

Ohio Environmental Council

Comments of the Ohio Environmental Council

Regarding the Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards

Submitted to the United States Environmental Protection AgencySeptember 22, 2025

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United States Environmental Protection Agency

EPA Docket Center, OAR Docket, Mail Code 28221T 1200 Pennsylvania Avenue NW Washington D.C. 20460

Subject: Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards, https://www.regulations.gov/docket/EPA-HQ-OAR-2025-0194

Dear EPA Office of Transportation and Air Quality:

On behalf of the Ohio Environmental Council, I hereby submit the enclosed public comments we have prepared to explain our opposition to the proposed repeal of the EPA's 2009 Endangerment Finding under the Clean Air Act.

"A well-documented rise in global temperatures has coincided with a significant increase in the concentration of carbon dioxide (CO₂) in the atmosphere. Respected scientists believe the two trends are related." *Massachusetts v. EPA*, 549 U.S. 497 (2007) (Stevens, J.) The science has not changed since 2009. In fact, "[m]uch of the understanding of climate change that was uncertain or tentative in 2009 is now resolved and new threats have been identified." National Academies: Sciences, Engineering and Medicine, "Effects of Human-Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare," 2025; https://doi.org/10.17226/29239.

Accordingly, and for the reasons further provided in our comment, the United States EPA should not rescind the EPA's 2009 Endangerment Finding under the Clean Air Act. The science is stronger now than in 2009 that GHG pollution endangers public health and welfare, and that vehicular GHG emissions contribute to that pollution. The continued leadership of the United States is essential to the encouraging international commitment to counteract climate change.

Sincerely,

Chris Tavenor General Counsel

Enc. (OEC Comments)

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I. Introduction

For all the reasons that follow, and many more, the United States Environmental Protection Agency ("EPA") should not rescind the EPA's 2009 Endangerment Finding or related vehicle standards regulating greenhouse gas ("GHG") emissions under the Clean Air Act. The evidence regarding the science of climate change dictates the exact opposite conclusion poised by the EPA in its proposed rescission.

The Ohio Environmental Council ("OEC") is a Section 501(c)(3) nonprofit environmental advocacy organization, founded in 1969, headquartered in Columbus, Ohio. Its work includes the environment, clean energy, and democracy. We represent thousands of supporters statewide who all understand the science of climate change and how it calls upon the government to act upon its causes.

From the air we breathe to the water we drink, the majority of Ohio's most pressing environmental concerns are impacted by climate change. Hotter, wetter, and more extreme weather caused by climate change threatens public health, harms our natural ecosystems, and strains the infrastructure and industries Ohio residents rely on. As the dangerous impacts grow, communities that have been systematically excluded will continue to suffer the most.

The United States cannot shy away from bold action. The OEC has catalyzed efforts to combat climate change and environmental injustice in all facets of our work. The OEC cannot succeed in its mission to protect air, land, water, and democracy for all who call Ohio home without addressing climate change. It is now clear that climate change threatens public health on multiple fronts, harms industries that Ohioans rely on to feed our families, and alters the landscapes that make our state special and unique. Climate change will affect us all.

Climate change is here, and we must be prepared with the solutions that will help present and future generations avoid its most devastating impacts:

 Clean up our power. Ohioans agree that our state needs more clean energy. We can reduce carbon and other pollutants that threaten our communities by increasing investments in energy efficiency and renewable power sources by utilities, local governments, businesses, and citizens.

- Reduce methane pollution. Cutting methane, a potent greenhouse gas, would be an extremely impactful measure for Ohio's communities and our climate. We are working with affected communities to advocate for strong state and federal standards for methane pollution produced by oil and gas operations.
- Grow adoption of electric vehicles. We can reduce environmentally damaging emissions and make the air in our cities healthier and cleaner for our families by encouraging electric vehicle ("EV") usage. We are working with communities to help them invest in robust EV charging infrastructure for the future.

Climate change increases risks to those with serious health conditions. Weather that contributes to poor air quality and the growing number of days with extreme temperatures threaten Ohioans' health and safety. We can combat these environmental health threats by eliminating the most harmful climate-change-causing air pollutants. In doing so, we will lessen Ohio's contribution to the causes of climate change while also decreasing health risks to future generations, including our children and grandchildren.

Municipal climate action plans established by Ohio communities in recent years are implementing programs intended to benefit both the climate and public health. In 2021, the City of Columbus unveiled its current Climate Action Plan, which sets a goal of a 45% reduction in GHG emissions by 2030 and total carbon neutrality by 2050. According to the Zero Energy Project, the cities in Ohio that have established climate action plans include Akron, Amesville, Athens, Bexley, Cincinnati, Cleveland, Columbus, Gambier, Lakewood, Lorain, Oberlin, and Toledo. 2

However, by repealing the Endangerment Finding, the EPA will derail federal efforts to address climate change as this repeal will function as a federally mandated climate denial. This short sighted, dangerous decision will only harm Ohioans and Ohio businesses now and in the future. We continue to see rising temperatures and extreme, unpredictable storms cause damage to our homes, harm our businesses, and make life more expensive, forcing us to adapt.

The Endangerment Finding, required as necessary by the United States Supreme Court in *Massachusetts v. U.S. EPA*, is a crucial legal and scientific foundation which protects our most vulnerable residents and holds polluters accountable. By denying the legal

¹ See https://smartcolumbus.com/programs/city-of-columbus-action-plan/. See also https://www.wosu.org/politics-government/2021-12-09/.

² See https://zeroenergyproject.com/all-cities-with-climate-action-plans/.

foundations of the Endangerment Finding, and its scientific conclusions, the EPA is attempting to rewrite legal history while simultaneously ignoring the established dangers of climate change. With its decision today, the EPA puts communities and businesses at significant risk while providing substantial benefits to wealthy special interest groups, ultimately jeopardizing the well-being of Ohio's present and future generations.

Therefore, the United States EPA should not rescind the EPA's 2009 Endangerment Finding or related vehicle standards regulating GHG emissions under the Clean Air Act. The science is stronger now than in 2009: GHG pollution endangers public health and welfare while vehicular GHG emissions contribute to that pollution. Legal precedent from the Supreme Court and the D.C. Circuit Court of Appeals is prescient and must be respected. Climate change actively impacts human health and the environment, both globally and at the local level here in Ohio. Both the international commitment to counteract climate change and the continued leadership of the United States are essential.³

II. Scientific Consensus

The U.S. EPA's own website states the science succintly: "Greenhouse gases, such as carbon dioxide, methane, nitrous oxide, and certain synthetic chemicals, trap some of the Earth's outgoing energy, thus retaining heat in the atmosphere. This heat trapping causes changes in the radiative balance of the Earth—the balance between energy received from the sun and emitted from Earth—that alter climate and weather patterns at global and regional scales." Accordingly, Associate Supreme Court Justice John Paul Stevens (1920-2019) opined that "a well-documented rise in global temperatures has coincided with a significant increase in the concentration of carbon dioxide (CO₂) in the atmosphere. Respected scientists believe the two trends are related." The Court recognized this scientific consensus in 2007, which has only gained more support in the sixteen years since the *Massachusetts v. EPA* ruling was issued.

A. The 2009 Endangerment Finding

For decades, the Endangerment Finding has been relied upon as an essential part of our legal framework governing the Clean Air Act. Whether in opinions or briefs, the

³ Project 2025 is not leadership. See The Heritage Foundation, Project 2025: Presidential Transition Project, Section 3, Chapter 13, Environmental Protection Agency ("Establish a system, with an appropriate deadline, to *update* the 2009 Endangerment Finding"), 2023 (emphasis added). https://static.heritage.org/project2025/2025-MandateForLeadership FULL.pdf.

⁴ EPA, Greenhouse Gases: What are the trends in greenhouse gas emissions and concentrations and their impacts on human health and the environment? https://www.epa.gov/report-environment/greenhouse-gases (last updated Jun. 17, 2025).

⁵ Massachusetts v. EPA, 549 U.S. 497 (2007) (Stevens, J.)

conclusions of *Massachusetts v. EPA* were clear: "On remand from *Massachusetts v. EPA*, the agency determined that GHG pollution may reasonably be anticipated to endanger public health and welfare, and that vehicular GHG emissions contribute to that pollution. 74 Fed. Reg. 66,496, 66,499 (Dec. 15, 2009)."

The Endangerment Finding was a scientific assessment and determination, not a legal conclusion. That said, in 2012, the U.S. Court of Appeals for the D.C. Circuit "conclude[d] that the Endangerment Finding is consistent with *Massachusetts v. EPA* and the text and structure of the [Clean Air Act], and is adequately supported by the administrative record." In 2014, the Supreme Court declined to review that decision and now, the EPA should adhere to the Supreme Court's decision and decline to rescind that decision based on the EPA's findings presented below.⁸

The Endangerment Finding depended on an immense amount of data with contributions from across the scientific spectrum: the "EPA prepared a detailed technical report ("TSD") relying in part on comprehensive analyses incorporating thousands of peer-reviewed studies of current climate change research developed by the Intergovernmental Panel on Climate Change, the United States Global Change Research Program ("USGCRP"), and the National Research Council ("NRC") each of which was in turn subject to further peer review. TSD 6, D.C. Cir. Endangerment Joint Appendix (End.JA) 3354. The agency then put the TSD through 'three rounds of technical review . . . by 12 federal experts,' and 'two rounds of public comment,' and prepared an 11-volume response to the thousands of written comments it received. See Response to Comments ("RTC") 1-10, End.JA 3566."

"EPA found that:

- Atmospheric carbon dioxide (CO₂) and methane concentrations have increased by approximately 38% and 149%, respectively, since the Industrial Revolution, 'almost all' due to anthropogenic emissions, and these concentrations are significantly higher than they have been for at least 650,000 years. 74 Fed. Reg. at 66,517.
- Warming of the climate system 'is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.' *Id*.

⁶ Consolidated Brief in Opposition of Environmental Organization Respondents (July 22, 2013) at 6, in *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014) ("Consolidated Brief").

⁷ Coalition for Responsible Regulation v. EPA, 684 F.3d 102, 117 (D.C. Cir. 2012).

⁸ See *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014).

