COMMENTS OPPOSING PROPOSED REPEAL OF GREENHOUSE GAS EMISSIONS STANDARDS FOR FOSSIL FUEL-FIRED ELECTRIC GENERATING UNITS, 91 FED. REG. 59002 (SEPTEMBER 17, 2026)

DKT. EPA–HQ–OAR–2025–0124; FRL–12674.1–01–OAR, RIN 2060–AX00

November 2, 2026

The commenters identified in Appendix A hereto oppose the supplemental proposal issued by the United States Environmental Protection Agency ("EPA") to justify repeal of all standards regulating greenhouse gas ("GHG") emissions from fossil fuel-fired electric generating units ("EGUs") under section 111 of the Clean Air Act ("CAA" or "Act"), 42 U.S.C. § 7411, 91 Fed. Reg. 59002 (Sept. 17, 2026) (hereinafter the "Supplemental Proposal"). The Supplemental Proposal purports to augment EPA's original proposal to eliminate regulations adopted in 2024 restricting GHG emissions from fossil fuel-fired EGUs under section 111 of the Act as set forth at 90 Fed. Reg. 25752 (June 17, 2025) (hereinafter the "Original Proposal"). The Supplemental Proposal focuses on EPA's current views regarding the scope of legal authority under the Clean Air Act to regulate GHG emissions (which conveniently and unsurprisingly mirror the political positions of the Trump Administration). The Supplemental Proposal attempts to explain how it differs in its primary rationale from the Original Proposal. 91 Fed. Reg. at 59008. The proffered explanation, however, represents a distinction without a difference, other than incorporating arguments offered by EPA to support its repeal of the 2009 Endangerment Finding under the Act,[1] and clarifying that EPA intends

[1] *Rescission of the Greenhouse Gas Endangerment Finding and Motor Vehicle Greenhouse Gas Emission Standards Under the Clean Air Act*, 91 Fed. Reg. 7686 (Feb. 18, 2026). The Supplemental Proposal relies heavily on EPA's rationale for rescinding the 2009 Endangerment Finding as described in the preamble for the final rule earlier this year and the associated proposal published in August 2025. 90 Fed. Reg. 36288 (Aug. 1, 2025). Because the Supplemental Proposal appears to include responses to arguments raised in comments opposing rescission of the 2009 Endangerment Finding, these comments include citations to EPA's arguments contained in support of both the proposed rule and final rule eliminating the 2009 Endangerment Finding as appropriate.

to apply the hollow rationale advanced in the Supplemental Proposal to *all* actions to regulate GHGs under section 111 of the Act.

Given the daisy chain of regulatory actions described above, we are hereby incorporating by reference as part of these comments addressing the Supplemental Proposal the comments that we previously submitted regarding the Original Proposal (which we believe should already be part of the record, *see* 91 Fed. Reg. at 59005 n.3, 59017) (hereinafter the "Original Comments"). We are also incorporating by reference our comments opposing rescission of the 2009 Endangerment Finding given EPA's reliance on arguments in support of that action in connection with the Supplemental Proposal. Specifically, we request that the submission titled *Comments Opposing Proposed Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards*, 90 Fed. Reg. 36288 (Aug. 1, 2025), DKT. EPA–HQ–OAR–2025–0194; FRL–12715–01–OAR, RIN 2060–AW71, dated September 22, 2025, by Robert B. McKinstry, Jr., John Dernbach and a number of the other commenters identified in Appendix A (hereinafter the "Endangerment Finding Comments") be incorporated and made part of the record for this rulemaking proceeding. The comments herein will restate relevant portions of the Original Comments and the Endangerment Finding Comments, as appropriate, and supplement those comments to address subsequent changes and new information.

As set forth below, the Supplemental Proposal is based on EPA's newly found "best reading" of the Clean Air Act that invokes several novel interpretations of the Act that run afoul of virtually all rules of statutory interpretation. This, by itself, is dispositive and requires that the Supplemental Proposal be rejected. In short, EPA's proposed interpretations are inconsistent with the clear words of the statute. Moreover, EPA's linguistic gymnastics were specifically rejected by the Supreme Court in *Massachusetts v. EPA*, 549 U.S. 497, 529 n.26 (2007). The new "best reading" of the Clean Air Act is also inconsistent with EPA's prior interpretation of section 111 of the Act, which appears

to be the basis of the regulations first proposed in 1972,[2] shortly after the adoption of the Clean Air Act, Pub. L. No. 91-604, § 4(a), 84 Stat. 1676, 1683 (Dec. 31, 1970). In addition, that interpretation is contrary to clear expression of legislative intent in the legislative history of both the 1970 Clean Air Act and the 1977 Amendments. The pertinent language in section 111 was not modified by Congress over the next half century, despite numerous amendments to the Act, including the very significant revisions to the Act adopted in 1977, Pub. L. No. 95-95, 91 Stat. 685 (Aug. 7, 1977), and 1990, Pub. L. No. 101-549, 104 Stat. 2399 (Nov. 15, 1990). The Supplemental Proposal and the already adopted repeal of the 2024 GHG emissions standards pursuant to the Original Proposal[3] are also contrary to the customary law of nations as identified by the International Court of Justice.

As shown in this outline of our comments, the Supplemental Proposal errs in the following respects:

I. EPA's Proposed Reinterpretation of Section 111 of the Clean Air Act Is Inconsistent with Basic Rules of Statutory Construction.

A. EPA's Reinterpretation of Section 111 of the Clean Air Act to Exclude GHG Pollutants Because They Purportedly Do Not Present Risks from Local or Regional

[2] Federal Register notices in the 1970s were bare-bones, to say the least. In later Federal Register notices, EPA explicitly determined that GHG emissions should be regulated under section 111 of the Clean Air Act. After EPA made the decision to regulate GHG emissions under section 111 and promulgated regulations implementing this determination, the so-called One Big Beautiful Bill Act addressed parts of the Clean Air Act implicating GHG emissions but did not amend section 111 of the Act.

[3] On September 17, 2026, EPA issued a final rule repealing most of the standards adopted in 2024 regulating GHG emissions from fossil fuel-fired EGUs pursuant to section 111 of the Clean Air Act. 91 Fed. Reg. 58954 (Sept. 17, 2026). EPA concluded, among other things, that the standards imposed requirements on fossil fuel-fired EGUs that did not qualify as a best system of emission reduction under the statute. As such, the standards were invalid. The Supplemental Proposal goes an important step further in seeking to justify the conclusion that the Clean Air Act does not authorize any regulation whatsoever of GHG emissions from power plants under section 111 of the Act, regardless of the standards that might be imposed.

Exposure Violates Basic Rules of Statutory Construction and Is Inconsistent with Its Longstanding Prior Interpretation of Section 111.

1. The Supplemental Proposal's Proposed Reinterpretation of Section 111 of the Clean Air Act Is Inconsistent with the Text and Structure of Section 111 of the Act.

2. EPA's Proposed Reinterpretation of Section 111 of the Clean Air Act in the Supplemental Proposal Is Inconsistent with the Interpretation of That Provision Applied over the Last Half Century.

3. EPA's Efforts to Limit the Types of Endangerments Cognizable Under Section 111 of the Clean Air Act Are Contrary to the Express Language of the Statute Specifying That Adverse Impacts on Welfare Include Impacts on Climate as well as the Act's Legislative History.

4. EPA's Interpretation of "Pollutant" Is Contrary to Supreme Court Precedent.

B. Because the Clean Air Act Authorizes Regulation of GHGs Under Section 111, the Regulations That EPA Seeks to Rescind Are Not Constrained by the Major Questions Doctrine.

C. The GHGs Emitted from Power Plants Can Reasonably Be Expected to Endanger Public Health and Welfare Because They Are Far from *De Minimis.*

1. EPA's Supplemental Proposal Ignores Abundant Scientific Evidence Concerning the Adverse Public Health and Welfare Impacts of GHG Emissions from Fossil-Fired Power Plants.

2. EPA's Supplemental Proposal Violates the Statutory Obligation to Identify Any Relevant Findings and Reports from the National Academy of Sciences and Explain Any Differences Between the Supplemental Proposal and Those Recommendations.

D. The Supplemental Proposal Is Arbitrary and Capricious Because It Ignores Significant Adverse Effects Stemming from EPA's Newly Found Interpretation of Section 111 of the Clean Air Act.

1. EPA Erred in Failing to Address the Cumulative Impacts of Its Reinterpretation of Section 111.

2. EPA Should Not Proceed with the Proposed Action Because the Costs Exceed the Benefits.

II. THE SUPPLEMENTAL PROPOSAL IS INCONSISTENT WITH THE PUBLIC INTERNATIONAL LAW GOVERNING PROTECTION OF THE GLOBAL CLIMATE, WHICH CONFIRMS THAT

EPA'S NEWLY FOUND BEST READING OF SECTION 111 OF THE CLEAN AIR ACT IS MISPLACED.

A. EPA Improperly and Unlawfully Ignores International Law in the Context of Analyzing the Scope of Authority Provided by Section 111 of the Clean Air Act.

B. Notwithstanding the Withdrawal from the Paris Agreement and the Pending Withdrawal from the UNFCCC, the Customary International Law of Climate Protection Continues to Bind the United States.

C. The ICJ's Advisory Opinion Authoritatively Sets Out Customary Legal Standards for All States, Binding Norms Against Which the Legality of the Behavior of the United States and EPA Must Be Measured.

1. The Supplemental Proposal Would Violate the Customary International Legal Duty Requiring States Effectively to Regulate GHG Emissions Within Their Jurisdiction or Control.

2. EPA's Analysis Disregards the Customary International Law Duty to Prevent Significant Climate Harm, Which Is Directly Relevant to This Proceeding.

3. EPA Disregards the Customary International Legal Duty of International Cooperation and Good Faith, Which Is Directly Relevant to This Proceeding.

4. Withdrawal from Climate Agreements Does Not Relieve the United States of the Corresponding Customary Obligations.

D. EPA Must Analyze the Domestic Legal Relevance of International Custom, as Set Out in the ICJ's Advisory Opinion, and Apply It as Appropriate to This Proceeding.

1. Public International Law, Including Binding Custom, Is Applicable in This Proceeding, and EPA May Not Disregard It.

2. The Clean Air Act Can, and Must, Be Interpreted and Applied by the Agency Consistent with International Legal Norms, Which Confirm That the Supplemental Proposal's Reading of Section 111 Is Not the Best Reading.

3. Congress Contemplated That International Legal Norms Would Inform EPA's Decisions, and Failure to Consider Them Would Be "Not in Accordance with Law."

III. EPA SHOULD PROVIDE ADDITIONAL TIME FOR PUBLIC COMMENT.

For the reasons summarized above and set forth in greater detail below, the parties identified in Appendix A urge EPA not to finalize the Supplemental Proposal. The commenters are a group of attorneys, academics, scientists and other professionals who are deeply concerned about climate disruption caused by GHG pollution and who have been working on the issue in one form or another for decades. Many of us have written extensively on climate disruption and the use of the law to reduce emissions and adapt to climate change. We have won awards for our work. We, collectively, have experience in litigating issues at all levels, including before the United States Supreme Court, the United States Court of Appeals for the District of Columbia Circuit, the Inter-American Court of Human Rights, the International Tribunal for the Law of the Sea, and the International Court of Justice; developing climate mitigation and adaptation plans; participating in and chairing bar association climate committees; and participating in United Nations Framework Convention on Climate Change ("UNFCCC") Conferences of the Parties ("COPs"). We have participated in state, regional and local climate planning efforts; worked with utilities and other companies in developing climate action policies and plans; conducted climate research; designed and administered large-scale energy efficiency services; provided advice in federal, state, and local government and private company clean energy financing; and developed and commented on federal, state, and local energy, air pollution and climate laws, regulations and ordinances. Together our group has over 600 years of experience in the relevant fields.

I. EPA'S PROPOSED REINTERPRETATION OF SECTION 111 OF THE CLEAN AIR ACT IS INCONSISTENT WITH BASIC RULES OF STATUTORY CONSTRUCTION.

In its Original Proposal, contrary to years of prior consistent interpretations of the Clean Air Act, EPA:

> Propos[ed] to conclude that CAA section 111 is best read to require, or at least authorize the EPA to require, an Administrator's determination that *an air pollutant* emitted by a source category causes, or contributes significantly to, air pollution

> which may reasonably be anticipated to endanger public health or welfare as a predicate to establishing emission standards for that pollutant.

90 Fed. Reg. at 25755 (emphasis added).[4]

EPA does not appear to depart from that position in the Supplemental Proposal. But it also seeks comment on five additional claims, each of which, EPA says, provides independent grounds for not regulating GHG emissions from fossil-fired power plants under section 111 of the Clean Air Act. 91 Fed. Reg. at 59020–41. These claims are that (1) section 111 reaches only specific pollutants that cause or contribute to harm through local or regional exposure,[5] (2) EPA improperly combined two source categories in regulating GHG emissions from fossil fuel-fired EGUs (i.e., steam generators and combustion turbines),[6] (3) the rescission earlier this year of the 2009 Endangerment Finding abrogated the legal framework underlying EPA's determination in 2015 to regulate GHG emissions from fossil fuel-fired EGUs,[7] (4) the major questions doctrine limits the reach of EPA's authority under section 111 of the Act to regulate GHG emissions from fossil fuel-fired EGUs,[8] and (5) regulating GHG emissions from fossil-fired plants would have only a *de minimis* effect on global emissions.[9] None of these assertions justifies EPA's efforts to rewrite the Clean Air Act as described in the Supplemental Proposal. We address the

[4] This was comment solicitation C–1 of the Original Proposal. 90 Fed. Reg. at 25777. In comment solicitation C–7, EPA raised the alternative interpretation that section 111 at least authorizes it to require a pollutant-specific significant-contribution determination. *Id.* at 25778. No agency is authorized to violate the clear words of its authorizing statute.

[5] 91 Fed. Reg. at 59020–29.

[6] 91 Fed. Reg. at 59020, 59030.

[7] 91 Fed. Reg. at 59020, 59030–32.

[8] 91 Fed. Reg. at 59020, 59032–35.

[9] 91 Fed. Reg. at 59020, 59035–41.

bulk of our comments to EPA's three major claims: local or regional effects and the need for a separate pollutant-specific endangerment finding (Subsection A), major questions doctrine (Subsection B), and *de minimis* effects (Subsection C). We address EPA's other two claims in footnotes: improper combination of source categories,[10] and the effect of rescission of the 2009 Endangerment Finding.[11]

EPA's proposed interpretation of section 111 of the Clean Air Act in the Supplemental Proposal is inconsistent with generally accepted rules of statutory construction. It violates the clear words of the statute. It ignores the Act's legislative history. It is contrary to the Act's regulatory structure. It is directly inconsistent with the Supreme Court's decision in *Massachusetts v. EPA*, 549 U.S. at 529 n.26, and later applicable decisions by the Supreme Court and lower courts. It is also inconsistent with years of EPA's application of section 111 to *all* pollutants, including GHGs.

[10] EPA's second claim is that it erred when it adopted its 2015 regulations for GHG emissions from fossil-fired power plants by combining two separate source categories "to create the fossil fuel-fired EGU source category specifically for the purpose of regulating GHG emissions from these sources" without "grappling fully with the predicate requirements for taking such an action." 91 Fed. Reg. at 59020. This claim is meritless. EPA's argument makes no sense, given the correct reading of the statute. If each of two (or more) existing categories created sufficient pollution by all pollutants to warrant listing of those categories under section 111 in the first place, simply combining those categories into a larger single category does not change anything. In this case, EPA addressed GHG emissions from steam generators and combustion turbines producing electricity collectively rather than as two separate source categories. Both of these classes of EGUs individually could have been regulated separately with the same outcome to which EPA now objects.

[11] EPA's third claim, that rescission of the 2009 Endangerment Finding abrogates EPA's authority under section 111 of the Clean Air Act to regulate greenhouse gases, is meritless. It is inconsistent with the structure of section 111 of the Clean Air Act, as discussed in Subsection A, where we address EPA's violation of rules of statutory interpretation. The endangerment finding under section 111 requires an assessment based on reasonably anticipated dangers to public health or welfare to which the collective emissions from all pollutants from the source category cause or significantly contribute. Once a source is regulated, any and all pollutants emitted from the source must be regulated under the technology-based best system of emission reduction standard, which would exclude regulation of pollutants that cannot be cost-effectively regulated, such as water vapor.

A. EPA's Reinterpretation of Section 111 of the Clean Air Act to Exclude GHG Pollutants Because They Purportedly Do Not Present Risks from Local or Regional Exposure Violates Basic Rules of Statutory Construction and Is Inconsistent with Its Longstanding Prior Interpretation of Section 111.

Section 111(b)(1)(A) of the Clean Air Act provides as follows:

> The Administrator shall, within 90 days after December 31, 1970, publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.

42 U.S.C. § 7411(b)(1)(A).

According to EPA, the point of departure for its new interpretation of section 111 of the Clean Air Act is as follows:

> the best reading of the requirement to list a source category "if in [the Administrator's] judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare" is that the "air pollution" to be addressed under CAA section 111 must adversely impact public health or welfare through local or regional exposure.

91 Fed. Reg. at 59020. While GHG emissions may have global impacts, EPA says, they do not endanger public health and welfare through local or regional exposure and therefore may not be regulated under section 111 of the Clean Air Act. *Id.* This argument is not only inconsistent with the Clean Air Act's text and legislative history, it is also inconsistent with EPA's longstanding interpretation of the Act.

EPA compounds its error by further contending that no pollutant from a source category may be regulated unless the emission of that particular substance from the source category endangers health or welfare through local or regional exposure. This is equally inconsistent with the statutory text and its longstanding and consistent application.

1. The Supplemental Proposal's Proposed Reinterpretation of Section 111 of the Clean Air Act Is Inconsistent with the Text and Structure of Section 111 of the Act.

Section 111 of the Clean Air Act first requires a finding that the *source category*, *not* the pollutant, causes or contributes significantly to air pollution that may reasonably be anticipated to endanger public health or welfare. EPA ignores this critical requirement in its new-found interpretation of the statute. After an endangerment finding is made for the *source category*, sections 111(b) and (d) then require EPA to establish technology-based standards or guidelines for any and all pollutants emitted by facilities in that source category.

EPA's Supplemental Proposal rewrites section 111 in two ways. First, it would require EPA to make a pollutant-specific endangerment finding before regulating GHG pollutants from the fossil fuel-fired source category, even though section 111's text requires the endangerment finding only for source categories and not individual pollutants from those categories. Second, it would add a requirement to the statutory predicate finding: pollutants must not only be reasonably anticipated to endanger public health or welfare; they must also exclusively do so "through local or regional exposure." 91 Fed. Reg. at 59020. Neither of these changes is contained in the text or structure of the Act. In short, to arrive at its "best reading" of section 111 of the Clean Air Act, EPA adds words to the statute that do not exist and ignores words in the statute that actually do exist. This is not a "best reading." It is fantasy.

In the Supplemental Proposal, EPA takes the position that in order to trigger regulation under section 111, GHG emissions from power plants (rather than emissions from the source category generally) must contribute significantly to "air pollution that may reasonably be anticipated to endanger public health or welfare." 91 Fed. Reg. at 59018. EPA then takes the baseless leap of asserting that "global climate change concerns cannot satisfy that standard." *Id.*

As it did in its repeal of the 2009 Endangerment Finding based on its reading of the definition of "pollutant" under section 202 of the Clean Air Act, EPA seeks to employ its new so-called "best reading" of section 111 of the Clean Air Act based on a tortured interpretation of "air pollution" and "air pollutant" that ignores the plain meaning of the definitions in the Clean Air Act and applicable precedents. 90 Fed. Reg. at 36299–302. Rather than following the broad Act-wide definition of an "air pollutant" in section 302(g) of the Clean Air Act as meaning any substance emitted into the air and "air pollution" as the collective universe of such individual pollutants, EPA suggests that for purposes of section 111, "air pollution" refers only to that "which itself endangers public health or welfare *through local or regional exposure*." 91 Fed. Reg. at 59021 (emphasis added). This is contrary to the express terms of the Clean Air Act. The phrase "through local or regional exposure" appears nowhere in section 111, section 302(g), or section 302(h) (or even section 202) of the Clean Air Act. In fact, it appears nowhere in the entire statute.

As noted above, section 111(b)(1)(A) states that the Administrator of EPA "*shall* . . . publish (and from time to time thereafter *shall* revise) a list of *categories* of stationary sources." 42 U.S.C. § 7411(b)(1)(A) (emphasis added). That section further provides:

> He shall include a *category* of sources in such list if in his judgment *it* causes, or contributes significantly to, air *pollution* which may reasonably be anticipated to endanger public health or welfare.

Id. (emphasis added). The endangerment determination is required only for the *category of sources* based on "*air pollution*" contributed by that category, not individual pollutants. After the "category" is listed, under the statute, the Administrator is required to publish "standards of performance" for new sources in the category and to review those standards at least every eight years following the same procedures used to establish the standards initially. *Id.* § 7411(b)(1)(B). There is no requirement that each and every pollutant to be regulated endanger health or welfare, that

endangerment be limited to direct exposure, or that it be limited to purely local or regional impacts. EPA creates all of these requirements out of whole cloth.

Section 111(a)(1) of the Clean Air Act defines a "standard of performance" to mean "a standard for emissions of air *pollutants* which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated." *Id.* § 7411(a)(1) (emphasis added); *see also id.* § 7411(b)(3). In short, a standard of performance is a standard based on the best system of emission reduction ("BSER").

Under this clear structure, if air pollution emitted *collectively* by the source category is "reasonably anticipated" to endanger public health or welfare, the Administrator must establish a technology-based BSER standard for each and every air pollutant emitted by that source category. This structure takes the precautionary approach of requiring regulation of every pollutant emitted by major sources including (but not limited to) criteria pollutants regulated under sections 108–110 and hazardous air pollutants regulated under section 112 of the Clean Air Act. It further recognizes that pollutants like GHGs may fall in neither category but should be regulated under a technology-based standard. This approach also recognizes that pollutants may have synergistic, additive or long-term effects, such that the precautionary approach of establishing technology-based standards for *all* pollutants is appropriate. The requirement to develop standards for each and every air pollutant from a covered source is limited by the requirement that such standards must reflect BSER, which considers cost and feasibility.[12]

[12] In its Supplemental Proposal, EPA posits that regulation of GHG emissions from fossil fuel-fired EGUs stands on the same footing as the theoretical regulation of water vapor from such sources, an outcome that EPA describes as "absurd." 91 Fed. Reg. at 59031–32. What EPA entirely misses is that any emission standard must satisfy the requirements for BSER. Controls on emissions of water

Here, there is no question that GHGs are pollutants as defined under sections 302(g) and (h) of the Clean Air Act. 42 U.S.C. §§ 7602(g) and (h). The Supreme Court found them to be pollutants in *Massachusetts v. EPA*, 549 U.S. 497 (2007). Thus, under the Act, the Administrator is required to establish BSER standards for GHG emissions from new sources of each listed category under section 111(b) of the Clean Air Act ("the Administrator shall") and emissions guidelines for GHG emissions from existing sources under section 111(d) ("The Administrator shall").

