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Office of Management and Budget  
Docket No. NHTSA-2025-0490  
725 17<sup>th</sup> St., NW  
Washington DC 20503

National Highway Traffic Safety Administration  
Docket No. NHTSA-2025-0491  
1200 New Jersey Avenue, SE  
Washington, D.C. 20590

Re: Proposed SAFE Rule: Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule III for Model Years 2022 to 2031 Passenger Cars and Light Trucks and its Draft Supplemental Environmental Impact Statement (“Draft SEIS”)

January 30, 2026

**Contents**

<b>I. Summary.....</b>	<b>2</b>
<b>II. The GHG Global Warming and Extreme Weather Theory Underlying the Biden CAFE Rule.....</b>	<b>3</b>
<b>III. Saturation Physics Demonstrates that by the Beginning of the Industrial Age in 1750, Carbon Dioxide at 280 ppm and Higher Can Only Cause Trivial Warming .....</b>	<b>5</b>
<b>IV. Multiple Lines of Other Science Confirm the GHG Global Warming and Extreme Weather Theory is Scientifically False .....</b>	<b>7</b>
<b>Conclusion .....</b>	<b>8</b>
<b>Curriculum Vitae .....</b>	<b>10</b>

## I. Summary

Dear Director Vought and Administrator Morrison,

Thank you for the opportunity to comment on the Proposed SAFE Rule<sup>1</sup> and Draft SEIS<sup>2</sup>.

We are career physicists who have specialized in radiation physics and dynamic heat transfer for decades, subjects directly relevant to the global warming debate that underlies the Biden Administration CAFE Rule<sup>3</sup> and many other Biden Administration rules and policies and the debate in general.

Each of us has published over 200 peer-reviewed papers on the science of climate or closely related subjects. We are both members of the National Academy of Sciences. Our curricula vitae are in the appendix.

The foundation of our comment is that physics makes the debate about global warming and climate change simple. Human contributions of carbon dioxide (“CO<sub>2</sub>”) and other greenhouse gases (“GHGs”) are negligible compared to natural causes, which have operated over the entire geological history of Earth.

Radiation transfer theory and experiment show that additions of CO<sub>2</sub> very rapidly cause less and less warming. In radiation transfer physics this is called *saturation*.

Important facts to consider are:

- Because of saturation, additions of CO<sub>2</sub> beyond 280 ppm in 1750 at the beginning of the Industrial Age can only cause slight increases in temperature, not catastrophic temperature increases, more extreme weather nor any other harm.
- Increasing CO<sub>2</sub> concentrations will increase agricultural productivity and create more food for people worldwide. For example, doubling CO<sub>2</sub> from today’s level would increase agricultural yields per acre by about 40%, but only cause trivial warming.
- Reducing CO<sub>2</sub> emissions to net zero would significantly reduce the amount of food available to people worldwide.
- Saturation physics also explains why there was no runaway greenhouse warming when the concentration of CO<sub>2</sub> was approaching 20 times that of today in the geological past.
- Examples of major climate change on the Earth like the major glaciations of the past 700 thousand years or the Eocene Optimum have essentially nothing to do with the greenhouse picture. The all-important temperature differences between the poles and the tropics are controlled by baroclinic instabilities in convective heat transport.

These facts are kept very well hidden and are rarely mentioned, for they undermine the entire theory that CO<sub>2</sub> and other greenhouse gases cause catastrophic global warming, extreme

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<sup>1</sup> 90 Fed. Reg. 56,348 (Dec. 5, 2025).

<sup>2</sup> Draft Supplemental EIS for the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule III, MY 2022 to 2031 Passenger Cars and Light Trucks

<sup>3</sup> 89 Fed. Reg. 52,540 (June 24, 2024).

weather and harm. We will refer to this false scientific theory as the “GHG Global Warming and Extreme Weather Theory.”

“[S]cientific knowledge’ ... must be derived by the scientific method,”<sup>4</sup> the Supreme Court has made clear, and we agree. Hiding and failing to consider contradictory facts and science is an egregious violation of the scientific method. That is the method used by those that advocate the world is flat, citing only what you see looking out the window and ignoring contradictory facts and science, and fabricating data to comply with the theory.