⁹ Consolidated Brief at 6-7

- Average surface temperatures have risen by $1.3 \pm 0.32^{\circ}$ F over the past century (1906-2005), with the greatest warming occurring during the past 30 years, and the 20 warmest years on record all occurring since 1981. *Id*.
- Anthropogenic GHG emissions very likely caused most of the warming that occurred over the past 50 years. *Id.* at 66,517-18, 66,522-23.
- Climate models project an increase in global average temperatures of 2.0
 11.5° F during the twenty-first century. *Id.* at 66,519, see also TSD 69, End. JA 3417 (citing projections for 2030 of between 2° 4° F).
- Reducing GHG emissions would reduce the pace and magnitude of the temperature rise. TSD 66, End.JA 3414."¹⁰

Those scientific conclusions also included evidence pertaining to impacts, both at the global and local level. "Based on copious record evidence that warming temperatures will cause (and in some cases are already causing) increased risks of mortality and illness from reduced air quality, intensified heat waves, and more frequent and intense storms, see 74 Fed. Reg. 66,497-99, 66,516-36; see also TSD ES4, 89-93, End. JA 3345, 3347-3341, the Administrator found that GHG pollution is 'reasonably anticipated to endanger public health, for both current and future generations.' 74 Fed. Reg. at 66,524." There is no reason to disturb this conclusion in 2025.

These impacts are particularly stark upon coastal communities. "The Administrator also found that climate change poses a variety of risks to public welfare, including increased droughts, sea level rise, harms to agriculture, more severe storms, and increased storm surge damage and flooding in coastal communities, *id.* at 66,497-99, 66,525, 66,530-36, and will 'fundamentally rearrange U.S. ecosystems,' *id.* at 66,498. In addition to the harmful effects from GHG' heat-trapping characteristics and the resulting climate changes, increased atmospheric concentrations of CO₂ have already caused a marked increase in the acidity of ocean water, with potentially serious implications for coral reefs, shellfish and other aquatic life. TSD 38, End. JA 3386, 3482."¹²

B. The Science Since 2009

¹⁰ Consolidated Brief at 7-8.

¹¹ Consolidated Brief at 8-9.

¹² *Id*.

Current scientific evidence that GHG pollution endangers public health and welfare, and that vehicular GHG emissions¹³ contribute to that pollution is significantly stronger than it was in 2009. The more recent scientific assessments include:

- The United Nations' Intergovernmental Panel on Climate Change, "Sixth Assessment Report (2021 - 2023), which concludes that human influence on the climate system is unequivocal and strongly attributes worsening heat waves, sea level rise, extreme weather, and health risks to anthropogenic GHG emissions."14
- The United States' "Fifth National Climate Assessment (2023), which finds that climate change is already affecting every region of the United States with increased intensity and speed, causing disproportionate harm to vulnerable communities and straining health and infrastructure systems."15
- Philip R. Duffy et al. (Science 2019), "Strengthened Scientific Support for the Endangerment Finding for Atmospheric Greenhouse Gases,' provides a detailed update of the basis for the EPA's 2009 finding, demonstrating that nearly all global warming since 1950 is due to human activity and reinforcing the causal link between greenhouse gas emissions and climate change. 16

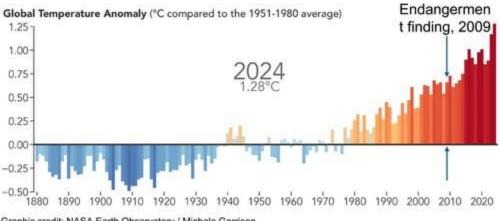
In a paper published on June 19, 2025, a group of 14 distinguished climate scientists (who participated as amicus curiae in the Massachusetts v. EPA case) reviewed the data since the 2009 Endangerment Finding. They concluded: "Sixteen years later, the scientific evidence supporting the Endangerment Finding is even stronger, with zero countervailing evidence. Our amicus brief's predictions of future climate trends have all come true, some alarmingly faster than anticipated."¹⁷

The following figure from the AGU paper illustrates the 2024 temperature anomaly of 1.28°C is close to twice that of 0.66°C in 2009, the year the Endangerment Finding was published.

¹³ Gases that trap heat in the atmosphere are called greenhouse gases. These include carbon dioxide, methane, nitrous oxide and fluorinated gases. EPA, Overview of Greenhouse Gases; https://www/epa.gov.ghgemissions/overview-greenhouse-gases#overview.

¹⁴ Natural Resources Defense Council, EPA's Endangerment Finding: The Legal and Scientific Foundation for Cutting Climate-Changing Pollution, August 1, 2025. ¹⁵ *Id*.

¹⁷ S. Saleska, et al., "What is Endangered Now? Climate Science at the Crossroads," Advancing Earth and Space Sciences / AGU Advances, June 19, 2025.



Graphic credit: NASA Earth Observatory / Michala Garrison

The researchers go on to say: "In addition to observed climate change trends continuing as predicted, climate science has advanced. Particularly relevant for the strength of the Endangerment Finding, the science of attribution—the ability to attribute part of the extremeness of extreme events to the effects of climate change—has advanced significantly. (Otto et al., 2024). Much more so than in 2009, we can now conclude with confidence that many climate and weather extreme events are more severe because of climate change. For example, the record-setting Pacific Northwest heat wave of 2021 was made about eight times more likely by greenhouse gas emissions (Leach et al, 2024). Absent mitigation, the future will be more dangerous than the past (Kemp et al., 2022)."18

The principal health effects supporting the EPA's 2009 Endangerment Finding include:

- "Direct temperature effects: Extremely hot days and heat waves have become more frequent, intense, and prolonged. Heat remains the leading cause of weather-related deaths in the United States, and recent date confirm that projected warming will substantially increase heat-related mortality and morbidity."19
- "Air quality effects: Stronger evidence has emerged showing climatedriven increases in ground-level ozone pollution (smog) and particulate matter, which have intensified respiratory illnesses and exacerbated asthma and other chronic respiratory conditions."²⁰

¹⁸ S. Saleska, et al., "What is Endangered Now? Climate Science at the Crossroads," Advancing Earth and Space Sciences / AGU Advances, June 19, 2025.

¹⁹ Natural Resources Defense Council, "EPA's Endangerment Finding: The Legal and Scientific Foundation for Cutting Climate-Changing Pollution," August 1, 2025. ²⁰ *Id*.

- "Extreme weather events: Recent studies document that heavy precipitation events are increasing in frequency and severity, and that hurricanes are becoming more intense and causing heavier rainfalls. Droughts and wildfires have also become more severe and persistent in parts of the U.S., linked to warming and drier conditions. These events have increased risks of death, injury, and the spread of infectious diseases."²¹
- "Disease and allergen effects: Warmer temperatures have extended geographical ranges and seasons for vector-borne diseases and significantly increased exposure to pollen and aeroallergens, amplifying allergic illnesses and related conditions. These changes pose growing health risks and contribute to EPA's Endangerment Finding that GHG pollution endangers public welfare."²²

The principal environmental and welfare effects supporting the EPA's 2009 Endangerment Finding include:

- "Food production, agriculture, and forestry effects: Although increased CO2 concentrations may benefit certain crops in controlled situations, the full body of evidence shows that, on net, climate change impacts including increased temperatures, droughts, and floods, changing precipitation patterns, and extreme weather events are harming U.S. agriculture. Wildfires have increased in size and frequency, particularly in the western United States, further harming U.S. forestry."²³
- "Water resource impacts: Recent assessments indicate significant reductions in snowpack, increased drought severity, and altered precipitation patterns, further threatening the adequacy of water supplies across large areas of the United States. Water temperatures and heavier rainfall have also contributed to rising temperatures in lakes and streams and more frequent flooding, which can worsen water quality and increase risks to public health and ecosystems."²⁴
- "Sea level rise: Ongoing observations have confirmed accelerated sealevel rise along much of the U.S. coast, surpassing previous projections.

²¹ *Id*.

²² *Id.* (citing 74 Fed. Reg. at 66,530-34).

²³ Natural Resources Defense Council, "EPA's Endangerment Finding: The Legal and Scientific Foundation for Cutting Climate-Changing Pollution," August 1, 2025.
²⁴ *Id.*

Increased sea-level rise heightens the risk of storm surge, flooding, coastal erosion, and loss of wetlands, posing greater threats to coastal communities."25

- "Energy and infrastructure effects: Climate change continues to increase stresses on energy production and use. Energy demand is increasing, especially for cooling. Risks to U.S. infrastructure – including energy transmission, water infrastructure, roads, bridges, airports, and homes – are growing due to more frequent permafrost melt, sea level rise, and coastal erosion."26
- "Impacts on ecosystems and wildlife: Recent evidence further highlights significant disruptions to plant life cycles, animal migration patterns, and habitat ranges due to climate change. These impacts increasingly threaten biodiversity and critical ecosystem goods and services on which current and future generations depend."²⁷

The AGU amicus scientists concluded: "In light of the accumulating evidence of the last 16 years, we strongly reiterate the conclusion stated in our Supreme Court amicus brief (Climate Scientists, 2006) that 'in our professional opinion as climate scientists, the evidence supporting such a determination [of reasonable anticipation of endangerment] is compelling.' The evidence supporting this conclusion is significantly stronger today than it was 16 years ago."²⁸

C. The Department of Energy's Climate Working Group Report

The Sixth Assessment Report by the United Stations' Intergovernmental Panel on Climate Change, published two years ago, "was a monumental effort, with 721 volunteer scientists synthesizing all available published research."²⁹

Similarly, the National Climate Assessment, a report required every four years by the Global Change Research Act of 1990, is produced by over 500 authors representing all

²⁶ *Id*.

²⁵ *Id*.

²⁸ S. Saleska, et al., "What is Endangered Now? Climate Science at the Crossroads," Advancing Earth and Space Sciences / AGU Advances, June 19, 2025.

²⁹ "Contrarian Climate Assessment From U.S. Government Draws Swift Pushback," Science Insider / Climate, July 30, 2025.

50 states, and is subject to multiple levels of peer review, including by the U.S. National Academy of Sciences.³⁰

In contrast, EPA's proposed action to repeal the Endangerment Finding relies on a report³¹ published by the Department of Energy ("DOE") and "authored by a hand-picked quintet of well-known skeptics of the mainstream consensus on climate change."³²

As scientific reporters have commented: "Handpicked by DOE Secretary Chris Wright, a fossil fuel entrepreneur, the authors are well known to climate scientists. Although the members of the Climate Working Group all hold scientific doctorates, they hold contrarian views on climate science that are out of step with the mainstream." ³³

The report utilizes theories long shown to be missing key pieces of evidence from their models—classic misinformation tactics. "The report, assembled in months, argues that some of the warming attributed to fossil fuel burning is instead driven by natural cycles or variability of the Sun, and that sea level rise has not been accelerating. Climate researchers say the authors cherry-picked evidence and highlighted uncertainties to achieve the net effect of downplaying the impacts of climate change. 'This shows how far we have sunk,' says Naomi Oreskes, a historian of science at Harvard University [and the author of *Merchants of Doubt*: how a handful of scientists obscured the truth on issues from tobacco smoke to global warming, 2010]. 'Climate denial is now the official policy of the U.S. government.'" ³⁴

However, "[t]he nation's premier group of scientific advisers announced [on August 7, 2025] that it [would] conduct an independent, fast-track review of the latest climate science. It [would] do so with an eye to weighing in on the Trump administration's planned repeal of the government's 2009 determination that greenhouse gas emissions harm human health and the environment." The National Academies of Sciences,

³⁰ P. Duffy, "Attempt to Repeal the Endangerment Finding for Greenhouse Gases Defies Science," Spark Climate Solutions, August 1, 2025; https://www.sparkclimate.org.

