Columbia Law School | COLUMBIA CLIMATE SCHOOL
SABIN CENTER FOR CLIMATE CHANGE LAW

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United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Transmitted Electronically Via Regulations.Gov

Re: EPA's Proposed Rule for Rescission of the Greenhouse Gas Findings for Fossil Fuel-Fired Power Plants and Repeal of Regulations for Power Plant Greenhouse Gas Emissions Under Clean Air Act Section 111 (Docket ID No. EPA-HQ-OAR-2025-0124)

To Whom It May Concern:

The Sabin Center for Climate Change Law ("Sabin Center") submits these comments in response to the Environmental Protection Agency ("EPA")'s proposed rule titled "Rescission of the Greenhouse Gas Findings for Fossil Fuel-Fired Power Plants and Repeal of Regulations for Power Plant Greenhouse Gas Emissions Under Clean Air Act Section 111" ("Proposed Rule") issued on September 17, 2026.[1] The Sabin Center strongly opposes the Proposed Rule and urges EPA not to finalize it.

As explained below, EPA has not provided a reasoned legal or scientific justification for the Proposed Rule. In particular:

- EPA's interpretation of "air pollution" and related terms is inconsistent with the plain text of the Clean Air Act ("CAA"), the legislative history, and decades of court decisions interpreting the statute. EPA claims that its reinterpretation of the CAA is justified by President Trump's return to the White House, but this runs directly counter to Supreme Court precedent, which establishes that there is only just one "best meaning" of a statute and agencies must comply with it.[2]

- EPA's factual determination that U.S. fossil fuel power plants do not "contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare" is directly refuted by a large body of scientific evidence demonstrating a clear causal link between the emissions at issue in this rulemaking and pervasive harms to human health and welfare in the United States.

[1] Rescission of the Greenhouse Gas Findings for Fossil Fuel-Fired Power Plants and Repeal of Regulations for Power Plant Greenhouse Gas Emissions Under Clean Air Act Section 111, 91 Fed. Reg. 59002 (Sep. 17, 2026) [hereinafter "Proposed Rule"].
[2] Loper Bright Enters. v. Raimondo, 603 U.S. 369, 400 (2024).

I. EPA's Legal Arguments Are Fundamentally Flawed

Section 111 of the CAA requires EPA to identify "categories of stationary sources" that "cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare."[3] EPA must issue new source performance standards (NSPS) to control emissions from new, modified, and reconstructed facilities in any identified source category, as well as regulations (known as "emissions guidelines") to guide States in developing plans for controlling emissions from existing facilities in the category. EPA has previously maintained that where it has listed a source category, it may regulate additional pollutants from that category without making a new endangerment finding; instead, it must only articulate a rational basis for regulating the additional pollutant.[4] This authority has been upheld by the Supreme Court.[5] Pursuant to this authority, in 2015, EPA adopted NSPS to regulate greenhouse gas ("GHG") emissions from new electric generating units and, in a separate action taken at the same time, issued emissions guidelines for existing units. Now, EPA intends to rescind these rules and regulations in the Proposed Rule at hand.

In the Proposed Rule, EPA claims that "the text, structure, and history of CAA Section 111 [and] the applicability and implications of the major questions doctrine . . . support the conclusion that EPA lacks authority to impose additional controls on power plants in response to global climate change concerns under the statutory standard for regulation."[6] EPA makes several legal arguments to support this claim. Each is unfounded for the reasons discussed below.

1. EPA's Interpretation of Section 111 is Incorrect; "Air Pollution" Encompasses Greenhouse Gases

The Proposed Rule claims "that 'air pollution' is best read as that which itself threatens health or welfare through local or regional exposure, consistent with the ordinary meaning of the term at the time of enactment, the surrounding language of the provision, the statute's structure and amendment history, and EPA's longstanding practice prior to 2015."[7] Therefore, EPA argues, it cannot regulate greenhouse gases ("GHGs") from power plants because "global climate change concerns . . . fall outside the scope of "air pollution" within the meaning of the CAA section 111."[8] This is contrary to the plain text and legislative history of the CAA, as well as EPA and court decisions interpreting it, all of which confirm that GHGs qualify as "air pollutants" contributing to "air pollution" that endangers the public welfare under the CAA.

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[3] 42 U.S.C. § 7411(b)(1)(A).

[4] 2015 Rule, 80 Fed. Reg. 64530 ("Under the plain language of CAA section 111(b)(1)(A), an endangerment finding is required only to list a source category. . . . the statute is clear that the endangerment finding is made with respect to the source category; section 111(b)(1)(A) does not provide that an endangerment finding is made as to specific pollutants. This contrasts with other CAA provisions that do require the EPA to make endangerment findings for each particular pollutant that the EPA regulates under those provisions.").

[5] Am. Elec. Power Co. v. Connecticut, 564 U.S. 410, 426 (2011) ("[T]he Clean Air Act directs the EPA to establish emissions standards for *categories* of stationary sources that, `in [the Administrator's] judgment,' `caus[e], or contribut[e] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.' § 7411(b)(1)(A)." (emphasis added)).

[6] Proposed Rule at 59005.

[7] Proposed Rule at 59006.

[8] *Id.*

a. The Plain Text of the Clean Air Act Supports EPA Regulation of GHGs From Power Plants

There are several misleading arguments EPA makes throughout the Proposed Rule which all circuitously lead back to the unfounded conclusion that EPA cannot regulate GHGs from power plants. Many of these involve EPA cherry-picking definitions, taking statutory text out of context, or adding language that simply does not appear in the text of the statute.

EPA's suggested new interpretation of "air pollution" runs directly counter to the clear language of the CAA. The CAA defines "air pollutant" as "any *air pollution agent* or combination of such agents . . . which is emitted into or otherwise enters the ambient air"[9] (emphasis added). As discussed in further detail below, in *Massachusetts v. EPA*, the Supreme Court recognized that GHGs qualify as "air pollutants" under the CAA.[10] If GHGs are "air pollutants" and, under the CAA, "air pollutants" encompass any "air pollution agent or combination of such agents," then GHGs, acting as an "air pollution agent," must cause "air pollution."[11] EPA throws several additional definitions of "pollutant" and "pollution" into the text of the Proposed Rule, claiming that somehow, these definitions require a "local or regional" impact.[12] It similarly relies on irrelevant and outdated judicial decisions, which focus on the *methods* of air pollution reduction, rather than the impact.[13] Nothing in the supplied definitions, statutory history of the CAA, or cited judicial decisions actually support EPA's argument.

