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September 22, 2025

Administrator Lee Zeldin
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

RE: Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards,
Docket No. EPA-HQ-OAR-2025-0194

Dear Administrator Zeldin:

Thank you for the proposed rule to reconsider the 2009 Endangerment Finding (EF) and Greenhouse Gas (GHG) standards for light-, medium-, and heavy-duty vehicles. After fifteen years of regulation that has been damaging to the economy while delivering negligible, if any, environmental benefit, the action is long overdue. We find the justification provided in the proposed rule is compelling both on a legal and evidentiary basis.

Besides the obvious legal errors of the original EF, we are struck by the absurdity of the reasoning behind it. It was bold in its desire to address the global problem of climate change, but paradoxically, based on the belief that the bigger the problem, the less significance was necessary. As quoted in the preamble of the proposed reconsideration rule, the Administrator admitted that the emissions reductions were less significant than would usually be required to support a finding of contribution for a local or regional air problem, but that, "...contributors must do their part even if their contributions to the global climate change problem, measured in terms of percentage, are smaller than typically encountered when tackling solely regional or local environmental issues." 74 FR 66542-43 The more expansive and global the problem, the less the need to show the emissions reductions contribute in a significant way. Likewise, the Section 202(a) vehicle tailpipe emissions standards aggregated six "well-mixed" GHG emissions, two of which are not even emitted by motor vehicles. Absurd.

Multiple-Use Advocacy strongly supports the proposed rule. We are representing various oil and natural gas companies and a trade association with our comments. We are proud that the oil and natural gas industry has a three-and-a-half decade record of success reducing methane emissions. The Biden Administration's EPA credited natural gas and renewable energy in the electric power sector for the fact that total U.S. greenhouse gas (GHG) emissions are 17% below 2005 levels,¹ yet Energy Information Administration (EIA) data have consistently shown that natural gas has reduced more GHG emissions than wind and solar combined, delivering about 61% of the reductions to wind and solar energy's 39%.²

¹ [Data Highlights: Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2022](#), EPA, April 2024, p. 1.

² [U.S. Energy-Related Carbon Dioxide Emissions, 2023—Report Appendix and Methodology](#), EIA, April 2024, p. 11.

We support the repeal of the 2009 Endangerment Finding both because: the EF did not find that U.S. GHG emissions from new vehicles significantly contribute to reducing global temperatures and therefore, do not endanger public health; and EPA violated the requirements of the Clean Air Act (CAA), both by deviating from CAA precedent before 2009 and now failing legal precedents since, particularly the major questions doctrine and the overturning of *Chevron* deference.

Section I: Legal Framework for Rescinding the Endangerment Finding

We struggle to find any fault with how EPA has articulated the justification for rescinding the 2009 EF in the preamble. The proposed rule does an excellent job of articulating the failure of EPA in 2009 to correctly show that the scientific record and the significance of the emissions reductions in the original rule passed the contribution test required by the CAA. The proposed rule also lays out very clearly how Supreme Court decisions since 2009 have knocked out the legal foundation upon which the 2009 EF so tenuously rested. We also share EPA's concern with severing the question of whether GHG emissions from motor vehicles contribute significantly to concentrations in the atmosphere from the question of whether those concentrations endanger public health and welfare. The best, plain language reading of CAA Section 202(a) requires both conditions to be met before EPA can issue a finding of endangerment and impose regulation. We agree that the impacts of GHG emissions are "too uncertain, too remote, and too confounded by intervening and confounding factors to fit within the terms 'cause' and 'contribute'" to meet the requirements of Section 202(a). We wish to avoid simply reiterating all the excellent legal analysis in the justification, so we limit our comments to just those we feel can help buttress the points with supporting information.

A. Contribution (C-1, C-2, C-11, C-15)

Under Section 111 of the Clean Air Act (42 U.S.C. § 7411), EPA must find that the emissions of a particular pollutant from a category of sources "contributes significantly" to air pollution that endangers the public health in order to regulate. Greenhouse gases (GHG) are not directly harmful to humans. The impact to humans is only indirect, many decades into the future, and based on the influences on global temperatures and their potential to change the climate. Even if global GHG emissions have an impact, the question is whether any U.S. source category is significantly or even measurably contributing to endangerment of public health. To meet Section 111(b)(1)(A) requirements, GHGs emitted from a source category must "contribute significantly" to air pollution that endangers public health in order for EPA to have the authority to regulate.

To answer the question of whether a source category is significantly or even measurably contributing to endangerment, EPA must provide strong evidence. Yet EPA in 2009 failed to show any convincing evidence at all that the emissions reductions would lead to meaningful public health outcomes. EPA's long-established Model for the Assessment of Greenhouse Gas Induced Climate Change (MAGICC), run under reasonable assumptions, provides convincing data to the contrary.³ The Texas Public Policy Foundation (TPPF) found that eliminating *all* U.S. CO₂ emissions from fossil fuels by 2030 would reduce worldwide CO₂ concentrations in 2050 by 11.4 parts per

³ [MAGICC](#), [Meinshausen et al. \(2011\)](#), with updates in [Meinshausen et al. \(2020\)](#).

million (ppm) or 2.3% of worldwide concentrations, and would reduce the increase in mean worldwide temperatures by 0.052° Celsius.⁴ As that change in temperature falls within the measurement error for global temperatures, which is $\pm 0.1^{\circ}\text{C}$, it is not measurable nor meaningful, and therefore, would have an insignificant impact on climate change and public health.

