversimplification. The IPCC AR6 states it is "likely that the global proportion of major (Category 3–5) tropical cyclone occurrence has increased over the last four decades". NOAA data also indicates that "cyclone intensity has risen noticeably over the past 30 years".²⁶ The report's Table 6.2.1 shows multiple Category 4/5 storms in recent years. By focusing solely on frequency of landfalls and downplaying intensity trends or global patterns, the report presents an incomplete and potentially misleading picture, violating IQA's completeness and objectivity.

- **Recommendation:** Revise Section 6.2 to include a more complete discussion of tropical cyclone trends, including global intensity increases, and to acknowledge the complexities of U.S. landfall data, rather than solely emphasizing a lack of frequency trend.

6.2.6 Factual Inaccuracy and Downplaying of Sea Level Rise Acceleration (Section 7, pages 75-81, particularly Figure 7.6):

- **Specific Item:** The claim on page 75 that "U.S. tide gauge measurements in aggregate show no obvious acceleration in sea level rise beyond the historical average rate". This is contradicted by the report's Figure 7.6 (page 80), which shows a clear upward acceleration in the 30-year trailing trend for sea level rise at The Battery, New York.
- **Explanation of Non-adherence:** The report's textual claim of "no obvious acceleration" is directly contradicted by visual evidence in Figure 7.6, which clearly depicts an accelerating rate of sea level rise at a key U.S. location. Furthermore, NOAA explicitly states that global mean sea level rise is "accelerating in recent decades" and projects significant acceleration for U.S. coasts. The report's emphasis on local subsidence as the "dominant driver" also downplays the accelerating global component. This constitutes a factual inaccuracy and a biased presentation, violating IQA's accuracy, clarity, and objectivity.
- **Recommendation:** Correct the text on page 75 to align with the visual evidence in Figure 7.6 and with established NOAA projections regarding accelerating sea level rise. Provide a more balanced discussion of both global and local drivers of sea level rise, acknowledging the accelerating climate-driven component.

6.2.7 One-Sided and Flawed Critique of Attribution Methodologies (Section 8.3, pages 82-90):

- **Specific Item:** The strong assertion that optimal fingerprinting is "inherently unreliable" and "biased" (page 88), self-citing McKittrick (2021, 2022, 2023, 2025), and the selective emphasis on high solar variability and large natural internal variability (e.g., Great Pacific Climate Shift) as major drivers of recent warming (pages 84-87).

- **Explanation of Non-adherence:** While methodological deliberations exist in attribution science, the report presents a one-sided and overly strong critique of optimal fingerprinting, a widely used and peer-reviewed method in climate science. It selectively highlights studies that support a dominant role for natural variability (solar, ocean oscillations) in recent warming, often from a minority viewpoint, without adequately representing the broader scientific consensus or the limitations of these alternative analyses. For instance, the IPCC's assessment of solar forcing is based on a broad review, not "suppression of dissenting scientific opinions". This biased and incomplete presentation of attribution science violates IQA's objectivity and sound methods.
- **Recommendation:** Revise Section 8.3 to provide a more balanced and comprehensive overview of climate change attribution methods, including a fair assessment of optimal fingerprinting's strengths and limitations, and a more representative discussion of the scientific literature on natural climate variability's contribution to recent warming.

6.2.8 Misleading Framing and Incomplete Analysis of U.S. Emissions Policy Impact (Chapter 12, pages 129-130):

- **Specific Item:** The assertion that "U.S. policy actions are expected to have undetectably small direct impacts on the global climate and any effects will emerge only with long delays" (page 129), and the motor vehicle emissions case study concluding that eliminating all U.S. vehicle emissions would have an "undetectably small" impact on global warming (page 130).
- **Explanation of Non-adherence:** While the isolated impact of U.S. emissions reductions may be small in a purely physical sense, this argument is misleading and violates the IQA's requirements for context and completeness. It ignores the collective action problem inherent in climate change mitigation and the crucial role of major economies like the U.S. in fostering international cooperation and technological innovation. Policy effectiveness is not solely measured by immediate, isolated physical detection but by contributions to global aggregate efforts and the signaling effect on other nations. Presenting this argument without addressing the broader policy context or the mechanisms of international climate action renders the information incomplete and biased, undermining its utility for policymakers.
- **Recommendation:** Revise Chapter 12 to provide a more comprehensive and balanced discussion of the impacts of U.S. emissions policies, acknowledging the collective nature of global climate action, the role of international agreements, and the broader economic and diplomatic implications of U.S. leadership, rather than solely focusing on a narrow, isolated physical detectability argument.