In our experience, the World Is Flat Method is the method used underlying the Biden Administration CAFE Rule, the Endangerment Finding, all the Biden Administration climate rules and policies, and all those advocating the GHG Global Warming and Extreme Weather Theory. Most importantly, all totally ignore and fail to consider the saturation physics of CO<sub>2</sub>, a glaring and clear violation of the scientific method.

Legally, the Biden CAFE Rule is therefore arbitrary, capricious and invalid under the Supreme Court’s *State Farm* decision because it both “entirely fail[ed] to consider an important aspect of the problem,” the saturation physics of CO<sub>2</sub> and "relied on factors which Congress has not intended it to consider,"<sup>5</sup> unscientific evidence discussed below. It has and will cause enormous damage to the automobile manufacturing industry and employees, Americans and the country. Therefore the Proposed SAFE Rule repealing much of the Biden Rule should be issued ASAP.

Further, the Supreme Court has made clear that “when an agency makes ... scientific judgments, ... a reviewing court must be at its ‘most deferential.’”<sup>6</sup> Accordingly, NHTSA should elaborate the correct science detailed below in the Proposed SAVE Rule, revise the Draft SEIS with it as well and for all of the Trump Administration agencies issuing rules repealing the Endangerment Finding and other Biden Administration rules to do the same.

Scientific details follow.

## **II. The GHG Global Warming and Extreme Weather Theory Underlying the Biden CAFE Rule**

The Biden CAFE Rule states the essential elements of the GHG Global Warming and Extreme Weather Theory as follows:

- “CO<sub>2</sub> concentrations are the key driver of all other climate effects.” Final Biden EIS p. 5-40.
- “CO<sub>2</sub> emissions affect the concentration of CO<sub>2</sub> in the atmosphere, which in turn affects global temperature, sea level, precipitation, and ocean pH.” *Id.* p. S-31.

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<sup>4</sup> *Daubert v. Merrell Pharmaceuticals, Inc.*, 509 U.S. 579, 593 (1993).

<sup>5</sup> *Motor Vehicle Mfrs. Assn. U.S., Inc. v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

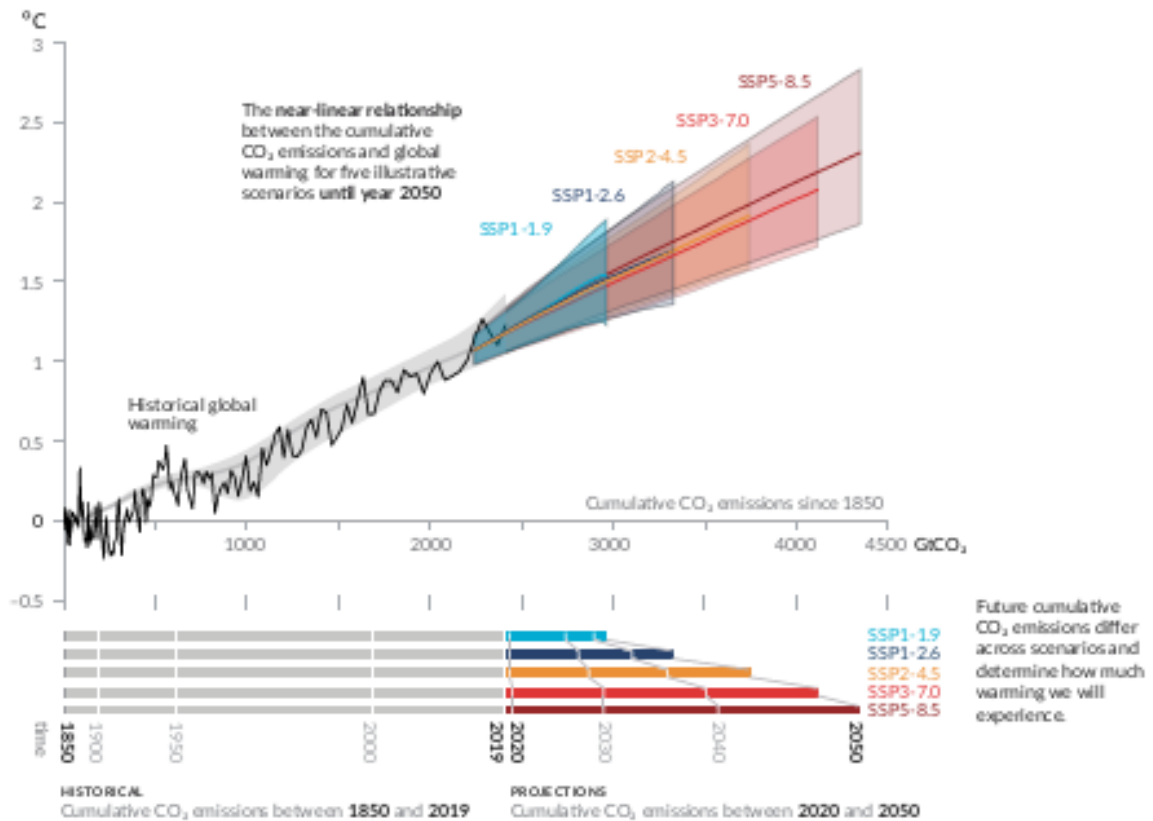
<sup>6</sup> *Seven County Infrastructure Coalition v. Eagle Cnty.*, 145 S. Ct. 1497, 1512 (2025), citing *Baltimore Gas & Electric Co. v. NRDC*, 462 U.S. 87, 103 (1983) (“When examining this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be its most deferential.”) As to NEPA, even more deferential: “The bedrock principle of judicial review ... can be stated in a word: Deference.” *Seven County*, p. 1515.