Of course, it is completely unrealistic to eliminate all U.S. fossil fuel use, as there is no alternative that does everything that oil, natural gas, and coal do, especially when considering affordability. If eliminating all U.S. fossil fuel use has an insignificant impact on climate and hence, the public health of its citizens, then CAA Section 202(a) emissions have even less significance. The TPPF study ran MAGICC for all U.S. future power plant emissions and found an imperceptible 0.015 °C impact on global temperatures by 2050. For the rule at issue, i.e., tailpipe emissions for all *new* light-, medium-, and heavy-duty vehicles, the significance is even less, as *total* U.S. vehicle emissions are comparable but less than U.S. power sector emissions, at 1,412.6 MMT-CO₂e⁵ versus 1,431.7 MMT-CO₂e,⁶ respectively. This insignificant impact on global temperatures means that the 2009 EF simply does not pass CAA Section 111 requirements to determine that a source category contributes significantly to endanger public health. The *de minimis* impact on global temperatures causes EPA's endangerment finding to fail the significance test.

In light of the Department of Energy's withdrawal of the CWG report, we recommend that EPA replace the reference to the 2025 CWG Draft report regarding the 3% reduction in predicted warming trends by simply running MAGICC with all light-, medium-, and heavy-duty vehicle emissions, which is more precise than the CWG report's analysis of just light- and medium-duty vehicles. (Proposed rule preamble V.A and V.B)

Further, in the 2009 EF, EPA conflated total vehicle emissions with new Section 202(a) emissions, a sleight of hand that demonstrates that the original 2009 EF is arbitrary and capricious. In its response to comments, EPA brushed aside valid concerns about significance, to the point of absurdity. "We disagree that the temperature or emissions reductions resulting from GHG standards are the appropriate emissions to use for a 'contribute' finding. The appropriate measure should be the emissions from the sector as a whole, regardless of the reductions resulting from any set of proposed standards." The dismissal of comments pointing out the insignificance of the emissions reductions EPA was proposing in an *endangerment finding*, the sole purpose of which is to determine if the emissions at issue significantly cause or contribute, is breathtaking in its brazen disregard for the CAA. The EPA Administrator is fully justified in rescinding the EF on this fact alone. Crediting the EF for eliminating emissions that it does not eliminate is nonsensical. How can a rule that addresses new emissions be justified by a nonexistent reduction of all emissions? EPA's response to comments is truly damaging.

⁴ [The Materiality of U.S. CO₂ Emissions on Global Climate Change](#), Brent Bennet for TPPF, June 2025.

⁵ *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2022*, EPA 430-R-24-004, April 11, 2024, p. 2-14. Light-duty trucks contribute about 646.6 million metric tons of carbon dioxide equivalents (MMT-CO₂e), medium-and heavy-duty trucks 404.1 MMT-CO₂e and passenger vehicles 361.9 MMT-CO₂e, for a total of 1,412.6 MMT-CO₂e.

⁶ *Ibid.* p. ES-10.

In the response to comments, EPA stated that a 4% reduction in GHGs, which was the rough global percentage of all U.S. vehicle GHG emissions, is significant. But EPA in 2009 failed to determine if even that phantom reduction in emissions from the 202(a) rule on *new* emissions would have any real environmental benefit in the form of actual reduction in global warming. In fact, at a hearing before Congress in response to the question, “Would you consider one one-hundredth of a degree Celsius to be enormously beneficial,” then-EPA Administrator Gina McCarthy confidently stated that, “The value of that rule is not measured in that way. It is measured in showing strong, domestic action, which can actually trigger global action.”⁷ That response gets to the absurdity of the 2009 EF, particularly as she was directly involved in the EF as Assistant Administrator, Office of Air and Radiation at the time of the EF.

We agree with EPA that entities regulated under Section 202(a) have no CAA obligation to “do their part” to reduce GHG emissions, particularly since only dramatic reductions in foreign and all domestic emissions would have any meaningful impact on climate change. Besides the fact that there is no “do their part” requirement in Section 202(a), if it cannot be shown that the reduction of emissions of CO₂—which in and of themselves are not harmful to public health—from vehicles or even *all* U.S. CO₂ emissions cannot produce an associated perceptible temperature reduction, then what is the point of reducing them? What public health benefit is delivered? Again, in the EF, EPA conflated all U.S. vehicle emissions in justifying a rule designed to eliminate only a portion of those emissions, thereby claiming credit for reductions it is not doing, yet was wholly uninterested in whether those reductions would avert significant or even measurable global warming many decades in the future. The Obama EPA’s negligence in showing that 202(a) emissions “cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare” is truly cavalier. In the EF, EPA simply did not show that the emissions could be regulated to the point at which a significant positive impact on climate change can be shown. EPA is on solid grounds to overturn the EF as well as the Section 202(a) rule.

Further, EPA relied on IPCC AR4 projections, which have since been largely contradicted by AR5 and AR6. EPA is on solid legal and scientific footing to find that the original EF did not meet its obligations to show endangerment from U.S. GHG emissions.