EPA erroneously argues that "air pollution" must "adversely impact public health or welfare through *local or regional exposure*" to qualify for regulation under the CAA (emphasis added).[14] But the phrases "local exposure" or "regional exposure" do not appear anywhere in the CAA. The statutory text makes clear that the public health and welfare impacts that EPA can consider include climate impacts. Indeed, the definition section in the CAA expressly states that:

> All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to

[9] 46 USC § 7602(g). EPA appears to conflate the term "climate change" with "air pollution" throughout the Proposed Rule. For example, EPA claims that the 2015 NSPS was in error because EPA should have determined "whether the *global climate change concerns* associated with power plant GHG emissions *qualified as air pollution* within the meaning of CAA section 111 and evaluat[ed] whether GHG emissions from power plants contribute significantly to such air pollution" (emphases added). Proposed Rule at 59021. "Climate change" is not air pollution, nor is it the activity that the 2015 regulations address. *See* 80 Fed. Reg. 64510, 64530 (Oct. 23, 2015) [hereinafter 2015 Rule] ("*[E]missions of CO2* from fossil fuel-fired power plants, which are the major U.S. source of *GHG air pollution*, merit regulation under CAA section 111. As noted, in 2009, the EPA made a finding that *GHG air pollution* may reasonably be anticipated to endanger public health or welfare[.]" (emphases added)). The presence of GHGs in the air is air pollution, and the thing being regulated. Climate change is its consequence, and the harms that follow (such as heatwaves, droughts, floods, mortality risks, and more) are the impacts to public health and welfare.

[10] Massachusetts v. EPA, 549 U.S. 497, 500 (2007).

[11] 42 U.S.C. 7602(g); despite EPA's argument that *Massachusetts v. EPA* did not address the term "air pollution," a plain reading of the definitions clearly encompasses "air pollution" as an amalgamation of any "air pollutant." *See* Proposed Rule at 59029.

[12] Proposed Rule at 59021–22.

[13] Proposed Rule at 59022 (citing Washington v. Gen. Motors Corp., 406 U.S. 109, 115 (1972)).

[14] Proposed Rule at 59020.

> transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.[15]

In including such a broad definition in the CAA, Congress clearly intended to capture both localized and large-scale impacts across the environment (*including "*climate"), economy, well-being, and more ("not limited to"). EPA cherry-picks a few examples from the definition to argue that, in fact, Congress was concerned only about local impacts, but this argument is not supported by its analysis.[16] EPA states that "[e]ach of the other terms in the definition of 'welfare' refers to things and mechanisms of action that occur in a particular place or under regionally bounded conditions."[17] Even if this were true—which it is not—that a harm may occur "in a particular place or under regionally bounded conditions"[18] has nothing to do with whether it cannot *also* occur elsewhere, or everywhere at once. EPA also completely ignores the text that involves consequences to property, transportation, economic values, and well-being. And, it provides a definition of "climate" that obfuscates the point: while "climate" may refer to prevailing weather patterns in a particular region, climate change is a global phenomenon of changes to regional weather patterns that *happens* to be occurring worldwide because of the physical and chemical properties of these particular pollutants. For example, NASA defines "climate change" as "a long-term change in the average weather patterns that have come to define Earth's *local*, *regional* and global climates" (emphasis added).[19]

Furthermore, EPA's argument that the air pollutants regulated under CAA Sections 107–110 and Section 112 adversely affect human health or welfare through local or regional exposure[20] has no bearing on whether Section 111 can be used to regulate pollutants that cause global harms. If it wanted to limit section 111 in this way, surely Congress would have included some limiting language in the section, specifying what substances EPA may consider for regulation—but it did not. And just because the pollutants currently regulated under the other CAA Sections "need not become globally well-mixed in the atmosphere to adversely impact human health or welfare through a further chain of subsequent effects" [21] does not foreclose regulation of a pollutant that does.

b. *The Legislative History of the Clean Air Act Supports EPA's Authority to Regulate GHGs From Power Plants*

The legislative history that EPA relies on does not actually support limiting air pollution regulation to the confines of "local or regional exposure." For example, EPA cites to a House Report from 1977 on the CAA Amendments, claiming that the report "indicates that Congress was primarily concerned about [sulfur dioxide] emissions, which confirms that Congress viewed

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[15] 42 U.S.C § 7602(h).
[16] Proposed Rule at 59022.
[17] *Id.*
[18] *Id.*
[19] *What is Climate Change?*, NAT'L AERONAUTICS & SPACE ADMIN., https://science.nasa.gov/climate-change/what-is-climate-change/ [https://perma.cc/YX3K-3MB3] (last visited Nov. 1, 2026).
[20] Proposed Rule at 59025.
[21] Proposed Rule at 59026.

CAA section 111 as focused on air pollutants that impact health or welfare through local or regional exposure."[22] But that same House Report actually includes a section on "Worldwide Weather Modification"—under the heading "The Welfare Basis for Prevention of Significant Deterioration"—which discusses gases and aerosols that cause "major modifications in weather and climate," and concludes that "[a] policy of preventing significant deterioration of clear air resources which minimizes the impact of emissions of new industrial sources will help reduce possible major weather modifications such as increased acidity of rainfall, changes in amounts of rainfall and temperature changes."[23]

c. Regulatory and Judicial Precedent of the Clean Air Act Support EPA's Authority to Regulate GHGs From Power Plants

EPA's proposed interpretation of "air pollution" is not only contrary to the plain text of the CAA and the legislative history, but also decades of regulatory and judicial precedent interpreting it.

EPA first attempts to support its proposed interpretation of the CAA by referencing a series of regulatory decisions and cases discussing the definition of "air pollutant" that are either outdated, overruled, or taken out of context. EPA begins with its 2003 denial of petitions for rulemaking on mobile source GHG emissions, in which it concluded "that GHGs 'are not air pollutants under the CAA's regulatory provisions, including sections 108, 109, 111, 112, and 202' because they categorically are not 'air pollutant[s]' under the Act-wide definition in CAA section 302(g)."[24] But a few years later, as EPA itself acknowledges, the Supreme Court held in *Massachusetts v. EPA* that GHGs "unambiguous[ly]" qualify as "air pollutants" under the CAA, and therefore "EPA has statutory authority to regulate emission of such gases from new motor vehicles."[25]

Despite this, in the Proposed Rule, EPA misleadingly relies on non-binding concurrences and out-of-context quotes from other cases to claim that GHGs do not actually qualify as "air pollutants" under the CAA, contrary.[26] The cited cases are not relevant here, however. They consider specific uses of the term "air pollutant" in other sections of the CAA, and are not applicable to Section 111. For instance, EPA points to the decision in *Utility Air Regulatory Group* (*UARG*), but that case concerned regulation under Title V of the CAA.[27] The Supreme Court again confirmed the finding in *Massachusetts* that "the Act-wide definition of air pollutant" includes GHGs, but accepted EPA's view that the term should be interpreted more narrowly in the specific context of Title V permitting. As EPA has itself previously noted, the *UARG* decision has no bearing on EPA's ability to regulate GHGs under Section 111.[28]

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[22] Proposed Rule at 59026 (citing H.R. Rep. No. 95-294 at 185-86, 188-89, 190-93 (1977)).
[23] H.R. Rep. No. 95-294 at 95 (1977), https://downloads.regulations.gov/NHTSA-2016-0068-0219/attachment_16.pdf.
[24] Proposed Rule at 59012 (citing 68 Fed. Reg. 52928 (Sep. 8, 2003)).
[25] Massachusetts v. EPA, 549 U.S. 497, 500 (2007).
[26] Proposed Rule at 59033 (citing *Learning Res. Inc.,* v. *Trump,* 607 U.S. 229, 255 (2026) (Gorsuch, J. concurring) (citing Utility Air Regulatory Group v. EPA, 573 U.S. 302, 316, 323–34 (2014)).
[27] *See generally UARG*, 573 U.S.
[28] 2015 Rule, 80 Fed. Reg. at 64637 n. 564.