- “The combustion of petroleum-based fuels... generates emissions of various GHGs, which contribute to changes in the global climate and resulting economic damages. Biden CAFE Rule, 89 FR p. 52,680.
- “This rulemaking is just one of many actions that will be needed ...to rapidly reduce GHG emissions in order to avert dangerous climate change.” Final Biden EIS p. 5-40.
- "NHTSA estimates that ...this final rule will reduce carbon dioxide (CO<sub>2</sub>) emissions by 659 million metric tons for passenger cars and light trucks, and by 55 million metric tons for HDPUVs [Heavy-Duty Pickups and Vans] through calendar year 2050.” Biden CAFE Rule, 89 FR p. 52,545.

The International Panel on Climate Change (“IPCC”) explains the Theory underlying the Biden CAFE Rule more fundamentally, that there is a “near linear relationship between cumulative CO<sub>2</sub> emissions and global warming.”<sup>7</sup>

### Every tonne of CO<sub>2</sub> emissions adds to global warming

Global surface temperature increase since 1850-1900 (°C) as a function of cumulative CO<sub>2</sub> emissions (GtCO<sub>2</sub>)



This figure is propaganda, not science. It is drawn to imply that the warming since 1850 has all been driven by linear increases of atmospheric CO<sub>2</sub>.

<sup>7</sup> IPCC, *Climate Change 2021: The Physical Science-Basis Summary for Policymakers (2021)*, p. 28.

Most of the warming shown in the figure has probably been a natural recovery from the Little Ice Age, caused by the same natural influences responsible for many similar warmings and coolings in the past 600 million years.

Because of saturation, the warming expected from CO<sub>2</sub> is proportional to the logarithm of the concentration. As we show below, assuming a linear dependence on concentration instead of a logarithmic dependence is scientifically false. Thus the GHG Global Warming and Extreme Weather Theory is based on flawed science and is invalid.

### III. Saturation Physics Demonstrates that by the Beginning of the Industrial Age in 1750, Carbon Dioxide at 280 ppm and Higher Can Only Cause Trivial Warming