B. Intervening Rulings (C-1, C-2, C-24)

Again, we find it difficult to find any flaws in EPA’s reasoning in this reconsideration. Four Supreme Court rulings, including *Massachusetts v. EPA*, do not support either the first EF, nor keeping it in place. With the *Massachusetts* decision, the Supreme Court did not require EPA to regulate GHGs, but just to “provide[] some reasonable explanation” as to whether it will regulate greenhouse gas emissions under the Clean Air Act. But the Supreme Court did make a major error, as it fell victim to EPA’s sleight of hand in conflating *all* U.S. vehicle emissions with *new* Section 202(a) vehicle emissions. “Judged by any standard, U.S. motor-vehicle emissions make a meaningful contribution to greenhouse gas concentrations and hence, according to petitioners, to global warming.” *Massachusetts v. EPA* 549 U.S. 497.

⁷ <https://www.youtube.com/watch?v=hkkeLpbz0-Y>

At the time of *Massachusetts*, all existing light-, medium-, and heavy-duty vehicle emissions accounted for 4.3% of global GHGs, but were down to 2.5% in 2022 (1.8% for light- and medium-duty, .7% for heavy-duty.) The impact is even less than in 2009, thereby further weakening the cause or contribute finding. Would Justice Stevens today find that 2.4% of global emissions “judged by any standard” makes a meaningful contribution? Would Justice Stevens believe “any standard” includes an imperceptible 0.052° C reduction in global warming? I think not, firstly as a function of its obvious *de minimus* effect, but also by the fact that there are many scientists, policymakers, members of the regulated community, and members of the public who have different opinions or “standards” of whether such a small impact on global warming is a meaningful contribution, including many of us who are commenting on this rulemaking. “By any standard” is a point of opinion, not an established fact. EPA’s interpretation, in the EF, to rely on just the amount of emissions reduced and not on whether they cause or contribute to the endangerment of public health and welfare is a fatal flaw of the EF.

Regardless of how *Massachusetts* can be interpreted, we have the benefit of not only significant reductions in U.S. GHG emissions, but three subsequent Supreme Court decisions. From 23.5% in 2005, U.S. GHG emissions are down to 11% of global emissions, and as such, any one source category has even less of an impact since the original EF has issued. Both *Utility Air Regulatory Group v. EPA (UARG)* and *West Virginia v. EPA* imposed the major questions doctrine, and, “judged by any standard,” a rule that regulates emissions from all new U.S. vehicles is a matter of broad economic and political consequence. Congress clearly did not provide such specific authorization in the CAA to regulate GHGs nor to compel a wholesale market transformation to electric vehicles, as the 202(a) rule does. Clearly EPA did not believe that it had any need to consider whether it was addressing major questions when making the EF and imposing the 202(a) rule. EPA clearly believed the Supreme Court had given it the green light to regulate GHGs in *Massachusetts* and had no further obligation to consider whether Section 202(a) carried any major questions constraints. After *UARG* and *West Virginia*, that is no longer the case.

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Certainly EPA is correct to reverse the assertion of authority, in light of *Loper Bright Enterprises v. Raimondo*, over global climate change. EPA is right to reverse the prior severance of endangerment from the finding of cause or contribute, by which EPA failed to meet the Section 202(a) requirement to show that the emissions “cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” The mere reduction of global GHGs without a meaningful public health benefit fails the best reading of the CAA Section 202(a).

Further, EPA acknowledged that regulating stationary sources was not practicable without the “tailoring rule” and in *UARG* the Supreme Court rejected EPA’s attempt to regulate GHGs from stationary sources. In *West Virginia* the Supreme Court disallowed fuel shifting from fossil fuels to renewables in the grid. How is that any different than requiring a shift from the internal combustion engine to electric vehicles in the 202(a) rule? EPA has no choice but to reject shifting in the tailpipe emission rule. EPA has since expended considerable time, effort, and resources with nothing to show for its attempts to regulate GHGs. Meanwhile, programs to reduce criteria and hazardous air pollutants that clearly fall within EPA’s authority and have direct public health impacts have gotten short shrift. EPA is on solid legal grounds in rescinding the EF and the Section 202(a) rule.

III. Alternative Rationale for the Proposed Revision (C-2, C-12, C-26)

In general, we believe that the legal rationale articulated in Section IV.A is the stronger argument, since a full reassessment of climate science is a lengthy endeavor. Scientific uncertainties were glossed over in the 2009 EF, and scientific developments since support rescission of the EF. The notion, as laid out in question C-26, that even if *UARG*, *West Virginia* and *Loper Bright* had not foreclosed the regulation of GHGs under Section 202(a) there is a strong basis nevertheless of rescinding the EF is true, but perhaps those three rulings are of such a definitive nature that is not necessary to provide a separate rationale. We fully support the Alternative Rationale in Section IV.B more as a subset of the primary rationale, to show how EPA failed to show that climate science provides the evidence necessary to legally make a cause and contribute finding, both back in 2009 and now. Scientific findings since 2009 provide additional evidence with direct empirical observations rather than just climate models which are not a reliable basis for asserting endangerment and assuming broad, novel GHG regulatory authority under Section 202(a).