The Courts have repeatedly affirmed that EPA has authority to regulate GHG emissions, under section 111 of the CAA.[29] Indeed, *American Electric Power Company* specifically recognized EPA's authority to regulate GHGs from power plants under section 111.[30] EPA argues that *American Electric* stands for the proposition that "the Act's preclusive effect does not turn on whether the EPA actually exercises its regulatory authority,"[31] but this implicitly recognizes that EPA *does in fact* have the statutory authority to regulate power plant GHG emissions. This is distinct from the question of whether it *should* regulate those emissions (a question definitively answered "yes" in the prior regulations and rules; as discussed below, EPA has not provided a reasoned justification for changing its answer now).

EPA further argues that a change in Presidential administration justifies reinterpreting the Clean Air Act. But that runs directly counter to the Supreme Court's reasoning in *Loper Bright Enterprises v. Raimondo*, which confirmed that statutes have a "single best meaning" that must be uncovered using the traditional tools of statutory interpretation discussed above.[32] EPA cites several cases that it claims support its argument,[33] but these are misleading characterizations and leave out important context. For instance, EPA cites Justice Rehnquist's non-binding concurrence and dissent in *State Farm* to support the proposition that "the election of a new Administration is an independent and sufficient basis for reassessing and revising legal interpretations to faithfully adhere to the best reading of the statute."[34] But actually, in *State Farm*, the Supreme Court held that the "agency failed to present an adequate basis and explanation for rescinding the [regulation] and that the agency must either consider the matter further or adhere to or amend [the regulation] along lines which its analysis supports."[35] And, Rehnquist's concurrence only suggested that it may be appropriate to reappraise "the *costs and benefits* of [an agency's] programs and regulations" when an Administration changes (emphasis added).[36] *People for the Ethical Treatment of Animals* had nothing to do with legal interpretations of statutes.[37] Neither did *National Association of Homebuilders* which, in addition to focusing on a *policy* rather than statutory interpretation, noted that an agency is sometimes obligated to "provide a more detailed justification than what would suffice for a new policy created on a blank slate . . . when, for example, its new policy rests upon factual findings that contradict those which underlay its prior policy. . . . In such cases . . . a reasoned explanation is

[29] *See* West Virginia v. EPA, 597 U.S. 697 (2022); *UARG*, 573 U.S. 302 (2014).
[30] Am. Elec. Power Co. v. Connecticut, 564 U.S. 410, 423 (2011).
[31] Proposed Rule at 59014 (citing Am. Elec. Power. Co., 564 U.S.).
[32] Loper Bright, 603 U.S. at 373 ("there is a best reading all the same—"the reading the court would have reached" if no agency were involved").
[33] Proposed Rule at 59019 (citing Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 59 (1983) (Rehnquist, J., concurring in part and dissenting in part) [hereinafter State Farm]; PETA v. USDA, 918 F.3d 151, 158 (D.C. Cir. 2019) ("new administrations are entitled to reevaluate and modify agency practices, even longstanding ones"); Nat'l Ass'n of Homebuilders v. EPA, 682 F.3d 1032, 1043 (D.C. Cir. 2012) ("the inauguration of a new President and the confirmation of a new EPA Administrator" went "a long way toward explaining why EPA" changed policy).
[34] Proposed Rule at 59019 (citing State Farm, 463 U.S. at 59 (1983) (Rehnquist, J., concurring in part and dissenting in part)
[35] State Farm, 463 U.S. at 34.
[36] State Farm, 463 U.S. 29, 59, (1983).
[37] *See generally,* People for the Ethical Treatment of Animals v. United States Dep't of Agric. & Animal & Plant Health Inspection Serv., 918 F.3d 151 (D.C. Cir. 2019).

needed for disregarding facts and circumstances that underlay . . . the prior policy."[38] And furthermore, several of these cases called for *Chevron* deference to agency interpretations of the law under new Administrations as justification for changes of heart.[39] Any arguments EPA has put forward about its reinterpretation of Section 111, on the basis of *Chevron* and its progeny, must therefore fail under *Loper Bright* where the new interpretation is clearly not the best reading of the statute, and where EPA has failed to present an "adequate basis and explanation" for the reversal.

EPA's proposal—i.e., to reinterpret the meaning of the terms "air pollution" and "welfare," as used in the CAA—goes well beyond what these cases suggested may be permissible. EPA is not attempting to change a policy, for example, because of concerns around costs and benefits, and it does not provide any reasoned explanation for "disregarding facts and circumstances that underlay . . . the prior policy."[40]

Finally, EPA erroneously claims that regulation of GHGs emitted by power plants is forestalled by the Supreme Court's decision in *West Virginia v. EPA* and the major questions doctrine.[41] EPA states that "Congress did not clearly provide that global climate change concerns may trigger regulation under CAA section 111(b)(1)(A) and therefore did not clearly authorize the Administrator to invoke that standard to subject power plant emissions to additional regulatory controls commensurate with the unique and global nature of the problem."[42] Thus, EPA argues—due to the alleged economically and politically significance of the issue—that a decision to regulate GHGs lies with Congress, rather than the agency.[43] But in *West Virginia*, the Court made it clear that the "major question" was not whether EPA had authority to regulate GHG emissions, but rather whether EPA could require generation shifting.[44] Like other Supreme Court precedent, *West Virginia v. EPA* confirmed EPA's authority to regulate GHG emissions.

2. <u>EPA's Analysis Excludes Relevant Findings of Regional and Local Impacts of Climate Change in the 2015 Promulgation of the Power Plant GHG Rules</u>

Even if EPA were correct that it does not have authority under Section 111 to regulate air pollution that harms public health and welfare via global impacts, that would not justify adoption of the Proposed Rule. The 2015 Rule included a detailed discussion of regional and local impacts from GHG emissions that would, by themselves, justify regulation under section 111 even under EPA's new interpretation.

[38] Nat'l Ass'n of Home Builders v. E.P.A., 682 F.3d 1032, 1037 (D.C. Cir. 2012) (citing Fox, 556 U.S. 502, 515 (2009)).
[39] *Id.* at 1043 ("[A]n agency to which Congress has delegated policy-making responsibilities may, within the limits of that delegation, properly rely on the incumbent administration's views of wise policy to inform its judgments." (citing *Chevron*, 467 U.S. 837, 865 (1984))).
[40] *See supra* note 35.
[41] Proposed Rule at 59016.
[42] Proposed Rule at 59006.
[43] Proposed Rule at 59006.
[44] West Virginia v. EPA, 597 U.S. 697, 724–25 (2022).