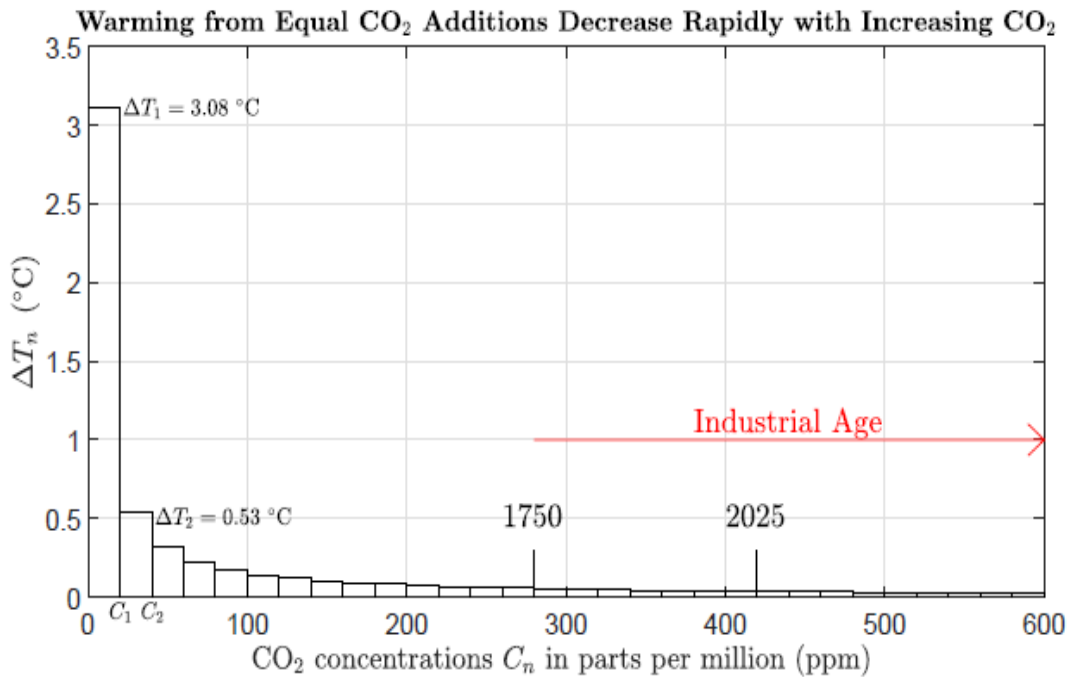


Figure 2: The warmings,  $\Delta T_n$  from successive additions of  $\Delta C = 20$  ppm increments of CO<sub>2</sub> to the atmosphere. The concentration after the first addition is  $C_1 = 20$  ppm, after the second addition,  $C_2 = 40$  ppm, etc. Over half of the total warming by the year 2026,  $T_n = 5.44$  C, when the concentration was  $C_n = 420$  ppm, was due to the first 20 ppm addition of CO<sub>2</sub>, which caused a warming of  $\Delta T_1 = 3.08$  °C. Representative numerical values are shown in Table 1.

As mentioned above, climate scientists have determined that the warming effect of CO<sub>2</sub> decreases very rapidly (logarithmically) as its concentration in the atmosphere increases, a phenomenon known as "saturation."

We focus on CO<sub>2</sub> because the next most important greenhouse gases methane, nitrous oxide each cause only about 1/10 the warming of CO<sub>2</sub>, and other GHGs are too small to matter.<sup>8</sup>

<sup>8</sup> "Radiative effects of CH<sub>4</sub> [methane] and N<sub>2</sub>O [nitrous oxide] are so small that they are irrelevant to climate." William van Wijngaarden and William Happer, "Methane and Climate" (2019), <https://co2coalition.org/wp-content/uploads/2021/08/Methane-and-Climate.pdf>,

And one should not forget that the most important influences on radiation transport in Earth's atmosphere are water vapor and clouds.

Figure 2 and Table 1 show how the logarithmic formula works.<sup>9</sup>

The very rapid logarithmic decrease of CO<sub>2</sub>'s power to warm the planet is dramatically demonstrated by what happens to CO<sub>2</sub>'s warming power as it increases from 0 ppm in the atmosphere to 40 ppm. The temperature increase from CO<sub>2</sub> = 0 ppm to CO<sub>2</sub> = 20 ppm is  $DT_1 = 3.08^\circ\text{C}$ , as shown in Table 1.

However, a second increase by the same amount, from CO<sub>2</sub> = 20 ppm to CO<sub>2</sub> = 40 ppm, cause a much smaller temperature increase, merely  $DT_2 = 0.54^\circ\text{C}$ .