6.2.9 Misrepresentation of NOAA's Billion Dollar Disaster Data (Section 10.2, page 111):

- **Specific Item:** The report's implicit support for the argument that NOAA's Billion Dollar Disaster series (Figure 10.1, page 112) is misleading due to lack of normalization for population and wealth growth, and the subsequent mention that NOAA "announced it has withdrawn the Billion Dollar Disaster product from publication" (page 111).
- **Explanation of Non-adherence:** The report leverages critiques of NOAA's Billion Dollar Disaster product to support its narrative that extreme weather losses are not worsening due to climate change. While normalization for exposure and wealth is a valid academic point, the report's statement that NOAA "announced it has withdrawn the Billion Dollar Disaster product from publication" is misleading. NOAA's official statement² indicates the product will be "retired, with no updates beyond calendar year 2024," but explicitly states "All past reports, spanning 1980-2024, and their underlying data remain authoritative, archived, and available".²⁷ The report's phrasing implies a withdrawal due to fundamental flaws, which is not what NOAA stated. The withdrawal is more likely due to a change in political leadership rather than scientific considerations. This misrepresentation of NOAA's action and the status of the data violates IQA's accuracy and clarity.
- **Recommendation:** Correct the text on page 111 to accurately reflect NOAA's official statement regarding the retirement and archiving of the Billion Dollar Disaster product, clarifying that the past data remains authoritative. Provide a more balanced discussion of the complexities of normalizing disaster losses without implying a complete invalidation of the dataset.

6.2.10 Non-Compliance of the Climate Working Group with Federal Advisory Committee Act (FACA) Requirements and Lack of Author Independence (Overall Report Structure and Preface, pages X, 140):

- **Specific Item:** The formation and operation of the "Climate Working Group" (CWG), as described in the Preface (page X) and About the Authors (page 140), including its assembly by the Secretary of Energy to provide advice. The absence of any indication that the CWG adhered to FACA requirements, and the lack of independence among the authors.
- **Explanation of Non-adherence:** The CWG appears to function as a federal advisory committee under FACA (5 U.S.C. chapter 10)^{5,6}, as it was "assembled" and "commissioned" by the Secretary of Energy to provide advice.¹ There is no evidence in the report or associated materials that the CWG complied with FACA's mandatory requirements for transparency, public access, and balanced membership, such as chartering, public notice of meetings, open meetings, and public comment on candidate selection.^{5,6} The selection of authors described as "outliers" and having "contrarian views"⁸, coupled with their extensive co-authorships (e.g., Christy and McKittrick, Christy and Spencer), alignments with

ideological organizations as previously noted, and lack of coverage of the scientific disciplines pertinent to the scope of the review, strongly suggests a lack of focus on representing the full spectrum of scientific expertise on climate change. This procedural non-compliance and lack of viewpoint diversity undermine the integrity and objectivity of the information disseminated, violating IQA's principles and creating the appearance of a "poisoned fruit" process.

- **Recommendation:** The DOE should formally acknowledge whether the Climate Working Group was subject to FACA. If it was, the report should be withdrawn until FACA compliance issues are addressed, which likely includes starting over with an appropriate appointment process for authors who would then draft a *de novo* report. If DOE asserts FACA did not apply, a detailed legal justification for this determination should be provided. Any advisory body formed to provide scientific advice to the Department must adhere strictly to FACA's balanced membership requirements, ensuring a diverse range of scientific viewpoints and independence from ideological or industrial affiliations.

6.2.11 Insufficient Pre-Dissemination Peer Review for a Highly Influential Scientific Assessment:

- **Specific Item:** The statement of "internal peer-review period amongst DOE's scientific research community"¹⁷ for a report described as a "critical assessment of the conventional narrative on climate change" and used to justify major policy changes.¹⁴
- **Explanation of Non-adherence:** As a "highly influential scientific assessment", this report is subject to OMB's stringent peer review guidelines.^{3,16} External experts have stated that the report "was rushed over four months, and would not pass muster in any traditional scientific peer review process" and that its conclusions "deviated, sometimes wildly, from the scientific literature" due to "lack of peer review".⁸ This indicates that the "internal peer-review" process was insufficient to ensure the report's accuracy, objectivity, and adherence to sound scientific methods, thus violating OMB and DOE information quality guidelines.
- **Recommendation:** The DOE should provide full transparency regarding the internal peer review process, including the names and affiliations of reviewers, their comments, and how those comments were addressed. If the review was indeed insufficient, the report should be withdrawn and, if a new report is developed, it should be subjected to a rigorous, independent, and transparent external peer review process consistent with OMB guidelines for highly influential scientific assessments.