In the 2015 Rule, EPA "determine[ed] that it had a rational basis for regulating GHG emissions from fossil fuel-fired power plants."[45] This determination was based on a thorough review of the global, regional, and local impacts of climate change, drawing, in part, on the 2009 Endangerment Finding[46] as well as other scientific studies. Throughout the Proposed Rule, EPA repeatedly claims that a reliance on "global climate change concerns" cannot be "used to justify regulation," especially following rescission of the Endangerment Finding.[47] We disagree for the reasons discussed above; but, even if EPA is correct, the 2015 Rule included significant evidence of regional and local public health and welfare impacts from GHG emissions. The 2015 Rule first listed regional impacts that were discussed in the earlier 2009 Endangerment Finding[48], including but not limited to:

- The increased "likelihood of heat waves, which are associated with increased deaths and illnesses";
- An increase in "ozone pollution over broad areas of the U.S., especially on the highest ozone days and in the largest metropolitan areas with the worst ozone problems, and thereby increase the risk of morbidity and mortality"; and
- Placing "large areas of the country at serious risk of reduced water supplies, increased water pollution, and increased occurrence of extreme events such as floods and droughts."[49]

But the 2015 Rule did not solely rely on evidence from the 2009 Endangerment Finding. The 2015 Rule was additionally based on scientific assessments and observation of impacts that endanger the public health and welfare that were published *after* the 2009 Endangerment Finding. Although some of those impacts are on a global scale, many are on a local and regional scale. For example, the 2015 Rule identified the following regional and local impacts:

- "[T]he western U.S., and especially the Southwest, is expected to become drier. This projection is consistent with the recent observed drought trend in the West. At the time of publication of the [NCA], even before the last 2 years of extreme drought in California, tree ring data was already indicating that the region might be experiencing its driest period in 800 years";
- "[H]eavy downpours are expected to increase in many regions, with precipitation events in general becoming less frequent but more intense. This trend has already been observed in regions such as the Midwest, Northeast, and upper Great Plains";
- "The east coast of the U.S. in particular is expected to see higher rates of sea level rise than the global average"; and
- "Particularly in Alaska, critical infrastructure and traditional livelihoods are threatened by climate change and, '[i]n parts of Alaska, Louisiana, the Pacific Islands, and other coastal locations, climate change impacts (through erosion and

[45] Proposed Rule at 59018; *see also* 2015 Rule, 80 Fed. Reg. at 64529
[46] 74 Fed. Reg. 66496, 66534–55 (Dec. 15, 2009) (this rule, often referred to as the Endangerment Finding, was repealed by EPA in February 2026).
[47] Proposed Rule at 59018.
[48] *See supra* note 46.
[49] 2015 Rule, 80 Fed. Reg. at 64517.

inundation) are so severe that some communities are already relocating from historical homelands to which their traditions and cultural identities are tied.'"[50]

Indeed, the 2015 Rule has an entire *section* dedicated to "Observed and Projected U.S. Regional Changes."[51] EPA similarly discussed regional and local impacts in subsequent rules establishing GHG emissions standards for new, modified, and reconstructed fossil fuel-fired power plants[52], and GHG emission guidelines for existing fossil fuel-fired power plants.[53]

II. EPA's Factual Findings Are Inconsistent with Scientific Evidence

In the Proposed Rule, EPA acknowledges that "global GHG concentrations in the upper atmosphere have continued to rise," but claims this increase is "driven primarily by increased emissions from foreign sources" and that it has not "produc[ed] the degree of adverse impacts to public health and welfare in the U.S. anticipated in the 2009 Endangerment Finding and 2015 NSPS and 2015 CPP."[54] EPA also claims that "the futility of power plant GHG standards in relation to the unique and global scale of the underlying problem" supports its proposal to rescind the 2015 Findings and repeal regulations governing GHG emissions for power plants. EPA argues that regulations must "yield more than *de minimis* gains for public health or welfare."[55]

As explained below, EPA's factual determination is not based on the best available science and flies in the face of clear scientific consensus. Indeed, the science supports precisely the opposite finding: the rise in GHG concentrations in the upper atmosphere have caused meaningfully *increased* adverse impacts to public health and welfare in the United States. And, those increases can be directly attributed to significant contributions from American sources, including fossil fuel-fired power plants. Those plants have made more than a *de minimis* contribution to the increase in atmospheric GHG concentrations and consequent impact to public health and welfare.

1. Scientific Consensus on Harms Attributable to Climate Change

In the Proposed Rule, EPA acknowledges the existing body of scientific and technical literature on attribution science, but references just *one* specific report: the National Academy of Sciences (NAS)'s 2026 report on the attribution of extreme weather events to global climate

[50] 2015 Rule, 80 Fed. Reg. at 64519 (citing Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., *2014: Climate Change Impacts in the United States: The Third National Climate Assessment*, U.S. GLOBAL CHANGE RESEARCH PROGRAM, p. 17.)
[51] 2015 Rule, 80 Fed. Reg at 64520.
[52] 40 C.F.R. § 60 Subpart TTTT.
[53] 80 Fed. Reg. 64662 ("Clean Power Plan" or "2015 CPP")
[54] Proposed Rule 59005.
[55] Proposed Rule at 59035.

change.[56] EPA does not consider any additional external studies in its analysis. Instead, EPA argues that it does not need to consider any of the science—either from the NAS or elsewhere—because the "issues raised in this supplemental proposal, however, are legal in nature and turn on statutory interpretation and the application of judicial precedent."[57] Despite this claim, EPA still relies exclusively on its own "Technical Memo" to conclude that "the changes in [carbon dioxide] emissions and global [carbon dioxide] concentrations by 2050 and 2100 resulting from the complete elimination of all [carbon dioxide] emissions from U.S. power plants would be relatively minor."[58] This is a blatantly factual finding. But, in making it, EPA ignored a vast body of scientific evidence that does not support its position – but it has an obligation to review all of the available scientific information and reach a rational determination on endangerment in light of that information.

There is a near universal scientific consensus that GHG emissions cause climate change, and that climate change is causing pervasive harm to human health and welfare.[59] These findings are based on many independent lines of evidence. These include physical principles and understanding of the climate system and its interaction with other systems; observational datasets consisting of hundreds of different climate variables monitored by thousands of different instruments and different organizations; and a wide assortment of climate models and statistical techniques that are used to evaluate patterns, trends, causal relationships, variability, and uncertainty within the climate system. These different lines of evidence all converge on the same conclusions about the causes and impacts of climate change.[60]

The Intergovernmental Panel on Climate Change (IPCC) recognized in its Sixth Assessment Report (AR6) that anthropogenic GHG emissions were "unequivocally" causing climate change, resulting in pervasive and harmful impacts across the world, many of which have been attributed to climate change with high or very high scientific confidence.[61] For

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[56] Proposed Rule at 59019 (citing National Academies of Sciences, Engineering, and Medicine. 2026. *Attribution of Extreme Weather and Climate Events and Their Impacts*, Washington, DC: National Academies Press. https://doi.org/10.17226/28590.)

[57] Proposed Rule at 59019.

[58] Proposed Rule at 59040.