In its Original Proposal, EPA provided an extensive discussion in a vain attempt to explain why the plain language of the Clean Air Act should be ignored in favor of EPA's newly minted pollutant-specific significant contribution argument. 90 Fed. Reg. at 25763–65. This explanation is contrary to the clear language of section 111. Section 111 expressly distinguishes between the term "air pollution" used in section 111(b)(1)(A) to refer to all pollutants collectively and the term "air pollutants" used in the definition of "standard of performance" in section 111(a)(1), the establishment of which is required under section 111(b)(1)(B). The term "pollution" used in section 111[13] is clearly different from the term "pollutant" or "pollutants" used in that section. *See id.* §§ 7411(a)(1) (definition of standards of performance as standards limiting emissions of air pollutants); 7411(a)(3) (definition of a "stationary source" as a building, structure, facility or installation which emits or may emit any air pollutant); 7411(a)(4) (definition of "modification"

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vapor would not meet these standards. Section 111 of the Clean Air Act does in fact contain limitations and curbs on EPA's authority, just not the ones that EPA has concocted in its efforts to rewrite the statute.

[13] *See* 42 U.S.C. §§ 7411(a)(7) (definition of "technological system of continuous emission reduction" as including a system for the reduction of "pollution" generated by a source) and 7411(b)(1)(A) (a category of sources is to be listed if it causes, or contributes significantly to, "air pollution" which may reasonably be anticipated to endanger public health or welfare).

as a change that increases emissions of any air pollutant); 7411(b)(3) (Administrator shall issue information on pollution control techniques for "air pollutants"); and 7411(d) (Administrator shall issue guidelines for any "air pollutant" that is not a criteria or hazardous air pollutant). This distinction appears throughout the Clean Air Act. *See, e.g.*, 42 U.S.C. §§ 7408(a)(1) (the Administrator must publish a list that includes "each air pollutant—(A) emissions of which . . . cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare"); 7409 (ambient air quality standards for "each air pollutant"); 7410(a)(2)(D) (state implementation plans must include provisions to prevent any source "from emitting any air pollutant in amounts which will . . . contribute significantly to nonattainment"). To say that the best reading of the Clean Air Act is one that contradicts its plain text turns the plain meaning rule on its head.[14]

EPA's reliance on the statutory use of the word "significantly" in section 111(b)(1) to bolster its position suffers from the same defect. EPA correctly points out that the source category must contribute "significantly" to air *pollution* that endangers public health or welfare. The Supplemental Proposal then makes the unsupported leap in logic that this requires that the emissions of a single *pollutant* from the source category must significantly endanger public health or welfare rather than assessing the collective emissions (i.e., air pollution) from a source category. 91 Fed. Reg. at 59024. The plain reading of the statute is that the cumulative air pollution to which the source category contributes must significantly endanger public health or

[14] EPA's "best reading" of the statute argument is a classic example of outcome-driven legal analysis. Having decided (or been told) what conclusion to reach, EPA has worked backwards to try to craft a path to reach that conclusion. Its efforts are reflected in its attempts to justify asserting that "pollution" is not the sum total of "pollutants" because GHGs do not count for such purposes; that even if GHGs do count, only dangers posed to public health or welfare on a local or regional level are relevant for purposes of the Clean Air Act; and that to be regulated, GHGs individually rather than the overall emissions from the source must pose the endangerment.

welfare. "Significantly" modifies only "contributes," and the verb "endanger" relates to "air pollution," not an "air pollutant." Under the Supplemental Proposal's tortured reading of the English language, if a category of coal-fired power plants emitted not only carbon dioxide but also NO_x, SO_2, acid gases, and heavy metals into airsheds where other sources contribute the bulk of each of those pollutants, none of them could be regulated under section 111. That outcome is obviously nonsensical.

Given this statutory structure, EPA's rescission of the 2009 Endangerment Finding is simply irrelevant to the question of whether a pollutant should be regulated under section 111 once the source category is listed.

2. EPA's Proposed Reinterpretation of Section 111 of the Clean Air Act in the Supplemental Proposal Is Inconsistent with the Interpretation of That Provision Applied over the Last Half Century.

Given the fact that section 111 of the Clean Air Act is clear on its face and has been consistently applied, EPA is not free to adopt a new and different interpretation of the statute. Such a reinterpretation (if any) is solely the province of the judiciary under Article III of the Constitution. *Loper Bright Enters. v. Raimondo*, 603 U.S. 369 (2024) ("*Loper Bright*"). Cynically, the Supplemental Proposal cites *Loper Bright* and *West Virginia v. EPA*, 597 U.S. 697 (2022), as providing support for its reinterpretation of the statute. This is far from the case.

Even were there some ambiguity in the statute, EPA's proposed reinterpretation of section 111 of the Clean Air Act to require a pollutant-specific endangerment finding should be rejected because it is inconsistent with the interpretation of section 111 first adopted in 1972, two years after section 111 was first enacted, and consistently applied by every Administration other than the most recent Trump Administration for over half a century. The Supreme Court, in *Loper Bright*, recognized that respect for administrative decisions is especially warranted when

an Executive Branch interpretation of a statute was issued roughly contemporaneously with enactment of the statute and has remained consistent over time. *Loper Bright*, 603 U.S. at 385–86 (citing *Edwards' Lessee v. Darby*, 25 U.S. (12 Wheat.) 206, 210 (1827); *United States v. Vowell*, 9 U.S. (5 Cranch) 368, 372 (1809); *United States v. Dickson*, 40 U.S. (15 Pet.) 141, 161 (1841); *United States v. Ala. Great S. R.R. Co.*, 142 U.S. 615, 621 (1892); *Nat'l Lead Co. v. United States*, 252 U.S. 140, 145–46 (1920); *NLRB v. Noel Canning*, 573 U.S. 513, 525 (2014)). The corollary is that, even if a statute is ambiguous, that ambiguity does not license EPA to "change course," as might have previously been permissible under *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984) ("*Chevron*"). *Loper Bright*, 603 U.S. at 411. An interpretation adopted contemporaneously with the statute's enactment and applied consistently for half a century is powerful evidence of the statute's best meaning, *see id.* at 394, and a newly minted reinterpretation that wholly breaks with it lacks the "consistency with earlier and later pronouncements" that gives an agency's view its "power to persuade," *id.* at 388 (quoting *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944)).

Such a prior, contemporaneous, and consistent interpretation is particularly significant here because Congress chose not to amend section 111 of the Clean Air Act to change that interpretation even though Congress had many opportunities to do so, including two very significant rewrites of the statute in 1977 and 1990. As discussed below, the Congressional Record indicates that in 1977 Congress understood the Clean Air Act to address air pollution that affects climate, as it did in 1970. The 1990 amendments specifically modified the Clean Air Act to remove a requirement that the determination of BSER be limited to technological systems of pollution reduction, a change intended to allow use of low sulfur coal, i.e., fuel switching, as part of BSER. Moreover, well after the regulations that EPA now attacks were promulgated, the so-

called One Big Beautiful Bill Act amended the Clean Air Act to remove provisions added by the Inflation Reduction Act ("IRA") but did not amend section 111.

3. EPA's Efforts to Limit the Types of Endangerments Cognizable Under Section 111 of the Clean Air Act Are Contrary to the Express Language of the Statute Specifying That Adverse Impacts on Welfare Include Impacts on Climate as well as the Act's Legislative History.

The Clean Air Act expressly covers any "air pollution" that is "anticipated to endanger public health or welfare." As EPA acknowledges, "effects on welfare" is explicitly defined in section 302(h) of the statute to include "effects on . . . climate." 42 U.S.C. § 7602(h). The claim that GHG pollutants must have local or regional impacts in order to qualify as air pollution that endangers public health or welfare is contrary to the express terms of section 302(h) of the Clean Air Act, 42 U.S.C. § 7602(h), which is applicable across all provisions of the Act. Section 302(h) of the Clean Air Act provides that "[a]ll 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 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." *Id.* (emphasis added). While weather and visibility may be local or regional, climate is certainly not. This statutory language is directly contrary to the baseless notion advanced by EPA that section 111 (or section 202) of the Clean Air Act only applies to pollution that has local or regional impacts.

A contemporaneous dictionary definition of climate is: "the average course . . . of the weather at a particular place over a period of many years as exhibited [by] temperature, wind velocity, precipitation, and other weather elements." *Webster's Third New International Dictionary of the English Language, Unabridged* 423 (Philip Babcock Gove et al. eds., G. & C. Merriam Co. 1971), *cited in* Richard L. Revesz, *Bostock and the End of the Climate*

Change Double Standard, 46 Colum. J. Env't L. 1, 34 n.176 (2020). Nothing about this definition suggests that the source of impacts on climate must be regional or local.

The inclusion of "climate" in the list of welfare effects was not a mistake or a "throw away" piece of legislative verbiage. It grew out of the extensive legislative history of the Clean Air Act of 1970 making it unmistakably clear that Congress passed the Act with an expectation that it would be used to address climate change:

> [N]umerous statements made during the Congressional hearings surrounding the passing of the Clean Air Act of 1970 establish that leading members of Congress were deeply aware of the potential for pollution to result in global climate change and that they expressed significant concern at this prospect. Moreover, Congress was exposed to significant testimony and research on carbon dioxide's impact on the atmosphere and its ability to initiate a "greenhouse effect" that results in global warming.

Revesz, *supra*, at 52–53 (summarizing prior description of legislative history at 33–52).

In the Supplemental Proposal, EPA attempts to avoid this clear reading of section 302(h), included in the Clean Air Act of 1970, by stating that "climate" is an undefined term and pointing to contemporaneous dictionary definitions that make the unremarkable point that the climate differs in various locations. This does not support the proposition that emissions of substances that affect the climate in all parts of the world would not fall within the definition of pollution having adverse effects under section 302(h). In fact, the legislative history directly contradicts this assertion.

In introducing the Clean Air Act to the Senate on September 21, 1970, its principal sponsor, Senator Edmund Muskie, stated that the legislation would curb air pollution that could, among other things, "threaten irreversible *atmospheric and climatic changes*." 116 Cong. Rec. 32,901 (1970) (emphasis added). As part of the Senate floor debate on the bill that resulted in the Clean Air Act of 1970, Senator Boggs entered into the Congressional Record a section of a report from the White House Council on Environmental Quality stating that "[a]ir pollution is *no*

longer solely a local, State, regional, or even national problem" and that "[a]ir pollution alters climate and may produce global changes in temperature." 116 Cong. Rec. 32,907, 32,914, 32,917 (1970); *see* Revesz, *supra*, at 48.

The legislative history of the 1970 Clean Air Act includes a statement by Senator John Sherman Cooper speaking in favor of the bill on September 22, 1970, that makes clear the Committee's understanding that substances that result in changes in the climate, like GHGs, would be considered air pollutants to be regulated under the Act:

> The committee is also cognizant of the fact that continued degradation of the environment through air pollution could cause serious changes in natural systems regulating the biosphere and possibly destroy the earth's ability to sustain life.
>
> These are not meant to be alarmist fears. However, the evidence which is accumulating should give every man cause for concern. We now know, although with varying degrees of precision, that incident sunlight striking the surface of the earth has been reduced significantly as a result of air pollution. In Washington, D.C., for instance, the Smithsonian Institution has recorded a 16-percent reduction in incident sunlight striking the surface of the earth at the Mall. We know that the air pollution is triggering competing forces, one causing or tending to cause a cooling of the earth's atmosphere and the other tending to cause a heating of the earth's atmosphere, but we are not yet clear as to which of these forces are predominating. Both have great implications for continued success of life on earth.

A Legislative History of the Clean Air Amendments of 1970, Together With a Section-By-Section Index Prepared by the Environmental Policy Division of the Congressional Research Service of The Library of Congress for the Committee on Public Works, U.S. Senate, vol. 1, at 392, https://hdl.handle.net/2027/mdp.39015077941642?urlappend=%3Bseq=392%3Bownerid=13510798895678165-402.

The air pollution causing "cooling" consisted of sulfur dioxide and other aerosol-forming gases, which were of concern at the time, and the air pollution that was then competing and causing warming was carbon dioxide and other GHGs. Both categories of pollutants affect climate, and neither does so through direct exposure or inhalation. While the relative contributions of aerosols

and GHGs were not known in the 1970s,[15] it is now well established that the heating effect of GHGs is much greater than the cooling effect of aerosols.[16] Moreover, emissions of aerosols have been dramatically reduced by regulation under the Clean Air Act, while the emissions of GHGs have not. Significantly, the two federal agencies most directly responsible for air quality at the time expressed concern about the effect of air pollution, including carbon dioxide, on the climate, and the Department of Health, Education, and Welfare testified in support of the bill that became the 1970 Clean Air Act. Revesz, *supra*, at 40, 44–45, 48–49.

Although the Supplemental Proposal discusses subsequent legislative history and points to unremarkable situations where the statute addresses pollutants that cause endangerment through direct exposure or local or regional effects, there is nothing to suggest that Congress ever intended to bar regulation of pollutants that affect climate, a proposition advanced in the Supplemental Proposal and embraced by EPA in the repeal of the 2009 Endangerment Finding. Indeed, on the day the Senate took up the conference report on the 1977 Amendments to the Clean Air Act, Senator Baker noted that heavy dependence on burning fossil fuels "could lead to a gradual warming of the Earth's climate" and entered an article regarding a National Academy of Sciences Report on climate change into the Congressional Record.[17] 123 Cong. Rec. 26,682–83 (1977) (statement of Sen. Baker).

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[15] *See* Spencer R. Weart, *Aerosols: Volcanoes, Dust, Clouds and Climate*, The Discovery of Global Warming (Apr. 2026), https://history.aip.org/climate/aerosol.htm (section titled "Sulfates, Soot and Clouds (mid 1970s-1980s)").

[16] *See, e.g.*, Intergovernmental Panel on Climate Change, *Summary for Policymakers*, *in Climate Change 2021: The Physical Science Basis* fig. SPM.2 (2021), https://www.ipcc.ch/report/ar6/wg1/chapter/summary-for-policymakers/.

[17] The predictions of the melting of the Antarctic and Greenland ice sheets and other impacts of climate disruption from GHG pollution described in the article are now being borne out.

Moreover, the 1977 Amendments' revision of section 115 of the Clean Air Act makes it clear that Congress specifically contemplated that the Clean Air Act would address domestic emissions that endanger public health or welfare in other countries. Section 115 of the Clean Air Act provides in part:

> (a) Whenever the Administrator, upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.
>
> (c) This section shall apply only to a foreign country which the Administrator determines has given the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country by this section.

42 U.S.C. § 7415(a), (c). It would be anomalous, to say the least, for Congress to have provided in section 115 for domestic emissions that endanger health or welfare abroad while excluding from section 111 the pollutants whose effects on health and welfare are most clearly global.

The addition of Title VI to the Clean Air Act in the 1990 Amendments to the statute undermines rather than supports the Supplemental Proposal's proposed limitation on the scope of the regulatory reach of the Clean Air Act. In the Supplemental Proposal, EPA acknowledges that Title VI of the Clean Air Act addresses pollutants that cause damage to ozone in the stratosphere and affect life throughout the earth, both as a result of limiting the ozone layer's protection from solar radiation and through the global warming potential of such pollutants. 91 Fed. Reg. at 59011, 59024–26. Merely because Congress added a new title to the statute to address those pollutants and included new findings and new definitions does not support EPA's conclusion that these additions circumscribe what substances qualify as air pollutants under section 302(g) of the Clean Air Act and what impacts qualify as effects on welfare under section 302(h) or that controls on emissions of ozone-depleting substances from sources listed under

section 111 were limited by enactment of Title VI of the Clean Air Act. The same argument now advanced by EPA was raised and rejected by the Supreme Court in *Massachusetts v. EPA*, 549 U.S. at 530 n.29 ("We are moreover puzzled by EPA's roundabout argument that because later Congress chose to address stratospheric ozone pollution in a specific legislative provision, it somehow follows that greenhouse gases cannot be air pollutants within the meaning of the Clean Air Act.").

The Supreme Court's rejection of EPA's contention is textually correct. Indeed, the definitions of air pollutant and adverse impacts on welfare, which appear in the title applying to all sections of the Clean Air Act, were not amended in the 1990 Amendments to the Clean Air Act that added Title VI. Instead, section 607 of the Clean Air Act indicates that the substances regulated under Title VI could be subject to "interpollutant transfers." Moreover, under section 602 of the Clean Air Act, those substances are regulated and listed both for their ozone-depleting potential and their global warming potential. A new title calling for the entire phase out and sale of such substances was necessary to prevent their adverse effects on ozone and climate, an approach that would not be feasible for the naturally occurring and most common GHGs - namely, carbon dioxide, methane and nitrous oxide. None of this suggests that these substances would not be pollutants regulated under section 111 for the sources covered thereby.

Like its treatment of the terms climate, pollutant and pollution, the Supplemental Proposal's discussion of Title VI also does undue violence to the Act's legislative history. Before the 1990 Amendments, section 157 of the Clean Air Act provided:

> If . . . any substance, practice, process, or activity may reasonably be anticipated to affect the stratosphere, especially ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health or welfare, the Administrator [of the Environmental Protection Agency] shall promptly promulgate regulations respecting the control of such substance, practice, process, or activity.

42 U.S.C. § 7457 (repealed by Pub. L. No. 101-549, § 601, 104 Stat. 2399, 2648 (1990)). Section 157 had been included in the Clean Air Act in the 1977 Amendments to the Act for the express purpose of regulating ozone-depleting substances. Pub. L. No. 95-95, § 126, 91 Stat. 685, 726–31 (1977).

In 1988, EPA adopted a regulation under section 157(b) implementing the Montreal Protocol and expressly rejected the notion that the Clean Air Act's regulation of air pollution did not extend to pollution or pollutants that were emitted throughout the world that had a global impact, viz. – the argument upon which the Supplemental Proposal is premised:

> EPA . . . believes that in deciding whether and how to regulate under section 157(b) it may consider other countries' effect on stratospheric ozone and the effect of United States action on other countries' willingness to take regulatory action. There is no dispute that the cause and effects of ozone depletion are global in nature. Ozone-depleting emissions from all nations mix in the atmosphere and threaten the stratosphere above every nation. Thus, in order to assess the risk of ozone depletion and the need for regulatory action, EPA must consider other nations' actions affecting the stratosphere. A logical next step in this analysis is what effect United States action could have on other nations' actions now and in the future. . . .
>
> ***
>
> . . . EPA judged that the obvious need for broad international adherence to the Protocol counseled against the United States' deviating from the Protocol, because any significant deviation could lessen other countries' motivation to participate. To the extent the Protocol's existing control requirements were later found more or less stringent than necessary to protect stratospheric ozone, EPA noted that key provisions in the agreement afford the Parties the opportunity to review and revise those requirements. . . . Industry commenters also generally agreed with EPA's concern that deviating from the Protocol risked undermining it. They recognized that implementation of less stringent controls than the Protocol required would be unacceptable, and shared EPA's concern that implementation of more stringent controls would yield little, if any, additional stratospheric protection, while possibly reducing other countries' incentive to join the Protocol.

53 Fed. Reg. 30566, 30569, 30573–74 (Aug. 12, 1988) (final regulation implementing Montreal Protocol). The adoption of Title VI, replacing section 157 and incorporating EPA's rule into the

statute, confirmed Congress's continuing understanding that, since its adoption in 1970, the Clean Air Act has been intended to govern emissions of substances having worldwide effect.

In the Supplemental Proposal, EPA points to various provisions in the Inflation Reduction Act of 2022 (the "IRA"), Pub. L. No. 117-169, to suggest that the creation of incentives to use clean energy, effectuate reductions in methane emissions, deploy carbon capture and sequestration technologies, and utilize other environmentally beneficial measures reflected congressional understanding that GHGs should not (and could not) be regulated under the existing provisions of the Clean Air Act. 91 Fed. Reg. at 59034. This is not the case. Merely providing "carrots" does not eliminate preexisting "sticks" or suggest that such sticks are imaginary.

Of importance, the IRA repeatedly defined GHGs as "the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride," including in provisions that amended the Clean Air Act, creating various incentives. IRA, Pub. L. No. 117-169, §§ 60105(h), 60106(c), 60107 (adding CAA § 135(c)), 60108(c), 60111(b), 60113 (adding CAA § 136(i)), 60116(b), 60201 (adding CAA § 138(d)), 60503(b), 136 Stat. 1818, 2069–83 (2022). The IRA was designed to reduce GHG pollution through federal incentives that would reduce the cost of regulation under sections 111, 202 and other potentially applicable sections of the Clean Air Act. Although those definitional sections were subsequently repealed along with most of the incentives, at least one of the incentives survived adoption of the One Big Beautiful Bill Act last year. The congressional decision to leave that incentive intact suggests that Congress has consistently understood that GHGs are pollutants to be regulated under the Clean Air Act. Specifically, the tax credit for the costs of equipment to capture carbon dioxide emissions from industrial effluent or directly from the air was not repealed. Without requirements to capture and reuse or sequester carbon dioxide from industrial operations (such

as from stationary sources regulated under section 111 of the Clean Air Act), there would be no reason for an industrial company or electricity generator to incur the capital and operating expenses of carbon capture and sequestration and thereby put itself at a competitive disadvantage with its competitors who failed to do so.

4. EPA's Interpretation of "Pollutant" Is Contrary to Supreme Court Precedent.

EPA's constricted interpretation of the term "air pollutant" and the related term "air pollution" is contrary to relevant Supreme Court precedent, including the Supreme Court's construction of section 202 of the Clean Air Act in *Massachusetts v. EPA*, 549 U.S. 497 (2007). In *Massachusetts v. EPA*, the Supreme Court rejected EPA's contention that carbon dioxide and other GHGs are not air pollutants, concluding that the statutory definition of an "air pollutant" in section 302(g) of the Clean Air Act foreclosed that argument. Having found that GHGs are air pollutants within the express terms of section 302(g) of the Clean Air Act, the Court *required* EPA to regulate GHGs under section 202(a) if EPA found that GHGs "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a); *Massachusetts v. EPA,* 549 U.S. at 533 ("If EPA makes a finding of endangerment, the Clean Air Act requires the Agency to regulate emissions of the deleterious pollutant from new motor vehicles.").