³¹ Climate Working Group (2025), *A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate*, under docket number DOE-HQ-2035-0207. Washington DC: Department of Energy, July 23, 2025, https://www.energy.gov/topics/climate. "The 2025 CWG Draft Report was provided to the EPA on May 27, 2025, and was reviewed and relied upon in formulating this proposal." 90 Fed. Reg. at 36,292, n. 10. *See also* 90 Fed. Reg. at 36,307 *et seq.* ("Alternative Rationale for Proposed Rescission").

³² M. Lavelle, "National Academies Will Review Endangerment Finding Science," Inside Climate News, August 7, 2025; https://insideclimatenews.org/news/07082025/national-academies-will-revewendangerment-finding-science/.

³³ P. Voosen, "Contrarian Climate Assessment from U.S. Government Draws Swift Pushback," Science Insider / Climate, July 30, 2025, https://www.science.org/.

³⁵ M. Lavelle, "National Academies Will Review Endangerment Finding Science," Inside Climate News, August 7, 2025.

Engineering and Medicine did so—it published its report³⁶ on September 17, 2025. The report states:

- "The evidence for current and future harm to human health and welfare created by human-caused GHGs is beyond scientific dispute."
- "Much of the understanding of climate change that was uncertain or tentative in 2009 is now resolved and new threats have been identified."
- "The United States faces a future in which climate-induced harm continues to worsen and today's extremes become tomorrow's norms." 37

It is worth noting the significance of the action by the National Academies of Sciences, as it underpins the importance of the Endangerment Finding as a scientific conclusion. As reported in Inside Climate, "the move by the National Academies of Sciences, Engineering, and Medicine to self-fund the study is a departure from their typical practice of responding to requests by government agencies or Congress for advice." The Academies publicly released the report on September 17th. 39

The President of the National Academy of Sciences, Marcia McNutt, said it best: "It is critical that federal policymaking is informed by the best available scientific evidence . . . Decades of climate research and data have yielded expanded understanding of how greenhouse gases affect the climate. We [undertook] this fresh examination of the latest climate science in order to provide the most up-to-date assessment to policymakers and the public." 40

Other scientists have taken definitive action, too, to establish the contrary, unscientific position proposed by the EPA. On August 30, 2025, a distinguished group of more than 85 climate scientists, headed by Andrew E. Dessler, Ph.D., of Texas A&M University and Robert E. Kopp, Ph.D., of Rutgers University, published a 459-page rebuttal of the Department of Energy's Climate Working Group Report.⁴¹ The climate experts' response contains 48 distinct comments, each of which makes a variety of points regarding

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³⁶ See National Academies: Sciences, Engineering and Medicine, "Effects of Human-Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare," 2025; https://doi.org/10.17226/29239.

³⁷ *Id.* See also R. Frazin, "National Academies: Climate Change Harms 'beyond scientific dispute," The Hill, September 17, 2025; https://thehill.com/policy/energy-environment/5508838.

³⁸ See M. Lavelle, *supra*.

³⁹ National Academies of Sciences, Engineering, and Medicine, *Effects of Human-Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare* (2025), https://doi.org/10.17226/29239.

⁴¹ See Dessler, A.E. and R.E. Kopp (Ed.) (2025) Climate Experts' Review of the DOE Climate Working Group Report; sites.google.com/tamu.edu/doeresponse/home.

different elements of the Climate Working Group ("CWG") report and the report as a whole. As with public comments on National Climate Assessments, the climate experts request a substantive response to each element of their comments. They assert that the Department of Energy ("DOE") must subject its CWG report to unbiased, robust, and transparent peer review under, *inter alia*, the Information Quality Act, and conclude that the DOE's report fails to adequately represent the scientific understanding of climate change. As

Given the EPA Administrator's professed efforts "to inform his judgment to the most impartial extent possible," 45 it would seem prudent for EPA to carefully consider the updated study by the National Academies as well as the extensive recent commentary from the scientific community. It would also seem prudent for NASA to "reconsider" its plan to decommission premier satellite missions that gather information on planet-warming pollution and other climate vital signs. 46 Even if the EPA were correct in its decision to rescind the Endangerment Finding (though it is not based on the current available science), and current climate models are incomplete or inaccurate, eliminating future collection of data from satellites only ensures we have no data upon which to determine the correct climate models.

III. Legal Precedent

In 1965, President Lyndon Johnson asked Congress to enact legislation to control air pollution, including heat trapping GHG emissions. In a special message to Congress, President Johnson cautioned that:

⁴² *Id*.

⁴³ *Id*.

⁴⁴ *Id.* On September 9, 2025, Politico reported that DOE "dissolved" its Climate Working Group *vis a vis* a September 4th filing in the U.S. District Court for Massachusetts in response to a lawsuit filed by the Environmental Defense Fund and the Union of Concerned Scientists asserting that DOE's CWG violated the Federal Advisory Committee Act. *See* Z. Coleman, "DOE says it dissolved research group that wrote its controversial climate report," PoliticoPro, Sept. 9, 2025; https://subscriber.politicopro.com.

⁴⁵ 90 Fed. Reg. at 36,396.

⁴⁶ "The planned destruction of the satellites—which will be abandoned and allowed to eventually burn up in a fiery descent into Earth's atmosphere—marks the latest step by the Trump administration to scale back federal climate science. President Donald Trump's budget proposal takes a hatchet to NASA's Earth science spending for fiscal year 2026, which begins in October. The greenhouse gas monitoring missions, known collectively as the Orbiting Carbon Observatory, are some of the many Earth science casualties in the proposal." A. Freedman, "The Perfectly Fine, Already-Paid-For Satellites Trump Wants to Destroy in a Fiery Atmosphere Reentry," CNN Climate, August 13, 2025;

https://www.cnn.com/2025/08/13/climate/nasa-satellites-trump-budget-cuts-weather/.

"Air pollution is no longer confined to isolated places. This generation has altered the composition of the atmosphere on a global scale through radioactive materials and a steady increase in carbon dioxide from the burning of fossil fuels." ⁴⁷

The modern Clean Air Act, signed by President Richard Nixon in 1970 and amended in 1977 and 1990, defined air pollutants expansively, expressly called out adverse effects on climate, and included broad, forward-looking language authorizing the EPA administrator to regulate any "air pollution which may reasonably be anticipated to endanger public health or welfare." *Id.*, quoting the Clean Air Act §202(a)(1), 42 U.S.C. §7521(a)(1). "This core directive has remained substantially the same since Congress enacted the Motor Vehicle Pollution Control Act of 1965."

In 1998, EPA's general counsel issued a legal opinion concluding that Carbon Dioxide ("CO₂") met the statutory definition of an "air pollutant" and "CO₂ emissions are within the scope of EPA's authority to regulate," but distinguishing the regulation of CO₂ as requiring an endangerment determination.^{49,50} The following year, EPA's general counsel reiterated this view in congressional testimony.⁵¹

In 1999, 19 groups filed a petition asserting that EPA was obligated to: (a) issue an Endangerment Finding; and (b) regulate GHG emissions from new cars.⁵² In 2003, nearly four years after the filing of the petition, EPA denied the petition, giving several legal and policy reasons.⁵³ The first reason was EPA's conclusion that that it did not have the legal

⁴⁷President L.B. Johnson, "Special Message to Congress on Conservation and Restoration of Natural Beauty," Feb. 8, 1965, https://www.presidency.ucsb.edu/documents/special-message-the-congress-conservation-and-restorationi-natural-beauty.

⁴⁸ EPA, Proposed Rule, Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards, 90 Fed. Reg. 36,288, 36,298 (Aug. 1, 2025), citing Pub. L. 89-272, 79 Stat. 992-93.

⁴⁹ See Memorandum from Jonathan Z. Cannon, EPA General Counsel, to Carol M. Browner, EPA Administrator, on EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources (Apr. 10, 1998).

⁵⁰ In 1998, Vice President Al Gore (on behalf of President Bill Clinton) signed the Kyoto Protocol on GHGs. The Senate declined to ratify the Protocol and, to prevent executive implementation, Congress enacted appropriations riders that prohibited using federal funds to implement the Kyoto Protocol. In a 1998 budget hearing, former U.S. Representative Tom DeLay asked former EPA Administrator Carol Browner whether EPA had authority to regulate CO₂.

⁵¹ Is CO₂ a Pollutant and Does EPA Have the Power to Regulate It?: Hearing Before the Subcomm. on National Economic Growth, Natural Resources, and Regulatory Affairs of the H. Comm. on Government Reform and the Subcomm. on Energy and Environment of the H. Comm. on Science, 106th Cong., at 11-19 (Oct. 6, 1999) (statement of EPA Gen. Counsel Gary S. Guzy).

⁵² See Petition for Rulemaking and Collateral Relief Seeking Regulation of Greenhouse Gas Emissions from New Motor Vehicles under §202 of the Clean Air Act, Int'l Ctr. for Tech. Assessment v. Browner, EPA Docket No. A-2000-04 (Oct. 20, 1999).

⁵³ See Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,922 (Sept. 8, 2003).

authority to regulate GHGs under the Clean Air Act, relying on a new EPA general counsel legal opinion.⁵⁴

EPA's 2003 order denying the petition asserted that: (1) the Clean Air Act does not authorize EPA to issue mandatory regulations to address global climate change; and (2) even if the Clean Air Act does authorize EPA to issue GHG emission standards, it would be unwise to do so.⁵⁵ The agency claimed, at the time, that "because EPA lacks [Clean Air Act] regulatory authority to address global climate change, the term 'air pollutant' as used in the regulatory provisions cannot be interpreted to encompass global climate change." But the 2003 EPA's conclusion was always flawed, for it focused on whether the law encompassed global climate change, not on the underlying air pollutants themselves.

