6450-01-P

DEPARTMENT OF ENERGY

[Docket No. DOE-HQ-2025-0207]

Notice of availability: A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate

AGENCY: Department of Energy.

ACTION: Notice of availability; request for comments.

SUMMARY: The U.S. Department of Energy (DOE or the Department) seeks public comment on the draft report produced by DOE's Climate Working Group (CWG), titled "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate" (CWG Report). DOE is seeking input from the public, especially from interested individuals and entities, such as industry, academia, research laboratories, government agencies, and other stakeholders. Information received may be used to assist DOE in planning the scope of future research efforts and may be shared with other Federal agencies.

DATES: Written comments and information are requested on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]** and must be received no later than 11:59 p.m. eastern time (ET) on that date. Written submissions received after the deadline may not be considered. DOE will not reply individually to responders but will consider all comments submitted by the deadline. DOE also intends to summarize all comments received by topic.

ADDRESSES: *Instructions:* Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *www.regulations.gov* under docket number DOE-HQ-2025-0207.

Response Guidance: Any comments provided must reference the relevant page in the CWG Report. If a comment addresses a table or figure, that cross-reference should be provided. To assist DOE's review of submitted comments, for each comment, please indicate a comment type from the following list: editorial; technical; reference; or other.

FOR FURTHER INFORMATION CONTACT: Requests for additional information may be submitted electronically to Mr. Joshua Loucks, U.S. Department of Energy,1000 Independence Avenue, SW, Washington, DC 20585; (202) 586-5281 or *DOEGeneralCounsel@hq.doe.gov*.

SUPPLEMENTARY INFORMATION:

Background

The draft report titled "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate" was developed by DOE's 2025 Climate Working Group, a group of five independent scientists assembled by Energy Secretary Chris Wright with diverse expertise in physical science, academic research and climate science. The landing page for the CWG Report, including a press release, can be found here: *www.energy.gov/topics/climate.*

Overview of the CWG Report

The report reviews scientific certainties and uncertainties in how anthropogenic carbon dioxide (CO2) and other greenhouse gas emissions have affected, or will affect, the Nation's climate, extreme weather events, and selected metrics of societal well-being. Those emissions are increasing the concentration of CO_2 in the atmosphere through a complex and variable carbon cycle, where some portion of the additional CO_2 persists in the atmosphere for centuries.

Elevated concentrations of CO_2 directly enhance plant growth, globally contributing to "greening" the planet and increasing agricultural productivity. They also make the oceans less alkaline (lower the pH). That is possibly detrimental to coral reefs, although the recent rebound of the Great Barrier Reef suggests otherwise.

Carbon dioxide also acts as a greenhouse gas, exerting a warming influence on climate and weather. Climate change projections require scenarios of future emissions. There is evidence that scenarios widely-used in the impacts literature have overstated observed and likely future emission trends.

The world's several dozen global climate models offer little guidance on how much the climate responds to elevated CO_2, with the average surface warming under a doubling of the CO_2 concentration ranging from 1.8°C to 5.7°C. Data-driven methods yield a lower and narrower range. Global climate models generally run "hot" in their description of the climate of the past few decades. The combination of overly sensitive models and implausible extreme scenarios for future emissions yields exaggerated projections of future warming.

Most extreme weather events in the U.S. do not show long-term trends. Claims of increased frequency or intensity of hurricanes, tornadoes, floods, and droughts are not supported by U.S. historical data. Additionally, forest management practices are often overlooked in assessing changes in wildfire activity. Global sea level has risen approximately 8 inches since 1900, but there are significant regional variations driven primarily by local land subsidence; U.S. tide

gauge measurements in aggregate show no obvious acceleration in sea level rise beyond the historical average rate.

Attribution of climate change or extreme weather events to human CO_2 emissions is challenged by natural climate variability, data limitations, and inherent model deficiencies. Moreover, solar activity's contribution to the late 20th century warming might be underestimated.

Both models and experience suggest that CO_2-induced warming might be less damaging economically than commonly believed, and excessively aggressive mitigation policies could prove more detrimental than beneficial. Social Cost of Carbon estimates, which attempt to quantify the economic damage of CO_2 emissions, are highly sensitive to their underlying assumptions and so provide limited independent information.

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.

Confidential Business Information

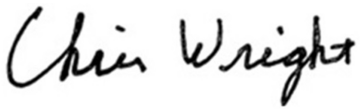
Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery/courier two well-marked copies: one copy of the document marked "confidential" including all the information believed to be confidential, and one copy of the document marked "non-confidential" with the information believed to be confidential deleted. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

Signing Authority

This document of the Department of Energy was signed on July 29, 2025, by Chris Wright, the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC on July 29, 2025.



Chris Wright
Secretary of Energy,
U.S. Department of Energy