Nevertheless, EPA has adequately shown in the Alternative Rationale that the EF failed to fully assess the uncertainties of climate modeling as opposed to actual empirical observations. Consistent modeling failures and empirical data from the intervening fifteen years fully support a rescission of the EF. In this section, we provide further information to help EPA buttress Section IV.B.1 Climate Science Discussion. In light of the Department of Energy's withdrawal of the Climate Working Group (CWG) draft report, we recommend removing references to it. In almost all cases, EPA has referenced the underlying documents and does not need reference to the CWG report, but not in all cases. All CWG Draft Report references should be replaced with a footnote containing direct references. We have suggested below some references.

Should any commenters assert that the proposed rule is invalid because it was informed by the CWG report, it is important to remember that the CWG report was withdrawn voluntarily by DOE in an effort to avoid extraneous, frivolous litigation that distracted from larger efforts. It is unlikely that the environmental groups would have prevailed in their argument that the CWG report violated the Federal Advisory Committee Act (FACA). The litigation was an attempt to control speech in violation of basic tenets of scientific inquiry, besides the fact that the plaintiffs do not have any standing because they cannot show any harm from DOE publishing a factual report and seeking public comment.

Further, the CWG was akin to numerous panels convened during the Obama and Biden Administrations that were directly providing policy advice, unlike the CWG report. Examples include the social cost of carbon working group and the Biden Administration's White House Climate Science Roundtable on Countering "Delayism" and Communicating the Urgency of Climate Action. Information about the roundtable was in short supply, including whether it met more than once. The readout from the meeting held on February 25, 2022 framed it as a two-hour roundtable "to discuss the scientific understanding of why arguments for delaying action on climate change are appealing and how they can be countered effectively."⁸ The committee failed to have balance in the

⁸ ["Readout of White House Climate Science Roundtable on Countering "Delayism" and Communicating the Urgency of Climate Action,"](#) February 25, 2022.

participants and likely failed basic conflict-of-interest standards. Notable participants included Michael Mann and Naomi Oreskes, both well known for their advocacy. In violation of FACA, the head of the White House Office of Science and Technology Policy (OSTP) and Deputy Assistant to the President Dr. Alondra Nelson applauded the roundtable participants for providing knowledge to help inform and accelerate federal climate action. Another example is the High-Level Consultative Group (HLCG) announced on October 14, 2021.⁹ Membership of the HLCG did not meet the balanced membership requirements of FACA, as it was limited to interest groups such as the Natural Resources Defense Council, World Resources Institute, ClimateWorks, and Sierra Club.

We would also point out that the CWG Report was compiled to help inform DOE's work, but relies on the well-established IPCC and NCA processes, which have informed U.S. climate policy for over three decades. The CWG report was a compendium of IPCC and NCA science, not a new scientific undertaking, and therefore, it is unlikely a judge would have found it to be subject to FACA because it does not provide any policy advice or recommendations. Further, EPA should not bow to those who have politicized science and will inevitably pressure EPA to abandon its efforts to overturn the EF. The notion of a "scientific consensus" on climate change is inherently an unscientific concept propagated by those who espouse a climate orthodoxy that is unable to explain away the uncertainties, biases, and discrepancies in the IPCC and NCA science itself. The CWG report did a good job of merely highlighting the uncertainties and deficiencies in IPCC's and NCA's work, which EPA should be cognizant of as it reconsiders the EF.

A Modeling Uncertainties (C-2, C-26)

Climate models consistently run hot and overpredict temperatures. IPCC is not always forthcoming about modeling uncertainties, and EPA is on solid grounds in the Alternative Rationale of correcting the fact that EPA downplayed those uncertainties when issuing the EF. Despite the uncertainties expressed in the underlying studies, the IPCC Synthesis Reports gloss over uncertainties such as how CO₂ is removed from the atmosphere, CO₂ concentrations, and uncertainties in simulations of future climate change. For decades, models have overpredicted temperatures, both past and future, and cannot even "predict" past temperatures. Yet the EF largely treated climate models results as reality, and EPA is right to reverse that overreliance.

EPA fell into the trap of using IPCC summaries as a basis to support the EF and as justification for regulation such as the Section 202(a) rule. The Alternative Rationale is correct in its emphasis. We recommend strengthening this aspect of the Alternative Rationale with an edit to the effect of:

"However, as previously noted, IPCC scenarios depicting worst-case, 'business as usual' assessments have been criticized as misleading (2025 CWG Draft Report at 16).⁹⁰ Comparisons of past modeling scenarios to observations consistently show that models overstate actual emissions and recorded temperatures. The difficulties involved with properly tuning models and the failure of models to align with the past raises serious questions of their ability to predict the future.^{90a} and eEmpirical data suggest that actual GHG emission concentration increase and corresponding

⁹ "U.S. State Department, Bezos Earth Fund, and The Rockefeller Foundation Announce Next Steps on Energy Transition Accelerator," Press Release from the Rockefeller Foundation, January 15, 2023.

warming trends through 2025 have tracked the IPCC’s more optimistic scenarios ~~(2025 CWG Draft Report at 18)~~.⁹¹

To footnote 90, we recommend adding:

- The “Many Muddled Models” chapter of the book *Unsettled* by Steven Koonin, Ph.D., which demonstrates how common models such as “Coupled Model Intercomparison Project” (CMIP) models do not “provide reliable, quantitative statements about relative risks and consequences and benefits of rising greenhouse gases to the Earth system as a whole, let alone to specific regions of the planet.”
- Palmer, Tim N. and Stevens, Bjorn. (2019) The scientific challenge of understanding and estimating climate change. *Proceedings of the National Academy of Sciences* 116 (49) 24390-24395. <https://doi.org/10.1073/pnas.1906691116>

In our new footnote 90a, we would add the following already referenced in the proposed rule:

- McKittrick et al. (2012)
- Hausfather et al. (2019)
- Scaffeta (2023)

In our new footnote 90a, we would add the following which are not already referenced in the proposed rule:

- Christy, John R. and McNider, Richard. (2017). Satellite bulk tropospheric temperatures as a metric for climate sensitivity. *Asia-Pacific Journal of Atmospheric Sciences* 53, 511-518. <https://doi.org/10.1007/s13143-017-0070-z>
- Hourdin, Frédéric et al. (2017) The Art and Science of Climate Model Tuning, *Bulletin of the American Meteorological Society* Vol. 98 No. 3. <https://www.jstor.org/stable/26243703>
- Hausfather, Zeke. (2019) CMIP6: the next generation of climate models explained. *CarbonBrief*. <https://www.carbonbrief.org/cmip6-the-next-generation-of-climate-models-explained/>
- Tokarska, Katarzyna et al. (2020) Past warming trend constrains future warming in CMIP6 models. *Science Advances*, Vol. 6 No. 12. <https://www.science.org/doi/10.1126/sciadv.aaz9549>
- Maher, Nicola et al. (2020) Quantifying the role of internal variability in the temperature we expect to observe in the coming decades, *Environ. Res. Lett.* 15 054014. <https://iopscience.iop.org/article/10.1088/1748-9326/ab7d02>
- McKittrick, Ross and Christy, John R. (2025) “Data and Code for DoE Report 2025”, Mendeley Data, V1, doi:10.17632/8n9ks93vn7.1
- Meehl, Gerald et al. (2020) Context for interpreting equilibrium climate sensitivity and transient climate response from the CMIP6 Earth system models. *Science Advances*, Vol. 6 issue 26. <https://www.science.org/doi/10.1126/sciadv.aba1981>
- Nichols, Lewis and Curry, Judith. (2018) The Impact of Recent Forcing and Ocean Heat Uptake Data on Estimates of Climate Sensitivity. *Journal of Climate*, Vol 31, No. 15. <https://www.jstor.org/stable/26496597>

- Seager, Richard et al. (2017). Whither the 100th meridian? The once and future physical and human geography of America’s arid–humid divide. Part II: The meridian moves east. *Earth Interactions* 22. <https://doi.org/10.1175/EI-D-17-0012.1>
- Zhu, Jiang et al. (2020) High climate sensitivity in CMIP6 model not supported by paleoclimate. *Nature Climate Change* 10, 378-379. <https://www.nature.com/articles/s41558-020-0764-6>

B. Cold Weather (C-2, C-26)

In the Alternative Rationale, EPA makes the astute observation that mortality risk from cold temperatures is much higher than that from heat, a point ignored in the EF along with the benefits of reduced mortality from global warming. That bias is also found in IPCC, which in the AR6 Synthesis report assigns *very high confidence* to increased mortality and morbidity from extreme heat events but says nothing about the larger decline in deaths from extreme cold events. EPA is right to rely on IPCC reports, but should do so with eyes wide open on the selection bias. IPCC and a large body of climate research in general focuses on weather events “that are more likely to have been made more severe by climate change” rather than those that climate change has made less severe, “creating a misleading impression about the impact of climate change on extreme weather” and, “can explain why attribution studies paint a more alarming picture than comprehensive IPCC assessments.”¹⁰

We recommend adding to footnote 93:

- Ritchie, Hannah. (2024). How many people die from extreme temperatures, and how this could change in the future: Part one. Our World in Data. <https://ourworldindata.org/part-one-how-many-people-die-from-extreme-temperatures-and-how-could-this-change-in-the-future>
- Brown, Patrick. (2025) Do Climate Attribution Studies Tell the Full Story?” *The EcoModernist*, <https://www.breakthroughjournal.org/p/do-climate-attribution-studies-tell>
- Lee, Jangho and Dessler, Andrew. (2023). Future Temperature-Related Deaths in the U.S.: The Impact of Climate Change, Demographics, and Adaptation. *GeoHealth* 7(8) <https://doi.org/10.1029/2023GH000799>
- EPA. (2025). Climate Change Indicators. <https://www.epa.gov/climate-indicators/view-indicators> referencing Centers for Disease Control data showing 2.2 deaths per million Americans for which cold was the main underlying cause and 2.4 deaths per million for which cold was a contributing factor, compared to 1.3 deaths and 0.8 per million for heat, respectively.

C. Adaptation (C-2, C-26)

Further, EPA is right to correct the failure of the EF to address adaptation. EPA wrongly determined that adaption is outside the scope of the EF, an arbitrary and capricious decision. How can something be irrelevant if it solves the very problem, i.e., public health impacts from climate

¹⁰ “[Do Climate Attribution Studies Tell the Full Story?](https://www.breakthroughjournal.org/p/do-climate-attribution-studies-tell)” Patrick Brown, *The EcoModernist*, January 8, 2025.

change, that is the very subject of the EF? If emissions were to be reduced for the sake of reducing emissions and not for having a measurable impact on global temperatures and hence, public health; and no consideration was even given to the fact that there are adaptation strategies that could better address impacts on human health from global warming more directly than very attenuated GHG reductions, then the rationale for the original EF crumbles away.