6.2.12 Legal Challenge to the Climate Working Group Under FACA

- **Specific Item:** A complaint, Case 1:25-cv-12249, EDF and UCS v. Wright,

USDOE, Zeldin, USEPA, and Climate Working Group, Filed in the United States District Court for the District of Massachusetts, requests that the court declare that the Climate Working Group is an advisory committee subject to FACA and all of its requirements; declare unlawful the establishment and utilization of the Climate Working Group by Defendants DOE, EPA, Secretary Wright, and Administrator Zeldin; declare that Defendants violated FACA by not complying with the requirements for holding advisory committee meetings and maintaining and disclosing advisory committee records; declare that Defendants violated FACA because the Climate Working Group does not have a fairly balanced membership and was inappropriately influenced by the appointing authority or by any special interest; postpone the effective date of, and vacate, the establishment of the Climate Working Group, including the selection and appointment of its members; postpone the effective date of, and vacate, each action taken by the CWG, including the drafting and completion of the CWG Report and the transmission of the CWG report to Defendants' DOE, EPA, Secretary Wright, and Administrator Zeldin; postpone the effective date of, and vacate, Defendants' actions utilizing the Climate Working Group, including DOE's publishing the CWG Report and transmitting it to Defendants EPA and Administrator Zeldin, and EPA's reliance on the CWG Report in its proposed rule to rescind the Endangerment Finding and the vehicle emissions standards; preliminarily and permanently enjoin the Climate Working Group from meeting, advising Defendants or any other federal officials or agencies, or otherwise conducting Climate Working Group business, and enjoin Defendants DOE, EPA, Secretary Wright, and Administrator Zeldin from facilitating any meetings or business of the Climate Working Group and receiving advice from the group or its members, unless and until Defendants comply with all requirements for the group to operate legally as an advisory committee; preliminarily and permanently enjoin or compel Defendants to immediately disclose all records and minutes required to be disclosed under 5 U.S.C. §§ 1009(b)-(c), and to produce a Vaughn index for any materials related to the Climate Working Group in any way that are withheld from disclosure for any reason; preliminarily and permanently enjoin Defendants DOE, EPA, Secretary Wright, and Administrator Zeldin from relying on or citing to the CWG Report and any other recommendations, advice, or reports of the Climate Working Group, in any agency actions or proceedings; preliminarily and permanently enjoin the current deadlines for public comments on the CWG Report and the EPA NPRM to rescind the Endangerment Finding and the vehicle emissions standards until the statutory violations described above are remedied; preliminarily and permanently enjoin Defendants EPA and Zeldin to maintain a public comment period on the proposed rescissions of the Endangerment Finding and vehicle emissions standards for at least 45 days from the date that Defendants release all records and minutes required to be disclosed under 5 U.S.C. §§ 1009(b)-(c).²⁸

- **Explanation of Non-adherence:** The factual and legal background of the plaintiffs complaint for relief provides the following:
 - “In March 2025, consistent with the President’s direction, EPA Administrator Lee Zeldin announced EPA’s intention to reconsider the Endangerment Finding. The Administrator called the announcement the “most consequential day of deregulation in U.S. history” that would “driv[e] a dagger straight into the heart of the climate change religion.” The EPA administrator’s subjective language reveal a strong predetermined policy outcome that contextualizes why the government, via DOE Secretary Wright, commissioned the Climate Working Group and its report. This policy bias is counter to the Information Quality Act.
 - “Because the overwhelming scientific consensus—and the federal government’s own expert analyses and reports—demonstrate the lack of any scientific basis to reconsider the Endangerment Finding, the Administration decided to manufacture purported expert opinions upon which the Administration could rely”. If the government had followed the law and applicable procedures, it would not have been able to appoint a five member CWG that would have produced such a biased and unbalanced report that fails to meet requirements of the IQA.
 - “Specifically, in March 2025, Secretary of Energy Chris Wright secretly devised a plan to convene a “climate working group” of individuals from outside the government. The express purpose of the group would be to issue a report that would “challenge the mainstream consensus” and “cut against the prevailing narrative that climate change is an existential threat.” The existence and work of the group was not publicly disclosed until July 29, 2025, the same day that EPA released its notice of proposed rulemaking to rescind the Endangerment Finding.” The intent of DOE was to create a biased report to support predetermined opinions of the DOE and EPA leadership and to support EPA’s preferred policy outcomes, irrespective of best available science. This is contrary to the IQA.
 - “From the outset, Secretary Wright knew who he wanted to serve on the working group. The Secretary asked Travis Fisher, the director of energy and environmental policy studies at the Cato Institute, to assemble Drs. John Christy, Judith Curry, Steven Koonin, Ross McKittrick, and Roy Spencer, to serve as members of the working group. Wright personally called the members to ask them to serve on the working group. All five of these individuals have a history of questioning the impacts of human-caused greenhouse gas emissions on climate change, and asserting that leading scientific assessments have overstated the impacts of climate change on human health and welfare and that the costs of climate change mitigation exceed the benefits.” The process described here, based on

information disclosed by DOE, the Secretary, the study authors, and Mr. Fisher, reveal lack of adherence to following applicable laws and procedures, leading to report that fails to comport with the IQA.