A. Massachusetts v. EPA, 549 U.S. 497 (2007)

In response, Massachusetts, eleven other states, several local governments and several environmental groups sued EPA, contending that the Clean Air Act encompassed GHG emissions. The Supreme Court held in *Massachusetts v. EPA*, that GHG emissions "without a doubt" and "unambiguous[ly]" fall within "the Act's sweeping definition of 'air pollutant[.]" The Court also held that Section 202(a)'s "clear . . . command" required EPA to make a "scientific judgment" as to "whether [GHG] emissions contribute to climate change," unless it found the science too profoundly uncertain to permit such a judgment. ⁵⁸

The Massachusetts court addressed two issues:

- 1) Does EPA have authority to regulate GHG emissions from new cars under Section 202(a)(1) of the Clean Air Act? I.e., Is CO₂ an air pollutant under the Clean Air Act? (The Court answered yes).
- 2) If EPA has this authority, are EPA's reasons for failing to regulate GHG emissions from new cars consistent with the Clean Air Act? (The Court answered no).

⁵⁴ See Memorandum from Robert E. Fabricant, EPA General Counsel, to Marianne L. Horinko, EPA Acting Administrator, on EPA's Authority to Impose Mandatory Controls to Address Global Climate Change Under the Clean Air Act (Aug. 28, 2003). Tragically, these conflicting general counsel opinions presaged the current seesaw moment -- the Trump administration is now proposing to reverse the significant progress achieved by the Obama and Biden administrations in addressing climate change, the consequences of which will be borne by future generations of Americans.

⁵⁵ See 68 Fed. Reg. 52,922.

⁵⁶ *Id.* at 52,928.

⁵⁷ Massachusetts v. EPA, 549 U.S. at 528-29 (citing and discussing section 302(g), 42 U.S.C. §7602(g)).

⁵⁸ *Id* at 533-34.

First, the *Massachusetts* court held that air pollutants, as defined by the Clean Air Act, include GHG emissions. Second, the *Massachusetts* court directed EPA, under the Clean Air Act, to determine whether GHG emissions from mobile sources endanger public health and welfare. If the Administrator makes such a determination, then EPA has the authority to regulate those GHG emissions. And since other sections of the Clean Air Act contain similar endangerment language, the finding of endangerment under section 202 triggers other requirements to regulate other sources of GHG emissions, such as power plants.⁵⁹

Section 202(a)(1) of the Clean Air Act authorizes EPA to regulate GHG emissions from new motor vehicles. CO₂ is an "air pollutant." Same with methane, NOx, HFCs; i.e., "physical [and] chemical . . . substance[s] . . . emitted into . . . the ambient air." The statute is unambiguous and provides a sweeping definition of "air pollutant" as "any" substance or material that enters the air. 61

Section 202 of the Clean Air Act conditions the exercise of EPA's authority on its formation of a "judgment," but that judgment must relate to whether an air pollutant "cause[s], or contribute[s] to, air pollution . . . reasonably . . . anticipated to endanger public health or welfare." That is, the use of the word "judgment" is not "a roving license to ignore the statutory text." If EPA makes a finding of endangerment, the Clean Air Act requires EPA to regulate emissions of the deleterious pollutant from new motor vehicles.

Under the Clean Air Act, EPA can avoid taking further action only if it determines that GHGs do not contribute to climate change or provides a reasonable explanation as to why it cannot, or will not, exercise its discretion to determine whether they do.⁶⁵ The EPA, in trying to rescind the Endangerment Finding, is attempting to refuse to comply with a clear statutory command and has offered a laundry list of reasons (executive branch has GHG voluntary programs; regulation will impair the President's negotiations with other nations; regulation of tailpipe emissions will create piecemeal approach), none of which

⁵⁹ See A. Carlson, "Why Repeal the Endangerment Finding?" Legal Planet, July 30, 2025; https://legal-planet.org/2025/07/30/why-repeal-the-endangerment-finding/. (Discussing that a repeal of the Endangerment Finding would cause GHGs to no longer be legally designated as endangering public health and welfare. However, if they are not a danger, then they do not need to be regulated, allowing the EPA to proceed without these obligations.)

⁶⁰ Clean Air Act §302(g).

⁶¹ "Air pollutant" includes "any physical, chemical, biological, radioactive . . . substance or material which is emitted into or otherwise enters the ambient air," and any precursors to the formation of any air pollutant. Clean Air Act §302(g). "Welfare" includes "effects on . . . weather . . . and climate." Clean Air Act §302(h). ⁶² *Id*.

⁶³ *Id*.

⁶⁴ *Id*.

⁶⁵ *Id*.

have anything to do with whether GHG emissions contribute to climate change, therefore, contributing nothing to the finding EPA needs to make under Section 202(a)(1) of the Clean Air Act.⁶⁶

B. The 2009 Endangerment Finding Has Withstood Judicial Scrutiny

In 2009, when the EPA issued its "Endangerment Finding," it found that CO₂ and five other GHGs may "reasonably be anticipated to endanger public health and welfare" by contributing to global warming and climate change.⁶⁷

In 2012, the U.S. Court of Appeals for the D.C. Circuit upheld EPA's 2009 Endangerment Finding, holding that the "body of scientific evidence marshaled by EPA in support of the Endangerment finding is substantial." The Court held that EPA's Endangerment Finding is consistent with *Massachusetts v. EPA* and the Clean Air Act and is adequately supported by the administrative record. 69

The Court held that section 202(a)(1) of the Clean Air Act requires EPA to answer only two questions: (1) whether particular "air pollution" (GHGs) "may reasonably be anticipated to endanger public health or welfare" and (2) whether motor vehicle emissions "cause or contribute to" that endangerment. **The Massachusetts v. EPA* rebuffed an attempt by EPA to inject policy considerations into what is a "scientific judgment" about the risks of GHGs. **The A "laundry list of reasons not to regulate" simply has "nothing to do with whether [GHG] emissions contribute to climate change. "The Scientific judgment" required by section 202(a)(1) is not informed by: cost-benefit analysis of GHGs; gauging the effectiveness of GHG emission standards; or predicting society's adaptive responses to climate change dangers or harms. **The Clean Air Part of the Clean

The Supreme Court declined to review the Circuit Court's decision upholding EPA's Endangerment Finding.⁷⁴ By electing not to review the Circuit Court's decision, EPA's

⁶⁶ *Id*.

⁶⁷ 74 Fed. Reg. 66,496 (Dec. 15, 2009). In 2010, EPA (and the US Department of Transportation) promulgated: i) the "Tailpipe Rule," i.e., GHG emission standards for new cars and light trucks (and corporate average fuel economy standards), 75 Fed. Reg. 25,324 (May 7, 2010); and ii) the "Tailoring Rule," applying new permit requirements to the largest stationary sources of GHGs, 75 Fed. Reg. 31,514 (June 3, 2010).

⁶⁸ Coalition for Responsible Regulation, Inc. v. EPA, 684 F.3d 102, 120 (D.C. Cir. 2012).

⁶⁹ *Id*.

⁷⁰ *Id*.

⁷¹ *Id*.

⁷² *Id*.

⁷³ *Id*.

⁷⁴ See *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014). The Court agreed to review part of the D.C. Circuit's decision (re: the "Tailoring Rule"), i.e., "whether regulation of GHG emissions from new

2009 Endangerment Finding remains the law of the land and EPA remains obligated to regulate GHG emissions to mitigate climate change.

C. Recent Supreme Court Decisions do not Invalidate the Endangerment Finding.

EPA's proposed rescission of the Endangerment Finding contends that since 2009, there have been "significant Supreme Court decisions that provide new guidance on how federal agencies should interpret the statutory provisions that Congress has tasked them with administering."⁷⁵

Specifically, EPA acknowledges that it has "relied in part on the Endangerment Finding in issuing subsequent Endangerment Findings and GHG regulations under other CAA provisions," but observes that the "Supreme Court has since vacated several of these actions, including GHG regulations for existing sources in the fossil-fuel fired power plant source category under CAA section 111(d) and for permitted sources under CAA Title V." Those cases are not applicable in the way the EPA contends.

1. Major Questions precedent is not applicable here.

In 2022, the Supreme Court held that Congress, in Section 111(d) of the Clean Air Act, did not grant EPA authority to devise emissions caps based on the generation shifting approach in the Clean Power Plan.⁷⁷

• Under the "major questions doctrine," there are "extraordinary cases" in which the "history and the breadth of the authority [EPA] has asserted," and the "economic and political significance" of that assertion, provide a "reason to hesitate before concluding that Congress" meant to confer such authority.⁷⁸

mobile sources triggered permitting requirements for stationary sources that emit GHGs," and held 1) that the Clean Air Act does not require PSD and Title V permitting for stationary sources based on GHG; and 2) EPA may continue to require BACT for "anyway" sources of GHG emissions. *Id*.

⁷⁵ 90 Fed. Reg. at 36,296, citing Feb. 19, 2025 Memorandum from Lee Zeldin, Administrator, EPA to Russell Vought, Director, OMB, which recommended that "EPA reconsider the Endangerment Finding to address legal and scientific developments that appear to undermine the bases for that action and subsequent regulations." 90 Fed. Reg. at 36,291.

⁷⁶ 90 Fed. Reg. at 36,298, citing *West Virginia v. EPA*, 597 U.S. 697 (2022) and *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014).

⁷⁷ West Virginia v EPA, 597 U.S. 697 (2022).

⁷⁸ *Id*.

• This is one such case, so EPA must point to "clear congressional authorization" for the authority it claims.⁷⁹

EPA's proposed rescission of the Endangerment Finding contends that EPA "lacks the 'clear congressional authorization' required for the novel approach taken in the Endangerment Finding and resulting GHG emission standards."80 But it has authorization under the Clean Air Act to make a scientific judgment; based on that judgment, it must regulate behaviors of particular industries accordingly.

2. The Endangerment Finding is a Scientific Assessment, not an Assertion of Authority.

EPA claims that "the Nation's response to global climate change concerns generally, and specifically whether that response should include regulating GHG emissions from new motor vehicles and engines, is an economically and politically significant issue that triggers the major questions doctrine under *UARG* and *West Virginia*, and that Congress did not clearly authorize the EPA to decide it by empowering the Administrator to 'prescribe . . . standards' under CAA section 202(a)."81

The Supreme Court's 2022 decision on the "major questions" doctrine stated:

It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme." Davis v. Michigan Dept. of Treasury, 489 U. S. 803, 809 (1989). Where the statute at issue is one that confers authority upon an administrative agency, that inquiry must be "shaped, at least in some measure, by the nature of the question presented"—whether Congress in fact meant to confer the power the agency has asserted. FDA v. Brown & Williamson Tobacco Corp., 529 U. S. 120, 159 (2000). In the ordinary case, that context has no great effect on the appropriate analysis. Nonetheless, our precedent teaches that there are "extraordinary cases" that call for a different approach—cases in which the "history and the breadth of the authority that [the agency] has asserted," and the "economic and political significance" of that assertion, provide a "reason to hesitate before concluding that Congress" meant to confer such authority. Id., at 159–160. 82

However, the 2009 Endangerment Finding is not an "assertion of authority"; rather, it is a scientific assessment that is expressly authorized by the Clean Air Act. The D.C. Circuit Court of Appeals stated:

⁷⁹ *Id*.