[59] *See* IPCC, CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP I TO THE SIXTH ASSESSMENT REPORT OF THE IPCC (Valérie Masson-Delmotte et al. eds. 2021) [hereinafter IPCC AR6 WGI]; NATIONAL ACADEMY OF SCIENCES, CLIMATE CHANGE: EVIDENCE AND CAUSES: UPDATE 2020 (National Academies Press, 2020); U.S. GLOBAL CHANGE RESEARCH PROGRAM, FIFTH NATIONAL CLIMATE ASSESSMENT (A.R. Crimmins et al., eds., 2023) [hereinafter NCA5]; U.S. GLOBAL CHANGE RESEARCH PROGRAM, FOURTH NATIONAL CLIMATE ASSESSMENT VOL. 1, CLIMATE SCIENCE SPECIAL REPORT (Donald J. Wuebbles et al. eds., 2017).

[60] This is not to suggest that all climate datasets, models, and studies converge on the exact same conclusions about climate change and its impacts. As with all scientific endeavors, climate science is a process whereby researchers are constantly acquiring new information, gaining new insights, and revising their understanding. There are still many areas of uncertainty that are being explored. But the existing body of evidence clearly supports the conclusion that climate change is adversely affecting human health and welfare. See IPCC AR6 WGII, Technical Summary (describing the many different pathways through which climate change is adversely affecting people and communities).

[61] *See* IPCC AR6 WGI at 4 ("it is unequivocal that human influence has warmed the atmosphere, ocean, and land" and "widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred"); Id. at 204 (finding that there are "multiple lines of evidence that unequivocally establish the dominant role in human activities in the growth of atmospheric CO2"). See also IPCC, Climate Change 2022: Impacts, Adaptation, and Vulnerability,

example, AR6 found that it is an "established fact" that anthropogenic GHG emissions are causing changes in the frequency and/or intensity of some weather and climate extremes, particularly extreme heat events.[62] AR6 also found that climate-related hazards are increasingly contributing to adverse health impacts such as increases in food-, water-, and vector-borne diseases; increases in air quality problems and exacerbation of respiratory diseases; and disruption to natural and human systems that are essential to the provision of food, water, sanitation, healthcare, and other human needs.[63]

The U.S. Global Change Research Program (USGCRP) reached similar conclusions about the "unequivocal" evidence of anthropogenic climate change in the Fifth National Climate Assessment (NCA5).[64] With regards to U.S. impacts, NCA5 noted that that the "effects of human-caused climate change are already far-reaching and worsening across every region of the United States" and that "each additional increment of warming is expected to lead to more damage and greater economic losses" across the country.[65] For example, NCA5 concluded, with very high confidence, that the frequency and intensity of extreme heat events are increasing, consistent with expected physical responses to a warming climate.[66] NCA5 also found "robust evidence" that anthropogenic climate change has contributed to increases in the frequency and severity of the heaviest precipitation events across nearly 70 percent of the United States.[67] Other physical hazards identified in NCA5 as affecting U.S. interests included increases in wildfires, river floods, crop failures, tropical cyclones, drought, infectious and vector-borne diseases, and sea level rise. Based on these and other hazards, NCA5 concluded that climate change is already having significant adverse effects on mental, spiritual, and community health and other aspects of human well-being across the United States.[68]

In addition, IPCC AR6 and NCA5 both found that climate change is rapidly intensifying and that each additional increment of global warming will cause additional harm.[69] There is a near linear relationship between increases in cumulative carbon dioxide emissions and increases in global surface temperatures, and thus every ton of carbon dioxide that is released into the atmosphere will contribute to global warming and the harmful impacts of warming.[70] However, the relationship between emissions and impacts is not always linear, and there are potential tipping points, feedback cycles, and cascading impacts that may result in acceleration of certain

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Contribution of Working Group II to the Sixth Assessment Report of the IPCC (2022) [hereinafter IPCC AR6 WGII].

[62] IPCC AR6 WGI at 42.

[63] IPCC AR6 WGII, Ch. 7. *See also* Jessica Wentz, *Climate Change and Human Health: A Synthesis of Scientific Research and State Obligations Under International Law* (Sabin Center for Climate Change Law May 2024) (summarizing key scientific findings regarding the effects of climate change on health).

[64] NCA5 at 2-4 ("[t]he evidence for warming across multiple aspects of the Earth system is incontrovertible, and the science is unequivocal that increase in atmospheric greenhouse gases are driving many observed trends and changes").

[65] *Id*. at 1-5.

[66] *Id*. at 2-38; See also NCA4 Vol. I at 19; IPCC AR6 WGI at 8 (finding that it is "*virtually certain* that hot extremes (including heatwaves) have become more frequent and more intense across most land regions since the 1950s" and there is "*high confidence* that human-induced climate change is the main driver of these changes").

[67] *See* NCA5 at 2-18.

[68] *See* NCA5, Ch. 15 ("Human Health").

[69] *See, e.g.*, NCA5 at 1-5.

[70] *See* IPCC AR6 WGI at 28.

trends such as sea-level rise.[71] Studies from the IPCC and others document that there are significant risks associated with surpassing these thresholds.[72]

Many other scientific authorities, including the National Research Council (NRC), the World Meteorological Organization (WMO), and the American Meteorological Society (AMS), have reached similar conclusions about the increasing severity of climate change and the pervasive nature of the harms attributable to climate change.[73] NAS also issued a consensus report last year, which identifies many different pathways through which anthropogenic GHG emissions and resulting climate change are adversely affecting the health and welfare of people in the United States, including "research that has uncovered additional risks that were not apparent in 2009."[74] The scientific conclusions in the NAS report and the other reports cited herein are based on a synthesis of climate datasets, climate model outputs, and a vast body of peer reviewed research documenting the many different ways in which climate change is affecting human and natural systems. Although there are many areas of nuance and uncertainty in the research, there is unassailable support for the overarching conclusion that climate change is endangering public health and welfare – globally, regionally, and locally.[75]

The reports published by these expert bodies are widely viewed as authoritative and credible sources of climate science. In particular, the IPCC's rigorous, transparent, and extensive assessment process has given it unique standing in both scientific and legal settings.[76] The International Court of Justice recently found that the IPCC reports constitute the "best available science on the causes, nature, and consequences of climate change."[77] Many other courts, including the U.S. Supreme Court, the European Court of Human Rights, and the Inter-American Court of Human Rights, have relied on IPCC reports as credible and definitive sources of climate science.[78] The IPCC reports have also been treated as definitive sources of climate data by

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[71] Some critical tipping point thresholds may have already been surpassed, although the full effects have not yet manifested (e.g., the near complete melting of the Greenland ice sheet may already be inevitable due to existing warming). David I. Armstrong McKay et al., *Exceeding 1.5° Global Warming Could Trigger Multiple Climate Tipping Points*, 377 Sci. 1171 (2022), https://doi.org/10.1126/science.abn7950; Niklas Boers & Martin Rypdal, *Critical Slowing Down Suggests that the Western Greenland Ice Sheet is Close to a Tipping Point*, 118 PNAS e2024192118 (2021), https://doi.org/10.1073/pnas.2024192118 (finding that the Greenland Ice Sheet melt tipping point is between 0.8°C and 3.2°C of warming above pre-industrial levels).