- The complaint in Case 1:25-cv-12249 has details regarding the prior known views and affiliations of each of the CWG authors, as set forth in paragraphs 30 to 37.³⁸ The lack of balance of the selected authors raises substantial, significant, and pertinent concerns and demonstrates the inability of the CWG as a whole to be able to produce a product that meetings IQA requirements.
- "By April 2025, DOE had assembled the Climate Working Group, and it began working in secret on its report. Over the next two months, the group sought to rewrite decades of climate science research". The CWG did not operate as would any other group of advisors would have under FACA. The lack of transparency and lack of opportunity for public involvement, including public comment, is contrary to FACA and is not consistent with producing a balanced and objective report that comports with IQA.
- "On May 27, 2025, the working group submitted its report to Secretary Wright, and the report was contemporaneously sent to EPA. According to Curry, although the group completed the CWG Report in May, its publication "was delayed to coincide with the release of EPA's proposal" to rescind the Endangerment Finding". Because of secrecy and lack of transparency, it is unclear how sharing the report with EPA prior to its publication may have led to changes in its content.
- In paragraph 44, "In the CWG Report, the authors assert that DOE commissioned the report to advise the federal government on "climate science relevant for energy policymaking". This conveys that the authors were aware that they were providing a report intended to advise the federal government. However, the report was not convened under FACA nor does the report comport with the IQA
- In paragraph 45: "Multiple scientists objected that their work had been mischaracterized by the CWG Report. One such scientist is Ben Santer, who is a board member of Plaintiff UCS. Santer noted that the report "fundamentally misrepresents" his 2023 paper, "Exceptional Stratospheric Contribution to Human Fingerprints on Atmospheric Temperature." Dozens of other scientists are in the process of coordinating a response to the report, which they say "misrepresents decades of climate science". This paragraph is consistent with findings presented above, that the DOE CWG mischaracterizes the work of other scientists. Therefore, it does not comport with the IQA.
- Paragraph 50: "DOE has already highlighted the CWG Report's advice on its website. DOE states: "Among the key findings, the report concludes

that carbon dioxide (CO₂)-induced warming appears to be less damaging economically than commonly believed, and that aggressive mitigation strategies could be more harmful than beneficial. Additionally, the report finds that U.S. policy actions are expected to have undetectably small direct impacts on the global climate and any effects will emerge only with long delays." It is clear that DOE is making use of this report as if it were a valid advisory report developed under FACA and as if it were in comport with the IQA. Neither of these conditions exist.

- Per paragraph 60: "FACA's implementing regulations require that, before forming a new advisory committee, an agency head must first consult with the General Service Administration's Committee Management Secretariat (the "Secretariat"). 41 C.F.R. § 102-3.60(a). As part of this consultation, agency heads "should provide the Secretariat with a full understanding of the background and purpose behind the advisory committee." *Id.* The agency head "must" provide an explanation as to "why the advisory committee is essential to the conduct of agency business and in the public interest" and "why the advisory committee's functions cannot be performed by the agency, another existing committee, or other means such as a public hearing." *Id.* § 102- 3.60(b)(1)-(2)." There is no evidence that this happened.
- Paragraph 61: "Once the Secretariat completes its review, the agency then "must" publish a notice in the Federal Register announcing that the advisory committee is being established. § 102-3.65(a). The notice "must describe the nature and purpose of the advisory committee and affirm that the advisory committee is necessary and in the public interest." There is no evidence that this happened.
- Paragraph 62: "Every advisory committee must also have a charter. 5 U.S.C. § 1008(c)(1). The committee "shall not meet or take any action until [the] advisory committee charter has been filed" with "the head of the agency to whom the advisory committee reports; and . . . the standing committees of the Senate and House of Representatives having legislative jurisdiction over the agency to which the advisory committee reports." *Id.*; see also 41 C.F.R. § 102-3.70. The charter "shall contain," among other information, "the committee's official designation," the committee's "objectives and the scope of its activity," a "description of the duties for which the committee is responsible," and "the estimated number and frequency of committee meetings." 5 U.S.C. § 1008(c)(2); see also 41 C.F.R. § 102-3.75. The charter is then uploaded to a FACA database and can be accessed and downloaded from www.facadatabase.gov." There is no evidence that this happened.
- Paragraph 63: "Agency heads must also designate an officer "to chair or

attend each meeting of [the] advisory committee," and the committee "shall not conduct any meeting in the absence of that designated officer or employee of the Federal Government." 5 U.S.C. § 1009(e); see also 41 C.F.R. § 102-3.120". There is no evidence that this happened.

- Paragraph 65: "Substantively, committee membership must be "fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee." 5 U.S.C. § 1004(b)(2)." The CWG is demonstrably not balanced, as noted above.
- Paragraph 68: "Once the agency "identifie[s] the points of view that would promote a fairly balanced advisory committee membership," agencies must "conduct broad outreach, using a variety of means and methods, to ensure that the call for nominees reaches the interested parties and stakeholder groups likely to possess those points of view." Id. § 103.360(b)(3)(ii). The membership balance plan "shall describe the agency's intended outreach efforts to accomplish these goals." The CWG was not appointed according to this process required under FACA.
- The Complaint notes other specific requirements under FACA as given in paragraphs 69-82.
- Paragraph 83: "The Climate Working Group satisfies all of the elements of being an "advisory committee" within the meaning of FACA. DOE established the group to provide advice and recommendations to DOE and EPA, and EPA has already utilized the CWG Report in EPA's proposed reconsideration of the 2009 Endangerment Finding and vehicle regulations. The Climate Working Group has an organized structure, a fixed membership, and a specific purpose that Secretary Wright laid out in his Foreword to the CGW Report—"to critically review the current state of climate science, with a focus on how it relates to the United States." CWG Report at viii".
- Paragraph 84: "Yet Defendants have not complied with any of FACA's procedural and substantive requirements. Secretary Wright did not consult with GSA before establishing the group. The Climate Working Group lacks a charter and a designated federal officer. Secretary Wright did not provide a Membership Balance Plan to GSA, and DOE did not conduct the outreach to different communities and stakeholders that the regulations require when selecting committee members"
- Paragraph 85: "The Climate Working Group is not fairly balanced in terms of points of view; most glaringly, it does not include a single member that concurs in the overwhelming scientific consensus regarding the causes and effects of climate change. The group also lacks balance in terms of representing a range of disciplines, perspectives, and institutions. There are also no provisions in place to prevent inappropriate influence of the