^{80 90} Fed. Reg. at 36,307, citing West Virginia, 597 U.S. at 723 (quoting UARG, 573 U.S. at 324).

^{81 90} Fed. Reg. at 36,298-99.

⁸² West Virginia v EPA, 597 U.S. at 721 (emphasis added).

At bottom, § 202(a)(1) requires EPA to answer only two questions: whether particular "air pollution"- here, greenhouse gases -'may reasonably be anticipated to endanger public health or welfare,' and whether motor-vehicle emissions 'cause, or contribute to' that endangerment. These questions require a 'scientific judgment' about the potential risks greenhouse gas emissions pose to public health or welfare--not policy discussions. *Massachusetts v. EPA*, 549 U.S. at 534.⁸³

The 2009 Endangerment Finding states: "Pursuant to CAA section 202(a), the Administrator finds that greenhouse gases in the atmosphere may reasonably be anticipated both to endanger public health and to endanger public welfare." The determination made conclusions about particular air pollutants, as authorized by the statute: "Specifically, the Administrator [defined] the "air pollution" referred to in CAA section 202(a) to be the mix of six long-lived and directly-emitted greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)." ⁸⁵ The Endangerment Finding is a statutorily authorized scientific determination, not a new or novel assertion of authority contemplated by the "major questions" doctrine. There may be many different policy pathways the U.S. EPA could take to regulate GHG emissions as a result of the Endangerment Finding, and some of those pathways may implicate doctrines such as the "major questions" doctrine. But the Endangerment Finding itself fits squarely within the express authority authorized by Congress under the Clean Air Act.

The Administrator "determined that the body of scientific evidence compellingly supports this finding. The major assessments by the U.S. Global Climate Research Program (USGCRP), the Intergovernmental Panel on Climate Change (IPCC), and the National Research Council (NRC) serve as the primary scientific basis supporting the Administrator's Endangerment Finding. The Administrator reached her determination by considering both observed and projected effects of greenhouse gases in the atmosphere, their effect on climate, and the public health and welfare risks and impacts associated with such climate change." Thus, the Finding is a scientific assessment, not a regulatory assertion.

The Endangerment Finding is clear regarding how the Administrator made her determination: She used "her judgment, based on existing science, to weigh the threat for each of the identifiable risks, to weigh the potential benefits where relevant, and ultimately to assess whether these risks and effects, when viewed in total, endanger public health or welfare."⁸⁷ Thus, "The Administrator [] considered how elevated

⁸³ Coalition for Responsible Regulation v. EPA, 684 F.3d at 117-118.

⁸⁴ 74 Fed. Reg. at 66,497.

⁸⁵ *Id*.

⁸⁶ *Id*.

⁸⁷ *Id*.

concentrations of the well-mixed greenhouse gases and associated climate change affect public health by evaluating the risks associated with changes in air quality, increases in temperatures, changes in extreme weather events, increases in food- and water-borne pathogens, and changes in aeroallergens."88

The agency was incredibly thorough in its assessment of the evidence when it issued the Endangerment Finding. For instance, "the Administrator [also] considered how elevated concentrations of the well-mixed greenhouse gases and associated climate change affect public welfare by evaluating numerous and far-ranging risks to food production and agriculture, forestry, water resources, sea level rise and coastal areas, energy, infrastructure, and settlements, and ecosystems and wildlife." The evidence rose beyond just global impacts, looking at specific adverse impacts to coastal areas, which provided "the clearest and strongest support for an Endangerment Finding, both for current and future generations." Extreme weather, too, proved to be key evidence: "Across the sectors, the potential serious adverse impacts of extreme events, such as wildfires, flooding, drought, and extreme weather conditions, provide strong support for such a finding."

In order to determine if emissions of the well-mixed greenhouse gases from CAA section 202(a) source categories contribute to the air pollution that endangers public health and welfare, the Administrator compared the emissions from these CAA section 202(a) source categories to total global and total U.S. greenhouse gas emissions, finding that these source categories are responsible for about 4 percent of total global well-mixed greenhouse gas emissions and just over 23 percent of total U.S. well-mixed greenhouse gas emissions. The Administrator found that these comparisons, independently and together, clearly establish that these emissions contribute to greenhouse gas concentrations. For example, the emissions of well-mixed greenhouse gases from CAA section 202(a) sources are larger in magnitude than the total well-mixed greenhouse gas emissions from every other individual nation with the exception of China, Russia, and India, and are the second largest emitter within the United States behind the electricity generating sector. As the Supreme Court noted, '[j]udged by any standard, U.S. motor-vehicle emissions make a meaningful contribution to greenhouse gas concentrations and hence, * * * to global warming.'92

A policy discussion may be what comes after the determination. But the determination itself is not a policy discussion: "These questions require a 'scientific judgment' about the potential risks greenhouse gas emissions pose to public health or welfare--not policy

⁸⁸ *Id*.

^{89 74} Fed. Reg. at 66,498.

⁹⁰ Id.

⁹¹ *Id*.

⁹² Massachusetts v. EPA, 549 U.S. 497, 525 (2007). 74 Fed. Reg. at 66,499.

discussions."93 The Endangerment Finding is a scientific assessment, not an assertion of authority implicated by the "major questions" doctrine.

3. The Endangerment Finding has been ratified by Congress through the Inflation Reduction Act amendments to the Clean Air Act.

Even if the major questions doctrine is applicable to the 2009 Endangerment Finding, Congress has expressly conferred authority upon the EPA to regulate GHG emissions as an air pollutant under the Clean Air Act. In 2022, Congress enacted the Inflation Reduction Act of 2022, Pub. L. 117-169, 136 Stat. 1818 ("IRA"), which amended the Clean Air Act to, in effect, codify the *Massachusetts v. EPA* holding that GHG emissions are air pollutants. 94

Congress confirmed EPA's duty to act to reduce climate pollution; in several instances, the Clean Air Act now references GHGs and confirms their status as air pollutants, in effect ratifying the Massachusetts ruling, as well as subsequent judicial and administrative precedent.

The IRA amendments to the Clean Air Act repeatedly list each of the six GHGs that EPA identified following the Massachusetts decision, stating that "greenhouse gas" means "the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride."95 These statutory provisions confirm that Congress has determined that GHGs are air pollutants under the Clean Air Act, which the OEC and others identified back in 2022 when the bill passed. There is no "major question" for Congress to answer.

4. Agency deference is not relevant to the Endangerment Finding.

EPA's proposed rescission of the Endangerment Finding also contends that "the Endangerment Finding relied on various forms of Chevron deference to depart from the best reading of the statute and exceeded the EPA's authority in several fundamental

https://www.statenews.org/government-politics/2022-08-31/.

⁹³ Coalition for Responsible Regulation v. EPA, 684 F.3d at 117-118, quoting Massachusetts v. EPA, 549 U.S. at 534.

⁹⁴ See e.g., 136 Stat. 2069-2070. "Sec. 135. Low Emissions Electricity Program [codified at 42 U.S.C. §7435]. (c) Definition of Greenhouse Gas – In this section, the term 'greenhouse gas' means the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride."

⁹⁵ See e.g., Clean Air Act section 135, 42 U.S.C. §7435(c).

⁹⁶ Although the One Big Beautiful Bill Act, Public Law 119-21, 139 Stat.72 (July 4, 2025), rolled back

many of the IRA's clean energy grants and tax incentives, it did not reverse this definition of GHG emissions as air pollutants. See also A. Chow, "Ohio environmentalists note climate change authority now 'enshrined' in federal law," Statehouse News Bureau, August 31, 2022;

respects, any one of which would independently require rescission to conform to the best reading of the law."97

As noted in previous sections, in 2012, the United States Court of Appeals for the District of Columbia Circuit upheld the EPA's 2009 Endangerment Finding. While the D.C. Circuit Court acknowledged the *Chevron* deference standard at the outset of its review of the Endangerment Finding, 99 the D.C. Circuit Court did not rely on the *Chevron* deference standard in its analysis of each of the arguments advanced by the Industry Petitioners who challenged the Endangerment Finding. 100

It is understood that the D.C. Circuit Court of Appeals granted "an extreme degree of deference to the agency when it is evaluating scientific data within its technical expertise." The D.C. Circuit Court stated:

Industry Petitioners also assert that the scientific evidence does not adequately support the Endangerment Finding. As we have stated before in reviewing the science-based decisions of agencies such as EPA, '[a]lthough we perform a searching and careful inquiry into the facts underlying the agency's decisions, we will presume the validity of agency action as long as a rational basis for it is presented.' *Am. Farm Bureau Fed'n v. EPA*, 559 F.3d 512, 519 (D.C. Cir. 2009) (internal quotation marks omitted). In so doing, 'we give an extreme degree of deference to the agency when it is evaluating scientific data within its technical expertise.' *Id.* (internal quotation marks omitted). ¹⁰²

This is not *Chevron* deference. The D.C. Circuit Court did not rely on the *Chevron* deference standard in its analysis of each of the arguments advanced by the Industry Petitioners who challenged the Endangerment Finding.¹⁰³ Therefore, the EPA's contention that "the Endangerment Finding relied on various forms of *Chevron* deference," has been contradicted by the D.C. Circuit Court of Appeals.¹⁰⁴

⁹⁷ 90 Fed. Reg. at 36,299, citing *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837 (1984), *overruled by Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024).

⁹⁸ Coalition for Responsible Regulation v. EPA, 684 F.3d 102 (D.C. Cir. 2012).

⁹⁹ "Questions of statutory interpretation are governed by the familiar Chevron two-step: 'First . . . if the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.' *Chevron, U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984). But 'if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute.' *Id.* at 843." *Coalition for Responsible Regulation v. EPA*, 684 F.3d at 134. ¹⁰⁰ *See generally Coalition for Responsible Regulation*, 684 F.3d 102 (D.C. Cir. 2012).

¹⁰¹ *Id*. at 120.

¹⁰² *Id*.