[72] *See, e.g.*, Timothy M. Lenton et al., *Climate Tipping Points—Too Risky to Bet Against*, 575 NATURE 592 (2019), https://doi.org/10.1038/d41586-019-03595-0.

[73] *See, e.g.*, NATIONAL RESEARCH COUNCIL, CLIMATE CHANGE: EVIDENCE AND CAUSES: UPDATE 2020 (2020); American Meteorological Society, State of the Climate in 2024, Special Supplement to the Bulletin of the American Mereological Society, Vol .106, No. 8 (August 2025); WORLD METEOROLOGICAL ORGANIZATION, STATE OF THE GLOBAL CLIMATE 2024 (March 19, 2025).

[74] NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE, EFFECTS OF HUMAN-CAUSED GREENHOUSE GAS EMISSIONS ON U.S. CLIMATE, HEALTH, AND WELFARE (2025) at 1, and Ch. 5, Ch. 6.

[75] *See* IPCC AR6 WGII Summary for Policymakers.

[76] The IPCC assessment process spans multiple years and involves thousands of scientific authors and expert reviewers, all working together to evaluate and synthesize an extensive body of peer-reviewed research. The draft reports undergo multiple rounds of review, with opportunities for input from external advisors, governments, and the public. *See* IPCC, *Procedures*, https://www.ipcc.ch/documentation/procedures/.

[77] International Court of Justice, Obligations of States in Respect of Climate Change, Advisory Opinion (July 23, 2025) at 1.

[78] *See* Massachusetts v. EPA, 549 U.S. at 508–11; European Court of Human Rights, Verein KlimaSeniorinnen v. Switzerland, No. 53600/20, Judgment (April 9, 2024), Part II(c); Inter-American Court of Human Rights (IACtHR),

government agencies in the United States and around the world.[79] Similarly, the NCA reports have special standing as sources of information about climate impacts within the United States due to the robust and transparent assessment process undertaken by the USGCRP when preparing those reports.[80]

EPA does not even claim to have considered IPCC or other scientific reports and studies in the Proposed Rule. While EPA does mention the NAS's 2026 extreme weather attribution report, it does not discuss it in detail. Nor does EPA discuss or acknowledge *any* other literature whatsoever. Instead, EPA relies almost exclusively on its own Technical Memo, which modelled forecast carbon dioxide emissions from power plants and corresponding changes in global mean surface temperature (GMST) and global sea level rise (GSLR). The Technical Memo was written for the express purpose of supporting the Proposed Rule, and is shockingly short: less than six pages long.[81] EPA's sole reliance on its own memo is improper. EPA should be engaging with the large body of evidence compiled by the IPCC, USGCRP, National Academies and other scientific institutions regarding the effects of temperature and sea level rise globally and in the United States.[82] These other scientific authorities have all concluded that climate change, driven by anthropogenic GHG emissions, is already causing harm (e.g., in the form of flooding, damage to infrastructure, ecological impacts, and economic impacts) and that there are significant risks associated with ongoing climate change.[83] These harms are not discussed in EPA's Technical Memo. For example, EPA does not acknowledge or discuss the effects of climate change in relation to floods, droughts and water security, wildfires and wildfire smoke, disease vectors, ecosystem health and ecosystem services, fisheries, forests, and much more. And, EPA fails to recognize the well-established principle that every ton of carbon dioxide added to the atmosphere contributes to harms—including here in the United States.

Climate Emergency and Human Rights, Advisory Opinion AO 32/25 (May 29, 2025), para 33; International Tribunal for the Law of the Sea, *Climate Change and International Law*, Advisory Opinion No. 31 (May 21, 2024), Part II(A).

[79] *See, e.g.*, U.S. EPA, Statement on the Publication of the IPCC Synthesis Report of the Sixth Assessment Cycle (March 20, 2023), https://www.epa.ie/news-releases/news-releases-2023/epa-statement-on-the-publication-of-the-ipcc-synthesis-report-of-the-sixth-assessment-cycle.php; U.S. Department of Interior, Department Manual, Part 526 ("Climate Change Science") (Sept. 28, 2023), https://www.doi.gov/sites/doi.gov/files/elips/documents/526-dm1_1.pdf; European Commission, Climate Change Science, https://research-and-innovation.ec.europa.eu/research-area/environment/climate-change-science_en.

[80] *See* MIT Climate Portal, The National Climate Assessment, https://climate.mit.edu/explainers/national-climateassessment. *See also, e.g.*, 350 Montana v. Haaland, 50 F.4th 1254, 1274 -75 (9th Cir. 2022); U.S. EPA, Climate Indicators 2024 (relying on and cross-referencing NCA findings); U.S. National Oceanic and Atmospheric Administration, *Climate change impacts are increasing for Americans* (Nov. 14, 2023), https://www.noaa.gov/news-release/climate-change-impacts-are-increasing-for-americans.

[81] Proposed Rule, Docket ID No. EPA-HQ-OAR-2025-0124, *Temperature, CO2 Concentration, and Sea Level Rise Impacts of CO2 Emissions from U.S. Electricity Generating Units*, U.S. EPA (Aug. 2026), https://downloads.regulations.gov/EPA-HQ-OAR-2025-0124-2921/content.pdf

[82] *See, e.g.*, IPCC AR6 WGI, Ch. 9; NCA5, Ch.9; National Academies (2025), *supra* note 74, at 31-34.

[83] *See, e.g.*, National Academies (2025), *supra* note 74, at 32; NCA5 at 9-8–9-9.

2. Attributing Harm to Power Plant GHG Emissions

Throughout the Proposed Rule, both in support of its legal arguments and factual determinations, EPA claims it is impossible to attribute the adverse impacts to public health and welfare of GHG emissions and climate change to power plants. This claim is incorrect.

EPA's Technical Memo indicates that, under baseline conditions, carbon dioxide emissions from U.S. power plants will constitute 3% of global emissions in 2050, and 9% in 2100. These baseline projections anticipate a 2% contribution to a 0.55°C increase in GMST in 2050 and a 3% contribution to a 1.3°C in GMST in 2100. Similarly, according to the EPA, the baseline emissions will contribute 1% of a 38.9 centimeter increase in GSLR in 2050 and 2% of a 97.1 centimeter increase in GSLR by 2100. EPA then evaluated two additional scenarios: where 50% of carbon dioxide emissions from U.S. power plants were eliminated, and where 100% were eliminated. EPA concluded that such reductions would "have no material impact (i.e., beyond a *de minimis* level) on key indicators of public health and welfare effects stemming from global climate change concerns."[84] This conclusion is deeply flawed and unlawfully ignores scientific evidence to the contrary.