group, and the group has been inappropriately influenced by being tasked with preparing a report that had a predetermined goal and outcome."

- Paragraph 86: "Defendants have also violated all of FACA's transparency requirements. Defendants did not publish notice of the Climate Working Group's meetings and did not make the meetings open to the public. Defendants did not even disclose the existence of the group until releasing its report."
- Paragraph 87: "Defendants have not made public any of the records and other documents that the Climate Working Group must make public under Section 10(b) of FACA. Defendants likewise have not kept or made public minutes of the Climate Working Group's meetings".
- Paragraph 88: "In short, Defendants' establishment and utilization of the Climate Working Group is wholly inconsistent with the processes, transparency, and public input that must be followed by federal advisory committees under federal law." The establishment and utilization of the CWG is inconsistent with FACA. It is in large part because DOE did not follow FACA and its required implementation procedures that produced a report that lacks quality, utility, objectivity, and integrity as required under the IQA.
- **Recommendation:** Given the very strong factual record that supports findings that DOE has disregarded FACA in forming the CWG, that the resulting report is tainted by the manifold violations of FACA and the processes and procedures that implement it, that these violations contribute substantially to the content of the disseminated CWG report of July 23, 2025, and that the resulting report fails to comport with the quality, utility, objectivity, and integrity requirements of the IQA, DOE should immediately withdraw the CWG report under the Request for Correction process under IQA. This report cannot be corrected by marginal changes to its content, because the entire report is infused throughout with intentional biases of how it is framed, what is included, what is excluded, cherry-picking, and inappropriate over of under emphases of uncertainty that result from how the CWG members were appointed, what they were asked to do, how they did their work, and the biases related to their prior known positions on pertinent issues, and the lack of credibility to address a wide scope of issues beyond their expertise.

6.3 Potential Impacts of the Alleged Errors on the Requester

The requester, H. Christopher Frey, as a Professor at North Carolina State University, a former Assistant Administrator for Research and Development at the U.S. Environmental Protection Agency, a former co-chair of the National Science and Technology Council Committee on Environment, a past president of the scientific profession organization Society for Risk Analysis, a past director of the scientific professional organization the Air & Waste Management Association, a former member

of several scientific advisory committees chartered and operated under the Federal Advisory Committee Act, including the EPA FIFRA Scientific Advisory Panel, the EPA Science Advisory Board, and the EPA Clean Air Scientific Advisory Committee, a person who has authored or co-authored several technical reports published by the U.S. Department of Energy,²⁹⁻³⁴ and a recognized leader in science advising and science policy, has a direct and substantial interest in the accuracy and integrity of information disseminated by federal agencies, particularly concerning climate change. With approximately 40 years of research experience at the nexus of energy, air pollution, and public health, including work with, for, and for the benefit of the U.S. Department of Energy, the U.S. Environmental Protection Agency, and other federal agencies, the requester's professional standing and past leadership role in a federal science organization underscore a profound commitment to evidence-based policymaking and the highest standards of scientific integrity in government.

This report, disseminated by the DOE, is being used to inform significant policy decisions, such as the EPA's proposed repeal of GHG emission standards.¹⁴ If the information contained within the report is inaccurate, biased, or incomplete, as it is asserted here to be, it could lead to:

- **Impact on Public Discourse:** The errors in the DOE report hinder my ability to participate in informed public and scientific discourse. The requester is a participant in this conversation, and the flawed information from a federal agency undermines the factual basis of that discourse.
- **Impact on Decision-Making:** The errors could mislead other researchers, policymakers, or the public, leading to poorly informed decisions about a variety of issues where the requester has a vested interest. The requester is not just a passive observer but an active participant whose work and interests are directly affected by the quality of government information.
- **Reputational Harm:** The DOE report's flawed conclusions could create a misleading impression about the scientific field in which I operate, potentially causing reputational harm.
- **Argument of Reliance:** I and many other researchers and research organizations rely on federal scientific reports to inform our research, policy positions, and public engagement. The errors in this specific report have forced me to spend significant time and resources to correct the record.
- **Demonstration of Harm:** The resources (time, effort, opportunity cost) I have spent to identify and correct these errors is, in itself, a form of demonstrated impact. I am spending my own resources to fix a problem created by the government's failure to adhere to its own standards.
- **Misinformed Public and Policy:** The report's conclusions, if based on flawed science or misleading interpretations, could misinform the public and policymakers,

leading to suboptimal or harmful policy decisions regarding climate change mitigation and adaptation. The cumulative effect of these errors is a misinformed public and a flawed basis for policy, which directly hinders our ability to engage in accurate scientific and public discourse, and ultimately undermines the integrity of the very processes and decisions that I and my colleagues in the broader research community rely upon.

