



EPN Comments on Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards

EPA-HQ-OAR-2025-0194 September 22, 2025

The <u>Environmental Protection Network</u> (EPN) harnesses the expertise of more than 700 former Environmental Protection Agency (EPA) career staff and confirmation-level appointees from Democratic and Republican administrations to provide the unique perspective of former regulators and scientists with decades of historical knowledge and subject matter expertise.

EPN would first like to thank the current EPA career staff — dedicated public servants who continue to show up everyday to protect human health and the environment, despite working under hostile conditions. We see you, we thank you, and we know you are fighting for all of our wellbeing.

I. Introduction

EPN calls for the EPA Administrator to rescind this proposal and implement the existing rules. EPA has a basic duty to the public to do an honest analysis of the impacts of their proposed action on the environment, public health and welfare, gas prices, and jobs. That analysis should then be presented to the American people so they can comment on it.

The "legal analysis" that undergirds this action is both deeply flawed and dishonest.

This proposal misrepresents the Clean Air Act (CAA) by conveniently ignoring key parts of the law that the courts have affirmed require EPA to act on climate change. For example, they eliminate the words "weather" and "climate" from the definition of "welfare." The Administrator does this to pretend that the Act cannot be used to regulate greenhouse gas (GHG) emissions. He imagines that the best reading of CAA does not allow the regulation of GHGs while ignoring that GHG regulation has been upheld in three separate Supreme Court opinions. Zeldin also misconstrues recent Supreme Court cases and decisions and imagines a best reading of the CAA that ignores the plain language of the law. He also imagines a test that the CAA can only regulate local and regional impacts, a test that simply does not exist and is inconsistent with a number of CAA provisions, including provisions protecting the ozone layer.

The Administrator has made no demonstration how the scientific bases for the 2009 Endangerment Finding have been weakened or contradicted.

The Administrator claims that, since 2009, the scientific evidence that climate change harms human health and the environment has been weakened or contradicted. This claim is made despite publication of numerous major national and international assessments of the science that demonstrate climate change is now causing such harm and those harms will worsen in the future without effective action. EPA's claims ignore these scientifically-robust findings. Instead, they base their claims upon fatally-flawed information presented as science. EPA fails to provide any scientifically valid information that weakens or contradicts the scientific basis for the Endangerment Finding.

EPA cannot simply refer to a study, or even multiple studies, as scientific justification for a decision as consequential as this proposal to rescind the Endangerment Finding. Instead, EPA must thoroughly explain its scientific rationale. When EPA first published its proposed Endangerment Finding in 2008, it described in detail the scientific basis for the proposed decision in more than 11 pages in the proposed rule and an

accompanying 150-page technical support document. EPA thoroughly explained how it interpreted the available scientific information, including the known uncertainties in the science. Today, Zeldin provides no such evaluation of the body of science necessary to show why its reliance on a single, flawed report is valid.

The analysis of the impacts of this action is woefully inadequate.

The length of EPA's Regulatory Impact Analysis (RIA) for the current proposal is a mere 3% of the combined length of the RIAs of the two most recent rules that EPA is rescinding. The RIA does not include any analysis of vehicle technology or economics, which may explain why the proposal shows a lack of understanding that electric vehicles (EVs) are both more efficient and more powerful than gas vehicles. EPA does not explain why American car companies cannot in six years produce EVs comparable to those produced in China today. EPA also excludes any analysis of potential alternative regulatory options such as extending the deadline or reducing the stringency of the standard. Instead, EPA takes an all or nothing approach as though regulatory options do not exist.

The Administrator ignores the benefits of pollution reduction from the existing regulations and the significant increase in gas prices that would result from this action.

EPA imagines that there are no benefits from reduced GHG emissions and reduces, without technical justification, the particulate matter (PM) and ozone benefits of rules it is proposing to rescind. The Administrator, without justification, says that rescinding a series of rules that all had positive net benefits will result in costs. The three most recent rules that would be rescinded by EPA's action had between \$198 billion - \$252 billion in net benefits including between \$17 billion - \$22 billion in health benefits.

The proposed action ignores the Energy Information Administration's (EIA) analysis (cited by EPA) that shows that Americans will have to pay a total of \$4.1 trillion in increased gasoline costs to oil companies as gas prices rise by 2050. That's not surprising, since increasing demand for gasoline would naturally increase its price. EPA also needs to explain how the public benefits from a rule that, according to the same EIA analysis, shows a net loss of 3,760,000 jobs between 2025 and 2050.