As detailed above, the existing scientific record provides unassailable support for the conclusion that GHG emissions endanger public health and welfare. It also provides unassailable support for the conclusion that GHG emissions from power plants cause or contribute to endangerment in a significant way. The GHG emissions from U.S. power plants comprise a large share of total global GHG emissions (comprising over 5% of all global GHG emissions from 1990-2022 and currently 3% annually).[85] Indeed, the EPA itself has found that "[p]ower plants are the largest source of greenhouse gas pollution in the United States, accounting for more than one-quarter of all domestic greenhouse gas emissions."[86] This is, on its face, a significant contribution to climate change-related damages.[87]

EPA has erroneously argued, as part of the legal justification for revoking the 2015 Rule and related regulations, that GHG emissions from power plants "do not have a sufficiently close connection to the harms identified in the 2015 Findings to fit within the legal meaning of 'cause' or 'contribute.'"[88] EPA does not provide any supporting analysis for this claim, apart from the assertion that GHGs do not endanger public health or welfare "through local or regional exposure."[89] But the fact that there are multiple steps in the causal chain linking GHG emissions to harmful impacts does not mean that the causal connection is inherently "weaker" or more

[84] Proposed Rule at 59040.
[85] Peter H. Howard & Jason A. Schwartz, *The Scale of Significance: Power Plants*, INST. FOR POLICY INTEGRITY (May 2025), https://policyintegrity.org/files/publications/Power_Sector_GHG_Contribution_Issue_Brief_vF.pdf
[86] GHGRP Power Plants, U.S. EPA, https://www.epa.gov/ghgreporting/ghgrp-power-plants (last updated Jan. 30, 2026) [https://perma.cc/MLK2-WAWX].
[87] We note that the EPA argues that the major questions doctrine applies to the Proposed Rule because of the alleged vast economic and political significance of the standards currently in place. But power plants contribute "only" 5% of the total GDP to the U.S. economy. If 5% of global emissions is insignificant and a reason to not bother with regulation, surely the same math applies to the major questions doctrine. *See* Edison Electric Institute, "The Energy of Every Day," https://www.eei.org/en/resources-and-media/industry-facts [https://perma.cc/BM5U-FRY7] (last visited Nov. 1, 2026).
[88] Proposed Rule 59023.
[89] *Id.*

"attenuated" than that which links other air pollutants to harmful effects. There are multiple links in the causal chain linking regional and local air pollutants to harmful effects as well. For example, nitrogen oxides (NOx) and volatile organic compounds (VOCs) first react in the presence of sunlight and heat to create ground-level ozone, a secondary air pollutant, which may then be transported long distances by wind to new locations where it may affect vegetation and ecosystems, or it may enter the respiratory tract where it causes inflammation and irritation of tissues lining human airways, potentially exacerbating underlying conditions such as asthma. The distinction that EPA attempts to draw between GHG emissions and other air pollutants does not provide an adequate basis for refusing to regulate air pollutants that clearly have an adverse effect on human health and welfare.

There is a large body of research on climate change and harm attribution that provides insights on the contribution of specific emission sources to specific climate impacts. EPA could use this research to gain additional insights on the nature and magnitude of the adverse impacts attributable to U.S. power plant emissions. But EPA has essentially ignored this entire branch of climate science in the Proposed Rule.

There are several different areas of attribution research that are relevant but have, again, been ignored by EPA. First, with regards to physical impacts: researchers have developed end-to-end attribution techniques for quantifying the contribution of GHG emissions to physical phenomena such as sea level rise, ocean acidification, extreme heat, and increases in wildfire smoke.[90] In some cases, it is possible to estimate the physical impacts attributable to emissions on a per ton basis. For example, Notz and Stroeve (2016) estimate that every additional ton of carbon dioxide emitted into the atmosphere will cause a sustained loss of approximately 3 square meters of September sea ice in the Arctic.[91] Semken (2025) estimates the marginal impact of emission reductions on physical climate change outcomes, specifically finding that a one ton reduction in carbon dioxide in 2025 would result in 4,000 liters less of glacier ice melt, a 6 hour increase in aggregate life expectancy[92], and a 5 square meter decrease in vegetation undergoing ecosystem change.[93]

Researchers have also developed techniques for estimating the economic damages attributable to GHG emissions. For example, Callahan and Mankin (2025) demonstrate how climate models and economic damage functions can be used to calculate heat-related losses

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[90] *See, e.g.*, David J. Frame et al., *Emissions and Emergence: A New Index Comparing Relative Contributions to Climate Change With Relative Climatic Consequences*, 14 ENV'T RSCH. LETTERS 084009 (2019); Rachel Licker et al., Attributing Ocean Acidification to Major Carbon Producers, 14 ENV'T RSCH. LETTERS 124060 (2019); Friederike E.L. Otto et al., *Assigning Historical Responsibilities for Extreme Weather Events*, 7 NATURE CLIMATE CHANGE 757 (2017); Brenda Ekwurzel et al., *The Rise in Global Atmospheric CO2, Surface Temperature, and Sea Level from Emissions Traced to Major Carbon Producers*, 144 CLIMATIC CHANGE 579 (2017); Shaina Sadai et al., *Estimating the sea level rise responsibility of industrial carbon producers*, 20(4) ENV'T RSCH. LETTERS 044012 (2025); Beverly E. Law et al., *Anthropogenic climate change contributes to wildfire particulate matter and related mortality in the United States*, 6 COMMC'NS EARTH & ENV'T 336 (2025); Yann Quilcaille et al., *Systematic attribution of heatwaves to the emissions of carbon majors*, 645 NATURE 392 (2025).

[91] Dirk Notz & Julienne Stroeve, *Observed Arctic sea-ice loss directly follows anthropogenic CO2 emission*, 354 SCIENCE 747 (2016).

[92] The "aggregate life expectancy" is defined as the life expectancy of everyone who lives until 2100 combined.

[93] Christoph Semken, *The Marginal Impact of Emission Reductions: Estimates, Beliefs, and Behaviors* (May 6, 2025).

attributable to GHG emissions.[94] Using this framework, Mankin et al. (2025) estimates that the climate damages to the U.S. economy caused by the U.S. power sector totaled $78 billion between 1973-2023.[95] Damages will continue to accrue from the warming attributable to those historical emissions as well as any future emissions. Duke (2025) estimates that climate damages will cost at least $11.1 billion as a result of the power sector's unabated greenhouse gas emissions from 2025-2035.[96] There are other damage estimates available for comparison. Burke et al. (2023) provide a framework for estimating both past and future damages attributable to GHG emissions on a per ton basis (which can be used to estimate the contribution of a specific emitter to damages globally and within specific countries).[97] EPA could also use its 2023 social cost of carbon dioxide (SC-CO2) to evaluate the potential costs of the emissions generated from U.S. power plants.[98]

Importantly, the SC-CO2, and other damage estimates only capture a portion of the harms attributable to GHG emissions, and thus these are conservative estimates that inevitably underestimate the total attributable damages. There may be variation in cost estimates due to differences in methodology and the scope of impacts included in the estimates. But even the most conservative estimates of the social costs attributable to U.S. power plant emissions would provide support for the 2015 finding and corresponding regulations.