- **Erosion of Trust in Government Science:** The dissemination of information that does not meet federal quality standards by a prominent agency like DOE erodes public trust in government science and its ability to provide objective, evidence-based guidance.
- **Undermining Climate Action:** The report's consistent downplaying of climate impacts and the effectiveness of policy actions could undermine efforts to address climate change, potentially leading to greater long-term risks and costs.
- **Precedent for Future Disinformation:** Allowing such a report to stand without correction could set a dangerous precedent for future federal information dissemination, where scientific integrity is compromised for policy advocacy.

6.4 Explanation of Non-Adherence to OMB and DOE Information Quality Guidelines

The identified shortcomings collectively demonstrate a systemic non-adherence to the core principles of the Information Quality Act (IQA) and its implementing guidelines from OMB and DOE. Specifically:

- **Objectivity:**
The report's stated intent to "challenge the mainstream consensus"⁸ and its consistent pattern of selective data presentation, cherry-picking of studies, and biased interpretations (as detailed with examples in sections 6.2.1-6.2.11) fundamentally compromise its objectivity "both in presentation and substance." The characterization by external experts as "pseudoscience" and a "law brief"⁸ underscores this failure. The lack of balanced membership and independence among the authors (Section 6.2.10) further compromises the report's objectivity from its very genesis.
- **Accuracy:**
Direct misrepresentations of cited sources (e.g., Hausfather et al. 2019¹¹), contradictions between textual claims and presented figures (e.g., sea level acceleration), and inaccurate characterizations of scientific consensus (e.g., on agricultural impacts) demonstrate a failure to ensure accuracy.
- **Completeness:**
The report systematically omits crucial contextual information, counter-evidence, or alternative perspectives that would provide a more balanced and complete scientific picture (e.g., mass coral bleaching events, full range of agricultural impacts,

nuanced extreme weather trends, broader context of U.S. policy impacts).

- **Sound Statistical and Research Methods:**

The report's reliance on selective re-analyses, oversimplification of complex scientific issues, and strong conclusions based on limited or disputed evidence (e.g., optimal fingerprinting critique, agricultural meta-analysis) indicates a failure to consistently apply sound scientific and statistical methods. Furthermore, the group of five authors do not have the breadth, depth, and diversity of expertise, experience, and scientific perspectives to address the report subject matter. Examples include that the authors lack expertise related to oceanic and agricultural impacts of climate change, and lack sufficient expertise in areas such as climate modeling. Thus, the report is fundamentally unsound.

- **Integrity:**

The procedural non-compliance with FACA (Section 6.2.8) and the insufficient pre-dissemination peer review (Section 6.2.9) for a "highly influential scientific assessment"¹⁶ undermine the integrity of the information dissemination process itself. A particularly integrity concern is the role of a member of an ideological organization, the Cato institute, in "helping" to organize the report and potentially undue influence from the office of the DOE secretary in appointing and directing the CWG.¹⁰

6.5 Specific Recommendations for Correction

To bring the report into compliance with federal information quality guidelines, the DOE should undertake the following actions:

1. **Withdraw the current report:** Given the egregious procedural non-compliance with FACA (Section 6.2.8) and the pervasive nature of the identified scientific shortcomings (Sections 6.2.1-6.2.11), the report is fundamentally flawed from its genesis and cannot be made valid through mere corrections. It should be formally withdrawn from dissemination immediately.
2. **Address FACA compliance for any future advisory bodies:** The DOE must formally determine whether the Climate Working Group was subject to FACA. If it was, the Department must acknowledge this non-compliance and commit to strict adherence to FACA's requirements for any future advisory bodies, including formal chartering, public notice of meetings, open meetings, and ensuring a truly balanced membership that reflects a diverse range of scientific viewpoints and is independent of ideological or industrial affiliations. If DOE asserts FACA did not apply, a detailed legal justification for this determination should be provided to the public and included in the report docket to inform EPA's potential use or non-use of the report.
3. **Issue a public statement:** Acknowledge the withdrawal of the report and commit to upholding the highest standards of information quality and scientific integrity in all

future disseminations. This statement should specifically address the procedural failures in the formation of the Climate Working Group and the scientific errors identified in the report.