In footnote 26 of its decision, the Court expressly rejected the interpretation that EPA advanced in its repeal of the 2009 Endangerment Finding and now seeks to advance in this Supplemental Proposal:

> In dissent, Justice Scalia maintains that because greenhouse gases permeate the world's atmosphere rather than a limited area near the earth's surface, EPA's exclusion of greenhouse gases from the category of air pollution "agent[s]" is entitled to deference under *Chevron U. S. A. Inc. v. Natural Resources Defense Council, Inc.,* 467 U. S. 837 (1984). *See post,* at 558–560. EPA's distinction, however, finds no support in the text of the statute, which uses the phrase "the ambient air" without distinguishing between atmospheric layers. Moreover, it is a plainly unreasonable reading of a sweeping statutory provision designed to capture "*any* physical, chemical . . . substance or matter which is emitted into or otherwise enters the

> ambient air." 42 U.S.C. § 7602(g). Justice Scalia does not (and cannot) explain why Congress would define "air pollutant" so carefully and so broadly, yet confer on EPA the authority to narrow that definition whenever expedient by asserting that a particular substance is not an "agent." At any rate, no party to this dispute contests that greenhouse gases both "ente[r] the ambient air" and tend to warm the atmosphere. They are therefore unquestionably "agent[s]" of air pollution.

Id. at 529 n.26.

In the footnote in *Massachusetts v. EPA*, the majority did not need to rely on the definitional subsection directly following subsection 302(g), where, as discussed in the previous subsection of these comments, Congress provided that "[a]ll language referring to effects on welfare includes, but is not limited to, effects on . . . weather, visibility, and climate," 42 U.S.C. § 7602(h); elsewhere in its opinion, the Court noted that "welfare" is defined to include effects on climate. 549 U.S. at 506. It is also significant that the dissent relied upon *Chevron* deference, *id.* at 558–60 (Scalia, J., dissenting), and that *Chevron* has since been overruled in *Loper Bright*.

B. Because the Clean Air Act Authorizes Regulation of GHGs Under Section 111, the Regulations That EPA Seeks to Rescind Are Not Constrained by the Major Questions Doctrine.

As discussed in Subsection A of these comments, the text and legislative history of the Clean Air Act demonstrate that the Act authorizes regulation of GHGs, and this authority has been confirmed multiple times by the United States Supreme Court. It is important to note that the Court did not rely on *Chevron* deference in *Massachusetts v. EPA* or in *American Electric Power Co. v. Connecticut*, 564 U.S. 410 (2011) ("*AEP*"). In *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014) ("*UARG*"), the Court applied the *Chevron* framework, but its holding on "anyway" sources[18] rested first on the statute's text, *id.* at 331–

[18] "Anyway" sources are stationary facilities (such as power plants and factories) that are already required to obtain Prevention of Significant Deterioration ("PSD") or Title V permits under the Clean Air Act because of their emissions of conventional air pollutants. The Supreme Court held in *UARG* that GHG emissions from such facilities could be required to meet best available control technology ("BACT").

32. *Loper Bright* leaves such holdings undisturbed, 603 U.S. at 412. Thus, the Court's decision in *Loper Bright* does not weaken the authority of the foregoing decisions. Similarly, the Court in *West Virginia v. EPA,* 597 U.S. 697 (2022), invalidated particular regulations implementing section 111 of the Clean Air Act because the regulations required generation shifting that fell outside the meaning of the best system of emission reduction in the Act. Here, the Supplemental Proposal's newly found "best reading" of section 111 goes significantly beyond what the challenged regulations did in *West Virginia*.

The Supplemental Proposal mischaracterizes the Supreme Court's decision in *West Virginia v. EPA*, 597 U.S. 697 (2022), which, read properly, forecloses the approach taken by EPA in the Supplemental Proposal. *West Virginia* addressed EPA's adoption of the Clean Power Plan. That rule established standards for *existing* fossil-fueled power plants under section 111(d) of the Clean Air Act using an interpretation of BSER that differed from the interpretation of that term that EPA had used since the adoption of section 111 in 1970. Moreover, in proposing the Clean Power Plan, EPA announced that the rule would transform the electricity generation industry. The Court narrowly considered whether BSER as provided for in the Clean Power Plan fell within EPA's statutory authority. *See id.* at 734–35 ("the only interpretive question before us, and the only one we answer, is . . . whether the 'best system of emission reduction' identified by EPA in the Clean Power Plan was within the authority granted to the Agency in Section 111(d) of the Clean Air Act").

Prior to adopting the Clean Power Plan, EPA had established performance standards for covered sources based on an interpretation of BSER that looked at measures that could be employed inside the boundaries of a single regulated plant by utilizing emissions controls, switching types of fuel or other steps. EPA departed from this location-specific approach in the

Clean Power Plan and established performance standards under section 111(d) based on emissions reductions to be achieved by shifting electricity generation from one type of power plant, namely, coal-fired power plants, to other types of power plant that were previously regulated under different standards pursuant to section 111, namely, combined-cycle natural gas-fired plants and other oil- or gas-fired turbines. By adopting requirements implementing BSER to shift electricity generation away from existing coal-fired power plants toward cleaner forms of electricity generation (i.e., forms of electricity generation producing fewer GHG emissions), EPA sought to fundamentally alter the mix of electricity generation sources across the country. As noted above, the question confronting the Court was whether such a new approach to BSER was authorized under section 111(d) of the Clean Air Act.

West Virginia invalidated EPA's dramatic change in interpretation of BSER, finding that where such a change in interpretation would alter an entire industry, as EPA had found in adopting the Clean Power Plan, such a change in interpretation presented a major question that required congressional action. In *UARG*, by contrast, a majority of the Court found that applying BACT to greenhouse gases emitted by "anyway" sources "need not result in such a dramatic expansion of agency authority" as to render EPA's interpretation unreasonable. *UARG*, 573 U.S. at 332; *cf. id.* at 324.[19]

Of importance, the Court in *West Virginia* did not question EPA's statutory authority to regulate GHG emissions from fossil fuel-fired power plants under section 111 of the Clean Air

[19] In adopting the 2024 power plant emissions standards, EPA corrected the error identified in *West Virginia v. EPA* by adopting "inside-the-fence" standards based on (1) technological mechanisms to capture GHGs and safely dispose of them underground and (2) switching to use of cleaner fuels. Both were long-recognized methods to achieve BSER for other pollutants. EPA's recent action repealing its 2024 determination that these methods constituted BSER, as contained in the alternative reasoning of the Original Proposal, was based on a flip-flop of technical judgment.

Act, the very issue that EPA has now advanced in the Supplemental Proposal. Moreover, *West Virginia* did not consider or address the standards for newly constructed coal-fired plants that EPA adopted under section 111(b) of the Act, where EPA relied on its longstanding inside-the-fence approach to establish standards for new coal-fired plants based on the emissions reductions that EPA determined could then be achieved by installing carbon capture and sequestration technology. Indeed, it is those new source standards that EPA is now seeking to invalidate with its newly found interpretation of section 111. Thus, it is clear that EPA's invocation of *West Virginia* to preclude all regulation of GHGs and to repeal the portion of the regulations that the Supreme Court did not address or disturb is entirely inconsistent with what the Court actually did.

Rather than being consistent with *West Virginia v. EPA*, the Supplemental Proposal commits the same error that the Court found fatal to the Clean Power Plan. Just as EPA had departed from its prior consistent interpretation of BSER in adopting the Clean Power Plan, EPA now rejects its prior consistent interpretation of the meaning of "air pollutants" and the construction of section 111 of the Clean Air Act. Moreover, the Supplemental Proposal's interpretation is contrary to both the Supreme Court's determinations in *Massachusetts v. EPA* and the clear words of section 302(h) indicating that changes in "climate" constitute adverse effects on welfare.

The significance of climate disruption caused by GHG emissions is now beyond cavil. It (1) has previously been recognized by EPA; (2) is reflected in treaties to which the United States is or was a party including the UNFCCC (the United Nations Framework Convention on Climate Change), to which the Senate gave its advice and consent by the requisite two-thirds supermajority; (3) has been verified in multiple reports by the National Academy of Sciences, including the report discrediting the science cited by EPA in the

proposal to rescind the 2009 Endangerment Finding; (4) has been found by all other major international Academies of Science and all reports by the Intergovernmental Panel on Climate Change; (5) is reflected in many consistent decisions by the United Nations, the governments of virtually all other nations, and decisions by their courts and international courts; and (6) is an express conclusion of the International Court of Justice in its 2025 advisory opinion, *see infra* Section II. Rather than supporting EPA's newly found "best" reading of section 111 of the Clean Air Act, the major questions doctrine precludes the approach taken by EPA in the Supplemental Proposal.

In *UARG*, the Supreme Court characterized the regulation of GHG emissions from mobile sources pursuant to its traditional approach as "modest." 573 U.S. at 318–19. By contrast, EPA's conclusion that it has no authority under the Clean Air Act to regulate GHG emissions from power plants as presented in the Supplemental Proposal (as well as the rescission of the 2009 Endangerment Finding) is a dramatic departure from prior determinations, which will have enormous consequences. EPA's complete reversal in position eliminates the principal regulatory mechanism for the United States, as the second largest current emitter of GHGs and the largest historic emitter, to address the problem of climate disruption from GHG emissions through traditional regulation.

Notwithstanding the fact that, if properly read, *West Virginia* forecloses the approach EPA takes in its Supplemental Proposal, EPA mischaracterizes the decision, saying: "the major questions doctrine applies to the EPA's assertion of authority" over GHGs under section 111 of the Clean Air Act, and claiming, "the Agency lacks the clear congressional authorization required for the unheralded assertion of authority adopted in the 2015 Findings." 91 Fed. Reg. at 59020. But this gets the Clean Air Act exactly wrong. As discussed above, there is clear congressional authority to regulate GHGs under section 111 of

the Clean Air Act. Moreover, the authority that EPA now calls an "unheralded assertion" is the authority that the Supreme Court recognized in *Massachusetts v. EPA* and *AEP*. According to EPA, Congress decided decades ago that the Clean Air Act does not apply to pollutants that have global impact, notwithstanding the abundant text and legislative history evidencing a contrary intent. EPA (and no one else) remarkably discovered this only now. As Justice Scalia frequently stated, Congress does not hide elephants in mouseholes.

The majority opinion in *UARG,* joined by Chief Justice Roberts, is directly contrary to EPA's position that the major questions doctrine should apply to prevent regulation of GHGs under section 111. In Part II–B–1 of the *UARG* opinion, a majority that included Chief Justice Roberts and Justices Thomas and Alito addressed the argument "that EPA may never require BACT [best available control technology] for greenhouse gases—even when a source must undergo PSD [prevention of significant deterioration] review based on its emissions of conventional pollutants—because BACT is fundamentally unsuited to greenhouse-gas regulation." 573 U.S. at 329–31. The Court also identified limitations on BACT that mitigated concerns about "unbounded" regulatory authority. *Id.*

The Court's reasoning in *UARG* directly contradicts EPA's new "best reading" of the Clean Air Act as presented in the Supplemental Proposal, particularly its reliance on the major questions doctrine:

> Moreover, assuming without deciding that BACT may be used to force some improvements in energy efficiency, there are important limitations on BACT that may work to mitigate petitioners' concerns about "unbounded" regulatory authority. For one, BACT is based on "control technology" for the applicant's "proposed facility," § 7475(a)(4); therefore, it has long been held that BACT cannot be used to order a fundamental redesign of the facility. *See, e.g., Sierra Club v. EPA,* 499 F.3d 653, 654–655 (CA7 2007); *In re Pennsauken Cty., N. J., Resource Recovery Facility,* 2 E. A. D. 667, 673 (EAB 1988). For another, EPA has long interpreted BACT as required only for pollutants that the source itself emits, see 44 Fed. Reg. 51947 (1979); accordingly, EPA acknowledges that BACT may not be used to require "reductions in a facility's demand for energy from the electric grid." Guidance 24. Finally, EPA's guidance suggests that BACT should not require every conceivable change that could result in minor improvements in energy efficiency, such as the

> aforementioned light bulbs. *Id.,* at 31. The guidance explains that permitting authorities should instead consider whether a proposed regulatory burden outweighs any reduction in emissions to be achieved, and should concentrate on the facility's equipment that uses the largest amounts of energy. *Ibid.*

Id. at 330–31.

In Part II–B–2 of the *UARG* opinion, a majority (including Chief Justice Roberts) concluded that requiring "anyway" sources (facilities that trigger federal permitting requirements anyway because they emit large amounts of traditional air pollutants) to employ BACT for GHGs was a permissible interpretation of the Clean Air Act. The Court first found that the statute was clear on its face (*Chevron* step one, not disturbed by *Loper Bright*), reasoning that:

> Whereas the dubious breadth of "any air pollutant" in the permitting triggers suggests a role for agency judgment in identifying the subset of pollutants covered by the particular regulatory program at issue, the more specific phrasing of the BACT provision suggests that the necessary judgment has already been made by Congress. The wider statutory context likewise does not suggest that the BACT provision can bear a narrowing construction: There is no indication that the Act elsewhere uses, or that EPA has interpreted, "each pollutant subject to regulation under this chapter" to mean anything other than what it says.

Id. at 331–32.

The Court then went on to reason:

> Even if the text were not clear, applying BACT to greenhouse gases is not so disastrously unworkable, and need not result in such a dramatic expansion of agency authority, as to convince us that EPA's interpretation is unreasonable. We are not talking about extending EPA jurisdiction over millions of previously unregulated entities, but about moderately increasing the demands EPA (or a state permitting authority) can make of entities already subject to its regulation. And it is not yet clear that EPA's demands will be of a significantly different character from those traditionally associated with PSD review. In short, the record before us does not establish that the BACT provision as written is incapable of being sensibly applied to greenhouse gases.
>
> We acknowledge the potential for greenhouse-gas BACT to lead to an unreasonable and unanticipated degree of regulation, and our decision should not be taken as an endorsement of all aspects of EPA's current approach, nor as a free rein for any future regulatory application of BACT in this distinct context. Our narrow holding is that nothing in the statute categorically prohibits EPA from interpreting the BACT provision to apply to greenhouse gases emitted by "anyway" sources.

Id. at 332.

This reasoning is directly applicable to section 111 of the Clean Air Act, which applies to *all* pollutants emitted by "anyway" sources; regulating GHGs from these sources does not result in a dramatic expansion of agency authority.

C. The GHGs Emitted from Power Plants Can Reasonably Be Expected to Endanger Public Health and Welfare Because They Are Far from *De Minimis.*

EPA, as we have emphasized, is required to make the endangerment finding under section 111(b)(1)(A) of the Clean Air Act based on *all* pollution emitted by a specific source category. Even if EPA were required to make that finding on a pollutant-by-pollutant basis (which it clearly is not), the finding would be compelled for GHG pollutants because their adverse public health and welfare effects within the United States are significant, not *de minimis* as EPA asserts. There is simply no merit in EPA's claim that it "lacks authority to regulate GHG emissions under CAA section 111(b)(1)(A) because such regulations have not and cannot diminish the public health and welfare impacts attributed to global climate change in any non-de minimis way." 91 Fed. Reg. at 59020.

The Supplemental Proposal, like the Original Proposal and the rescission of the 2009 Endangerment Finding, relies on the argument that emissions of GHGs from relevant sources in the United States are *de minimis* in comparison to total worldwide emissions, such that the United States' power sector's total emissions are not significant and therefore cannot reasonably be anticipated to endanger health and the environment. EPA's position stems from a more fundamental position advanced by the Trump Administration that climate disruption from GHG emissions is not "real" and therefore is not a problem that EPA needs to address.

In an address to the United Nations on September 23, 2025, President Trump stated that climate change is "the greatest con job ever perpetrated on the world, in my opinion" and added that "[t]he carbon footprint is a hoax made up by people with evil intentions." Donald J. Trump,

Remarks to the United Nations General Assembly in New York City (Sept. 23, 2025), https://www.presidency.ucsb.edu/documents/remarks-the-united-nations-general-assembly-new-york-city-20. He also stated that predictions about climate change made by the United Nations and many others were wrong. "They were made by stupid people that have cost their countries fortunes and given those same countries no chance for success. If you don't get away from this green scam, your country is going to fail. And I'm really good at predicting things." *Id.* President Trump's views are also reflected in at least three executive orders directing national policy toward fossil fuels and their attendant greenhouse gas emissions—executive orders that EPA cites at the beginning of the Supplemental Proposal under the heading, "Need for Regulatory Action." 91 Fed. Reg. at 59006–07. Although EPA uses different language here, the Supplemental Proposal is a full-throated endorsement of President Trump's views on climate change science and, in particular, the effects of increasing GHG emissions.

Our Original Comments, our Endangerment Finding Comments and many other comments on the proposed rescission of the 2009 Endangerment Finding, including a report by the National Academy of Sciences, rebutted the premise that climate change is a "con job" and "hoax" as President Trump has characterized it before the United Nations, concluding that climate change produced by GHG emissions is very real and a major danger to public health and welfare. Moreover, the amount of GHGs contributed individually by the United States' power sector and the mobile source sector is, as a scientific matter, significant and can reasonably be anticipated to endanger health and the environment. In other words, even if the statute required that EPA make an endangerment finding for each specific pollutant emitted by a listed category in order to regulate that pollutant under section 111 (which it does not), there is no real question that as a factual matter, GHG emissions from power plants in the United States endanger public health and welfare. Although EPA contends that its *de minimis* argument is a question of

statutory interpretation, it is transparently based on scientific conclusions that radically differ from the near-universal consensus of respected scientists in the United States and elsewhere across the world.

Perhaps in recognition of the weakness of its scientific position on the reality of climate change and the threats posed thereby, EPA attempts to sidestep that problem by attempting to turn its analysis into a simple mathematical question. But even that approach underscores EPA's ignorance of basic mathematical and scientific principles. If one seeks to argue that emission of a pollutant has a *de minimis* effect, one must understand the full dynamics of the overall problem. In short, EPA seeks to separate the magnitude of emissions or exposure (either in absolute or percentage terms) from the overall dangers posed to human or environmental receptors by those emissions or exposure, thereby turning a two-parameter issue into a one-parameter issue.

To take an extreme example, it is well understood that exposure to arsenic can be lethal. The Agency for Toxic Substances and Disease Registry ("ATSDR") estimates that an acute lethal dose of inorganic arsenic to humans is about 0.6 mg/kg/day. EPA, Arsenic, https://hero.epa.gov/reference/1356687/. For an individual who weighs 100 kilograms, or approximately 220 pounds, the lethal dose equates to 60 mg/day, or 0.002 ounces per day. Put differently, that amount would be less than one millionth or less than 0.0001% of the receptor's individual body weight. In terms of impact, lethality is about the most significant outcome imaginable. But from a mathematical point of view, 0.0001% could be construed as a *de minimis* relative amount.

Here, EPA seeks to substitute an appeal to an ostensible common sense approach for consideration of the relevant science to argue that GHG emissions from power plants are *de minimis*. But EPA cannot know what *de minimis* means in this context without recognizing and acknowledging the underlying science. And what makes the Supplemental Proposal so deeply

arbitrary and capricious is that EPA knows the underlying science but is nonetheless seeking to ignore it.

1. EPA's Supplemental Proposal Ignores Abundant Scientific Evidence Concerning the Adverse Public Health and Welfare Impacts of GHG Emissions from Fossil-Fired Power Plants.

Multiple studies by the National Academy of Sciences ("NAS"), all international academies of science, and United States government-wide interagency task forces have concluded that climate disruption from GHGs has severe adverse effects, including the 1,500-page study issued by the federal government during President Trump's first term. *See* U.S. Global Change Research Program, *Fourth National Climate Assessment 2017/2018* (2018); *see also* U.S. Global Change Research Program, *Fifth National Climate Assessment* (2023). Among other things, numerous reports by the NAS and other influential scientific studies have established that a substantial fraction of each ton of carbon dioxide emitted today will remain in the atmosphere for centuries and will cause long-term adverse impacts on health and the environment. These studies, without exception, conclude that emissions of GHGs endanger health and welfare both in the United States and throughout the world. As noted by the scientists in Exhibit 2 to the Endangerment Finding Comments:

> The NAS conducted detailed technical reviews of the last three U.S. National Climate Assessments (NCAs) post-dating the 2009 Endangerment Finding (2023, 2018, and 2013), as well as ten more narrowly focused assessments. None of these reviews or assessments supports the conclusions of the Proposal or the CWG Report [i.e., the draft DOE Report on which EPA relied].

Endangerment Finding Comments, Ex. 2, at 4.

In light of the NAS reports, EPA now appears to be taking the position that the Supplemental Proposal is solely based on statutory interpretation rather than science, such that EPA does not need to respond to those reports. 91 Fed. Reg. at 59008, 59019 (disregarding the findings and recommendations of the NAS 2026 report on the attribution of extreme weather and

climate events because "[t]he issues raised in this supplemental proposal, however, are legal in nature and turn on statutory interpretation and the application of judicial precedent"). However, the notion that the contribution of GHGs from power plants is *de minimis* and cannot reasonably be anticipated to endanger health or welfare is a scientific assertion, not a legal one.

Because EPA is required under section 307(d)(3) of the Clean Air Act, 42 U.S.C. § 7607(d)(3), to address reports, findings and recommendations of the National Academy of Sciences with respect to proposals under the Clean Air Act, the Supplemental Proposal is defective for this reason, as explained in greater detail in Subsection 2 below. Moreover, EPA's findings in its rescission of the 2009 Endangerment Finding, upon which the Supplemental Proposal relies in support of its *de minimis* argument, are inconsistent with the conclusions of all other international academies of science and of the U.S. government-wide assessments cited above.

In response to the proposal to rescind the 2009 Endangerment Finding, the National Academies of Sciences, Engineering, and Medicine, of which NAS is a part (hereinafter also referred to as NAS), initiated a fast-track study "on whether greenhouse gas emissions are reasonably anticipated to endanger public health and welfare in the U.S." https://www.nationalacademies.org/our-work/anthropogenic-greenhouse-gases-and-us-climate-evidence-and-impacts. The prepublication version of that study, National Academies of Sciences, Engineering, and Medicine, *Effects of Human-Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare* (2025), https://nap.nationalacademies.org/catalog/29239/effects-of-human-caused-greenhouse-gas-emissions-on-us-climate-health-and-welfare ("2025 NAS Report"), was released on September 17, 2025, and is incorporated herein.