The Alternative Rationale treats the subject of adaptation to sea level rise in particular, but we would suggest broadening that discussion. There is a good body of literature regarding adaptation to temperature extremes. Might we suggest the following additions:

“The Endangerment Finding also identified public health and welfare impacts from projected increases in sea level and related weather and climactic events. However, on this issue, too, recent data and analyses suggest that aggregate sea level rise has been minimal, at least with respect to impacts on the United States, and that sea level has risen in some domestic localities while falling in others ~~(2025 CWG Draft Report at 75–80).~~ * Research shows heat vulnerability is decreasing as human adaptation outpaces observed warming, with simple adaptation techniques as availability of air conditioning. ** The Administrator also questions whether it was appropriate for the Endangerment Finding to exclude any analysis of adaptation with respect to sea level rise or increased temperatures, in particular. Population growth, infrastructure development, and local and regional planning decisions have been dynamic in coastal areas since 2009, with different trends in different coastal areas and different choices made independently of the EPA’s regulatory actions by state and local governments and private entities. The lack of analysis of adaptation generally, and particularly with respect to sea level rise and extreme temperatures, reduces confidence in the reasonableness, accuracy, and reliability of the assumptions and conclusions in the Endangerment Finding.”

We recommend new footnote * contain:

- Fox-Kemper, B. et al. (2021). Ocean, cryosphere and sea level change. In *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the IPCC*, 1211–1362. <https://eprints.soton.ac.uk/497762/>
- Karegar, Makan A., et al. (2016). Subsidence along the Atlantic Coast of North America: Insights from GPS and late Holocene relative sea level data. *Geophysical Research Letters*, 43(7), 3126–3133. <https://doi.org/10.1002/2016GL068015>
- NASA. (2020). *NASA sea level rise portal: 2020 edition*. <https://www.nasa.gov/specials/sea-level-rise-2020/>
- National Oceanic and Atmospheric Administration (NOAA) Center for Operational Oceanographic Products and Services. (n.d.). Sea level trends. <https://tidesandcurrents.noaa.gov/sltrends/>
- Nienhuis, Jaap H. et al. (2017). A new subsidence map for coastal Louisiana. *GSA Today*, 27(6), 28–29. <https://doi.org/10.1130/GSATG337GW.1>
- Sweet, William. V. et al. (2022). Global and regional sea level rise scenarios for the United States. United States Geological Survey Report 70229139. <https://www.usgs.gov/publications/global-and-regional-sea-level-rise-scenarios-united-states>

We recommend new footnote ** contain:

- Lee, Jangho and Dessler, Andrew (2023). Future Temperature-Related Deaths in the U.S.: The Impact of Climate Change, Demographics, and Adaptation. *GeoHealth* 7(8). <https://doi.org/10.1029/2023GH000799>
- Nordio, Francesco et al. (2015). *Environmental International*, Vol. 81, 80-86. <https://pubmed.ncbi.nlm.nih.gov/25965185/>
- Ana M. Vicedo-Cabrera, et al. (2018). A multi-country analysis on potential adaptive mechanisms to cold and heat in a changing climate. *Environmental International*, Vol. 111, 239-246. <https://www.sciencedirect.com/science/article/pii/S0160412017310346?via=ihub>

D. Natural Disasters (C-2, C-26)

The Alternative Rationale rightly notes that the assumptions in the EF regarding extreme weather were overstated at the time and not supported by evidence since. Most extreme weather events have not shown statistically significant long-term trends. Ranasinghe (2021) finds no evidence in the historical record of a change in river floods, heavy precipitation, drought, fire weather, severe windstorms, and tropical cyclones (i.e., hurricanes.)

The EF projected increased frequency and severity of wildfires, but scientific evidence simply does not support that conclusion. The number of fires and area burned is not increasing, although increasing population and encroachment of development on forested lands, particularly in arid climates of the western United States raises the visibility of wildfire in the public's mind.

Doerr/Santín (2016) finds that wildfires are within historic norms and where they have been more extreme, such as in California, they have been shown to be affected much more by the proximate cause of poor forest management than climate change. Miller/Stafford (2012) finds an increase in burn severity in Californian mixed conifer forests, but attributes that largely to decades of fire suppression and other forest management practices, not climate change.

We recommend the following changes and addition of references:

“With respect to extreme weather events, the Endangerment Finding projected adverse health impacts from increased frequency and severity of hurricanes, flooding, and wildfires. *E.g.*, 74 FR 66498. Recent data and analyses suggest, however, that despite increased public attention and concern, such extreme weather events have not demonstrably increased relative to historical highs (~~2025 CWG Draft Report at 65–72, 111~~).⁹⁴ In reviewing the assumptions and conclusions regarding extreme weather events in the Endangerment Finding, the empirical bases asserted appear to be more generalized and unsupported than previously believed and no longer inspire the same degree of confidence.”