¹⁰³ See generally Coalition for Responsible Regulation v. EPA, 684 F.3d 102 (D.C. Cir. 2012).

¹⁰⁴ 90 Fed. Reg. at 36,299, citing *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837 (1984), overruled by *Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024).

Experts in the field of environmental policy have made clear that the U.S. EPA's currently proposed history of the case law on the subject contradicts what the cases actually say. "The Supreme Court has followed the *Massachusetts* precedent in three other climate change cases decided over the following 15 years. While two of those decisions put limits on precisely what *form* EPA regulations can take, none of those decisions casts any shade on the underlying Endangerment Finding and the EPA's legal duty to act on climate pollution. That's true of even the most recent decision, *West Virginia v. EPA*, which upheld the EPA's authority to set 'traditional' technology-based standards for power plants' climate pollution, even as it ruled out a particular emission credit and trading approach." 105

5. Costs are Not Required to be Considered in the Endangerment Finding.

EPA's proposed rescission of the Endangerment Finding also contends that "the Administrator erred in analogizing to the NAAQS program and the Supreme Court's decision in *Whitman* to avoid considering costs in the Endangerment Finding." According to the EPA, the Administrator who issued the Endangerment Finding incorrectly "declined to consider cost, asserting that the Endangerment Finding imposed no regulatory requirements as a standalone action and relying on the Supreme Court's decision in *Whitman v. American Trucking Association*, 531 U.S. 457 (2001), that the EPA cannot consider cost in setting and revising the NAAQS under CAA section 109." 107

But costs are not required to be considered by the Endangerment Finding. The D.C. Circuit Court of Appeals rejected this argument in 2012.¹⁰⁸

To be sure, the subsection following § 202(a)(1), § 202(a)(2), requires that EPA address limited questions about the cost of compliance with new emission standards and the availability of technology for meeting those standards, see *infra* Part III, but these judgments are not part of the § 202(a)(1) endangerment inquiry. ¹⁰⁹

A scientific judgment does not dictate the regulatory acts needed in response, which may or may not require an actual cost benefit analysis. "As in *Massachusetts v. EPA*, a 'laundry list of reasons not to regulate' [such as performing a cost-benefit analysis for GHGs] simply has 'nothing to do with whether greenhouse gas emissions contribute to climate change. [Massachusetts v. EPA, 549 U.S. at 533-34],' and do not inform the

 $^{^{105}}$ D. Doninger, "Can Trump Reverse the Climate Endangerment Finding?".NRDC, August 14, 2025; https://www.nrdc.org/bio/david-doninger/can-trump-reverse-climate-endangerment-finding#action . 106 90 Fed. Reg. at 36,303.

¹⁰⁷ *Id.*, citing 74 Fed. Reg. at 66,515.

¹⁰⁸ Coalition for Responsible Regulation v. EPA, 684 F.3d at 118.

¹⁰⁹ *Id*.

'scientific judgment' that § 202(a)(1) requires of EPA." 110 "As EPA stated in the Endangerment Finding, such inquiries 'muddle the rather straightforward scientific judgment about whether there may be endangerment by throwing the potential impact of responding to the danger into the initial question."111 As the Court in Coalition for Responsible Regulation further stated:

The Supreme Court made clear in Massachusetts v. EPA that it was not addressing the question 'whether policy concerns can inform EPA's actions in the event that it makes such a finding,' 549 U.S. at 534-35, but that policy concerns were not part of the calculus for the determination of the Endangerment Finding in the first instance. The Supreme Court emphasized that it was holding 'that EPA must ground its reasons for action or inaction in the statute.' Id. at 535. The statute speaks in terms of endangerment, not in terms of policy, and EPA has complied with the statute. 112

EPA's reliance on the Supreme Court's decision in Michigan v. EPA, 576 U.S. 743 (2015) is also misplaced. 113 The Michigan court held that EPA must consider costs when it issued a "finding" that it was "necessary and appropriate" to regulate emissions of hazardous air pollutants from stationary sources such as power plants under section 112 of the Clean Air Act. 114 115 In contrast, section 202(a)(1) of the Clean Air Act, the statutory authority for the 2009 Endangerment Finding, contains no such language.

The EPA's 2009 Endangerment Finding analogy to EPA's NAAQS standard setting, which must be based purely on evidence about the risks caused by air pollutants, is appropriate. 116 As noted by the Institute for Policy Integrity:

"The Clean Air Act requires EPA to assess regulatory costs when setting emission standards, not when making an Endangerment Finding that underlies the regulations. Under the Clean Air Act, EPA first makes a scientific judgment regarding whether certain emissions "endanger public health or welfare" (a.k.a., an Endangerment Finding). For emissions meeting that criterion, EPA then separately issues emission

¹¹⁰ Id

¹¹¹ *Id.* citing 74 Fed. Reg. at 66,515.

¹¹² Coalition for Responsible Regulation v. EPA, 684 F.3d at 118.

¹¹³ See 90 Fed. Reg. at 36,303 ("We propose that the Administrator erred in analogizing to the NAAQS program and the Supreme Court's decision in Whitman to avoid considering costs in the Endangerment Finding.").

¹¹⁴ Michigan v. EPA, 576 U.S. at 759.

^{115 &}quot;EPA found power-plant regulation 'appropriate' because power plant emissions pose risks to public health and the environment and because controls capable of reducing these emissions were available. It found regulation "necessary" because other CAA requirements did not eliminate those risks. See generally Michigan v. EPA, 576 U.S. 743 (2015).

¹¹⁶ See Whitman v. American Trucking Association, 531 U.S. 457 (2001). See also D. Farber, "Dissecting the Attacks on the Endangerment Finding," Legal Planet, March 17, 2025; https://legalplanet.org/2025/03/17/dissecting-the-attacks-on-the-endangerment-finding/. ("The process of deciding what levels of a pollutant would endanger health seems to involve the same considerations used in deciding whether it endangers health at all").

standards. The courts have made clear that cost is considered only at the stage of issuing specific standards to limit emissions. The plain text of the Clean Air Act compels this approach, and Supreme Court case law further affirms this understanding of the text and appropriate practice."¹¹⁷

The law is settled—the Endangerment Finding should stand as determined in 2009. The EPA should not disturb it.

IV. Climate Change: Impact on Ohio

EPA's proposed rescission of the Endangerment Finding contends that EPA cannot regulate GHG emissions "raising global climate change concerns" because "the text, structure, and history of CAA section 202(a) and related provisions demonstrate that this language targets air pollution that threatens public health or welfare through *local or regional exposure*." 118

In effect, EPA claims that the term "air pollution" in the Clean Air Act should be confined to only air pollutants that cause harms through "local or regional exposure." This interpretation of the Clean Air Act would mean, in effect, that EPA cannot regulate any air pollutant on the basis that the pollutant causes global harm. However, the Supreme Court's *Massachusetts* decision found that air pollutants that warm the global atmosphere are clearly "air pollutants" under the Clean Air Act. That said, even if the scope of EPA's regulatory authority under the Clean Air Act is narrowly construed in this manner, GHG emissions certainly threaten public health and welfare through "local or regional exposure."

B. Evidence demonstrates the impact of greenhouse gases at the state and local level

In 2022, the OEC in collaboration with Power a Clean Future Ohio and Scioto Analysis, published a report that estimated the financial impacts of climate change for municipal governments in Ohio.¹²¹ The OEC Report estimated that the state of Ohio will need to increase municipal spending by at least \$1.8 billion to \$5.9 billion per year by midcentury in order to adapt to these ten challenges of a worsening climate crisis (Table

120 See generally Massachusetts v. EPA, 549 U.S. 497.

¹¹⁷ D. Adler and K. Welty, "The Bottom Line: Regulatory Costs Don't Belong in Endangerment Findings: How the Clean Air Act Separates Regulatory Cost Analysis from Endangerment Findings," Institute for Policy Integrity, May 20, 2025; https://policyintegrity.org.

¹¹⁸ 90 Fed. Reg. at 36,299 (emphasis added).

¹¹⁹ *Id*.

¹²¹ See OEC, Report: "The Bill is Coming Due: Calculating the Financial Cost of Climate Change to Ohio's Local Governments," July 2022 (Exhibit 1).

12). This change in spending would constitute an increase in spending of 26 to 82 percent over 2019 baseline spending on environment and housing. Many of the costs of climate change are expressed in 2021 dollars, which means that simple inflation may drive these costs up on their own.

Impact	Low-End Estimate	High-End Estimate
A/C Installation	\$1.4 million	\$6.8 million
Electrical Costs	\$5.4 million	\$79 million
Cool Roofing	\$0	\$4.6 million
Cooling Centers	\$52 million	\$590 million
Road Repair	\$170 million	\$1 billion
Drinking Water Treatment	\$580 million	\$2.2 billion
Storm Recovery	\$35 million	\$78 million
Power Lines	\$140,000	\$18 million
Stormwater Management	\$140 million	\$150 million
Elevating Roads	\$858 million	\$1.7 billion
Total	\$1.8 billion	\$5.9 billion

Table 12. Total costs of climate change for major impacts on local governments expected by midcentury 122

The 2009 Endangerment Finding assessed the impacts of GHG emissions on the United States: "The Administrator's assessment focused on public health and public welfare impacts within the United States. She also examined the evidence with respect to impacts in other world regions, and she concluded that these impacts strengthen the case for endangerment to public health and welfare because impacts in other world regions can adversely affect the United States." Notably, international impacts that strengthen the case for the Endangerment Finding do not invalidate the sufficiency of the impacts to the United States as a basis for making the Finding.

Ohio universities have conducted various studies addressing the adverse impacts that climate change has and will continue to impose on the environment, resulting in consequences for human health and safety. One key study highlighting these adverse climate conditions is authored by a former Ohio State University graduate student, Kyungmin Sung and assistant professor of civil, environmental and geodetic engineering, James Stagge, titled the "Centennial-Scale Intensification of Wet and Dry Extremes in

¹²² The monetized amounts also represent only 10 of the 50 different impacts addressed in this report. Monetization of the other 40 impacts would add to the overall costs reflected here. This also constitutes a static analysis of the costs associated with climate change adaptation. Behavioral responses to adoption of one policy may influence the decision to adopt other policies that could increase or lower the total cost of adaptation, but OEC did not estimate the impact of those changes in this analysis. *Id*.

¹²³ 74 Fed. Reg. at 66.497.