$n$	$C_n$ (ppm)	$\Delta T_n$ ( $^\circ\text{C}$ )	$T_n$ ( $^\circ\text{C}$ )
0	0	0	0
1	20	3.08	3.08
2	40	0.53	3.61
...	...	...	...
14	280	0.058	5.12
...	...	...	...
21	420	0.038	5.44
...	...	...	...
30	600	0.026	5.72

Table 1: The number  $n$  of concentration increments,  $\Delta\text{CO}_2 = 20$  ppm, added to the atmosphere is shown in the first column. The second column shows the cumulative concentration  $C_n$ . The third column shows the incremental warming,  $\Delta T_n$ , caused by adding the  $n$ th increment of CO<sub>2</sub>. The fourth column shows the cumulative warming  $T_n$  after  $n$  increments. Figure 2 shows the these results graphically.

At the beginning of the Industrial Age in 1750 at 280 ppm. CO<sub>2</sub>'s warming per 20 ppm increase was much less, only about  $0.06^\circ\text{C}$  as shown in Table 1.

280 ppm to 420 ppm. How much warming did CO<sub>2</sub> cause when CO<sub>2</sub> increased from 280 ppm in 1750 to the 420 ppm in the atmosphere today? Very little, Table 1 shows a temperature increase of only  $0.32^\circ\text{C}$

Therefore CO<sub>2</sub> from fossil fuel emissions and other human sources could not and did not cause any global warming, more extreme weather or damages between 1750 and today.

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p. 4; William van Wijngaarden & William Happer, *Instantaneous Clear Sky Radiative Forcings of Halogenated Gases* (June 23, 2023), <https://arxiv.org/pdf/2306.13642>

<sup>9</sup> William van Wijngaarden and William Happer, "Saturation Graphics" <https://co2coalition.org/publications/saturation-graphics>.

What about the future?

2100. What will happen if nothing is done to reduce CO<sub>2</sub> emissions from fossil fuels and other human sources by 2100?

Human emissions are increasing CO<sub>2</sub> 2.5 ppm per year. Thus in 75 years the CO<sub>2</sub> level in the atmosphere would be about 600 ppm (420 ppm + 75×2.5 = 188, total 608).

Table 1 shows that warming from CO<sub>2</sub> would change from 5.44° C to 5.72° C, an increase of only 0.28 °C for a relatively large, 180 ppm increase of CO<sub>2</sub>.

Accordingly, increased CO<sub>2</sub> emissions from fossil fuels and other human sources since the beginning of the Industrial Age in 1750 have had virtually no effect on global temperature and extreme weather, and in the future will have virtually no effect on temperature and extreme weather also.

Multiple lines of other science confirm these conclusions, covered next.

#### **IV. Multiple Lines of Other Science Confirm the GHG Global Warming and Extreme Weather Theory is Scientifically False**

We have elaborated in Physics Demonstrates That Increasing Greenhouse Gases Cannot Cause Dangerous Warming, Extreme Weather or Any Harm (June 7, 2025) (“Lindzen Happer Physics Paper”), in our comments on the proposed Endangerment Finding repeal and other papers multiple lines of other science that confirm the GHG Global Warming and Extreme Weather Theory underlying the Biden CAFE Rule is scientifically false, including:

- using the World is Flat Method, including government opinion, consensus, 97% of scientists’ opinions, peer review, models that do not work, and cherry picked, fabricated, falsified or omitted contradictory data. Not using the scientific method, where agreement with observations is the measure of scientific truth. Lindzen Happer Physics Paper, pp. 5-6.
- 600 Million years of data confirm GHGs do not cause catastrophic global warming and extreme weather. Lindzen Happer Physics Paper, pp. 12-15.
- The EPA’s MAGCC Model confirms carbon dioxide and other GHGs have only a negligible impact on temperature. For example the Final Biden EIS reports the “following cumulative impacts” of its CAFE Rule by 2100 is that the “global mean surface temperature decreases...[would at most be] 0.004° C.” Id. p. S-34. See also Lindzen Happer Physics Paper, p. 12.
- Misrepresentation, exaggeration, cherry picking, outright lying, fabrication and falsification pretty much covers all the so-called evidence supporting the GHG Climate Warming and Extreme Weather Theory.<sup>10</sup> Since theories are tested with observations, fabricating data, falsifying data, and omitting contradictory facts to make a theory work is an egregious violation of the scientific method.<sup>11</sup>

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<sup>10</sup> Richard Lindzen, *Global Warming for the Two Cultures*, Global Warming Policy Foundation 10 (2018).