That last sentence is fully supported by the base scientific reports underlying IPCC AR5 and AR6. Sardeshmukh (2015) urges caution when attempting to attribute extreme weather events to climate change, finding that attribution studies ignore, “distinctively skewed and heavy-tailed aspects of

the probability distributions of daily weather anomalies.” The authors warn that, “the issue, at its core, is the meaningfulness of assigning quantitative probabilities to events that have never occurred or have occurred only a few times in a finite record.” Attribution methods struggle to account for uncertainties, and use expert judgement to assess whether climate change was the cause. Such “expert judgement” is simply subjective opinion that fails to meet basic scientific standards for empirical evidence. Clearly, attribution science fails to meet basic scientific norms and uphold the independence required of true scientific inquiry.

To footnote 94, we recommend adding:

- Doerr, Stefan H. and Santín, Cristina. (2016). Global Trends in Wildfire and Its Impacts: Perceptions Versus Realities in a Changing World. *Philosophical Transactions of the Royal Society of London*, Series B, Biological Sciences 371, no.1696. <https://royalsocietypublishing.org/doi/10.1098/rstb.2015.0345>
- Miller, Jay and Stafford, Hugh. (2012). Trends in Wildfire severity: 1984 to 2010 in the Sierra Nevada, Modoc Plateau, and Southern Cascades, California, USA. *Fire Ecology*, 8, pp. 41-57. <https://fireecology.springeropen.com/articles/10.4996/fireecology.0803041>
- Sardeshmukh, Prashant et al. (2015). Need for Caution in Interpreting Extreme Weather Statistics. *Journal of Climate*. <https://journals.ametsoc.org/view/journals/clim/28/23/jcli-d-15-0020.1.xml>
- Ranasinghe, Roshanka et al. (2021). Chapter 12: Climate change information for regional impact and for risk assessment. In V. Masson-Delmotte et al. (Eds.), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 1767–1926). <https://doi.org/10.1017/9781009157896.014>
- UN Office for Disaster Risk Reduction. (2024) “Blame it on Climate Change”: What Attribution Studies Tell Us and What They Don’t. *PreventionWeb*. <https://www.preventionweb.net/news/blame-it-climate-change-what-attribution-studies-tell-us-and-what-they-dont>
- Visser, H. and Petersen, A.C. (2012). Inferences on weather extremes and weather-related disasters: a review of statistical methods, *Climates of the Past* 8, 265–286 <https://cp.copernicus.org/articles/8/265/2012/cp-8-265-2012.pdf>

IV. Separate Bases for Proposed Repeal of GHG Emissions Standards (C-12, C-14, C-15, C-25)

We agree with EPA in the proposed rule that EPA has taken inappropriate novel positions in rulemakings since 2009 and that indeed, there is no requisite technology for controlling the mix of GHGs from light-, medium- and heavy-duty vehicles that the 2024 emissions standards attempted to regulate. Because of that lack of requisite control technologies, the 2024 202(a) rule was contorted into a mandate to electrify the U.S. vehicle fleet. The GHG emissions standards in particular fail the Section 202(a)(2) requirement to give “appropriate consideration to the cost of compliance.”

Clearly, Congress did not give EPA authority to mandate the electrification of the vehicle fleet, and therefore, the 202(a) rule fails the major questions doctrine, per *West Virginia* and *UARG*. The CAA

does not provide EPA with the clear authority to set standards that cannot be met with internal combustion engine vehicles (ICEV). EPA does not have the authority to compel the transition to completely new vehicle types under the guise of setting tailpipe standards for ICEVs. Electric vehicles (EV) do not have a tailpipe, and although their emissions should be evaluated over the full lifecycle and not assumed to be zero as EPA did in the Section 202(a) rule, EPA only has authority to consider tailpipe emissions from ICEVs with this rule. Mandating a shift in the market from ICEVs to EVs is clearly nowhere in the best reading of the CAA, thereby running afoul of *Loper Bright* as well. EPA cannot assert powers to decide major questions of vast economic or political significance without clear congressional authorization. Congress nowhere provided authorization for EPA to effectively mandate a shift from ICEVs to EV and compel market penetration of EVs more than ten-fold of natural consumer demand. Further, *Massachusetts* was interpreted by EPA as a mandate to regulate GHGs, but nowhere in a best reading of *Massachusetts* can regulating GHGs be interpreted as a mandate to impose a reorientation of the automotive market to new vehicle technologies that do not control GHGs.

EPA attempted to subvert the major questions doctrine by citing its authority under 202(a) to tighten emissions standards for six well-mixed GHGs, yet vehicles only emit four of them. Carbon Dioxide (CO₂) emissions constitute more than 95% of vehicle tailpipe GHG emissions (75 FR 25326), yet there has not yet been invented a technology to control or capture them from vehicles. With its contorted logic in the GHG emissions standards, EPA equated control technology to a EV, but an electric vehicle is not akin to a pollution control device. Section 202(a) does not give EPA authority to treat EVs as pollution control devices.