North America."¹²⁴ This study evaluates future precipitation conditions, predicting that climate patterns will exacerbate drought conditions in the Southwestern United States while simultaneously increasing the severity and frequency of wet seasons in the Northeastern United States. This instability in precipitation habits is expected to have significant impacts on water resource management due to outdated infrastructure and strategies that are becoming "no longer representative of current or future climate extremes."¹²⁶

In addition to strains placed on water resource management procedures, these changing climate conditions may pose serious risks to the infrastructure of American agriculture. As mentioned in Sung's research, changes in precipitation are likely to occur, and Christina Dierkes, in her article "Investigating the Impacts of Climate Change on Ohio Agriculture," highlights that these changes may lead to flooding or droughts, which could adversely impact crops. Farmers may also face increases in extreme weather events that have the potential to adversely impact the growth and management of crops. Some additional consequences that farmers may experience because of climate change include heat stress on crops and livestock, risk of crop harming weeds, pests, and diseases, risk of livestock disease, pollination disruption, "erratic spring freeze/thaw cycles," greater agricultural production costs, and lower crop yields. 129

In Ohio, communities are experiencing threats to their health due to the increase in temperature resulting from climate change. For example, in Columbus, Ohio, temperatures are increasing at a higher rate than the national average, as the annual average temperature has increased by 2.3°F between 1951 and 2012. These increases in temperature likely played some role in the "total of 102 heat-related fatalities in Ohio, and 8,634 fatalities in the entire United States." Climate change also likely played a role in the 2012 North American Heat Wave which resulted in 155 fatalities, which was "one of the most severe heat waves recorded in North American history." As a result of a warming climate, "heat stress is now the leading cause of weather-related deaths in the

¹²⁴ Kyungmin Sung and James Stagge, *Centennial-Scale Intensification of Wet and Dry Extremes in North America* (Sept. 2024), https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023GL107400. ¹²⁵ *Id* at 8.

¹²⁶ *Id* at 8,9.

¹²⁷ Christina Dierkes, *Investigating the Impacts of Climate Change on Ohio Agriculture and Forests* (Jun 2011), https://changingclimate.osu.edu/features/climate-and-ohio-farms.

¹²⁹ Aaron Wilson and Lee Beers, *Climate Change Impacts on Ohio Agriculture* (2024); www.climatehubs.usda.gov/hubs/midwest/topic/assessing-impacts-climate-change-midwest-agriculture. ¹³⁰ *Columbus Climate Action Plan*, 28 (Dec. 2021);

 $https://www.columbus.gov/files/sharedassets/city/v/1/utilities/sustainability/cap/columbus-climate-action-plan_final.pdf.\\$

¹³¹ State of Ohio Enhanced Hazard Mitigation Plan, 2-239 (Feb. 2024);

 $https://dam.assets.ohio.gov/image/upload/ema.ohio.gov/mip/links/2023/ema-sohmp-Section-2.15.pdf. \\ ^{132} \textit{Id} \ at \ 2-240.$

United States."¹³³ The risks of these increases in temperature may also exacerbate "heat-related illnesses" and contribute to the worsening of air quality, threatening the health and safety of Ohioans.¹³⁴

The Columbus Climate Action plan has adopted several mitigation efforts to "reduce the root of the problem", but acknowledges that in many cases, mitigation by itself is no longer effective, and adaptation efforts must also be employed to promote a "sustainable and resilient Columbus." Adaptation will likely include addressing "changes in rainfall patterns, leading to more extreme flooding or more intense drought impacts; rising temperatures; and more severe storm events." A result of the changes in precipitation patterns that the Midwest has recently experienced is "significant flooding." Because of this and other consequences of climate change, Columbus, in their Action Plan, has strategically decided to assess these consequences in terms of the impacts that they may have on the city and its specific characteristics including its "shifting demographics, aging infrastructure, changing land uses, effects on natural resources, and atmospheric pollution," and creating a "Columbus Climate Adaptation Plan." and creating a "Columbus Climate Adaptation Plan."

According to the United States Energy Information Administration, Ohio ranks fifth in the nation in the generation of GHG emissions, i.e., contribution to climate change. The following table lists the top ten states and their total annual CO₂ generation, based on most recent data available (2022):¹³⁹

	Total MMT CO ₂	% change since 2000
Texas	663.0	-1.4
California	326.2	-14.6
Florida	231.0	-3.4
Pennsylvania	213.5	-23.3
Ohio	196.2	-26.4
Louisiana	191.8	-13.0
Illinois	183.7	-21.5
New York	166.1	-21.7
Indiana	163.2	-31.8
Michigan	154.0	-20.5

¹³³ State Climate Office of Ohio, *How Climate Change is Already Impacting Ohio, and What's Ahead* (May, 2025); https://climate.osu.edu/news/how-climate-change-already-impacting-ohio-and-whats-ahead. ¹³⁴ *Id.*

 $https://www.columbus.gov/files/sharedassets/city/v/1/utilities/sustainability/cap/columbus-climate-action-plan\ final.pdf.$

¹³⁵ Columbus Climate Action Plan, 26 (Dec. 2021);

 $^{136 \} Id$. at 28.

¹³⁷ *Id*.

¹³⁸ *Id.* at 28-29.

¹³⁹ See https://www.eia.gov/state/seds/sep_sum/html/pdf/sum_co2_tot.pdf. See also https://www.chooseenergy.com/data-center/carbon-dioxide-by-state/.

The Ohio State University, State Climate Office of Ohio

The State Climate Office of Ohio is a primary level partnership between the Department of Geography and the Byrd Polar and Climate Research Center at the Ohio State University. The State Climate Office is a "timely convergence of scientific research, educational skills, technical expertise, and professional interconnectedness." ¹⁴⁰

The Office has a straightforward purpose: "Accessing accurate climate information, education, and interpretation is critical for policy makers and all sectors of Ohio's economy and will enhance the quality of life, health, food and water security, and economic prosperity of all Ohioans." The State Climate Office embodies four core mission activities focused on connecting people and climate: Communication, Information Services, Education & Outreach, and Research.

Key climate-related questions require engagement of experts from many disciplines, sectors (energy, security, food, health), and institutions, underlain and sustained by transformative data stewardship that facilitates a climate aware and resilient society.

- How will Ohio adapt and build resilience to a warmer world?
- What will be the imprint of climate variability on our economy, food security, natural resources, energy infrastructure, health and well-being?
- What are the chances and potential manifestations of extreme floods and droughts?
- How can Ohioans build resilience to actual and future climate disruptions?

The Office has the following to say about localized climate impacts: "Across Ohio, the impacts of climate change are increasingly evident. From record-breaking heat waves to catastrophic flooding and prolonged droughts, the realities of a warming climate are already transforming life in the Buckeye State. According to experts, these changes will only intensify in the years ahead." ¹⁴²

¹⁴⁰ See https://climate.osu.edu/. (accessed Sept. 10, 2025).

¹⁴¹ Id

¹⁴² Ohio State University, State Climate Office of Ohio, "How Climate Change is Already Impacting Ohio, and What's Ahead," May 21, 2025; https://climate.osu.edu/news/how-climate-change-already-impacting-ohio-and-whats-ahead.

The Office's statement provides plenty of examples of the localized impacts:

- "I think it's kind of hard not to see the signs, to be honest," said Aaron Wilson, Ohio's State Climatologist and Ag Weather and Climate Field Specialist at The Ohio State University. Climate change is no longer a distant threat; it's already here. We are seeing warming across all seasons, particularly in winter and spring, along with increased rainfall and more frequent extreme weather events."143
- "Ohio's recent climate reflects this reality. In 2024 alone, the state endured a record number of tornadoes, a historic drought in the southeast, and 35 days above 90 degrees in Columbus. More intense summer heat and erratic precipitation patterns are becoming the norm, altering agriculture, ecosystems, public health, and infrastructure."144
- "Farmers are already feeling the pressure. Last year in Guernsey County, 'exceptional drought,' the most severe category recognized by the U.S. Drought Monitor, led to grasslands drying out, creeks running dry for months, and wheat crops vanishing. Such events are expected to become more frequent as the planet warms."145
- "Dr. Jim Hood, an associate professor at Ohio State, studies the ecology of aquatic systems. He notes that the decline in Lake Erie's winter ice cover over the past 30 years is already disrupting the lake's food web. Without ice protection, wind stirs up sediment, making the water turbid and uninhabitable for algae that form the base of the food chain. This ecological disruption has ripple effects throughout the lake's ecosystem."146
- "The warming climate also brings serious health risks. Heat stress is now the leading cause of weather-related deaths in the United States. Rising temperatures can exacerbate chronic conditions such as asthma, heart disease, and diabetes, and increase the incidence of heat exhaustion and heat stroke."147

¹⁴⁴ *Id*.

¹⁴³ *Id*.

¹⁴⁵ *Id*.

¹⁴⁶ *Id*.

- "Urban areas are particularly vulnerable. Due to limited green space and the urban heat island effect, cities like Columbus can experience a wide disparity in temperature between neighborhoods. A 2022 study by Sustainable Columbus found a 14-degree difference across the city, with lower-income communities at greater risk." ¹⁴⁸
- "In addition to heat-related illnesses, air quality is expected to worsen. High temperatures promote the formation of ground-level ozone, a harmful lung irritant. Wildfire smoke, like that from the 2023 Canadian fires, has also proven capable of traveling hundreds of miles and degrading Ohio's air."¹⁴⁹
- "Hotter days and wetter weather are expected to drive up energy costs for Ohioans. Increased demand for air conditioning during heat waves strains systems that become less efficient in extreme temperatures. This can lead to higher utility bills, more frequent, costly repairs, and higher homeowner insurance premiums."¹⁵⁰
- "Since 1990, eight of Ohio's ten wettest years on record have occurred, signaling a clear shift in the state's climate. In riverfront communities like New Richmond, floods that were once considered rare are now a recurring reality. According to Wilson, warmer winters combined with wetter springs are expected to increase the frequency and severity of flooding. Precipitation is arriving in shorter, more intense bursts, with Ohio already experiencing a rise in rainfall events that deliver one to three inches in a matter of hours, while summers could become slightly drier." 151
- "Despite the daunting challenges, Wilson emphasizes that mitigation and adaptation are possible and necessary. Local governments, nonprofits, and individuals across Ohio are already taking action—from planting trees and restoring wetlands to improving energy efficiency and modernizing infrastructure. For residents of places like New Richmond, where spring floods have become routine, the question is not if the river will rise again but when. Ohioans are already taking action to prepare for a changing climate by implementing local solutions and working together to protect their communities for the future."152

¹⁴⁸ *Id*.

¹⁴⁹ *Id*.

¹⁵⁰ *Id*. ¹⁵¹ *Id*.

¹⁵² *Id*.

The EPA's claim that local climate impacts cannot be measured, and thus climate change is solely a global issue, is directly contradicted by the evidence.