4. **Develop a new, properly commissioned report (if deemed necessary):** If a new report on climate science is commissioned, it must:
 - Be based on a comprehensive and balanced review of the full scientific literature, reflecting the range of scientific consensus and uncertainty, not a pre-determined narrative.
 - Be authored by a truly independent and diverse group of experts, selected through a transparent process that ensures balanced viewpoints and avoids conflicts of interest.
 - Have an author committee with the breadth, depth, and diversity of expertise, experience, and perspectives to credibly, accurately, and objectively address the subject matter.
 - Have an appointed author committee whose members are free of conflicts of interest and the appearances of lack of impartiality.
 - Undergo a rigorous, independent, and transparent external peer review process consistent with OMB guidelines for highly influential scientific assessments. The review process, including reviewer comments and agency responses, should be made publicly available.
 - Clearly distinguish between established scientific findings, areas of active research, and dissenting viewpoints, ensuring accurate representation of each.
 - Adhere strictly to IQA principles of accuracy, objectivity, completeness, and utility in both substance and presentation.
 - Provide full transparency regarding data sources, methodologies, and review processes to facilitate independent verification.
 - Be in compliance with all applicable laws, such as FACA, APA, and IQA, and associated requirements, processes and procedures.

7. Conclusion and Recommendations for Future DOE Information Dissemination Practices

This independent review concludes that the U.S. Department of Energy's "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate" fails to meet the fundamental standards of information quality mandated by the Information Quality Act and its implementing guidelines from OMB and DOE. The pervasive issues of selective data presentation, misrepresentation of scientific literature, and procedural non-compliance, particularly concerning the formation and lack of independence of the authoring group, undermine the report's objectivity, accuracy, and integrity. The reliance on such a report to inform significant policy decisions, as evidenced by its citation by the EPA¹⁴, raises serious concerns about the quality of federal scientific advice and its

potential to misinform public discourse and policy.

For future information dissemination, particularly for "highly influential scientific assessments," the DOE should implement the following recommendations:

- **Prioritize IQA Compliance:** Embed IQA principles deeply into every stage of information development, from conception to dissemination. This requires treating information quality not as a checklist item, but as an integral part of scientific rigor and public service.
- **Strengthen Peer Review:** Implement robust, independent, and transparent external peer review processes for all influential scientific information. This ensures diverse perspectives and rigorous scrutiny by the broader scientific community, beyond internal departmental review, aligning with OMB's emphasis on "meaningful peer review".^{3,16}
- **Ensure FACA Compliance:** Proactively assess and ensure compliance with FACA for any group assembled to provide advice to the Department. This includes formal chartering, transparent selection of balanced membership, and open public meetings, fostering transparency and accountability in advisory processes.^{5,6}
- **Foster a Culture of Scientific Integrity:** Promote an environment where scientific findings are presented objectively, regardless of their alignment with policy preferences. Critiques and dissenting views should be addressed through open scientific discourse and rigorous evidence, rather than through selective appointments of authors, dismissal, or misrepresentation.
- **Enhance Transparency:** Make all supporting data, methodologies, and review processes publicly accessible to facilitate independent verification. This increased transparency is crucial for upholding the "burden of proof" expectation placed on requesters and for building public trust in federal scientific information.

8. References

References Cited

1. Climate Working Group (2025) A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate. Washington DC: Department of Energy, July 23, 2025; [DOE Critical Review of Impacts of GHG Emissions on the US Climate July 2025 .pdf](#), accessed August 5, 2025
2. Information Quality Act (2000) | CIO.GOV, accessed August 5, 2025, <https://www.cio.gov/handbook/it-laws/information-quality-act/>
3. Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, accessed August 5, 2025, [Federal Register :: Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies: Republication](#)
4. Department of Energy Information Quality Guidelines, accessed August 5, 2025, <https://www.energy.gov/cio/department-energy-information-quality-guidelines>
5. Federal Advisory Committee Act (FACA) Management Overview - GSA, accessed