<sup>11</sup> David Goodstein, *On Fact and Fraud* p. 135 (2010). “Fabrication is making up data or results,” “falsification is ... changing or omitting data or results.”

- The Biden CAFE Rule is a classic example of falsifying data about GHGs causing extreme weather. The Final Biden EIS claims there will be many more heat waves, hottest years on record, hurricanes, wildfires, and higher sea levels. *Id.* Appendix F, pp. 10, 11, 15, 21, 22.
- We show the cherry picking, fabrication and falsification of this extreme weather data in Lindzen Happer Physics Paper pages 29-33. Prof. Koonin’s book does the same on pp. 101-204.
- The most important example of fabrication and falsification is what the IPCC did in 1995. The IPCC controlling governments changed what the scientists concluded:

“No study to date has positively attributed all or part (of the climate warming observed) to (manmade) causes”? (emphasis added).

The IPCC governments changed it to, frankly, a scientific lie: "The balance of evidence suggests a discernible human influence on global climate." (emphasis added). Detailed in Lindzen Happer Physics Paper, pp. 23–26.

- Unscientific evidence is all that supports the Theory, including but not limited to IPCC government controlled opinions, theoretical models that do not work, National Climate Assessments, the National Academy of Sciences (“NAS”) *Effects of Human Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare* (Sept. 2025) and the NAS National Research Council and the Federal Judicial Center *Reference Manual on Scientific Evidence: 4<sup>th</sup> Edition* (Dec. 2025) “How Science Works” and “Reference Guide on Climate Science” chapters. Detailed in Lindzen Happer Physics Paper, pp.23-43.

Steven Koonin’s book *Unsettled* (2d. 2004) also provides confirmation that the Theory is scientifically false.

## Conclusion

Saturation physics demonstrates that the rapid logarithmic decrease in CO<sub>2</sub>’s power to warm the planet means:

- Increased CO<sub>2</sub> emissions from fossil fuels and other human sources since the beginning of the Industrial Age in 1750 have had and in the future will have virtually no effect on global temperature, and therefore have not and will not cause extreme weather and any damages.
- There is no scientific basis for the Biden CAFE rule and many other rules that are being repealed by the Trump administration.
- The IPCC linear graph above, the fundamental basis of the GHG Global Warming and Extreme Weather Theory, is scientifically false because the Theory failed to consider saturation physics that shows the formula is logarithmic.
- There is no scientific basis for the EPA and other government agencies, the IPCC, National Academy of Sciences *Effects of Human-Cause Greenhouse Gas Emissions On U.S. Climate, Health, and Welfare* (Sept. 2025), state cases and laws and others claims that fossil fuel CO<sub>2</sub> emissions have caused and will cause catastrophic global warming, and trillions of dollars of damages from extreme weather because they, in fundamental violation of the scientific method, failed to consider saturation physics.

Moreover, contrary to what is widely reported, increasing carbon dioxide emissions, and increasing the use of fossil fuels, will increase the food supply worldwide and provide people worldwide with affordable and reliable energy.

Accordingly:

1. The Biden CAFE Rule is arbitrary, capricious and invalid under *State Farm* because it both “entirely fail[ed] to consider an important aspect of the problem,” the saturation physics of CO<sub>2</sub>, and “relied on factors which Congress has not intended it to consider,”<sup>12</sup> unscientific evidence.
2. The Proposed SAFE Rule repealing much of the Biden Rule should be issued ASAP. It has and will cause enormous damage to the automobile manufacturing industry and employees, Americans and the country.
3. NHTSA should elaborate the correct science detailed here and in our comments and papers in the final SAVE Rule, the final SEIS and all other Trump administration’s rules repealing Biden Administration climate rules because the Supreme Court has made clear that “when an agency makes ... scientific judgments, ... a reviewing court must be at its ‘most deferential.’”<sup>13</sup>

Finally, it is our opinion the Nation and the world are confronted with policies, like the Biden CAFE Rule, the Endangerment Finding and other government rules and actions, that will destroy western economies, impoverish the working middle class, condemn billions of the world's poorest to continued poverty and increased starvation, leave our children despairing over the alleged absence of a future, and will enrich the enemies of the West who are enjoying the spectacle of our suicide march.<sup>14</sup>

They all must be stopped ASAP.