There is also a growing body of research on impact attribution that can be used to assess impacts on human health. For example, a recent issue of Nature Climate Change featured multiple studies on the health effects of climate-driven changes in physical phenomena such as heat waves and wildfires.[99] These studies show that it is possible, in some instances, to quantify impacts such as mortality from increased smoke and extreme heat.[100] These estimates can be

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[94] Christopher W. Callahan & Justin S. Mankin, *Carbon majors and the scientific case for climate liability*, 640 NATURE 893 (2025).
[95] Justin Mankin et. al., *Climate Damages to the U.S. Economy from U.S. Power Sector Emissions*, DARTMOUTH CLIMATE MODELING & IMPACTS GROUP (June 2025), https://climateattribution.org/resources/climate-damages-to-the-u-s-economy-from-u-s-power-sector-emissions/.
[96] Rick Duke, *Analysis: Calculating Near-Term U.S. damages from U.S. greenhouse gas power sector emissions from 2025-2035*, GIGATON STRATEGIES (Aug. 6, 2025), https://climateattribution.org/resources/analysis-calculating-near-term-u-s-damages-from-u-s-greenhouse-gas-power-sector-emissions-from-2025-2035/
[97] Marshall Burke et al., *Quantifying Climate Change Loss and Damage Consistent with a Social Cost of Greenhouse Gases*, NBER Working Paper 31658 (September 2023). *See also* Solomon Hsiang et al., Estimating Economic Damage from Climate Change in the United States, 356 SCIENCE 1262 (2017).
[98] EPA, *Supplementary Material for the Regulatory Impact Analysis for the Final Rulemaking, "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review"*, EPA-HQ-OAR-2021-0317 (Nov. 2023). We recognize that the current administration has raised concerns about the technical validity of these estimates, and has issued guidance directing agencies to "limit their analysis and consideration of greenhouse gas emissions only to that plainly required in their governing statutes." OMB, Memorandum for Regulatory Policy Officers at Departments and Agencies and Managing and Executive Directors of Commissions and Boards (May 5, 2025). For the proposed rulemaking, EPA has a legal obligation to assess the magnitude of harm attributable to GHG emissions. EPA's 2023 social cost estimates continue to be a viable tool for quantifying such harms. These estimates incorporate dozens of peer-reviewed studies and reflect the best available science on GHG damage estimation. See Max Sarinsky & Kurt Weatherford, *The Social Cost of Greenhouse Gases: An Overview* (Institute for Policy Integrity May 2024).
[99] *Advances in Attribution*, 14 NATURE CLIMATE CHANGE 1108 (2024). *See also* Colin J. Carlson et al., *Health losses attributed to anthropogenic climate change*, NATURE CLIMATE CHANGE (2025).
[100] *See, e.g.*, Chae Yoen Park et al., *Attributing human mortality from fire PM2.5 to climate change*, 14 NATURE CLIMATE CHANGE 1193 (2024).

tailored to the United States – for example, Khatana et al. (2024) estimated that by mid-century (2036-2065), heat-related cardiovascular deaths in the U.S. could rise by up to 233 percent as climate change intensifies the frequency, duration, and severity of extreme heat.[101] Qui et al. (2025) project that the increase in wildfire smoke attributable to climate change could result in 71,420 excess deaths per year in the U.S by 2050 under a high warming scenario (a 73% increase relative to the 2011-2020 baseline).[102] Law et al. (2025) found that wildfire smoke attributable to climate change has caused approximately 15,000 deaths and a cumulative economic burden of $160 billion over 15 years.[103] Researchers have also published meta-assessments of health impacts attributable to climate change, including most notably the annual reports issued by the Lancet Countdown on Climate Change and Human Health.[104]

Our goal in this discussion is to highlight the fact that tools are available to quantify impacts and damages attributable to the GHG emissions at issue in this rulemaking. However, we are not suggesting that it is necessary to use these tools in order to arrive at the conclusion that the emissions from U.S. power plants endanger public health and welfare. As noted above, this source category generated approximately 5% of total global GHG emissions over the last 30 years and currently accounts for 3% of annual global emissions. In 2025, U.S. power plants emitted 1.485 billion metric tons of carbon dioxide, representing nearly 4% of global carbon dioxide emissions.[105] This is an exceedingly large share. It is larger than the total GHG emissions attributable to most countries, with the exception of the top four emitters (U.S., China, India, and Russia).[106] It is equivalent to approximately half of the emissions attributable to the entire European Union, and it exceeds the emissions generated by the entire continent of Africa.[107] Most importantly: the harms attributable to this contribution are significant because the denominator (i.e., all harms attributable to climate change) is enormous. This is clear even when focusing only on damages that will occur within the United States. As detailed in NCA5, climate change is already causing pervasive adverse effects across the country, there are multiple climate impacts "of significant concern" in every U.S. region, climate-related damages "pose significant risks to the US economy", and every incremental increase in GHG emissions and fraction of a degree of additional warming will lead to increasing risks across essentially all U.S. regions and sectors.[108]

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[101] Sameed Ahmed M. Khatana et al*., Projections of Extreme Temperature-Related Deaths in the US*, 7(9) JAMA NETWORK OPEN: ENV'L HEALTH e2434942 (2024).
[102] Minghao Qui et al., *Wildfire smoke exposure and mortality burden in the US under climate change*, NATURE (2025). *See also* Junri Zhao et al., *Global warming amplifies wildfire health burden and reshapes inequality*, NATURE (2025).
[103] Law et al. (2025), *supra* note 90.
[104] *See, e.g.*, Marina Romanello et al., *The 2024 report of the Lancet Countdown on health and climate change: facing record-breaking threats from delayed action*, 404 THE LANCET P1847 (2024); The Lancet Countdown on Health and Climate Change, Policy brief for the United States (2024).
[105] https://globalcarbonbudget.org/fossil-fuel-co2-emissions-hit-record-high-in-2025/
[106] Emissions Database for Global Atmospheric Research, *GHG emissions of all world countries*, EUROPEAN COMMISSION (2025 Report) https://edgar.jrc.ec.europa.eu/report_2025; Olhoff, A. et. al., *Emissions Gap Report 2026: The Point of Return*, UNITED NATIONS ENVIRONMENT PROGRAMME (2026), https://wedocs.unep.org/rest/api/core/bitstreams/8819b586-8d60-4aaf-bd0e-4a48d04759f2/content, https://doi.org/10.59117/20.500.11822/50038.
[107] *Id.*
[108] See NCA5 at Table 1.2 ("Climate Change is Already Affecting All US Regions and Will Continue To Have Impacts in the Near Term"); 1-32.

III. Conclusion

For the reasons discussed above, the Sabin Center strongly opposes adoption of the Proposed Rule. The EPA's legal arguments are fundamentally flawed; its proposed interpretation of "air pollution" does not comport with the plain text of the CAA, nor the legislative history, or previous agency and judicial decisions interpreting it. Furthermore, EPA's factual determinations disregard the best available science on climate change and the ability to attribute GHG emissions to particular harms endangering the public health and welfare in the United States. We therefore urge EPA not to move forward with the proposal.

Sincerely,

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