Based on a comprehensive review of the climate science available after the 2009 issuance of the Endangerment Finding, the 2025 NAS Report reached the following overarching conclusion directly contradicting EPA's rationale for rescinding the 2009 Endangerment Finding:

> **Overarching Conclusion: EPA's 2009 finding that the human-caused emissions of greenhouse gases threaten human health and welfare was accurate, has stood the test of time, and is now reinforced by even stronger evidence.** Today, many of EPA's [2009] conclusions are further supported by longer observational records and multiple new lines of evidence. Moreover, research has uncovered additional risks that were not apparent in 2009.

2025 NAS Report at 1 (emphasis in original).

That overarching conclusion was based on five other key conclusions, as follows:

> (1) **Emissions of greenhouse gases from human activities are increasing the concentration of these gases in the atmosphere**. Human activities—such as the extraction and burning of fossil fuels, cement and chemical production, deforestation, and agricultural activities—emit GHGs, which include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and fluorinated gases (F-gases), to the atmosphere. Total global GHG emissions continue to increase, even though U.S. emissions of CO2 have decreased slightly in recent years largely due to changes in energy production and consumption. Multiple lines of evidence show that GHG emissions from human activities are the primary driver of the observed long-term warming trend. No known natural drivers, such as incoming solar radiation or volcanic emissions, can explain observed changes.
>
> (2) **Improved observations confirm unequivocally that greenhouse gas emissions are warming Earth's surface and changing Earth's climate.** Longer records, improved and more robust observational networks, and analytical and methodological advances have strengthened detection of observed changes and their attribution to elevated GHGs. Trends observed include increases in hot extremes and extreme single-day precipitation events, declines in cold extremes, regional shifts in annual precipitation, warming of the Earth's oceans, a decrease in ocean pH, rising sea levels, and an increase in wildfire severity.
>
> (3) **Human-caused emissions of greenhouse gases and resulting climate change harm the health of people in the United States**. Climate change intensifies risks to humans from exposures to extreme heat, ground-level ozone, airborne particulate matter, extreme weather events, and airborne allergens, affecting incidence of cardiovascular, respiratory, and other diseases. Climate change has increased exposure to pollutants from wildfire smoke and dust, which has been linked to adverse health effects. The increasing severity of some extreme events has contributed to injury, illness, and death in affected communities. Health impacts related to climate-sensitive infectious diseases—such as those carried by insects and

in contaminated water—have increased. New evidence is developing about additional health impacts of climate change, including on mental health, nutrition, immune health, antimicrobial resistance, kidney disease, and negative pregnancy-related outcomes. Groups such as older adults, people with preexisting health conditions or multiple chronic diseases, and outdoor workers are disproportionately susceptible to climate-associated health effects. Even as non-climate factors, including adaptation measures, can help people cope with harmful impacts of climate change, they cannot remove the risk of harm.

(4) **Changes in climate resulting from human-caused emissions of greenhouse gases harm the welfare of people in the United States**. Climate-driven changes in temperature and precipitation extremes and variability are leading to negative impacts on agricultural crops and livestock, even as technological and other changes have increased agricultural production. Climate change, including increases in climate variability and wildfires, is changing the community composition and function of forest and grassland ecosystems and the services they provide. Climate-related changes in water availability and quality vary across regions in the United States with some regions showing a decline. Climate-related changes in the chemistry and the heat content of the ocean are having negative effects on calcifying organisms and contributing to increases in harmful algal blooms. U.S. energy systems, infrastructure, and many communities are experiencing increasing stress and costs owing to the effects of climate change.

(5) **Continued emissions of greenhouse gases from human activities will lead to more climate changes in the United States, with the severity of expected change increasing with every ton of greenhouse gases emitted.** Despite successful efforts in many parts of the world to reduce emissions, total global GHG emissions have continued to increase, and additional warming is certain. All climate models—regardless of assumptions about future emissions scenarios or estimates of climate sensitivity—consistently project continued warming in response to future atmospheric GHG increases. Applying fundamental physics of the Earth system leads to the same conclusion. Continued changes in the climate increase the likelihood of passing thresholds in Earth systems that could trigger tipping points or other high-impact climate surprises.

2025 NAS Report at 1–2 (emphasis in original). The 2025 NAS Report concluded that "evidence for current and future harm to human health and welfare created by human-caused GHGs is beyond scientific dispute." *Id.* at 2. Moreover, it found both that uncertainties or tentative conclusions in 2009 had been resolved and that new threats from GHG pollution had been identified. *Id.*

EPA defends its Supplemental Proposal by positing that GHG emissions from fossil fuel-fired EGUs are not significant because EGUs contribute "only" three percent of total world emissions. This position is astounding. U.S. power plants endanger public health and welfare, given that the emissions from such power plants exceed the GHG emissions of every other nation of the world except China, India and Russia.[20] It defies common sense to say that GHG emissions exceeding those of all nations other than China, India, and Russia cannot "reasonably" be anticipated to endanger public health or welfare. To take that position, one would have to believe that GHG emissions in any amounts simply do not pose any sort of danger to public health and welfare because there would be no basis—ever—for regulating GHG emissions from stationary sources, regardless of how high global concentrations of GHGs become. That is, in fact, the outcome that EPA seeks to achieve with the Supplemental Proposal.

EPA's statement that three percent is not significant is also inconsistent with EPA's prior regulatory actions under the Clean Air Act. In EPA's adoption of regulations under the "Good Neighbor" provision of the Clean Air Act, 42 U.S.C. § 7410(a)(2)(D), EPA adopted a one percent significance threshold in determining whether sources in any state "contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any" national ambient air quality standard. That determination and the resulting regulation were upheld by the Supreme Court (reversing the D.C. Circuit) in *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 500–02, 524 (2014). It is difficult to fathom how a one percent contribution to very localized and limited harm could be significant under one section of the Clean Air Act but three percent of

[20] *See* Monica Crippa et al., *GHG Emissions of All World Countries* (Publ'ns Off. of the Eur. Union 2023), https://edgar.jrc.ec.europa.eu/report_2023 (2022 data, excluding land use: U.S. power industry 1,627 Mt CO2e; China 15,685 Mt; India 3,943 Mt; Russia 2,580 Mt; next largest, Brazil, 1,311 Mt). EPA relies on the same source. 91 Fed. Reg. at 59005 n.6. On the significance of these emissions under customary international law, *see infra* Section II.C.2.

world emissions, causing significantly greater harm to health and the environment, could be deemed *de minimis* here.[21]

2. EPA's Supplemental Proposal Violates the Statutory Obligation to Identify Any Relevant Findings and Reports from the National Academy of Sciences and Explain Any Differences Between the Supplemental Proposal and Those Recommendations.

The Supplemental Proposal does not address the findings and recommendations of the many NAS reports on climate change, including the 2025 report quoted in detail above, despite the express requirement in section 307(d)(3) of the Clean Air Act that it do so. 42 U.S.C. § 7607(d)(3). EPA did not consult with the NAS *before* issuing the Original Proposal, the proposal to rescind the 2009 Endangerment Finding, or this Supplemental Proposal, as it should have, because of the importance of the scientific issues relating to these proposals.

The National Academy of Sciences was established as a private, nongovernmental organization by an Act of Congress signed by President Lincoln in 1863 to promote science in the United States and to provide the government with sound scientific advice. Its mission is:

- Recognizing and elevating outstanding science;
- Fostering the broad understanding of science; and
- Overseeing the National Research Council in producing and promoting the adoption of independent, authoritative, trusted scientific advice to the government for the benefit of society.

https://www.nasonline.org/about-the-nas/.

Consistent with this role and mission, Congress and federal agencies have frequently requested reports from the NAS and its operating arm, the National Research Council, on proposed

[21] We do not suggest that a one-percent threshold is the correct standard for evaluating whether GHG emissions are *de minimis*. It certainly is not. We simply point out that EPA has used this benchmark in other circumstances which belies any rationality to EPA's assertion that three percent of global GHG emissions is a *de minimis* amount.

legislation, regulations and matters of national importance. Congress recognized the importance of incorporating sound science into decision-making under the Clean Air Act by requiring, in section 307(d)(3) of the Act, that every major proposed rule, including rules under section 111 (and section 202), include the following:

> [A] statement [that] shall . . . set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by . . . the National Academy of Sciences, and, if the proposal differs in any important respect from any of these recommendations, an explanation of the reasons for such differences.

42 U.S.C. § 7607(d)(3).

Given the findings from the NAS set forth in the preceding subsection of these comments, which directly contradict and are certainly "pertinent" to the fundamental basis for the Supplemental Proposal (as well as the rescission of the 2009 Endangerment Finding and repeal of the mobile source standards), EPA cannot legally finalize its positions set forth in the Supplemental Proposal without first meeting the requirements of section 307(d)(3) of the Clean Air Act. 42 U.S.C. § 7607(d)(3). The conclusion that "the severity of expected change increas[es] with every ton of greenhouse gases emitted," in particular, directly rebuts the Supplemental Proposal's *de minimis* argument. By failing to address this conclusion, EPA violates the requirement of 42 U.S.C. § 7607(d)(3) to explain why it is departing from the recommendations of the NAS. The Supplemental Proposal cannot be adopted without such an explanation.

D. The Supplemental Proposal Is Arbitrary and Capricious Because It Ignores Significant Adverse Effects Stemming from EPA's Newly Found Interpretation of Section 111 of the Clean Air Act.

1. EPA Erred in Failing to Address the Cumulative Impacts of Its Reinterpretation of Section 111.

EPA has not conducted an assessment of the cumulative adverse impacts of its newly found "best reading" of section 111 of the Clean Air Act. Neither the Supplemental Proposal nor the accompanying economic impact analysis contains such an assessment. The Clean Air

Act is expressly intended to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," 42 U.S.C. § 7401(b)(1). It follows that any "best reading" of the Act must, at a minimum, be fully cognizant of the impact of that interpretation on achievement of these purposes. That is impossible without an understanding of the cumulative impacts of EPA's action. *Cf. Kleppe v. Sierra Club*, 427 U.S. 390*,* 409–10 (1976) (requiring consideration of the cumulative effects of multiple similar decisions in the NEPA context). Under the Clean Air Act, a court may set aside any action by EPA that is arbitrary and capricious. Under that standard, a final action resting on EPA's failure to analyze or consider the full impact of the Supplemental Proposal, by itself or in combination with other proposed actions, must be set aside, absent further analysis and the opportunity to comment on that analysis.

The Supplemental Proposal should be rejected because EPA has failed to consider the cumulative impacts of its proposed newly found interpretation of section 111 of the Clean Air Act. EPA's proposal to require a pollutant-specific endangerment determination focusing exclusively on local or regional exposure for each pollutant for each source category under section 111 is designed to eliminate all regulation of GHGs under that section. Fossil fuel-fired EGUs are the largest source category of GHG emissions under section 111. The production and transmission of oil and gas is the second largest category of GHG emissions and is the subject of a separate regulation limiting GHG emissions. 89 Fed. Reg. 16820 (Mar. 8, 2024). Because that sector's GHG emissions are lower than the electricity generation sector's, regulation of those GHG emissions would be impermissible under EPA's rationale set forth in the Supplemental Proposal. And because all other sectors also have lower GHG emissions than the GHG emissions from fossil fuel-fired EGUs, EPA's newly found interpretation of section 111 of the Clean Air Act would preclude *all* regulation of GHG emissions from any of the industrial source categories

under section 111, including cement manufacturing facilities, incinerators, fertilizer production facilities, smelters, iron and steel manufacturing facilities, coke plants, industrial boilers, reciprocating engines and smaller electric generating units and chemical plants, among others. *See* 40 C.F.R. pt. 60.

Because the rationale presented by EPA in the Supplemental Proposal is designed to preclude regulation of GHG emissions from all source categories regulated under section 111 of the Clean Air Act, the cumulative impact of the Supplemental Proposal is far greater than three percent of the world's GHG emissions (which are already greater than the emissions of all other nations besides China, India, and Russia). These source categories include the full universe of electricity generating units, which includes not only the larger generating facilities subject to the regulations currently at issue (i.e., EGUs), but also turbines and steam electric units smaller than 25 MW, most co-generation facilities, reciprocating engines, and electric generating units that do not deliver electricity to the grid. According to the most recent inventory of GHG emissions in the United States, that larger universe of electric generating units appears to account for 25 percent of the nation's GHG emissions. EPA, *Sources of Greenhouse Gas Emissions*, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions (2022 data) (hereinafter the "*Inventory*"). In addition, GHG emissions from most of the rest of the United States' industrial sector, which represents 23 percent of the country's GHG emissions according to the *Inventory,* would escape regulation. *Id.* The sources in the industrial sector include cement manufacturing plants, iron and steel mills, coke plants and many other industrial facilities that are source categories listed and regulated under section 111. Larger boilers and incinerators, also regulated under section 111, fall within the residential and commercial sector (which includes other sources not regulated under section 111), which is responsible for an additional 13 percent of the nation's GHG emissions. Although EPA failed to do an analysis of the total GHG emissions

of source categories that have been listed in 40 C.F.R. pt. 60 as it should have, the figures above indicate that the Supplemental Proposal is designed to allow 50 percent or more of total United States emissions of 6,343.2 million metric tons of GHGs (in CO_2 equivalents) to escape any sort of regulation. *Id.*

In evaluating the effects of its Supplemental Proposal, EPA should have considered the cumulative impacts of its newly found interpretation of section 111 of the Clean Air Act. Its failure to consider this important aspect of its Supplemental Proposal is quintessentially arbitrary and capricious action. Section 307 of the Clean Air Act requires each proposal to include a summary of "the major legal interpretations and policy considerations underlying the proposed rule." 42 U.S.C. § 7607(d)(3)(C). EPA's newly found rationale is a major legal interpretation and its significant cumulative effect is an important policy consideration.

The cumulative effect of all of EPA's recent actions, including the partial repeal of the section 111 power plant standards, 91 Fed. Reg. 58954 (Sept. 17, 2026), the repeal of the 2009 Endangerment Finding, and the repeal of GHG emissions standards for mobile sources, 91 Fed. Reg. 7686 (Feb. 18, 2026), is to largely eliminate regulation of GHG emissions under the Clean Air Act altogether. This is the outcome EPA wants regardless of what the law and science may otherwise provide. EPA has boasted about its "deregulatory" actions being the largest in history. EPA's actions will virtually guarantee that the United States' six billion annual metric ton contribution to global GHG pollution will continue unabated, if not increase.[22] This outcome

[22] The limited incentives that survived the One Big Beautiful Bill Act are unlikely to make a significant dent in the GHG emissions in the United States, particularly in light of the increasing demand for electricity sparked by data centers. As noted above, the tax credit for carbon capture and sequestration is unlikely to result in any investment in that equipment without a meaningful incentive to reduce emissions. The tax credit for advanced nuclear technology will still leave nuclear energy at a competitive disadvantage with fossil-fired units unless some cost is imposed on their emissions of GHGs. The Trump Administration's other final or proposed actions to interfere with development of renewable sources of energy, to eliminate fuel and other energy efficiency standards,

will undoubtedly exacerbate the damage in the United States and the rest of the world caused by GHG pollution.

A cumulative impact analysis should have been conducted and included in EPA's regulatory impact analysis, including its cost-benefit analysis. If the social cost of carbon that EPA itself estimated in 2023 for 2020 emissions ($120 to $340 per ton of CO2) is applied to the foregoing GHG emission figures, EPA's new "best reading" of section 111 of the Clean Air Act will cause between $380.6 billion and more than $1 trillion in damages *annually* and the cumulative impacts of all actions will likely cause double those damages. EPA's willful blindness to the cumulative effects of its newly found "best reading" of the Act is arbitrary and capricious.

2. EPA Should Not Proceed with the Proposed Action Because the Costs Exceed the Benefits.

Similarly, EPA cannot say that the Supplemental Proposal's newly found interpretation of section 111 of the Clean Air Act is the best reading of the Act because it has failed to explain how or why Congress intended the Act to be read that way in spite of the fact that its costs exceed its benefits. EPA cited costs as a consideration driving its reinterpretation of section 111 of the Clean Air Act and repeal of the current EGU standards for GHG emissions in its Original Proposal. Taking that proposition at face value, EPA's cost-benefit analysis in the Regulatory Impact Analysis ("RIA") remarkably showed that the Original Proposal would create *negative* net benefits—*i.e.*, the costs would exceed the benefits. *See* RIA at 6-3 to 6-4 tbl. 6-1. EPA concluded

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to keep coal- and oil-fired plants operating contrary to their owners' wishes and those of the host states, and to oppose state actions to curb GHG emissions all point to increasing rather than decreasing GHG emissions in the future. For example, the six fossil fuel-fired plants that the Trump Administration has forced to stay open have emitted approximately 9.2 million tons of CO_2 and released thousands of tons of SO_2 and NO_x, even though they have run infrequently and needlessly inflated consumers' electricity bills. Zack Colman, *Trump Rescued These Fossil Fuel Power Plants. Americans Are Paying for It,* POLITICO Pro (Oct. 6, 2026).

that the Original Proposal's costs would exceed its benefits, even though EPA's cost-benefit analysis, contrary to good economic practice, stacked the deck in favor of the proposed actions. EPA unlawfully segmented its analysis by adopting a repeal of the 2024 GHG emission standards for fossil fuel-fired EGUs separate from the Supplemental Proposal. The original cost-benefit analysis provides a reason for rejecting the Supplemental Proposal, as well as for reversing the repeal of the 2024 GHG emission standards.

Even if adverse environmental impacts are ignored, the RIA's claims of economic benefits from elimination of emission standards for electricity generating units are false. They are based on what constitutes a transfer of resources from one sector of the economy to another, not changing aggregate output or levels of economic activity. First, the costs avoided by the power sector comprise revenues lost to other sectors (inputs that the power sector no longer purchases) in the absence of any impacts on national output—and none is claimed. Second, tax credits are mentioned as a benefit to the power sector but a "cost from a societal perspective." These are pure financial transfers and have no value in a cost-benefit analysis. Third, the claim is made that the social costs of the transfer (which has no value) are saved because of the repeal of the emissions regulations. There is no basis for this claim.

Notwithstanding the assertion in the RIA (§ 1.4, at 1-5) that "the EPA did not monetize impacts associated with CO_2 emissions," the adverse impacts of GHG pollution have previously been monetized by EPA, https://www.epa.gov/environmental-economics/scghg, using accepted economic standards. As noted above, EPA has determined that the cost in terms of monetary damage associated with the emission of each ton of CO_2 (or equivalents) emitted in 2020 ranged from $120 to $340, and will rise each year, such that the cost will range from $140 to $380 in 2030. EPA, *Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances* 4 tbl. ES.1 (Nov. 2023), https://www.epa.gov/system/files/documents/2023-

12/epa_scghg_2023_report_final.pdf. A source category emitting three percent of world GHG emissions will cause enormous damage under this metric. The Supplemental Proposal does nothing to explain why this is not significant. The rise in emissions from 20 million tons of CO_2 to over 400 million tons documented in RIA Table 1-2 warrants analysis of the environmental and health impacts. Simply dismissing those costs because the "SAGE model [used by EPA to account for social costs] does not account for the effects of changing environmental quality . . ." (RIA at 1-4) results in an incomplete accounting of the regulatory change impacts.

In the Supplemental Proposal, EPA has compounded the errors of the Original Proposal by assuming a baseline where the 2024 GHG emission standards have been repealed. EPA, *Economic Impact Analysis for the Supplemental Proposed Rule, 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* (Sept. 11, 2026). The analysis focuses only on the emissions limits for new coal-fired power plants, which are no longer economic and not being built, and ignores both the impact of the repeal of the 2024 standards and the implications of not regulating any industrial sector under section 111 pursuant to the Supplemental Proposal's rationale. Improper segmentation of the effects of governmental action has been invalidated by the courts. *See Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313–14 (D.C. Cir. 2014); *NRDC v. Hodel*, 865 F.2d 288, 297–98 (D.C. Cir. 1988).

Both here and in the Original Proposal, EPA is doing what the Supreme Court in an earlier opinion said it cannot do. In *Michigan v. EPA*, 576 U.S. 743 (2015), the Supreme Court reversed the D.C. Circuit's decision upholding EPA's finding that regulation of hazardous air pollutants from power plants under section 112 of the Clean Air Act was "appropriate and necessary" because EPA refused to consider the costs of regulation. The statutory language in that case did not reference costs, but the Court held that the phrase "appropriate and necessary" requires "at

least some attention to cost." *Id.* at 752. The Court reversed because EPA's refusal to consider costs was inconsistent with the statutory requirement and reasoned decision-making.

Here, EPA has yet again failed to factor costs and benefits into its decision-making. It has again arbitrarily ignored the conclusions of the cost-benefit analysis contained in its RIA and has ignored the costs resulting from increased GHG emissions. Although it states that cost factors into its positions set forth in the Supplemental Proposal, EPA does not discuss how this squares with the conclusions in its RIA or the conclusions that it should have reached if the costs associated with increased GHG emissions had been considered. This is directly contrary to *Michigan v. EPA* and reasoned decision-making. Under these circumstances, EPA cannot say that its newly found reinterpretation is the best reading of the Act.

II. THE SUPPLEMENTAL PROPOSAL IS INCONSISTENT WITH THE PUBLIC INTERNATIONAL LAW GOVERNING PROTECTION OF THE GLOBAL CLIMATE, WHICH CONFIRMS THAT EPA'S NEWLY FOUND BEST READING OF SECTION 111 OF THE CLEAN AIR ACT IS MISPLACED.

In our comments regarding EPA's proposed elimination of standards governing GHG emissions from power plants in the Original Proposal, we raised the relevance of a recent advisory opinion regarding environmental obligations shared by all nations of the world issued by the International Court of Justice ("ICJ") on July 23, 2025. *See Obligations of States in Respect of Climate Change*, Advisory Opinion, I.C.J. General List No. 187 (July 23, 2025) (hereinafter "*Obligations of States*" or "the ICJ Advisory Opinion"), https://www.icj-cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf. Notwithstanding these comments, the Supplemental Proposal fails to make any mention of the ICJ Advisory Opinion.