B. Methane Pollution also has localized impacts.

The 2009 Endangerment Finding rightly recognized methane as one of the six "wellmixed greenhouse gases" that endanger public health and welfare. Weakening this foundation now would create loopholes for polluters at the expense of our health, environment, and climate stability. 153 In 2023, oil and gas operations released 16 million metric tons of methane. Methane is over 80 times more potent than CO₂ over a 20-year period and is responsible for at least 25% of the warming we are experiencing today. Cutting methane is the fastest, most cost-effective way to slow climate change and prevent its worst impacts. 154

Methane pollution comes hand-in-hand with other toxic co-pollutants like benzene, toluene, and smog-forming VOCs that worsen asthma, cardiovascular disease, and cancer risks. Studies show people living within 2,000 feet of oil and gas sites face elevated risks of cancer and other health harms. 155

V. **International Commitment**

The EPA should also uphold the Endangerment Finding to ensure the United States maintains its role in climate action at the international level. The United States should be a leader on these issues amongst the world's countries, not an outsider.

A. International Court of Justice

On March 29, 2023, the 77th session of the United Nations General Assembly ("UNGA") adopted the resolution A/77/L.58, which requested an advisory opinion from the International Court of Justice ("ICJ") on the obligations of nations with respect to climate change. 156 On April 12, 2023, the request for an advisory opinion was transmitted to the Court by the Secretary-General of the United Nations. Presentations of written statements were due on March 22, 2024. The ICJ received 91 written statements. 157 Written

¹⁵³ 74 Fed. Reg. 66,497 (Dec. 15, 2009)

¹⁵⁴ See https://www.edf.org/climate/methane-crucial-opportunity-climate-fight

¹⁵⁵ Final Report: Human Health Risk Assessment for Oil & Gas Operations in Colorado, ICF, (October 17, 2019), available at: https://www.fcgov.com/oilandgas/files/20191017-cdphe-healthimpactsstudy.pdf 156 See https://www.icj-cij.org/case/187.

¹⁵⁷ The March 22, 2024 Written Statement of the United States of America concluded that treaty law, including the 1992 UN Framework Convention on Climate Change and the 2015 Paris Agreement, do not prescribe any particular measures, GHG emissions targets or mitigation policies that nations must adopt

comments were submitted on August 15, 2024. The ICJ received 62 written comments. The public hearings were held in December 2024. 158

On July 23, 2025, the ICJ delivered its advisory opinion. ¹⁵⁹ The Court found that nations are obligated to protect the climate system and other parts of the environment from anthropogenic GHG emissions, based on multiple legal sources including the UN Charter, climate treaties (UNFCCC, Kyoto Protocol, Paris Agreement), customary international law, environmental treaties, and international human rights law.

These obligations include mitigation, adaptation, and cooperation duties, guided by principles such as sustainable development, precaution, and intergenerational equity. The Court affirmed that the duty to prevent significant harm and the duty to cooperate apply to all nations, with due diligence as the governing standard. It also concluded that when nations breach these obligations, they incur legal consequences under the customary international law of nation responsibility, including duties to cease the harmful conduct, guarantee non-repetition, and provide reparation. The opinion emphasized that obligations related to climate protection are owed erga omnes 160 and apply equally to harm caused to other nations, vulnerable populations, and future generations. 161

B. International Pledges and Progress

On December 12, 2015, an international treaty on climate change was adopted by 195 Parties at the United Nations Climate Change Conference (COP21) in Paris, France. It entered into force on November 4, 2016. Its overarching goal is to hold "the increase in the global" average temperature to well below 2°C above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels." ¹⁶²

However, in recent years, the need to limit global warming to 1.5°C by the end of this century has become paramount; the UN's Intergovernmental Panel on Climate Change indicates that crossing the 1.5°C threshold risks unleashing far more severe climate

and implement in response to anthropogenic climate change. See https://www.icjcij.org/sites/default/files/case-related/187/187-20240322-wri-06-00-en.pdf.

¹⁵⁸ *Id*.

¹⁵⁹ See https://www.icj-cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf. 160 "Erga Omnes" is a Latin term meaning "towards all" or "in relation to everyone." In international law, it describes obligations that are owed to the international community as a whole, rather than just to specific states. This means that any state can potentially claim a right or responsibility when these obligations are breached. See e.g., ICJ, Case Concerning the Barcelona Traction, Light and Power Company, Limited, (Belgium v. Spain), 1970. $^{\hat{1}61}$ Id.

¹⁶² See United Nations Framework Convention on Climate Change (UNFCCC), aka the Paris Agreement; https://unfccc.int. The Paris Agreement is a landmark in the multilateral climate change process; for the first time, a binding agreement brings all nations together to combat climate change and adapt to its effects.

change impacts, including more frequent and severe droughts, heatwaves and rainfall. To limit global warming to 1.5°C, GHG emissions must decline 43% by 2030. *Id*.

According to the United Nations, "the science shows clearly that in order to avert the worst impacts of climate change and preserve a livable planet, global temperature increase needs to be limited to 1.5°C above pre-industrial levels. Currently, the Earth is already about 1.2°C warmer than it was in the late 1800s, and emissions continue to rise. To keep global warming to no more than 1.5°C—as called for in the Paris Agreement—emissions need to be reduced by 45% by 2030 and reach net zero by 2050." ¹⁶³

According to the World Resources Institute, "as part of the 2023 Global Stocktake, which took place at COP28 in Dubai, countries collectively agreed to transition away from fossil fuels in energy systems, accelerate the phase-down of unabated coal power, and, by 2030, triple the world's renewable energy capacity and double global annual rates of energy efficiency improvement." ¹⁶⁴

The United States, both presently and historically, has contributed significantly to the total excess greenhouse gas emissions in the atmosphere. "The six largest greenhouse gas emitters (China, the United States of America, India, the European Union, the Russian Federation, [and] Brazil) accounted for 63 per cent of global emissions in 2023. By contrast, the 45 least developed countries accounted for only 3 per cent. The **G20**, the group of the world's largest 20 economies (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union) are responsible for **about 77 per cent of global greenhouse gas emissions**."^{165,166}

An analysis of national responsibility for historical CO₂ emissions from 1850 to 2021 concluded that the US has released more than 509GtCO₂ since 1850 and is responsible for the largest share of historical emissions (20% of the global total), followed by China (11%), followed by Russia (7%), Brazil (5%), Indonesia (4%), Germany (4%) and the

¹⁶³ United Nations / Climate Action, "For a livable climate: Net-zero commitments must be backed by credible action." https://www.un.org/en/climatechange/net-zero-coalition (accessed August 15, 2025). "[N]et zero means cutting carbon emissions to a small amount of residual emissions that can be absorbed and durably stored by nature and other carbon dioxide removal measures, leaving zero in the atmosphere."

World Resources Institute, "Global Climate Pledges: A Progress Report," N. Cogswell et al, Nov. 11, 2024. https://www.wri.org/insights/climate-commitment-tracker (accessed August 17, 2025).

¹⁶⁶ See also United Nations Environment Programme ("UNEP"), Emissions Gap Report 2024, htps://www.unep.org/resources/emissions-gap-report-2024 (GHG emissions reductions of 42% by 2030 and 57% by 2035 are needed to achieve the 1.5°C target, in the next round of nationally determined contributions ("NDCs"), due in early 2025 ahead of COP30, the UN Climate Change Conference to be held in Belem, Brazil on November 10-21, 2025).

UK (3%). These proportions matter: "Historical responsibility for climate change is at the heart of debates over climate justice. History matters because the cumulative amount of carbon dioxide (CO₂) emitted since the start of the industrial revolution is closely tied to the 1.2°C of warming that has already occurred. In total, humans have pumped around 2,500 bn tonnes of CO₂ (GtCO₂) into the atmosphere since 1850, leaving less than 500GtCO₂ of remaining carbon budget to stay below 1.5°C of warming." The analysis included CO₂ emissions from land use and forestry, in addition to those from fossil fuels.

And fossil fuel consumption continues to rise. According According to the United Nations Environment Programme, global GHG emissions in 2022 set a new record of 57.4 gigatons of CO₂ equivalent. According to US EPA's most recent data available (2022), GHG emissions in the United States totaled 6,343.2 million metric tons (MMT) of CO₂ equivalent (transportation 28%, electric power 25%, industry 23%, agriculture 10%). 169

According to the latest annual assessment by the American Meteorological Society, "an acceleration of warming that started in 2023 continued through 2024 [,] as atmospheric concentrations of greenhouse gases continue to increase at a quickening rate." "Since observations began in 1970, only one other year saw every monitored glacier shrink: 2023. Now 2024 appears to have broken grim records for global temperatures and greenhouse concentrations set just the year before, according to the annual AMS climate assessment released [on August 14, 2025]." ¹⁷¹

While climate change is felt profoundly at the local level, the international circumstance matters too. The EPA must uphold the Endangerment Finding for both the local climate impacts felt in Ohio and across the country—and across the world.

¹⁶⁷ S. Evans, "Analysis: Which Countries are Historically Responsible for Climate change?" Oct. 5, 2021; https://www.carbonbrief.org. ("This means that, by the end of 2021, the world will collectively have burned through 86% of the carbon budget for a 50-50 probability of staying below 1.5°C, or 89% of the budget for a two-thirds likelihood.")

¹⁶⁸ See Emissions Gap Report 2023: Broken Record, UNEP Nov. 9, 2023; https://www.unep.org.

¹⁶⁹ See EPA, Sources of Greenhouse Gas Emissions; https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

¹⁷⁰ Inside Climate News, "Temperatures and Carbon Emissions Continue to Rise," D. Baddour, August 14, 2025.

¹⁷¹ *Id*.

VI. Conclusion

Accordingly, the United States EPA should not rescind the EPA's 2009 Endangerment Finding or related vehicle standards regulating GHG emissions under the Clean Air Act. The science is stronger now than in 2009 that GHG pollution endangers public health and welfare, and that vehicular GHG emissions contribute to that pollution. Legal precedent from the Supreme Court and the D.C. Circuit Court of Appeals is prescient and must be respected. The international commitment to counteract climate change is encouraging and the continued leadership of the United States is essential.

Submitted On behalf of the Ohio Environmental Council

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For submittal to:

United States Environmental Protection Agency EPA Docket Center, OAR Docket, Mail Code 28221T 1200 Pennsylvania Avenue NW Washington D.C. 20460

Exhibit 1: OEC, Report: "The Bill is Coming Due: Calculating the Financial Cost of Climate Change to Ohio's Local Governments," July 2022 (attached)