Further, the GHG emissions standards were arbitrary and capricious by asserting that the standards are technically feasible and that the cost of compliance was reasonable. Besides failing on the feasibility of nonexistent GHG control technologies for ICEVs, EPA failed to consider the commensurate increased load on the electrical grid, and the cost thereof, nor of the access to the critical minerals required for such a high market penetration of EVs. EPA ignored the large body of work raising concerns about how a large, forced market penetration of EVs would destabilize the grid.¹¹

¹¹ For example see [Electric Vehicle Dynamic Charging Performance Characteristics during Bulk Power System Disturbances](#), North American Electric Grid Reliability Corp. et al., April 2023; [Testimony](#) of Federal Energy Regulatory Commission Chairman Willie Phillips before the Senate Energy & Natural Resources Committee, May 4, 2023, warning: “We face unprecedented challenges to the reliability of our nation’s electric system.”...the U.S. electric grid is “heading for a very catastrophic situation in terms of reliability...” and there is a “looming reliability crisis in our electricity markets.”; [Preview: Final REPEAT Project Findings on the Emissions Impacts of the Inflation Reduction Act and Infrastructure Investment and Jobs Act](#), Rapid Energy Policy Evaluation and Analysis Toolkit, Princeton University, April 2023, which projected energy electricity demand would need to increase 18% by 2030 and 38% by 2035 to meet the president’s EV goals; [“Why the electric vehicle boom could put a major strain on the U.S. power grid,”](#) CNBC, July 1, 2023 quotes Rob Gramlich, founder and president of Grid Strategies, a transmission policy group, warning that the United States would need to spend \$20 billion to \$30 billion annually on new transmission lines for the increased demand, but is spending next to nothing.

In the GHG emissions standards, EPA completely skirted the issue of whether the rule would even reduce GHGs. Pure plug-in battery-powered vehicles can create more emissions than hybrid EVs and even more than some traditional ICEVs for a variety of reasons including the fuel mix of the electrical grid where the EV is being charged and the large GHG footprint for producing the battery. The manufacture of a battery can produce GHGs equivalent to driving 24,000 miles in an ICEV, in the case of a Nissan Leaf, and up to 60,000 miles in the case of a Tesla Model S.¹² Those numbers are before a single mile is driven by the EV and the GHGs from charging included. When CO₂ emissions from battery production and the energy mix are considered, EVs can emit 11% to 28% more than their diesel counterparts.¹³ Volvo reports that, in comparing a gas-burning model with its fully electric equivalent, with both vehicles built in the same factory, on the same assembly line, and sharing a large number of components, the electric version results in 70% more emissions.¹⁴ EPA failed to look at EV GHGs comprehensively, from battery to power usage, thereby assuming that EVs are “zero emission”, an arbitrary and capricious result.

V. Subsequent Regulation (C-3)

We understand that EPA is taking a step-by-step approach, first by rescinding the EF and Section 202(a), and is not proposing to reopen or substantively modify any other regulations at this time. We appreciate that EPA recognizes that subsequent GHG regulations under other CAA provisions relied upon the flawed EF and will initiate separate rulemakings accordingly. Should EPA rescind the EF, we urge rulemaking to reconsider OOOOb and OOOOc with respect to methane emissions. While removing methane as a pollutant would not affect OOOOb substantially, as the Volatile Organic Compounds legitimately regulated by OOOOb require similar controls, but would affect OOOOc regulation of existing sources.

We would also point out that in III.B of the preamble, it states, “These statutes [the Energy Policy and Conservation Act of 1975 (EPCA) and the 2007 Energy Independence and Security Act (EISA)] also direct the EPA to determine compliance values for manufacturers subject to the CAFE program and the fuel economy labeling program...distinct from the EPA’s authority under CAA section 202(a) and from the EPA’s decisions since 2009 to regulate GHG emissions under CAA section 202(a).” The existence of these laws and CAFE standards, which reduce GHG emissions by reducing the burning of fuels that produce GHGs, are further justification of why 202(a) is not necessary for controlling GHGs.

Further, because EPA severed the endangerment and cause or contribute analysis from the development of subsequent regulations in a manner that was unlawful and asserted that there was no need to make particularized findings for other source categories. As such, EPA did not properly make a finding that methane causes and contributes to air pollution that endangers public health

¹² [“A Data-Driven Greenhouse Gas Emission Rate Analysis for Vehicle Comparisons,”](#) SAE International, *Journal of Electrified Vehicles*, V132-14EJ, April 13, 2022.

¹³ [KohleMotoren, Windmotoren und Dieselmotoren: Was zeigt die CO₂-Bilanz?](#), Christoph Buchal et al., Ifo Institut, 2019.

¹⁴ [“Building An EV Produces 70% More Emissions Than ICE, Says Volvo,”](#) *InsideEVs*, Andrei Nedelea, November 20, 2021.

or welfare before regulating New Source Performance Standards for the oil and gas sector under OOOO. We urge EPA to reconsider the OOOOc rule.

In conclusion, we very much appreciate the Administrator's courageous stance in taking on the EF. That the United States should "do its part" to address climate change regardless of whether that action will have any substantive impact on reducing temperatures has become a tenant of climate change orthodoxy. The Administrator is right to tackle the major question of whether EPA's regulation has had any impact for fifteen years other than damaging the economy and promising to ultimately eliminate Americans' access to reliable, affordable energy. We thank you for having the courage to boldly take on the challenge and for such comprehensive scientific and legal justification.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K M Sgamma', with a long horizontal flourish extending to the right.

Kathleen M. Sgamma
Principal, Multiple-Use Advocacy