The ICJ Advisory Opinion interprets the obligations of States with respect to climate as a matter of public international law, including custom, and is directly relevant to the Supplemental Proposal, as well as EPA's final actions repealing GHG mobile source emissions standards under

section 202 of the Clean Air Act and the repeal of the 2024 GHG emission standards for fossil fuel-fired EGUs as discussed in our previous comments in three respects:

> (1) under the doctrine of *The Paquete Habana*, customary international law is the law of the land and applies in this proceeding without any need for a statute expressly applying public international law;
>
> (2) under the *Charming Betsy* doctrine, the laws of the United States, including the Clean Air Act, must be interpreted consistently with the law of nations, including customary international law; and
>
> (3) the requirement under section 307 of the Clean Air Act that a court set aside any action that is "not in accordance with law" must include public international law, including custom.

Each of these lenses applies to the Supplemental Proposal. The fact that EPA positions in the Supplemental Proposal (and its other climate-related actions) are inconsistent with the ICJ Advisory Opinion precludes adoption of the Supplemental Proposal. EPA's failure even to address the applicability of public international law, including international custom, as interpreted in the ICJ Advisory Opinion, in the Supplemental Proposal equally precludes any final action regarding the Supplemental Proposal.

A. EPA Improperly and Unlawfully Ignores International Law in the Context of Analyzing the Scope of Authority Provided by Section 111 of the Clean Air Act.

EPA fails to consider the relevance of public international law, the law governing the relations between States[23] (including the United States as a subject of international law), to the positions that it advances in the Supplemental Proposal. It clearly appears that EPA believes

[23] In the context of international law, "States" refer to subjects of international law—countries or nations—such as the United States, Canada, France and Germany. By contrast, usage of that term in domestic U.S. law refers to subnational, quasi-sovereign constituent units—such as Pennsylvania, Virginia, Iowa and Kentucky—of the United States as sovereign state in the international legal system.

(incorrectly) that public international law has no bearing on its evaluation of the scope of its authority under section 111 of the Clean Air Act.

In submissions opposing EPA's proposed rescission of the 2009 Endangerment Finding, various commenters stated that such rescission would violate international law, particularly customary international law. EPA summarily dismissed those concerns. *See* EPA, *Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards: Response to Comments* 311–17 (EPA-420-R-26-003, Feb. 2026), https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101HV15.pdf (hereinafter "*Response to Endangerment Comments*"). In particular, EPA dismissed the role and importance of the ICJ Advisory Opinion. EPA stated, "[N]ot only are international advisory opinions of the ICJ not legally binding, but even for the binding decisions of the ICJ, the U.S., since 1986, has not accepted the ICJ's compulsory jurisdiction." *Id.* at 314–15 (footnotes omitted).

We assume that EPA's stance regarding the role and importance of international law in the context of the Supplemental Proposal is substantially similar to its positions in connection with the rescission of the 2009 Endangerment Finding. We are left to that assumption because the Supplemental Proposal is devoid of any discussion of this issue.

EPA's claims in the *Response to Endangerment Comments* completely miss the point. The obligations at issue do not derive their binding force from the ICJ Advisory Opinion; they derive it in part from customary international law, "as evidence of a general practice accepted as law," which binds the United States whether or not a court has declared that law. Statute of the International Court of Justice art. 38(1)(b). The advisory opinion itself, the product of a formal proceeding before an international tribunal created by the member States of the United Nations, is authoritative evidence of the existence and requirements of that law, in the form of obligations of States. *Id.* art. 38(1)(d). The content of the ICJ Advisory Opinion is directly relevant to the instant proceeding, and

its application must be considered and analyzed as a component of EPA's reasoned decision-making process in connection with the Supplemental Proposal.

EPA's observation that the United States is no longer subject to the ICJ's so-called "compulsory" jurisdiction in contentious cases—disputes between identifiable States—initiated under Article 36 of the Court's Statute is irrelevant to whether the customary obligations identified in the ICJ Advisory Opinion apply to the United States with legally binding force. The ICJ's capacity to render advisory opinions rests on an entirely different jurisdictional basis (Article 96 of the U.N. Charter and Articles 65–68 of the Statute of the International Court of Justice) from that in contentious cases (Article 36), including the so-called "compulsory jurisdiction." Accordingly, withdrawal by the United States from the compulsory jurisdiction of the ICJ has no bearing on the ICJ's declarative, advisory function or on the customary obligations that its advisory opinions identify. "The consent of States, parties to a dispute, is the basis of the Court's jurisdiction in contentious cases. The situation is different in regard to advisory proceedings . . . ." *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania*, Advisory Opinion, 1950 I.C.J. 65, 71 (Mar. 30). Article 65(1) expressly authorizes the ICJ to render an advisory opinion "on any legal question" without regard to constraints on the exercise of its jurisdiction in contentious cases under Article 36.

The ICJ Advisory Opinion does not create the obligations it identifies; rather, it identifies the law as it already exists. The ICJ unanimously found that "customary international law sets forth obligations for States to ensure the protection of the climate system and other parts of the environment from anthropogenic greenhouse gas emissions," including the duty "to prevent significant harm to the environment by acting with due diligence" and the duty "to co-operate with each other in good faith." ICJ Advisory Opinion ¶ 457(3)(B) (operative clause, *dispositif*). EPA thus cavalierly dismisses what the ICJ, including the Judge of U.S. nationality, identified without dissent as the existing law binding on every State. The request for the advisory opinion was made by

General Assembly resolution 77/276, adopted without a vote. *Id.* ¶ 47. The United States, moreover, took part in every phase of the proceedings: it filed a written statement and written comments, and presented an oral statement through the Legal Adviser of the Department of State. *Id.* ¶¶ 17, 24, 35.

In the *Response to Endangerment Comments*, EPA similarly and summarily dismissed other international advisory opinions. With respect to the International Tribunal for the Law of the Sea ("ITLOS") and Inter-American Court of Human Rights advisory opinions, EPA took the position that the United States is not a party to the agreements creating those tribunals. *Response to Endangerment Comments* at 315. It does not follow, however, that the legal principles articulated in those advisory opinions do not apply to the United States. The advisory opinions of the Inter-American Court of Human Rights and the International Tribunal for the Law of the Sea are relevant here not as judicial orders or judgments directed to the United States, but as concordant declarations of much the same obligations which the ICJ had also articulated. *See, e.g.*, ICJ Advisory Opinion ¶¶ 138, 313 (relying on the ITLOS opinion), 385 (citing the Inter-American Court's opinion); *see also* Statute of the International Court of Justice art. 38(1)(d) (identifying "judicial decisions . . . as subsidiary means for the determination of rules of law").

In summary, EPA's position that international law was not relevant to its decision to rescind the 2009 Endangerment Finding is well captured in the *Response to Endangerment Comments*. Specifically, EPA broadly asserted that "we do not concede that any aspect of this final action contravenes any international law by which the United States is bound." *Response to Endangerment Comments* at 313. We note that a bare refusal to "concede" is not the sort of reasoned decision-making in which EPA must engage. We also infer that EPA believes more generally that international law has no bearing on its actions to dismantle protections against climate disruption. There is certainly nothing in the Supplemental Proposal to suggest otherwise.

Contrary to EPA's rejection of its relevance, public international law contains specific, detailed requirements governing the obligations of States, including the United States, with respect to protection of the climate, a global commons. Those include, but are not limited to:

- Binding international agreements, including the Paris Agreement and the UN Framework Convention on Climate Change,[24] to which the United States has been or is currently party; and
- "[I]nternational custom, as evidence of a general practice accepted as law,"[25] which also operates with binding force in the international legal system.

Both sources of law, which are equally authoritative, create specific legal obligations for the United States, along with other States in the system. The United States reciprocally benefits from the performance of those obligations by other States, through maintaining the integrity, and reducing degradation, of the global climate system.

As elaborated in this section, the international legal obligation of climate protection is both highly specific and robust, containing detailed requirements on which the federal government is obliged to deliver on behalf of the United States. Further, as explained in detail below, those requirements apply to EPA in this proceeding, as both an instrumentality of the United States Government,[26] and as necessary for the United States Government to implement

[24] The United States, having given notice of its intention to withdraw, is nonetheless a party to, and bound by, the provisions of the UNFCCC. The withdrawal takes effect on February 27, 2027. *See* United Nations Framework Convention on Climate Change, Status, U.N. Treaty Collection ch. XXVII, no. 7, n.9, https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXVII-7&chapter=27 (last visited Oct. 23, 2026) (withdrawal notified Feb. 27, 2026, taking effect Feb. 27, 2027, under art. 25(2)).

[25] Statute of the International Court of Justice art. 38(1)(b).

[26] *See* ICJ Advisory Opinion ¶ 427 (conduct of an organ of a State is attributable to that State in the context of climate change).

the required regulatory oversight called for by public international law over private parties within its jurisdiction.

As a consequence of basic principles of administrative law, and jurisprudence interpreting section 307 of the Clean Air Act, 42 U.S.C. § 7607, EPA's wholesale failure even to acknowledge the potential relevance of public international law to its positions in the Supplemental Proposal, coupled with its complete disregard of the necessity to explain the potential applicability of binding norms as articulated within that legal system, is arbitrary and capricious within the meaning of section 307(d)(9)(A) of the Clean Air Act, 42 U.S.C. § 7607(d)(9)(A). Further, as explained below, EPA's failure to take into account the public international law governing climate protection, and to consider its potential application to the instant proceeding, is "not in accordance with law." *Id.*

The contours of international law set out below bear on the manner in which EPA is obligated to implement its responsibilities under the Clean Air Act, and the interpretive gymnastics that EPA has engaged in to arrive at a newly found "best reading" of section 111 of the Clean Air Act—a reading that, as explained in Section I of these comments, conflicts with the plain language of the statute, applicable and binding Supreme Court precedents, and a longstanding and contrary understanding of that provision. As such, Section II of these comments should be read and understood as further support for each of the arguments made in Section I.

Over the arc of more than 200 years, it has been well settled that statutes adopted by the federal government must be read to avoid conflicts with international law if at all possible. As Chief Justice Marshall found in *Murray v. Schooner Charming Betsy*, 6 U.S. (2 Cranch) 64, 118 (1804), "an act of Congress ought never to be construed to violate the law of nations if any other possible construction remains." There is simply no evidence that EPA took such

considerations into account in crafting the Supplemental Proposal. Indeed, EPA appears to have dismissed the relevancy of international law to the Supplemental Proposal altogether. This failure is fatal to the Supplemental Proposal.

B. Notwithstanding the Withdrawal from the Paris Agreement and the Pending Withdrawal from the UNFCCC, the Customary International Law of Climate Protection Continues to Bind the United States.[27]

Three advisory opinions have emerged in relatively short order, through different and independent processes, from the International Tribunal for the Law of the Sea,[28] the International Court of Justice,[29] and the Inter-American Court of Human Rights.[30] Of these, the ICJ advisory opinion is of the greatest applicability in the present instance: it articulates general legal obligations, covers all sectors of the environment, and identifies customary obligations that bind all States, with legal effect comparable to that of treaties.[31]

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[27] *See generally* David A. Wirth & Lisa Benjamin, *UN Environmental Negotiations in a Political Environment, in* THE POLITICS OF ENVIRONMENTAL LAW (Bruce Huber & Josephine van Zeben eds., forthcoming 2027).

[28] *Request for an Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law*, Case No. 31, Advisory Opinion of May 21, 2024, https://www.itlos.org/fileadmin/itlos/documents/cases/31/Advisory_Opinion/C31_Adv_Op_21.05.2024_corr.pdf.

[29] *Obligations of States in Respect of Climate Change*, Advisory Opinion, I.C.J. General List No. 187 (July 23, 2025).

[30] *Climate Emergency and Human Rights*, Advisory Opinion OC-32/25, Inter-Am. Ct. H.R. (ser. A) No. 32 (May 29, 2025).

[31] Statute of the International Court of Justice art. 38(1). Although the application of treaties and custom to overlapping subject matter depends on the details of a particular situation, the public international legal system as a matter of principle does not make distinctions between the legal effect of these two sources of law, both of which are binding upon States to which they apply.

This category of proceedings is "advisory" in the sense that such advisory opinions are distinct from concrete controversies between identifiable States (contentious cases), with the Court providing advice to the requesting organ, here the General Assembly, as to the content of binding law. Advisory opinions in the ICJ rest on a jurisdictional basis[32] distinct from that governing "contentious cases," which involve cases or controversies between identifiable States parties to the particular dispute.[33]

The International Court has repeatedly emphasized that, in advisory proceedings, it does not recommend what the law should be, but instead states what the law actually is as it presently exists.[34] That includes determining whether a body of State practice and *opinio juris* (referring to motivation originating in a sense of legal obligation) has crystallized into internationally legally binding customary international law,[35] based not—as in a treaty regime—on express consent, but rather on the accumulated behavior of States over time.

Accordingly, while advisory opinions do not produce case-specific judgments or remedial orders directed at particular States, they constitute authoritative judicial

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[32] U.N. Charter art. 96, ¶ 1; Statute of the International Court of Justice arts. 65–68.

[33] Statute of the International Court of Justice art. 36.

[34] *See* ICJ Advisory Opinion ¶ 48 (the Court "states the existing law and does not legislate" (quoting *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 226, ¶ 18 (July 8)).

[35] *E.g.*, *Pulp Mills on the River Uruguay (Arg. v. Uru.)*, Judgment, 2010 I.C.J. 14, ¶¶ 101, 204 (Apr. 20) (customary international law governing environmental impact assessment); *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 226, ¶¶ 29–33 (July 8) (customary international law concerning prevention of environmental harm beyond national jurisdiction).

determinations of the content of international law and are widely regarded as carrying substantial legal authority notwithstanding their formally non-binding character.[36]

The ICJ advisory opinion originated in part from a youth movement, Pacific Islands Students Fighting Climate Change (PISFCC), whose activism was translated by UN Member States led by Vanuatu into an advisory request for the ICJ to clarify the status of the law in the field. Of great relevance here is the ICJ's treatment of the relationship between the expressly consent-based UNFCCC/Paris treaty regime on the one hand and accumulated customary practice on the other, as an equally authoritative source of law.

This is in no sense motivated by what might be derided as "forum shopping" in a municipal legal system, but, rather, an approach entirely consistent with the international legal system in general, and the specific declarative function of the International Court in particular. Indeed, the Court's functions in settling concrete disputes by deciding contentious cases and declaring the law in advisory opinions are mutually complementary components of a comprehensive landscape of judicial governance including international tribunals such as the ICJ. The analytical framework in which the advisory opinion was crafted is consistent with extant doctrine, dating back centuries to the beginning of the Westphalian legal system in the mid-17th century. The authority to issue advisory opinions, resting on Article 96 of the U.N. Charter and Articles 65–68 of

[36] *See* ICJ Advisory Opinion ¶ 48 (the Court "states the existing law and does not legislate" (quoting *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 226, 237, ¶ 18 (July 8))); *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania*, Advisory Opinion, 1950 I.C.J. 65, 71 (Mar. 30) (although advisory opinions have "no binding force," they constitute the Court's judicial response to legal questions submitted to it); Roberto Ago, *"Binding" Advisory Opinions of the International Court of Justice,* 85 Am. J. Int'l L. 439 (1991) (written while the author was sitting as a Judge of the International Court of Justice).

the Statute of the International Court of Justice, has been universally recognized for more than a century, dating back to Article 14 of the Covenant of the League of Nations and the practice of the Permanent Court of International Justice, to which the present ICJ is the successor.[37]

The *dispositif* (the operative paragraph setting out the Court's conclusions) of the ICJ Advisory Opinion clearly states the operative role of custom in establishing and framing the duties of States to protect the climate:

> THE COURT . . .
>
> Unanimously, *Is of the opinion that* customary international law sets forth obligations for States to ensure the protection of the climate system and other parts of the environment from anthropogenic greenhouse gas emissions.
>
> These obligations include the following:
>
> (a) States have a duty to prevent significant harm to the environment by acting with due diligence and to use all means at their disposal to prevent activities carried out within their jurisdiction or control from causing significant harm to the climate system and other parts of the environment, in accordance with their common but differentiated responsibilities and respective capabilities;
>
> (b) States have a duty to co-operate with each other in good faith to prevent significant harm to the climate system and other parts of the environment, which requires sustained and continuous forms of co-operation by States when taking measures to prevent such harm[.][38]

The remainder of this section identifies salient portions of the ICJ's analysis relevant to this proceeding and explains their applicability to EPA's proposed repeal of greenhouse gas emission standards for fossil fuel-fired electric generating units.

[37] League of Nations Covenant art. 14 (the Permanent Court "may also give an advisory opinion upon any dispute or question referred to it by the Council or by the Assembly").

[38] ICJ Advisory Opinion ¶ 457(3)(B).

C. The ICJ's Advisory Opinion Authoritatively Sets Out Customary Legal Standards for All States, Binding Norms Against Which the Legality of the Behavior of the United States and EPA Must Be Measured.

In an opinion unusual for its unanimity, the ICJ clarified and delineated the relationship between the treaty regime and international customary law. In effect, it treated the treaty obligations, and State practice in implementing them, as informing a parallel body of custom. It also found that the 1.5°C temperature goal has become the parties' "agreed primary temperature goal" under the Paris Agreement, notwithstanding the "well below 2°C" formulation in the text of the Agreement.[39] Relying on the scientific consensus reflected in IPCC reports and on subsequent COP decisions, the Court determined that the 1.5°C goal is a "specification and quantification" of the UNFCCC's overall objective: to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system.[40] But the Court also based its analysis on application of a much broader corpus of existing customary international law, portions of which it had recognized in earlier decisions.[41]

As discussed in greater detail below, the Court also emphasized States' duties to implement climate-related treaty commitments in good faith, consistent with their object and

[39] ICJ Advisory Opinion ¶¶ 224, 313.

[40] ICJ Advisory Opinion ¶¶ 224, 270; *see also* Rita Guerreiro Teixeira, Nataša Nedeski & Gleider Hernández, *The 1.5°C Temperature Target as a Means to an End: Key Implications of the ICJ's Interpretation of the Paris Agreement's Overall Objective*, *EJIL: Talk!* (Nov. 4, 2025), https://www.ejiltalk.org/the-1-5c-temperature-target-as-a-means-to-an-end-key-implications-of-the-icjs-interpretation-of-the-paris-agreements-overall-objective/.

[41] *Pulp Mills*, 2010 I.C.J. 14, ¶¶ 101, 204; *Legality of the Threat or Use of Nuclear Weapons*, 1996 I.C.J. 226, ¶¶ 29–33.

purpose, and set out the legal consequences of a breach of these obligations, which may include cessation, assurances and guarantees of non-repetition, and full reparation.[42]

The consequences of the advisory opinions, and the ICJ's in particular, are profound. For one, they clearly imply that States such as the United States, having withdrawn, or given notice of withdrawal, from the relevant treaty instruments, are nonetheless bound by a parallel custom that in effect tracks those agreements. The ICJ's advisory opinion also engages with the question of the legal significance of nationally determined contributions ("NDCs") under the Paris Agreement.[43] Although not necessary to the legal significance of the ICJ's advisory opinion, which does not depend on endorsement by any political organ, the United Nations General Assembly subsequently adopted a resolution[44] that "[w]elcomes" the opinion and affirms its importance "as an authoritative contribution to the clarification of existing international law." The resolution was adopted by a recorded vote of 141 to 8, with 28 abstentions; the United States voted against it. A vote on a General Assembly resolution, however, does not alter the customary obligations the Court identified.

Particularly relevant here, the ICJ did not limit its analysis to treaty obligations arising under instruments such as the UNFCCC and the Paris Agreement. Instead, the Court devoted substantial attention to customary international law, which arises from the combination of general and consistent State practice and *opinio juris*, namely the belief by States that such practice is carried out pursuant to legal obligation. The Court concluded that several climate-

[42] ICJ Advisory Opinion ¶ 457(4).

[43] *See infra* Section II.C.4.

[44] G.A. Res. 80/263, ¶¶ 1–2 (May 20, 2026), https://digitallibrary.un.org/record/4118331/files/A_RES_80_263-EN.pdf; *see* U.N. Press Release GA/12760 (May 20, 2026) (recording the vote of 141 to 8, with 28 abstentions).

related obligations, including obligations of prevention, due diligence, and international cooperation, have significance independent of particular treaty commitments.[45] The discussion below therefore focuses principally on customary international law rather than treaty law.

The international legal issues discussed below are relevant not because they arise in the abstract, but because they bear directly on the legality of the specific agency action proposed here. The International Court of Justice addressed questions that directly address critical issues presented by EPA's Supplemental Proposal, including the continuing significance of climate obligations following treaty withdrawal, the legal relevance of nationally determined contributions, the role of international cooperation in circumstances involving cumulative emissions, and the responsibility of States for failing to maintain regulatory measures governing emissions generated by private actors. Because the Supplemental Proposal would repeal an existing federal regulatory regime directed at greenhouse gas emissions from power plants, those issues bear directly on the legal and factual premises of the Supplemental Proposal.

These comments do not suggest that EPA must act at the direction of an international tribunal. Rather, they identify legal considerations that are plainly relevant to the Agency's exercise of delegated authority and that the Supplemental Proposal either does not address or fails to consider in sufficient detail. The issue is whether the assumptions underlying the Supplemental Proposal can be reconciled with the customary international law obligations identified by the ICJ and with longstanding domestic doctrines governing the relevance of customary international law in United States law.

[45] ICJ Advisory Opinion ¶ 314 (treaty and custom "establish independent obligations that do not necessarily overlap"); *id.* ¶ 315 (customary obligations "exist independently regardless of whether a State is a party to the climate change treaties").

International tribunals such as the ICJ do not make law, in the sense that common law courts in the Anglo-Saxon legal tradition may. Rather, the ICJ is confined to finding and articulating the law as it presently exists, in this case as made by States through either treaty or custom, and as demonstrated by the evidence-based test of their actual behavior. The ICJ's advisory opinion in *Obligations of States* consequently does not create any new obligations; rather, it clarifies, at the consensus request of the United Nations General Assembly,[46] the existing international legal framework applicable to climate change, including the Framework Convention, the Paris Agreement, and binding international custom.

Several aspects of the advisory opinion are particularly relevant to the United States and this Supplemental Proposal. The Court, as explained in greater detail below, found that States, including the United States, have customary international law obligations to, among other things, prevent significant harm to the climate system and other parts of the environment, and cooperate in good faith to that end. Further, the Court found that a breach of any of these obligations constitutes an internationally wrongful act entailing the responsibility of the State concerned, with legal consequences that may include cessation, assurances and guarantees of non-repetition, and full reparation, and that any State may invoke the responsibility of a State that breaches obligations owed to the international community as a whole.[47]

[46] ICJ Advisory Opinion ¶ 47 (resolution 77/276 "was adopted without a vote").

[47] ICJ Advisory Opinion ¶¶ 442, 457(4).