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<sup>12</sup> *Motor Vehicle Mfrs. Assn. U.S., Inc. v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

<sup>13</sup> *Seven County Infrastructure Coalition v. Eagle Cnty.*, 145 S. Ct. 1497, 1512 (2025), citing *Baltimore Gas & Electric Co. v. NRDC*, 462 U.S. 87, 103 (1983) (“When examining this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be at its most deferential.”). As to NEPA, even more deferential: “The bedrock principle of judicial review ... can be stated in a word: Deference.” *Seven County* at 1515.

<sup>14</sup> Richard Lindzen, “Manufacturing Consensus on Climate Change,” *The American Mind* (Nov. 21, 2024).

## Curriculum Vitae

### **Richard Lindzen, Ph.D.**

I am an Alfred P. Sloan Professor of Atmospheric Science Emeritus at MIT. After completing my doctorate at Harvard in 1964 (with a thesis on the interaction of photochemistry, radiation and dynamics in the stratosphere), I did postdoctoral work at the University of Washington and at the University of Oslo before joining the National Center for Atmospheric Research as a staff scientist. p. the end of 1967, I moved to the University of Chicago as a tenured associate professor, and in 1971 I returned to Harvard to assume the Gordon McKay Professorship (and later the Burden Professorship) in Dynamic Meteorology. In 1981 I moved to MIT to assume the Alfred P. Sloan Professorship in Atmospheric Sciences. I have also held visiting professorships at UCLA, Tel Aviv University, and the National Physical Laboratory in Ahmedabad, India, and the Hebrew University in Jerusalem, the Jet Propulsion Laboratory in Pasadena, and the Laboratory for Dynamic Meteorology at the University of Paris.

I developed our current understanding of the quasi-biennial oscillation of the tropical stratosphere, the current explanation for dominance of the solar semidiurnal and diurnal tides at various levels of the atmosphere, the role of breaking gravity waves as a major source of friction in the atmosphere, and the role of this friction in reversing the meridional temperature gradient at the tropopause (where the equator is the coldest latitude) and the mesopause (where temperature is a minimum at the summer pole and a maximum at the winter pole). I have also developed the basic description of how surface temperature in the tropics controls the distribution of cumulus convection and led the group that discovered the iris effect where upper-level cirrus contract in response to warmer surface temperatures. I have published approximately 250 papers and books. I am an award recipient of the American Meteorological Society and the American Geophysical Union. I am a fellow of the American Meteorological Society, the American Geophysical Union and the American Association for the Advancement of Science, and a member of the National Academy of Sciences and the American Academy of Arts and Sciences.

I have served as the director of the Center for Earth and Planetary Sciences at Harvard and on numerous panels of the National Research Council. I was also a lead author on the Third Assessment Report of the UN's Intergovernmental Panel on Climate Change – the report for which the IPCC shared the Nobel Peace Prize with Al Gore.

**William Happer, Ph.D.**

I am a Professor Emeritus in the Department of Physics at Princeton University.

I began my professional career in the Physics Department of Columbia University in 1964, where I served as Director of the Columbia Radiation Laboratory from 1976 to 1979. I joined the Physics Department of Princeton University in 1980.

I invented the sodium guidestar that is used in astronomical adaptive optics systems to correct the degrading effects of atmospheric turbulence on imaging resolution. I have published over 200 peer-reviewed scientific papers, am a Fellow of the American Physical Society, the American Association for the Advancement of Science, and a member of the American Academy of Arts and Sciences, the National Academy of Sciences and the American Philosophical Society.

I served as Director of Energy Research in the U.S. Department of Energy from 1991 to 1993. I was a co-founder in 1994 of Magnetic Imaging Technologies Incorporated (MITI), a small company specializing in the use of laser-polarized noble gases for magnetic resonance imaging. I served as Chairman of the Steering Committee of JASON from 1987 to 1990.

I served as Deputy Assistant to the President and Senior Director for Emerging Technologies at The National Security Council in the White House from 2018 to 2019.

I am the Chair of the Board of Directors of the CO<sub>2</sub> Coalition, a nonprofit 501(c)(3) organization established in 2015 to educate thought leaders, policy makers and the public about the vital contribution made by carbon dioxide to our lives and our economy.