- August 5, 2025, <https://www.gsa.gov/policy-regulations/policy/federal-advisory-committee-management>
6. DOE guidance on the Federal Advisory Committee Act, [federal-advisory-committee-act-1972](https://www.gsa.gov/policy-regulations/policy/federal-advisory-committee-act-1972), accessed August 12, 2025.
 7. Department of Energy Information Quality Guidelines, accessed August 5, 2025, <https://www.energy.gov/cio/departments-energy-information-quality-guidelines>
 8. Scientists slam Trump administration climate report as a 'farce' full of ..., accessed August 5, 2025, <https://www.theguardian.com/us-news/2025/aug/01/trump-epa-climate-change-report>
 9. [Judith Curry's Take: New Climate Assessment Report from US DOE – Watts Up With That?](#), accessed 8/12/25
 10. [Why I Helped Organize the Department of Energy's Climate Report](#), accessed 8/12/25
 11. DOE report challenges climate impacts of greenhouse gas emissions - POLITICO Pro, accessed August 5, 2025, <https://subscriber.politicopro.com/article/2025/07/doe-report-challenges-climate-impacts-of-greenhouse-gas-emissions-00482193>
 12. [Judicial Review Under the Administrative Procedure Act \(APA\) | Congress.gov | Library of Congress](#), accessed 8/12/25
 13. [Request for Correction | Department of Energy](#), accessed 8/12/25
 14. Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards, accessed August 5, 2025, <https://www.regulations.gov/document/EPA-HQ-OAR-2025-0194-0093>
 15. Department of Energy Issues Report Evaluating Impact of Greenhouse Gases on U.S. Climate, Invites Public Comment, accessed August 5, 2025, <https://www.energy.gov/articles/departments-energy-issues-report-evaluating-impact-greenhouse-gasses-us-climate-invites>
 16. [Federal Register :: Final Information Quality Bulletin for Peer Review](#), accessed 8/12/25.
 17. Department of Energy Issues Report Evaluating Impact of Greenhouse Gases on U.S. Climate, Invites Public Comment, accessed August 5, 2025, <https://www.energy.gov/articles/departments-energy-issues-report-evaluating-impact-greenhouse-gasses-us-climate-invites>
 18. Federal Advisory Committee Act (FACA) Management Overview - GSA, accessed August 5, 2025, <https://www.gsa.gov/policy-regulations/policy/federal-advisory-committee-management>
 19. Recommendation 80-3 Interpretation and Implementation of the Federal Advisory Committee Act, accessed August 5, 2025, <https://www.acus.gov/sites/default/files/documents/80-3-ss.pdf>
 20. [Ross McKittrick | Fraser Institute](#)
 21. [Who We Are - The Global Warming Policy Foundation](#)
 22. [Heritage Foundation Report Questions Climate Model Accuracy Compared to Observations](#)
 23. [Steven Koonin | Fraser Institute](#)
 24. [A Red Team Climate Report](#), accessed 8/12/25
 25. DOE report challenges climate impacts of greenhouse gas emissions - POLITICO Pro, accessed August 5, 2025, <https://subscriber.politicopro.com/article/2025/07/doe-report-challenges-climate-impacts-of-greenhouse-gas-emissions-00482193>
 26. [Climate Change Indicators: Tropical Cyclone Activity | US EPA](#)
 27. Billion Dollar Weather and Climate Disasters | NESDIS, accessed August 5, 2025, <https://www.nesdis.noaa.gov/about/documents-reports/notice-of-changes/2025-notice-of-changes/billion-dollar-weather-and-climate-disasters>
 28. Case 1:25-cv-12249, Filed in the United States District Court for the District of Massachusetts, EDF and UCS v. Wright, USDOE, Zeldin, USEPA, and Climate Working

- Group, [0kdlw6og5v8hsvj152eqx01b0qn74uuq.pdf](#), accessed 8/13/25.
29. Rubin, E.S., J.S. Salmento, J.G. Barrett, C.N. Bloyd, and H.C. Frey, *Modeling and Assessment of Advanced Processes for Integrated Environmental Control of Coal-Fired Power Plants*, NTIS DE86014713, Prepared by Carnegie-Mellon University for the U.S. Department of Energy, Pittsburgh, Pennsylvania, July 1986.
 30. Frey, H.C. and E.S. Rubin, *Stochastic Modeling of Coal Gasification Combined Cycle Systems: Cost Models of Selected Integrated Gasification Combined Cycle (IGCC) Systems*, Topical Report, DOE/MC/24248-2901, NTIS DE90015345, Prepared by Carnegie-Mellon University for the U.S. Department of Energy, Morgantown, West Virginia, June 1990, 307p.
 31. Rubin, E.S., J.S. Salmento, H.C. Frey, A. Abu-Baker, and M. Berkenpas, *Modeling of Integrated Environmental Control Systems for Coal-Fired Power Plants*, Final Report, DOE Contract No. DE-AC22-87PC79864, Prepared by Carnegie-Mellon University for the U.S. Department of Energy, Pittsburgh, Pennsylvania, April 1991, 214p
 32. Frey, H.C., and E.S. Rubin, *Development and Application of a Probabilistic Evaluation Method for Advanced Process Technologies*, Final Report, DOE/MC/24248-3015, NTIS DE91002095, Prepared by Carnegie-Mellon University for the U.S. Department of Energy, Morgantown, West Virginia, April 1991, 364p.
 33. Frey, H.C., and D.S. Rhodes, *Quantitative Analysis of Variability and Uncertainty in Environmental Data and Models: Volume 1. Theory and Methodology Based Upon Bootstrap Simulation*, Report No. DOE/ER/30250–Vol. 1, Prepared by North Carolina State University for the U.S. Department of Energy, Germantown, MD, April 1999.
 34. Rubin, E.S., M.B. Berkenpas, H.C. Frey, C. Chen, S. McCoy, and C.J. Zaremsky, *Technical Documentation: Integrated Gasification Combined Cycle Systems (IGCC) with Carbon Capture and Storage (CCS)*, Prepared by Carnegie Mellon University for the U.S. Department of Energy, Pittsburgh, PA, May, 2007.