An agency acts arbitrarily and capriciously when it fails to consider important aspects of the problem before it.[48] The threshold question is not whether EPA must agree with every aspect of the ICJ's analysis. The question is whether EPA may disregard a unanimous advisory opinion of the principal judicial organ of the United Nations concerning the existence and content of climate-related customary international law when evaluating its proposed repeal of regulations controlling emissions of GHGs.

The Supplemental Proposal does not meaningfully engage—or engage at all—with the ICJ's analysis of prevention, due diligence, cooperation, treaty withdrawal, regulatory omissions, or State responsibility. Those issues bear directly on several premises underlying the Supplemental Proposal. Their omission therefore raises a substantial question whether the Agency has fully considered all relevant aspects of the problem before it.

1. The Supplemental Proposal Would Violate the Customary International Legal Duty Requiring States Effectively to Regulate GHG Emissions Within Their Jurisdiction or Control.

The ICJ's advisory opinion directly addressed a central issue in this administrative proceeding: the obligation of States, acting through regulatory authorities such as EPA, to regulate private actors so that each State delivers on its international obligations to protect the climate from excess emissions of GHGs. Paragraph 428 of the ICJ opinion provides as follows:

> 428. Some participants also argued that the conduct of private actors resulting in emissions of GHGs is not attributable to States. In relation to private actors, the Court observes that the obligations it has identified [in response to the General Assembly's request] include the obligation of States to regulate the activities of private actors as a matter of due diligence. Therefore, attribution in this context involves attaching to a State its own actions or omissions that constitute a failure to exercise regulatory due diligence. In such circumstances, the question of attributing the conduct of private actors to a State does not arise. The legal standard to assess compliance with the obligation to regulate, as

[48] *See Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agency action is arbitrary and capricious where the agency has "entirely failed to consider an important aspect of the problem").

> well as the nature of the actions or omissions that lead to attribution, has been set out by the Court in several cases [citations omitted]. Thus, a State may be responsible where, for example, it has failed to exercise due diligence by not taking the necessary regulatory and legislative measures to limit the quantity of emissions caused by private actors under its jurisdiction.[49]

As clarified below, this paragraph has domestic legal significance, even in the United States' dualist legal structure. Accordingly, EPA is obliged to consider its application to the instant proceeding, as a component of the Agency's duty to identify, assess, and explain all relevant junctures in its decision-making process.

Throughout the advisory opinion, as specifically highlighted in paragraph 428, the Court observed that States have an obligation to regulate the activities of private actors as a matter of due diligence. Further, the Court concluded that a State may incur responsibility for an internationally wrongful act (the international law analogue of a civil wrong, such as a tort) where it has failed to exercise due diligence by not taking the necessary regulatory and legislative measures to limit emissions caused by private actors under its jurisdiction.

That conclusion is directly applicable here. EPA is not merely declining to establish a new program. It proposes to repeal an existing federal mechanism that regulates emissions from private entities operating within U.S. jurisdiction. The Supplemental Proposal therefore concerns the precise category of governmental conduct discussed by the Court: the adoption, maintenance, modification, or repeal of regulatory measures governing private emissions.

Moreover, the Court throughout its analysis emphasizes a demanding *standard of due diligence* for all States in responding to the climate crisis: the standard is "stringent," and "a heightened degree of vigilance and prevention is required."[50] Measured against that standard, the

[49] ICJ Advisory Opinion ¶ 428.

[50] ICJ Advisory Opinion ¶ 138.

Supplemental Proposal cannot be reconciled with the obligations of the United States. Due diligence requires a State to "put in place a national system, including legislation, administrative procedures and an enforcement mechanism necessary to regulate the activities in question," and the rules and measures adopted "must regulate the conduct of public and private operators within the States' jurisdiction or control."[51] EPA instead proposes to repeal one of the principal federal mechanisms that does exactly that. The Supplemental Proposal is thus a clear departure from the standards set out in the advisory opinion.

The Supplemental Proposal nowhere addresses paragraph 428 or the Court's analysis of regulatory due diligence. Nor does it explain why repeal of one of the principal federal mechanisms limiting emissions from private actors is consistent with the standards articulated by the Court. The omission is particularly significant because paragraph 428 frames the inquiry in regulatory rather than emissions terms. The relevant question becomes whether the State has taken the regulatory measures necessary to limit emissions. EPA's Supplemental Proposal places that question squarely before the Agency.

2. EPA's Analysis Disregards the Customary International Law Duty to Prevent Significant Climate Harm, Which Is Directly Relevant to This Proceeding.

The ICJ concluded that States have obligations of prevention and due diligence with respect to climate-related harm. Those obligations require States to use all means at their disposal, including regulatory measures, to prevent activities within their jurisdiction or control from causing significant harm to the climate system. The Court further explained that due diligence is a "standard of conduct," and that under obligations of conduct a State incurs

[51] *Id.* ¶¶ 281–282 (internal quotation marks omitted).

responsibility if it "fails to take all measures which were within its power to prevent the significant harm."[52]

The Supplemental Proposal does not examine whether repeal of greenhouse gas standards for power plants is consistent with those obligations. Instead, it largely treats repeal as a question of domestic policy and statutory interpretation. Correctly understood, the obligations identified by the ICJ are binding as customary international law, and they form part of the legal context within which repeal must be evaluated.

With respect to the duty of *prevention of significant harm,* the Court explained: "The duty to prevent significant harm to the environment also applies to the climate system, which is an integral and vitally important part of the environment and which must be protected for present and future generations . . . ."[53] The standard of conduct for prevention of significant harm is due diligence, which means that a State, including the United States, must use all means at its disposal, including the adoption and implementation of appropriate legislation and administrative measures, to prevent and control the harm.[54] "As far as climate change is concerned, such appropriate rules and measures include, but are not limited to, regulatory mitigation mechanisms that are designed to achieve the deep, rapid, and sustained reductions of GHG emissions that are necessary for the prevention of significant harm to the climate

[52] ICJ Advisory Opinion ¶¶ 280, 409, 457(3)(B)(a).

[53] ICJ Advisory Opinion ¶ 273.

[54] *Id.* ¶¶ 280–81.

system."[55] In addition, a State cannot meet its obligation of due diligence by ignoring plausible risks of significant harm.[56]

EPA's Supplemental Proposal, if finalized, would breach the obligation to prevent significant harm, and it fails to engage with the ICJ's analysis of binding customary obligations at multiple junctures.

The Supplemental Proposal relies heavily on the purported, comparatively limited contribution of the United States power sector to global emissions.[57] The ICJ addressed similar arguments and rejected the proposition that a State may avoid responsibility merely because climate harm results from cumulative emissions arising from the conduct of many actors and many States: "it is scientifically possible to determine each State's total contribution to global emissions," and "the responsibility of a single State for damage may be invoked without invoking the responsibility of all States that may be responsible."[58] The logic of the Court's analysis is that cumulative causation strengthens, rather than weakens, the importance of action by individual States.

Categorically excluding a three percent share of global greenhouse gas emissions, as EPA here proposes, is, to say the least, inconsistent with the due diligence standard required to prevent harm. In addition, there is more than a plausible risk of further adverse effects to the climate system, as well as human health and wellbeing, from greater emissions. Finally, the need

[55] *Id.* ¶ 282.

[56] *Id.* ¶ 294.

[57] *See* 91 Fed. Reg. at 59024 ("in 2022, fossil fuel-fired power plants in the United States contributed 3.0 percent of global GHG emissions").

[58] ICJ Advisory Opinion ¶¶ 429–430.

to deploy regulatory mechanisms to achieve "deep, rapid, and sustained" GHG reductions is consistent with, and is furthered by, the Paris Agreement's approach to reducing greenhouse gas emissions by more ambitious reduction targets in each succeeding nationally determined contribution.[59]

But there is no discussion whatsoever of these questions in EPA's Supplemental Proposal, much less any effort to reduce greenhouse gas emissions at all. Accordingly, the United States cannot lawfully treat this contribution to global emissions as *de minimis*.

Rather than increasing the United States' ambition, the Supplemental Proposal will put the United States in reverse and literally step on the gas. Particularly given the expected increase in electricity demand projected for the United States due to the growth of data centers and artificial intelligence—but even if that consideration were to be left aside—the repeal of the GHG standards will result in a proliferation of new fossil-fired power plants and delays in planned closings of aging coal plants. This will increase emissions from a sector that already accounts for some three percent of global emissions, at a time when, according to the ICJ, due diligence calls for regulatory mechanisms designed to achieve "deep, rapid, and sustained reductions of GHG emissions," not increases.[60]

According to the Court, the obligation to prevent significant transboundary harm caused by greenhouse gas emissions is an obligation *erga omnes*—one owed "to the international community as a whole,"[61] by the United States along with every other State on the planet. Any

[59] The effect of the ICJ's opinion on Paris NDCs, even for States such as the U.S. that are no longer party to that instrument, is discussed *infra* Section II.C.4.

[60] ICJ Advisory Opinion ¶ 282.

[61] *Id.* ¶¶ 440, 442.

State may hold any other State, including the United States, responsible for breach of such customary international law obligations.[62] EPA's Supplemental Proposal to abandon federal greenhouse gas emission standards for power plants cuts against a customary international law duty owed to every State, not merely to domestic constituencies. Obligations *erga omnes* are, in the Court's words, "[b]y their very nature . . . the concern of all States," whatever the size of a particular State's share of global emissions.[63] Accordingly, if finalized, the repeal would place the United States in breach of the customary duty to prevent significant harm, which is owed to all States, and would thus constitute an internationally wrongful act engaging the international legal responsibility of the United States.

3. EPA Disregards the Customary International Legal Duty of International Cooperation and Good Faith, Which Is Directly Relevant to This Proceeding.

The ICJ's advisory opinion identifies international cooperation as an international legal duty, not a matter committed entirely to political discretion. The Court emphasized that climate change is a problem requiring collective action and that obligations of cooperation retain significance precisely because the actions of multiple States contribute to the harm at issue.

The Supplemental Proposal repeatedly references international emissions trends and developments outside the United States.[64] The apparent implication of parts of the Supplemental

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[62] *Id.* ¶ 442.

[63] *Id.* ¶ 441 (quoting *Barcelona Traction, Light & Power Co. (Belg. v. Spain)*, Judgment, 1970 I.C.J. 3, 32, ¶ 33 (Feb. 5)).

[64] *See, e.g.*, 91 Fed. Reg. at 59005 (GHG concentrations "have continued to rise, driven primarily by increased emissions from foreign sources"); *id.* at 59025 (proposing that "finding endangerment when the overwhelming bulk of emissions are from sources outside the United States is impermissible under CAA section 111"); *id.* at 59041 (impacts "stem from a collective mass of emissions that is both globally diffused and predominantly emitted by sources outside of the United States").

Proposal is that rising emissions elsewhere diminish the significance of domestic action. The ICJ's analysis is premised on the opposite understanding. Because climate change results from aggregate conduct, cooperation requires States to continue meeting their own responsibilities even where other States may fail to do so.

The ICJ's advisory opinion identifies a duty of *cooperation in good faith*. According to the Court: "Co-operation between States is the very foundation of meaningful international efforts with respect to climate change."[65] Because "[c]limate change is a common concern" requiring the active involvement of all States, "[c]o-operation is not a matter of choice for States but a pressing need and a legal obligation."[66] Cooperation is governed by the principle of good faith.[67] The duty "requires sustained and continuous forms of co-operation by States when taking measures to prevent such harm."[68]

There is nothing in this Supplemental Proposal about cooperation with other States, much less any explanation of how this Supplemental Proposal would help other nations. To the contrary, EPA's Supplemental Proposal reflects a unilateral U.S. decision to forgo regulation of greenhouse gas emissions from power plants and is the antithesis of good faith cooperation on meaningful efforts to address climate change. A unilateral rollback is difficult to square with the "sustained and continuous" cooperation the Court described. As with the duty of due diligence in preventing significant harm, the obligation to cooperate in good faith is among the "obligations pertaining to the protection of the climate system" that the Court characterized as obligations

[65] ICJ Advisory Opinion ¶ 302.

[66] *Id.* ¶ 308.

[67] *Id.* ¶ 303.

[68] ICJ Advisory Opinion ¶ 457(3)(B)(b).

erga omnes, which means that any other State may invoke the responsibility of the United States for its breach.[69]

The Supplemental Proposal does not engage the duty to cooperate, as identified by the ICJ. Nor does it explain how reliance on foreign emissions trends can be reconciled with the Court's conception of cooperation and good faith. The Agency must both engage with the international legal duty of cooperation, by reference to the ICJ's analysis in its advisory opinion, and thoroughly explain its reasoning in responding to it. Accordingly, EPA is obliged to consider its application to the instant proceeding, as a component of the requirements of administrative transparency, requiring the Agency to identify, assess, and analyze all relevant junctures in its decision-making process.

4. Withdrawal from Climate Agreements Does Not Relieve the United States of the Corresponding Customary Obligations.

The Supplemental Proposal does not discuss the UNFCCC or the Paris Agreement, from which the United States has withdrawn or is in the process of withdrawing. This leaves the impression that EPA assumes that climate-related international obligations become largely irrelevant once the United States ceases participation in particular treaty arrangements. The ICJ's analysis points in the opposite direction.

The Court emphasized that many obligations relevant to climate change do not arise solely from treaty commitments but also reflect and inform broader obligations arising under customary international law, including duties of prevention, due diligence, and cooperation. As the ICJ's further analysis demonstrates, withdrawing from the climate treaties does not absolve the United States of those substantive obligations under customary international law:

[69] *Id.* ¶¶ 440, 442.

> It follows from the above that the customary obligations of any State which is not a party to one or more of the climate change treaties at present find expression, at least in part, in the general practice of States which is in accordance with their obligations under the climate change treaties, as interpreted herein . . . . *Customary obligations are the same for all States and exist independently regardless of whether a State is a party to the climate change treaties.* On this basis, the Court considers that it is possible that a non-party State which co-operates with the community of States parties to the three climate change treaties in a way that is equivalent to that of a State party, may, in certain instances, be considered to fulfil its customary obligations through practice that comports with the required conduct of States under the climate change treaties. However, if a non-party State does not co-operate in such a way, it has the full burden of demonstrating that its policies and practices are in conformity with its customary obligations.[70]

To that extent, the Court reinforced the treaty regime as the primary forum for realizing climate-related goals for the benefit of all States and the global commons. But by articulating this parallel set of obligations of customary origin, the Court in effect treated the UNFCCC/Paris treaty obligations as a floor—a springboard to facilitate effectuating a broader panoply of obligations related to the environment, public health, and human rights.[71]

The Supplemental Proposal, by omitting any discussion of international legal duties, evades a central legal question, squarely raised by the ICJ advisory opinion: whether obligations reflected in the UNFCCC, Paris Agreement, and related instruments continue to apply through

[70] *Id.* ¶ 315 (emphasis added).

[71] *See* ICJ Advisory Opinion ¶ 314 (compliance with the treaties does not mean "that the customary obligations would be fulfilled simply by States complying with their obligations under the climate change treaties"). The advisory opinion has already generated substantial scholarly and practitioner discussion concerning its implications for climate governance and international law. *See, e.g.,* Daniel Bodansky, *How Authoritative Is the ICJ Climate Change Advisory Opinion?*, 16 Climate L. 287 (2026), https://doi.org/10.1163/18786561-bja10093; Daniel Bodansky & Susan Biniaz, *The ICJ's Advisory Opinion on Climate Change: Does It Throw a Wrench into the Negotiator's Toolbox of Diplomatic Problem-Solving Techniques?*, *EJIL: Talk!* (Sept. 23, 2025), https://www.ejiltalk.org/the-icjs-advisory-opinion-on-climate-change-does-it-throw-a-wrench-into-the-negotiators-toolbox-of-diplomatic-problem-solving-techniques (arguing that the advisory opinion has an effect of constraining climate negotiators' options). While there might be a range of views on issues arising from the advisory opinion, none of that justifies EPA's gross disregard of the advisory opinion's significance altogether.

customary international law even if treaty participation changes. The ICJ's reasoning indicates that withdrawal from a treaty does not necessarily terminate obligations that have an independent basis in customary international law and which, as in this case, track the international obligations in the principal climate treaties, the UNFCCC and the Paris Agreement, as a baseline standard of performance.

The omission is especially significant because the Court assigned substantial legal relevance to the Paris Agreement's nationally determined contributions.[72] Although NDCs do not create identical obligations for all States, they provide evidence of the level of effort States themselves have regarded as necessary. The Supplemental Proposal does not explain the relevance of prior United States mitigation commitments—in the form of successive NDCs[73]—to EPA's evaluation of whether repeal remains consistent with duties of due diligence and prevention.

D. EPA Must Analyze the Domestic Legal Relevance of International Custom, as Set Out in the ICJ's Advisory Opinion, and Apply It as Appropriate to This Proceeding.

The United States' domestic (municipal) legal order is a modified dualist system, a consequence of its Anglo-Saxon, common law heritage. Some countries, such as the Netherlands, are described as "monist": binding treaty provisions operate directly in the domestic legal order and

[72] ICJ Advisory Opinion ¶¶ 245–249, 270; *see also id.* ¶ 315 (customary obligations of non-parties "find expression, at least in part," in State practice in accordance with the climate change treaties "as interpreted herein").

[73] *See* NDC Registry, UNFCCC, https://unfccc.int/NDCREG (last visited Oct. 21, 2026) (noting that "[t]he NDCs communicated by the USA are accessible in the archive").

can prevail over national statutes.[74]

In "dualist" legal systems like the United States, by contrast, the international and domestic legal regimes are formally decoupled. That, however, does not mean that sources of international law—and specifically the law arising from international agreements (treaties and other binding instruments concluded by the United States) and binding international custom—have no relevance in domestic legal proceedings, such as EPA's proposed repeal of greenhouse gas emissions standards for fossil fuel-fired electric generating units.

The Framers recognized the importance of "the law of nations," as demonstrated by the text of Article I, section 8, clause 10 of the Constitution. The Supremacy Clause of Article VI expressly makes "all Treaties made, or which shall be made, under the Authority of the United States" part of "the supreme Law of the Land."[75] These features of the United States domestic legal order have the beneficial effect of harmonizing the domestic and international legal orders—ideally so as to give effect to both sources of law, and at a minimum by discouraging potential conflicts between the two.

Since the early days of the Republic, the United States legal system has further adapted to recognize the relevance of, and in some cases directly to incorporate, public international law into the domestic legal order. There are at least three identifiable entry points relevant to this

[74] *See* Grondwet [Gw.] [Constitution] arts. 93–94 (Neth.). The Dutch Supreme Court has held that the precedence accorded by Article 94 does not extend to unwritten international law. HR 18 September 2001, ECLI:NL:HR:2001:AB1471 (*Bouterse*).

[75] Treaties generally fall into two groupings: those that are self-executing, which may operate directly as domestic law without implementing legislation, and those that are not. *See Medellín v. Texas*, 552 U.S. 491, 504 (2008); Restatement (Fourth) of the Foreign Relations Law of the United States § 310 (Am. L. Inst. 2018). The distinction concerns the domestic mode of implementation of treaty obligations, and "does not affect the obligation of the United States to comply with [a treaty] under international law." *Id.* § 310(1).

proceeding, through which international law—and specifically customary international law—can penetrate the divide so as to acquire domestic legal significance:

- The doctrine of *The Paquete Habana*, which under certain defined conditions—applicable in the instant context—results in the domestic operation of international law. Those international legal standards can, under defined conditions, operate as rules of decision in domestic courts;

- The doctrine of *The Charming Betsy,* which counsels harmonization, where fairly possible,[76] of federal statutes with international law—including custom—by interpreting domestic legal authorities consistently with the international legal obligations of the United States; and

- Direct statutory incorporation, as through CAA § 307(d)(9)(A), 42 U.S.C. § 7607(d)(9)(A), authorizing a federal court of appeals reviewing an EPA action such as the repeal of greenhouse gas emissions standards for fossil fuel-fired electric generating units to set aside agency action that is "not in accordance with law," in this situation international law.

All three of these analytical pathways are potentially relevant and warrant consideration in the instant proposed action, the anticipated repeal of greenhouse gas emissions standards for fossil fuel-fired electric generating units. Accordingly, EPA is obliged to consider, apply, and explain its analysis of each as part of a reasoned decision-making process leading to final action in this proceeding. Failure to do so would be arbitrary and capricious behavior on the part of the Agency. Moreover, as demonstrated below, each of these three modes of analysis leads to the same conclusion: the binding international legal norms that the proposed repeal would contravene must be given effect in this proceeding.

1. Public International Law, Including Binding Custom, Is Applicable in This Proceeding, and EPA May Not Disregard It.

In failing even to allude to customary international law, the Supplemental Proposal appears to proceed from the premise that customary international law is irrelevant to the

[76] Restatement (Fourth) of the Foreign Relations Law of the United States § 309 (treaties); Restatement (Third) of the Foreign Relations Law of the United States § 114 (Am. L. Inst. 1987) (international law or agreement).

Agency's exercise of authority. That premise is difficult or impossible to reconcile with *The Paquete Habana*, in which the Supreme Court stated that international law is part of our law, and with *Sosa v. Alvarez-Machain*, which reaffirmed the longstanding domestic significance of customary international law.

The Supreme Court in 1900 expressly recognized the operational relevance of customary international law in our dualist legal system. *The Paquete Habana*[77] was an action in admiralty based on the allegedly wrongful seizure of a Spanish-flagged private vessel by the United States Navy during the Spanish-American War, asserted to be contrary to a customary international prohibition on seizure as prizes of vessels of a belligerent power engaged in subsistence fishing near the coast.

Consistent with the standard methodology for proving custom—the same analytical approach employed by the ICJ in the climate advisory opinion—the Supreme Court engaged in a lengthy analysis of State practice going back centuries before. Concluding that the asserted rule had been proven through a pattern and practice motivated by a sense of legal obligation, the Court, significantly, ordered that the proceeds of the sale of the vessel be restored to the claimant, with damages and costs.[78]

In a famous passage, the Court stated:

> International law is part of our law, and must be ascertained and administered by the courts of justice of appropriate jurisdiction, as often as questions of right depending upon it are duly presented for their determination. For this purpose, where there is no treaty, and no controlling executive or legislative act or judicial decision, resort must be had to the customs and usages of civilized nations [customary international law] . . . [79]

While this passage has been the subject of extensive scholarly and judicial commentary, often neglected is the structural attribute that the successfully challenged action had been taken by an

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[77] 175 U.S. 677 (1900).

[78] *Id.* at 714.

[79] *Id.* at 700.

organ of the United States federal government. So structurally *The Paquete Habana* is a proceeding for judicial review of United States government action, initiated by a private party, successfully relying on international legal custom as a cognate domestic legal standard for adjudicating the legality of Executive Branch behavior.

The Supreme Court most recently reaffirmed the viability of the doctrine of *The Paquete Habana* in 2004.[80] In recent decades, the doctrine has been contested both in academic scholarship[81] and the lower courts.[82] Since its reinforcement as black letter law in the Third Restatement of Foreign Relations Law in 1987,[83] subsequent decisions have limited the reach of the doctrine, largely on separation-of-powers grounds, because under some unusual circumstances not found here—in a regulatory context against the background of standards articulated in a congressionally delegated rulemaking authority—the principle might be read to constrain the political branches. Nonetheless, *The Paquete Habana* remains authoritative for the proposition that customary international law is part of our law and judicially cognizable.[84]

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[80] *Sosa v. Alvarez-Machain*, 542 U.S. 692, 729 (2004) ("For two centuries we have affirmed that the domestic law of the United States recognizes the law of nations.").

[81] *See, e.g.*, Curtis A. Bradley & Jack L. Goldsmith, *Customary International Law as Federal Common Law: A Critique of the Modern Position*, 110 Harv. L. Rev. 815 (1997).

[82] *E.g., Al-Bihani v. Obama,* 619 F.3d 1, 13, 17 (D.C. Cir. 2010) (Kavanaugh, J., concurring in the denial of rehearing en banc).

[83] Restatement (Third) of the Foreign Relations Law of the United States § 111 & reporters' note 3.

[84] The *Third Restatement of the Foreign Relations Law of the United States* from 1987 identifies *The Paquete Habana* and its progeny as a species of common law, which, like admiralty and the law of interstate pollution, survives *Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938) ("There is no federal general common law."). In recent decades, that characterization has been contested, largely due to the work of academic legal scholars. *E.g.*, Bradley & Goldsmith, *supra* note 81. The modern debate concerns domestic institutional competence and the separation of powers, and the instant situation does not concern the question whether *The Paquete Habana* operates as federal common law. While those issues have implications for the application of international custom by United States courts, the critique does not question the existence of customary law itself, which continues to articulate

The Paquete Habana and its progeny articulate an architectural framework in which customary international law acquires operational life in the domestic legal system of the United States. At a minimum, those decisions establish that customary international law cannot simply be dismissed as irrelevant. If EPA considers customary international law to be inapplicable to this Supplemental Proposal, the Agency must explain why. Nothing in the Supplemental Proposal appears to identify statutory language expressly displacing the customary-law obligations discussed by the ICJ. Indeed, the goals and purpose of the Clean Air Act and the ICJ advisory opinion are very much mutually reinforcing. EPA's Supplemental Proposal cannot in effect assume the irrelevance of customary international law without confronting the principal domestic authorities recognizing its role within the legal system of the United States.

Significantly, EPA does not contend that customary international law requires—or, indeed, authorizes—repeal of the greenhouse gas emissions standards for fossil fuel-fired electric generating units identified in the Supplemental Proposal; it does not address customary law at all. Rather, as analyzed above, customary international legal norms, as identified by the ICJ in its climate advisory opinion, cut against that action. Certainly nothing in the statute requires repeal of the standards, and a repeal that places the United States in breach of its customary obligations is not in accordance with law. From this perspective, customary international law does not override the statute; it governs the choices the statute leaves open. Because of the constraints imposed by customary international law, as identified by the ICJ in its advisory opinion, repeal of the greenhouse gas emissions standards for fossil fuel-fired electric generating units is precluded as among those options.

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standards for the behavior of States in their relations with other subjects of international law.

2. The Clean Air Act Can, and Must, Be Interpreted and Applied by the Agency Consistent with International Legal Norms, Which Confirm That the Supplemental Proposal's Reading of Section 111 Is Not the Best Reading.

For more than two centuries, United States law has recognized the principle that statutes should not be interpreted to place the United States in conflict with international law where another reasonable interpretation is available. *The Charming Betsy* canon remains one of the traditional tools of statutory interpretation. When it is possible to reconcile a statute and international law, domestic law is construed so as not to conflict with the international duty. Congress is thus presumed to act consistently with international law and the international legal responsibilities of the United States.

In this respect, the doctrine of *The Charming Betsy* performs a function complementary to that of *The Paquete Habana*. Whereas *The Paquete Habana* recognizes the possibility that customary international law may itself operate as law in United States municipal law, and be applied in domestic judicial proceedings, the *Charming Betsy* doctrine reflects the premise that Congress ordinarily legislates against the background of international law and does not lightly place the United States in breach of its international obligations. The doctrine therefore performs the crucial salutary function within the United States legal system of facilitating harmonization of the domestic and international legal orders, by reducing avoidable conflict between them.

The doctrine originated in *Murray v. Schooner Charming Betsy*,[85] which arose from a seizure during the Quasi-War with France. The case concerned the application of the Non-Intercourse Act to a vessel that had been transferred to a Danish subject and subsequently seized as allegedly engaged in prohibited commerce with a French territory. Faced with a statutory interpretation that would have interfered with neutral rights recognized under the law of nations, Chief Justice Marshall construed the statute narrowly, stating that "an act of Congress ought never to be construed to violate the law

[85] 6 U.S. (2 Cranch) 64, 118 (1804).

of nations if any other possible construction remains." The Court thus avoided an interpretation that would have placed the United States in tension with established international norms governing neutral commerce—tellingly, of customary origin.

The canon has subsequently been applied across a wide range of contexts involving both treaties and customary international law.[86] Modern formulations describe it as a presumption that, where fairly possible, federal statutes should be interpreted consistently with the international legal obligations of the United States.[87]

For present purposes, the doctrine is significant not only as a substantive canon of construction but also as a structural feature of foreign relations law. Like *The Paquete Habana*, it creates a judicially recognized connection between two formally distinct legal systems. The United States remains fundamentally dualist, but the operation of *The Charming Betsy* demonstrates that the boundary between them is not impermeable. International law functions as part of the legal context in which domestic statutes are interpreted, thereby acting as another "portal" through which international norms enter domestic legal analysis.

The significance of this principle has only increased in the wake of *Loper Bright,* which emphasizes the responsibility of reviewing courts to determine the best reading of statutes using traditional interpretive tools. If EPA contends that repeal represents the best interpretation of section 111, it should explain how that conclusion accounts for the longstanding principle favoring interpretations that avoid unnecessary conflict with international law. Nor can EPA avoid the canon

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[86] *See, e.g.*, *The Nereide*, 13 U.S. (9 Cranch) 388, 423 (1815) ("the court is bound by the law of nations, which is a part of the law of the land") (applying customary international law, the law of nations governing neutrality and maritime belligerency).

[87] Restatement (Fourth) of the Foreign Relations Law of the United States § 309 (treaties); Restatement (Third) of the Foreign Relations Law of the United States § 114 (international law or agreement).

by asserting that section 111 is unambiguous. The canon applies whenever "any other possible construction remains,"[88] and Section I.A.2 above shows that the construction EPA now rejects is the one the Agency itself applied for half a century. After *Loper Bright*, moreover, the canon is not a tiebreaker reserved for cases of residual ambiguity but one of the traditional tools courts use to identify the best reading in the first place.[89]

The Supplemental Proposal does not engage with any of these questions, except by omission. Nor does it explain why alternative interpretations that would avoid tension with the customary-law obligations identified by the ICJ should be rejected. The omission weakens the Supplemental Proposal's assertion that repeal reflects the best interpretation of the statute. And the absence of such an analysis renders the Agency action resulting from that omission arbitrary and capricious.

3. Congress Contemplated That International Legal Norms Would Inform EPA's Decisions, and Failure to Consider Them Would Be "Not in Accordance with Law."

The previous two subsections address the domestic operation of customary international law through judicially crafted doctrines. Congress can also create similar "portals" through the semi-permeable membrane separating the international and domestic legal systems. Indeed, this approach is entirely consistent with a strict understanding of a separation between the international and domestic legal regimes.

A well-known example in the field of United States foreign relations law is the Alien Tort Statute (ATS):

> The district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States.[90]

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[88] *Charming Betsy*, 6 U.S. (2 Cranch) at 118.
[89] *See Loper Bright*, 603 U.S. at 400 (courts "use every tool at their disposal to determine the best reading of the statute and resolve the ambiguity").
[90] 28 U.S.C. § 1350.

Enacted by the First Congress in 1789, the Alien Tort Statute is generally understood as having been intended to provide a federal judicial forum for at least certain violations of the law of nations, particularly disputes involving foreign diplomats and other matters with the potential to generate international friction. By providing access to the federal courts, the statute reduced the risk that such incidents would have to be addressed through diplomatic channels by the injured foreign State. After remaining largely dormant for nearly two centuries, the statute received renewed attention following the Second Circuit's decision in *Filártiga v. Peña-Irala*,[91] which recognized federal jurisdiction over claims alleging violations of customary international law ("the law of nations"), thereby opening the door to modern human rights litigation under the Alien Tort Statute. Although still a viable theory, this application has since been significantly narrowed in a series of Supreme Court decisions.[92]

By its terms, the ATS applies only to tort actions brought by aliens. Of greater interest in the present context is the potential for the application of customary international law to actions seeking judicial review of Executive Branch actions. The starting point for such an inquiry is the Administrative Procedure Act ("APA"),[93] a statute of broad application to executive branch action, excluding the President.[94] Section 706 of the APA, 5 U.S.C. § 706, which defines the scope of the federal courts' review of executive branch action, instructs a reviewing court to:

> hold unlawful and set aside agency action, findings, and conclusions found to be— arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law[.][95]

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[91] 630 F.2d 876, 880–85 (2d Cir. 1980).

[92] *See Sosa*, 542 U.S. at 724; *Kiobel v. Royal Dutch Petroleum Co.*, 569 U.S. 108, 124–25 (2013) (presumption against extraterritoriality applies to claims under the ATS); *Jesner v. Arab Bank, PLC*, 584 U.S. 241, 272 (2018) (foreign corporations may not be defendants in suits under the ATS); *Nestlé USA, Inc. v. Doe*, 593 U.S. 628 (2021).

[93] 5 U.S.C. §§ 551–559, 701–706.

[94] *E.g.*, *Franklin v. Massachusetts*, 505 U.S. 788, 800–01 (1992).

[95] 5 U.S.C. § 706(2)(A).

The identical standard—"not in accordance with law"—is found in section 307, the judicial review provision of the Clean Air Act,[96] the operative standard which applies in this proceeding.

The choice of a broad catchment universe implied by the word "law" in this context is of considerable analytical significance. Evaluating potential alternative formulations, Congress impliedly rejected two obvious possibilities of limiting language: "not in accordance with federal statute," or with "the Constitution." Indeed, both possibilities are reflected in the text of section 307.[97] The choice of the most general term "law" then naturally raises the interpretive question whether customary international law is to be included within the relevant legal background.

The term "law" in section 307 naturally includes customary international law, through the analytical framework employed in *The Paquete Habana* and the statute's use of the broad term "law" rather than more limited alternatives. Then, *The Charming Betsy* provides an additional and analytically distinct path by which international legal standards influence the outcome of administrative proceedings such as this Supplemental Proposal, as well as of domestic litigation. Even where a court declines to treat a customary norm as directly controlling, the canon counsels in favor of interpreting statutory language so as to avoid unnecessary conflict with the international

[96] CAA § 307(d)(9)(A), 42 U.S.C. § 7607(d)(9)(A) ("In the case of review of any action of the Administrator [of the Environmental Protection Agency] . . . the court may reverse any such action found to be—(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law . . . ."). Section 307(d) governs this rulemaking, *see* 42 U.S.C. § 7607(d)(1)(C) ("the promulgation or revision of any standard of performance under section 7411"), and displaces section 706 of the APA except as it expressly provides, *id.* § 7607(d)(1).

[97] "[I]n excess of statutory jurisdiction, authority, or limitations, or short of statutory right," § 307(d)(9)(C); "contrary to constitutional right, power, privilege, or immunity," § 307(d)(9)(B).

obligations of the United States, where fairly possible,[98] or, in Chief Justice Marshall's words, "if any other possible construction remains."[99]

The significance of customary law in the context of judicial review of Executive Branch action is not that it overrides or supersedes domestic law. Rather, as an analytical matter the question is the extent to which international custom forms part of the legal background against which agency action is reviewed.

More generally, in the absence of contrary indications, domestic statutory authorities and customary international law should be presumed to be mutually reinforcing.[100] The customary norms concerning prevention of significant environmental harm and international cooperation articulated in the climate advisory opinions therefore provide relevant interpretive context in determining the scope and application of the Clean Air Act, because the norms and the Act are both directed at the salutary purpose of protecting the integrity of the global climate.

In short, the customary international law of climate protection, as clarified by the ICJ in its July 2025 advisory opinion, has domestic legal salience—operating through the doctrines of *The Paquete Habana* and *The Charming Betsy* and as a reference point for section 307, the Clean Air Act's judicial review provision, which provides a remedy for agency actions "not in accordance with law." All of this strengthens and supports the arguments we make in Section I that EPA's proposed reinterpretation of section 111 is not the best reading, and that it is both inconsistent with section 111

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[98] Restatement (Third) of the Foreign Relations Law of the United States § 114.

[99] *Charming Betsy*, 6 U.S. (2 Cranch) at 118.

[100] In *Massachusetts v. EPA*, the Supreme Court rejected EPA's contention that the global nature of climate change and the existence of ongoing international negotiations justified declining to exercise authority conferred by Congress. The decision accordingly treats domestic regulatory action and international cooperation as mutually reinforcing rather than mutually exclusive responses to climate change. *Massachusetts*, 549 U.S. at 523–26, 533–34.

and arbitrary and capricious. Consequently, the commenters urge the Agency to refrain from finalizing the proposed repeal of greenhouse gas emissions standards for fossil fuel-fired electric generating units, which is inconsistent with customary legal standards.

III. EPA SHOULD PROVIDE ADDITIONAL TIME FOR PUBLIC COMMENT.

The amount of time provided by EPA for public comment—forty-six days—is clearly inadequate for a proposal of this magnitude.

CONCLUSION

For the foregoing reasons, EPA should not adopt the Supplemental Proposal.

Respectfully submitted,

Parties identified in Appendix A

November 2, 2026

Appendix A

Commenters

Robert B. McKinstry, Jr., is a Fellow of the American College of Environmental Lawyers and the American Bar Foundation. In 2018, he retired from Ballard Spahr LLP, where he co-founded and headed the firm's Environmental and Natural Resources Practice Group and then its Climate Change and Sustainability Practice Initiative. He continues his practice involving the full range of environmental issues but concentrates on climate and public interest work. Before entering private practice, he served as law clerk to the Honorable James L. Latchum, Chief Judge of the United States District Court for the District of Delaware. He completed a six-year appointment as the Maurice K. Goddard Chair in Forestry and Environmental Resource Conservation at the Penn State School of Forest Resources on July 1, 2007, where he taught climate change law. He was co-counsel for a group of leading climate scientists before the Supreme Court in *Massachusetts v. EPA*. He represented clean energy utilities supporting EPA rulemaking before the Supreme Court and the United States Court of Appeals for the D.C. Circuit in *EPA v. EME Homer City Generation* and *Michigan v. EPA*. He has written widely on the topic of climate change and how the Clean Air Act provides useful tools for addressing the climate crisis. He is a member of the Board of Directors of the Pennsylvania Environmental Council. He has served on the Boards of many non-profit environmental and educational organizations and state, regional and local advisory committees. He is a member of the Section of Environment, Energy, and Resources (SEER) of the ABA, where he is a former Co-chair and a current Vice Chair of SEER's Climate Change Committee. He has taken a lead role in numerous state, regional and local greenhouse gas reduction planning processes. He is a member of the Environmental and Energy Law (EEL) Section of the PBA and serves on the EEL Climate Committee. Robert McKinstry is a Master in and former President of the Delaware Valley Environmental Inn of Court. He is the recipient of the PBA's Environmental and Energy Law Section 2010 Award for Distinguished Service and was named as MVP in environmental law by Law360 in 2014. He has been recognized by Chambers USA, The Best Lawyers in America, Super Lawyers and Who's Who Legal: Environment. He holds a B.A. with Honors from Swarthmore College, where he was named to Phi Beta Kappa, a J.D. from Yale Law School and an M.F.S. from Yale School of Forestry & Environmental Studies.

548 School House Rd.
Kennett Square PA 19348
robert.mckinstry@gmail.com
484-467-3207

John C. Dernbach is Commonwealth Professor of Environmental Law and Sustainability at Widener University Commonwealth Law School in Harrisburg, Pennsylvania and Director of that school's Environmental Law and Sustainability Center. Professor Dernbach has written on climate change, sustainable development, environmental law, and other topics in more than 50 articles for law reviews and peer-reviewed journals, and has authored, coauthored, or contributed chapters to more than 20 books. He and Professor Michael Gerrard are the co-editors of *Legal Pathways to Deep Decarbonization in the United States* (ELI Press 2019), a comprehensive analysis and description of more than 1,000 legal tools for reducing greenhouse gas emissions by at least 80% by 2050. He is also the principal author or editor of three books assessing U.S.

progress toward sustainability and making recommendations (*Acting as if Tomorrow Matters: Accelerating the Transition to Sustainability* (2012), *Agenda for a Sustainable America* (2009), and *Stumbling Toward Sustainability* (2002)).

Professor Dernbach coauthored a successful *amicus* brief to the U.S. Supreme Court on behalf of 18 prominent climate scientists in *Massachusetts v. Environmental Protection Agency*. His scholarship and advocacy helped persuade the Pennsylvania Supreme Court in landmark decisions in 2013 and 2017 to reinvigorate the Environmental Rights Amendment (Article I, Section 27) of the Pennsylvania Constitution. He is the recipient (with Robert McKinstry) of the Pennsylvania Bar Association's Environmental and Energy Law Section 2010 Award for Distinguished Service. He is a vice chair and former chair of the American Bar Association's Climate Change, Sustainable Development, and Ecosystems Committee, and is the primary drafter of an ABA House of Delegates resolution adopted in 2019 urging a broad range of actions to reduce U.S. greenhouse gas emissions "to net zero or below."

In two periods totaling about 15 years, he worked for the Commonwealth of Pennsylvania. He was policy director at the Department of Environmental Protection from 2003 to 2005. From 1981 to 1993, he counseled the waste and mining programs at the Department of Environmental Resources and served as special assistant in the waste program. In those capacities, he played a major role in drafting four major waste and mining laws and their regulations, including two significant rulemakings—comprehensive revisions to municipal waste regulations finalized in 1988 and comprehensive revisions to residual waste regulations finalized in 1992—that are, in complexity, scale, and public visibility, somewhat analogous to the present rulemaking.

He is a *cum laude* graduate of the University of Michigan Law School (1978), and a *summa cum laude* graduate of the University of Wisconsin-Eau Claire (1975).

Environmental Law and Sustainability Center, Widener University Commonwealth Law School. 3800 Vartan Way
Harrisburg PA 17110
jcdernbach@widener.edu

Michael M. Meloy is a Fellow of the American College of Environmental Lawyers. He has served as an environmental lawyer for more than 40 years, bringing both a legal and engineering background to bear in representing a wide array of clients ranging from Fortune 100 companies to closely held corporations, partnerships, municipalities, and citizens groups in environmental litigation, regulatory compliance, and transactional matters. Over the course of his career, Mr. Meloy has provided regulatory assistance and advice to clients in connection with all of the major environmental regulatory programs, handled the environmental aspects of complex real estate and corporate transactions, been actively involved in numerous redevelopment and remediation projects around the world, handled environmental litigation in both federal and state courts and before administrative tribunals, helped to design and implement environmental auditing and compliance management programs, and worked on a wide array of energy-related projects including the production and transportation of natural gas. In 2023, Mr. Meloy retired as a senior partner at Manko, Gold, Katcher & Fox, LLP, a firm he helped to found in 1989 that concentrates its practice in environmental and land use law. Since retiring from Manko, Gold,

Katcher & Fox, LLP, Mr. Meloy has continued to represent clients on a *pro bono* basis in connection with a variety of issues including solar energy development projects.

Mr. Meloy earned his bachelor's degree in civil engineering, *summa cum laude*, from the University of Delaware in 1980. He was admitted to the Pennsylvania Bar in 1983 after graduating *cum laude* from Harvard Law School. During 1984 and 1985, he clerked for the Honorable Walter K. Stapleton of the United States Court of Appeals for the Third Circuit. Mr. Meloy is admitted to practice before the United States Courts of Appeals for the District of Columbia and Third Circuits, and the United States District Courts for the Eastern and Middle Districts of Pennsylvania.

Before retiring from Manko, Gold, Katcher & Fox, LLP, Mr. Meloy served as the vice-chair of the Pennsylvania Cleanup Standards Scientific Advisory Board and chaired the Solid Waste Advisory Committee for the Pennsylvania Chamber of Business and Industry for many years. He served on the Advisory Council for the Department of Civil and Environmental Engineering at the University of Delaware from 2006 to 2017, and he previously chaired the Agricultural Law Committee of the Pennsylvania Bar Association. Mr. Meloy was listed in *Chambers USA – America's Leading Lawyers for Business* and in *Best Lawyers® in America* for almost two decades. Mr. Meloy was selected in 2013 by *Best Lawyers® in America* as the *Philadelphia Environmental Law Lawyer of the Year*.

Michael M. Meloy
520 Cedar Lane
Swarthmore, PA 19081
mmeloy80@gmail.com

Margaretha Wewerinke-Singh is an Associate Professor of Sustainability Law at the University of Amsterdam and Co-Founder of SEVEN, the University's climate institute. She holds concurrent appointments as Adjunct Professor of Law at the Justice Devendra Pathik School of Law, University of Fiji, serves as a Member of the Permanent Court of Arbitration in The Hague, and is a Barrister and Solicitor of the Supreme Court of Vanuatu.

Her research and teaching focus on the role of law in transitioning to sustainable societies, with a strong emphasis on international law, human rights law, and climate litigation. Professor Wewerinke-Singh previously held an appointment as Assistant Professor of Public International Law at Leiden University (2018–2022), coordinated the University of the South Pacific's Environmental Law Programme in Port Vila, Vanuatu (2015–2018), and was a Visiting Scholar at Cambridge's Lauterpacht Centre for International Law (2012–2014).

Professor Wewerinke-Singh has authored and edited numerous key publications, including *The Cambridge Handbook on Climate Litigation* (Cambridge University Press 2025, co-ed. with Sarah Mead), *State Responsibility, Climate Change and Human Rights under International Law* (Hart Publishing 2019), and *Environmental Law and Governance in the Pacific: Climate Change, Biodiversity and Communities* (Routledge 2020, co-ed. with Evan Hamman).
Her practice spans two decades of legal work at the intersection of international climate policy, public international law and human rights. She has represented and advised governments, NGOs, and intergovernmental bodies, including the African Commission on Human and Peoples' Rights and the UN High Commissioner for Human Rights. She served as Lead Counsel for Vanuatu in advisory proceedings on climate change before the International Court of Justice, the Inter-American Court of Human Rights and the International Tribunal for the Law of the Sea, and is a member of the Legal Experts Committee of the Commission of Small Island States on Climate Change and International Law. She is also Lead Counsel for the Organization of African, Caribbean and Pacific States in the advisory proceedings on climate change before the African Court on Human and Peoples' Rights.

David A. Wirth is Professor of Law and former Director of International Programs at Boston College Law School. He teaches and writes in the fields of public international law, international environmental law, and global governance. Before entering academia, he served as Attorney-Adviser for Oceans and International Environmental and Scientific Affairs in the Office of the Legal Adviser of the U.S. Department of State, where he was responsible for all international environmental issues and participated extensively in multilateral environmental negotiations in the United Nations Environment Programme, the Organisation for Economic Co-operation and Development, the UN Economic Commission for Europe, and other international organizations. He also served as Senior Attorney and Co-Director of the International Program at the Natural Resources Defense Council and has taught at Harvard University, the Massachusetts Institute of Technology, the Fletcher School of Law and Diplomacy, the University of Virginia, and the University of Oxford.

Professor Wirth has participated extensively in international environmental diplomacy and has served in advisory roles to governments, international organizations, and academic institutions. He was a Member of the National Advisory Committee to the U.S. Representative to the Commission for Environmental Cooperation from 2001 to 2004 and served as Acting Chair from March 2002 to May 2003. He has also served on the Trade and Environment Policy Advisory Committee to the Office of the United States Trade Representative. Professor Wirth was a member of the Environmental Advisory Council of the European Bank for Reconstruction and Development from 1995 to 1998, a Fulbright Scholar through the Organization for Security and Cooperation in Europe Regional Research Program, and Fulbright Distinguished Chair in Sustainable Development at the Higher School of Economics in Moscow, Russian Federation. He is a life member of the Council on Foreign Relations.

A prolific scholar, Professor Wirth is the author of more than 100 publications on international law, environmental law, and policy. His work has appeared in leading journals including the *Yale Law Journal*, *Columbia Law Review*, *Virginia Law Review*, *Harvard Environmental Law Review*, and the *American Journal of International Law*. He received his J.D. from Yale Law School and holds degrees in chemistry from Princeton University and Harvard University.

Boston College Law School
885 Centre Street
Newton, Massachusetts 02459 USA
david.wirth@bc.edu
617-552-1237

Richard Alley (Ph.D. 1987, Geology, Wisconsin) is Evan Pugh University Professor of Geosciences at Penn State. He studies the great ice sheets to help predict future changes in climate and sea level, and has made four trips to Antarctica, nine to Greenland, and more to Alaska and elsewhere. He has been honored for research (including election to the US National Academy of Sciences and Foreign Membership in the Royal Society), teaching, and service. Dr. Alley participated in the UN Intergovernmental Panel on Climate Change (co-recipient of the 2007 Nobel Peace Prize), and has provided requested advice to numerous government officials in multiple administrations from both major political parties including a US Vice President, multiple Presidential Science Advisors, and committees and individual members of the US Senate and House of Representatives. He has authored or coauthored over 300 refereed scientific papers. He was presenter for the PBS TV miniseries on climate and energy *Earth: The Operators' Manual*, and author of the book. His popular account of climate change and ice cores, *The Two-Mile Time Machine*, was Phi Beta Kappa's science book of the year.

Baird Brown is the principal of eco(n)law LLC. His practice is devoted to taking effective action on climate change and on issues of energy and environmental justice. He assists in the development of innovative programs and strategies for widespread adoption of energy efficiency, renewable energy, and other sustainable technologies. He has helped develop pooled procurement and financing techniques for energy efficiency and renewable energy and has structured public private partnerships for a broad array of infrastructure projects. Baird also advises on energy policy issues and represents clients before energy regulatory agencies.

Baird has formed and advised benefit corporations and nonprofit organizations in addition to traditional enterprises, and he develops tax structures and regulatory strategies for projects. He counsels clients in connection with taxable and tax-exempt, rated and unrated, and registered and unregistered financings and credit arrangements. He understands the risks and obligations appropriate to public and private parties and structures incentive compensation arrangements that align private incentives with public goals. He has assisted in the development of energy and environmental markets. He represents clients with strong environmental goals in practical transactions that create clean energy results.

Baird has played key roles in organizations that advance energy and sustainability goals. He served as a co-chair of the Renewable Energy Resources and Energy and Environmental Markets Finance Committees of the American Bar Association (ABA) and the Power Law Committee of the International Bar Association, and he was a principal author of the form Renewable Energy Credit Purchase Agreement for the American Council on Renewable Energy (ACORE), the Energy Markets Association, and the ABA. He serves on the boards of non-profit organizations that work for community revitalization and energy justice.
Baird received a B.A. in Economics from SUNY at Buffalo and a J.D. from the University of Pennsylvania Law School. He began his legal career in the Office of the General Counsel of the Federal Reserve Board.

eco(n)law LLC
230 S. Broad Street, 17th Floor
Philadelphia, PA 19102
baird@eco-n-law.net

Stephen G. Harvey is a lawyer in Philadelphia, PA, and the owner of Steve Harvey Law LLC. He has over thirty years of experience as a litigator and trial lawyer for complex and business matters.

In 2014, with Robert McKinstry and others he founded A Call to the Bar: Lawyers for Common Sense on Climate Change. The effort is now known as Lawyers for Climate Action. From 2014 to the present, this group of lawyers from around the world has convened multiple times with leaders from other disciplines to discuss the problem of climate change and what lawyers and the legal community can do about it.

Steve Harvey Law LLC
1880 John F. Kennedy Boulevard
Suite 1715
Philadelphia PA 19103
steve@steveharveylaw.com

Arundhati ("Tinku") Khanwalkar served as an environmental attorney for over 35 years, mostly with PPL Corporation, a large, international power company. She advised the company on policy and strategy on all clean air matters, including market-based programs for acid rain and ozone-forming pollutants.

208 North Marshall Street
Allentown, PA 18104
tinkuvolk@me.com

Roger Latham, Ph.D. has worked as a research ecologist, conservation biologist, biogeographer, and environmental planner since 1973. After earning his doctorate in biology at the University of Pennsylvania, he served as Pennsylvania Director of Science and Stewardship for The Nature Conservancy, post-doctoral researcher in biogeochemistry and fire ecology in the University of Pennsylvania's Department of Geology, and Assistant Professor in the Department of Biology at Swarthmore College. Since 2000 he has been principal at Continental Conservation (continentalconservation.us), conducting applied research and planning for the National Park Service, The Nature Conservancy, Natural Lands Trust, Western Pennsylvania Conservancy, Pennsylvania Department of Conservation and Natural Resources, New York Department of Environmental Conservation, and other agencies and nonprofit organizations involved in wildland restoration and management and endangered species recovery, including the Pennsylvania Biological Survey (pabiologicalsurvey.org), where he has served on the Steering Committee since 2005, as president (2015-2016), and as a member of three of its ten technical committees.

Dr. Latham's research focuses on global, regional, and local plant diversity patterns and their causes, and finding the best means to restore damaged forest, heathland, and grassland ecosystems, recover endangered species populations, and enhance wildlife habitat. His applied science work includes ecosystem restoration and management planning; desired conditions analysis; design of

ecological field experiments and adaptive management monitoring programs; and supervising implementation of stewardship plans, field experiments, and monitoring programs. His scientific journal and other professional publications include two books and five book chapters, peer-reviewed research papers in high-impact scientific journals, government agency technical reports, NGO technical reports, editorials, and book reviews. He has presented his work at numerous regional, national, and international symposia. His publications have been cited by other researchers in over 2,500 publications cataloged by Web of Science and ResearchGate.

Joseph M. Manko is one of the leading environmental lawyers in the nation, beginning his involvement in environmental law as the first Regional Counsel for EPA Region 3, where he served from 1973 until 1975, as EPA was first implementing the newly enacted Clean Air and Clean Water Acts. He has served as an adjunct law professor at Penn and Vermont Law Schools for eighteen years, teaching environmental law. He is a founding partner of Manko, Gold, Katcher & Fox. He has served on many boards of environmental and other public interest organizations, spoken and written widely on the full range of environmental law topics, participated in bar association activities, including as a Fellow of the American College of Environmental Lawyers and one of the founding members of the Delaware Valley Environmental Inn of Court, and has won many awards and wide recognition for his work. He received his B.A. *cum laude* from Yale University and his J.D. *magna cum laude* from Harvard Law School.

Professor Peter B. Meyer, PhD, conducts research on the economics and financing of public sector climate change response. He is President and Chief Economist of The E.P. Systems Group, Inc., and Professor Emeritus of Urban Policy and Economics at the University of Louisville. He also serves as a member of the Borough Council and the Planning Commission for the Borough of New Hope, PA. He left the University of Louisville in 2008 after directing the Center for Environmental Policy and Management in the College of Business from its founding in 1993 to his retirement. He also directed the US EPA Region 4 Environmental Finance Center from 1996 to 2007 and served as an Expert Witness to EPA's Environmental Finance Advisory Board from 1996 to 2011 and then on the agency's Board of Scientific Advisors from 2014 to 2017. From 2010 to 2013, he provided financial management technical assistance to state and local governments funded to promote energy efficiency and renewable energy under the American Recovery and Reinvestment Act. His federal environmental and energy policy work has been funded by EPA, HUD, the US Department of Commerce and the Department of Energy. He previously provided education and training to state legislators on the economics of climate change from 2008 to 2010 with funding from the British government and continues to serve on the steering committee of an EU-funded project to improve city and regional energy policies in Europe. In his international research on climate change policy and economics he participates in the German-US 'Zukunftsstadt – Future City' Network, serves on the Executive Committee of the International Urban Policy and Environment Association, directs economic analysis for the Urban Climate Change Research Network, and has represented the UCCRN at United Nations meetings. Dr. Meyer was on the faculty of The Pennsylvania State University from 1968 to 1987 and directed its Local Economic Development Project for a decade. He provided economic impact expert witness services to the Pennsylvania Legal Aid Society and the Pennsylvania Utility Law Project and served as a consultant to PECO and the Utility Emergency Services Fund through the 1980s. He holds a B.A. from Swarthmore College and a PhD in Economics from the University of Wisconsin–Madison.

Professor Emeritus of Urban Policy and Economics, U. of Louisville
President and Chief Economist, The E.P. Systems Group, Inc.
Council Member, Borough of New Hope
228 Riverwoods Dr.
New Hope, PA 18938
pbmeyer@louisville.edu

Joseph Minott is the former Executive Director and Chief Counsel for Clean Air Council, a member-based environmental non-profit headquartered in Philadelphia, from which he retired after more than 40 years. Clean Air Council is Philadelphia's oldest environmental non-profit, having served the mid-Atlantic region for over 50 years. The Council is driven by its mission to protect and defend everyone's right to a healthy environment, and Mr. Minott supervised all Council projects. He previously served as a regulatory and litigation attorney for the Council and has over 40 years' experience in this field. As an environmental attorney, Mr. Minott has litigated cases primarily brought under the Clean Air Act and Air Pollution Control Act. He has developed statewide recognition as an expert on urban air pollution issues, air pollution impacts on low-income neighborhoods, and climate change mitigation. Mr. Minott has served on numerous regulatory and policymaking boards at the state and local level over the past four decades. Mr. Minott has also taught environmental policy courses at the University of Pennsylvania. He holds an M.A. in political science from the University of Pennsylvania and a J.D. from the Villanova University School of Law.

Joseph Otis Minott, Esq.,
2301 Cherry Street 4J
Philadelphia, PA 19103
jminott@gmail.com.

Raymond Najjar is employed by The Pennsylvania State University (Penn State), where he is a Professor of Oceanography in the Department of Meteorology and Atmospheric Science, with a joint appointment in the Department of Geosciences. He graduated with a Bachelor of Engineering in Mechanical Engineering from the Cooper Union for the Advancement of Science and Art in 1985 and a Ph.D. in Atmosphere and Ocean Science from Princeton University in 1990. He was a post-doctoral scholar at the National Center for Atmospheric Research from 1990 to 1993. His early research focused on large-scale, open-ocean biogeochemistry, particularly the cycling of nutrients (nitrogen, phosphorus, and silicon), oxygen, and carbon. Since arriving at Penn State in 1993, he initiated a research program in coastal oceanography, focusing on issues such as eutrophication, hypoxia, and sea level rise. Dr. Najjar is mainly a data analyst but also uses numerical models and remote sensing. He has conducted field studies in the Sargasso Sea and coastal waters of Antarctica, the Eastern United States, and Florida. He has received funding for his research from the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, the National Aeronautics and Space Administration, the National Science Foundation, the Department of Energy, the Pennsylvania Department of Environmental Protection, and Pennsylvania Sea Grant.

At Penn State, Dr. Najjar teaches undergraduate and graduate courses in meteorology, atmospheric science, fluid dynamics, physical oceanography, marine biogeochemistry, and scientific communication. The material in these courses lays the foundation for climate science and many of the courses directly discuss global warming. For years now, Dr. Najjar's work has focused on the science of climate change. He conducts research on climate change, publishes papers on it, gives regular talks to public and professional audiences about it, and directs (or has directed) educational programs at Penn State about it, such as the Dual Title Ph.D. Program in Climate Science and the Research Experiences for Undergraduates Summer Climate Science Program. His research has been published in peer-reviewed scientific journals, including *Nature*, *Nature Climate Change*, the *Proceedings of the National Academy of Sciences*, the *Journal of Climate*, *Climatic Change*, and *Climate Research*. Dr. Najjar has been an author of numerous regional climate impact assessments, including three reports the Pennsylvania Department of Environmental Protection has produced in compliance with the Pennsylvania Climate Change Act (Act 70 of 2008). Other climate impact assessments and climate-related reports he has contributed to include the First U.S. National Climate Assessment, the Second State of the Carbon Cycle Report (a U.S. Global Change Research Program Sustained Assessment Report), and reports analyzing the Delaware Bay, Chesapeake Bay, and their watersheds, which take up a large part of the Commonwealth's area.

522 Walker Building
Department of Meteorology and Atmospheric Science
The Pennsylvania State University
University Park, PA 16802-5013
rgn1@psu.edu
https://www.met.psu.edu/directory/raymond-g-najjar

Liz Robinson, Executive Director, Philadelphia Solar Energy Association (PSEA). PSEA is a nonprofit corporation dedicated to increasing the understanding and utilization of solar energy.

Ronald Sarachan has 45 years' experience as a practitioner in environmental law. While in the government, he served as Chief of the Environmental Crimes Section at the U.S. Department of Justice. He also served as an Assistant United States Attorney in the Eastern District of Pennsylvania where he co-founded the Philadelphia Environmental Crimes Task Force and supervised environmental prosecutions as Chief of Major Crimes and Deputy Chief of the Criminal Division for White Collar. Before beginning his legal career, he worked as Assistant to the Director at the Rhode Island Department of Environmental Management. He headed or co-headed the white collar defense practice groups while in private practice at Ballard Spahr LLP and Drinker Biddle LLP (now Faegre Drinker). He teaches courses in business ethics and responsibility at the Wharton School at the University of Pennsylvania. Sarachan served as law clerk to the Honorable Edward Weinfeld, U.S. District Judge for the Southern District of New York. He holds an Sc.B. in Chemistry from Brown University, *magna cum laude,* and a J.D. from the University of Michigan, *magna cum laude*.

James A. Schmid, Ph.D., is a biogeographer and plant ecologist who has headed the firm of Schmid & Company, Inc., Consulting Ecologists, since 1985. He holds a B.A. degree *cum laude* from Columbia University, where he was elected to Phi Beta Kappa, and M.A. and Ph.D. degrees from the University of Chicago. He left his tenure-track position as Assistant Professor in the Department of Biological Sciences at Barnard College and Columbia University to become Vice President at the consulting firm of Jack McCormick & Associates in Devon,

Pennsylvania, and served as Senior Ecologist at other firms before establishing his own organization. Dr. Schmid has served hundreds of clients, both those seeking permits for construction and those opposing projects, as well as federal, State, and local regulatory agencies seeking to design and implement environmental regulatory programs nationwide and in the Mid-Atlantic States. He frequently provides expert testimony on environmental matters in federal and State courts. He has published a dozen books, many book chapters and professional papers, and hundreds of reports including dozens of environmental impact statements. He has served on the professional certification committees of the Ecological Society of America and the Society of Wetland Scientists. For three decades he served on the Environmental Advisory Board of Marple Township in Delaware County and served two terms as a gubernatorial appointee to the Citizens Advisory Council of the Pennsylvania Department of Environmental Protection.

Schmid & Co., Inc., Consulting Ecologists
1201 Cedar Grove Road
Media PA 19063-1044
schmidjamesa@gmail.com

Professor Amy Sinden is a Professor of Law at the Temple University Beasley School of Law and on the board of directors of the Center for Progressive Reform, www.progressivereform.org. She writes and teaches in the areas of environmental, climate, and natural resources law. She has written about the misuse of economic theory in environmental law and about the application of classical human rights norms to climate change and other environmental conflicts. Her articles have appeared in a number of academic books and journals, including the *Iowa Law Review* and the *Harvard Environmental Law Review*, and have twice been selected for the *Land Use and Environmental Law Review*'s annual compilation of the five best environmental law articles of the year. She has also published in a number of popular news outlets, including *The American Prospect* and *The Hill*. Prof. Sinden received her B.A. from Swarthmore College and her J.D. *summa cum laude* from the University of Pennsylvania Law School. Before joining the Temple faculty in 2001, she practiced law for 10 years, including representing citizen groups in Clean Water Act and endangered species litigation with Earthjustice and PennFuture. She has been working on environmental/climate change issues since 1997.
Center for Progressive Reform

Temple University Beasley School of Law 1719 N. Broad St.
Phila., PA 19122
amy.sinden@temple.edu

Michael Sklaroff, Executive Director, Pennsylvania Bipartisan Climate Initiative, Inc.

(215)-206-0266
msklaroff@paclimateinitiative.org

Erica Smithwick, Distinguished Professor of Geography, is a landscape and ecosystem ecologist. She is the Director of the Earth and Environmental Systems Institute and Associate Director of the Institute of Energy and the Environment. Smithwick leads the Penn State Climate Consortium that brings together interdisciplinary researchers in partnership with society to innovate climate solutions. Dr. Smithwick is also a former director of the Ecology Institute and the Center for Landscape Dynamics.

Dr. Smithwick's research aims to support sustainable land management decision-making under climate change, with particular focus on forest resilience to wildfire, natural carbon sequestration strategies, and Indigenous knowledge systems. She has worked extensively across the U.S., including in the Mid-Atlantic, western U.S., and Alaska. In addition, Dr. Smithwick has many past or ongoing research projects in Africa (Ghana, South Africa, Kenya, and Zambia). She served as a U.S. Fulbright Scholar in South Africa.

Prior to joining Penn State, Dr. Smithwick was a postdoctoral scholar at the University of Wisconsin–Madison, supervised by Dr. Monica Turner. She received her M.S. in Resource Conservation and Forestry from the University of Montana in Missoula, MT and her Ph.D. from Oregon State University College of Forestry, advised by Drs. Mark Harmon and Warren Cohen. Her undergraduate degree is in Geological Sciences and Environmental Studies from Tufts University.

Jeffrey A. Thaler is a nationally recognized energy and environmental attorney, working in Preti Flaherty's Energy & Telecommunications and Environmental practice groups. A skilled advocate for large-scale clean energy and transmission line projects and climate-related initiatives, his practice focuses on representing private and public clients in complex energy matters at all regulatory levels, and in federal and state courts. Jeff has broad and extensive experience counseling clients through project siting and permitting, compliance, enforcement, and litigation for on- and offshore wind projects and hydro power and wood-to-biofuel facilities, as well as many other commercial and land use development projects. He also has served as an expert witness in federal environmental litigation.

Jeff has authored numerous articles, including the oft-cited "Fiddling as the World Floods and Burns: How Climate Change Urgently Requires a Paradigm Shift in the Permitting of Renewable Energy Projects" (42 *Environmental Law* 1101 [2012]), and is the lead author of *The Maine Environmental Handbook* and the LexisNexis Treatise, *Treatment of Greenhouse Gases Under the National Environmental Policy Act*. He also is co-founder of the Environmental and Energy Technology Council of Maine, and the Arctic Futures Institute.

Most recently, Jeff served as Associate Counsel for the University of Maine System, as a Professor of Practice at the University of Maine School of Law, and as an associate faculty member of the University of Maine's Climate Change Institute. His teaching has involved Energy Law, Administrative Law, and Environmental and Climate Litigation. In 2019, Jeff was placed as a Fulbright Program Specialist at Duke Kunshan University's Environmental Law and Policy Department in Kunshan, China. For Duke Kunshan, he has taught courses and presented on energy, climate litigation, environmental policy, and the U.S. Legal System.

In his previous private practice, Jeff was a partner at two of Maine's most respected law firms, where he developed a regional and statewide energy, environmental, and litigation practice. In his wide-ranging career, he has been responsible for significant complex litigation and regulatory matters at the federal, state, and local levels in areas including environmental, toxic tort, employment discrimination, professional liability, personal injury, commercial, banking, criminal, and insurance matters.

Jeff is one of the cofounders of the American College of Environmental Lawyers, which consists of the top environmental attorneys in the United States, and was elected to serve as its third President. He has been recognized by *Chambers USA*, *Best Lawyers*, and *Super Lawyers* for his work in the fields of energy and environmental law, is AV Preeminent rated by *Martindale-Hubbell*, and, in 2021, was named one of the Top 500 Environmental and Energy Lawyers in the United States by *Lawdragon*. Presently, he has been appointed by the Maine Supreme Judicial Court to serve on its Civil Rules Committee, and on its Advisory Committee on the Rules of Professional Conduct. He received a B.A. from Williams College *magna cum laude* and a J.D. from Yale Law School.

Preti Flaherty
One City Center
Portland, ME 04101
jthaler@preti.com
207-831-8185