II. EPA's proposed interpretation that CAA § 202(a) requires treating contribution, endangerment, and standard setting as a "cohesive whole" is unlawful.

A. Introduction

The best reading of § 202(a)'s threshold provision on contribution and endangerment is embodied in EPA's 2009 "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act." That EPA action was comprehensive and exhaustive in its discussion of what the provision meant and how EPA applied it to the facts and evidence before it. As discussed below, this reading is fully supported by § 202(a)'s text and structure, its context in the Act, important case law, and past agency practice in interpreting this and other similar threshold provisions. In contrast, EPA's proposed interpretation is inconsistent in all of these respects. The proposal is noted for its lack of depth of analysis, its failure to discuss past reasoning and actions, and its failure to explain how its proposal could or should be implemented with respect to emissions of greenhouse gases from motor vehicles. EPA's proposal is unlawful and is far from the best reading of § 202(a).¹

¹ The discussion below routinely refers to findings or determinations on contribution and endangerment. These terms are used for convenience, and do not indicate or imply that the threshold agency judgments under § 202(a) are solely factual findings or determinations. As EPA recognized in its 2009 proposal, the agency's judgment in applying the scientific evidence to the statutory criteria has to be grounded squarely in the science of climate change and also embody relevant policy considerations. 74 FR

B. The best reading of $\S 202(a)$.

1. The text and context of $\S 202(a)$.

Section 202(a) establishes a two step process to determine whether EPA has authority to and must set standards for new motor vehicles. The first step asks whether emissions from new motor vehicles cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. If EPA makes an affirmative determination on this threshold step, then Congress has determined that EPA must set standards for new motor vehicles applicable to the emissions. Section 202(a) and other provisions provide EPA with instructions on how to set standards and give EPA significant discretion in what standards it sets. EPA is required to follow this two-step approach. These steps address different questions, on a different timeline. The first step is a requirement that EPA determine the class or classes of motor vehicles that meet the contribution/endangerment criteria. This is a threshold determination. It identifies when EPA has authority to and must adopt federal emissions standards for new motor vehicles. Unless and until EPA makes an affirmative determination, EPA has no authority to adopt federal emissions standards for emissions of the relevant air pollutants from new motor vehicles.

The second step is a requirement that EPA adopt emissions standards for new motor vehicles. Assuming an affirmative determination is made in the first step, Congress provided direction and significant discretion on the adoption of emissions standards for new motor vehicles. Congress specified various factors that EPA must take into consideration in setting standards under § 202(a). Setting the appropriate standards involves evaluating complex questions of availability and performance of emissions control technology, cost, and the like. EPA has been conducting this kind of standard setting for new motor vehicles for decades.

The text and structure of § 202(a) make clear that the two steps are separate and distinct. They call for consideration of different factors. For the first step, the factors EPA must consider involve questions on the level of air pollution and the risks and severity of adverse effects to public health and welfare from the air pollution. It also involves questions of the relationship between emissions from the source category and the levels of air pollution. EPA is to exercise its judgment in evaluating these questions and making the determinations called for in the first step. However, EPA's judgment is not free ranging. EPA's judgment is constrained by the text of § 202(a), with Congress directing EPA to focus only on the threshold issues of contribution and endangerment in the first step.

(i) EPA has no authority to establish federal emissions standards for a class or classes of new motor vehicles unless and until EPA makes a final affirmative determination on the threshold issue of contribution and endangerment. That means when EPA is making the contribution and endangerment determinations, EPA has no authority to adopt federal controls for that group of new motor vehicles, either then or in the future. Such authority only arises after EPA has finished making these determinations. Thus, when EPA is making these determinations, it solely focuses on the question of contribution and endangerment. Issues related to future controls — their timing, cost, impact on emissions reductions, and so on — are irrelevant to EPA's threshold determination and cannot be considered in making that determination.

This makes eminent sense. The first threshold step calls for analyzing the risks and severity of adverse effects from air pollution and analyzing emissions contribution from motor vehicles to levels of the air

cause or contribute, given EPA did not and apparently does not now claim that motor vehicle emissions cause the relevant greenhouse gas air pollution.

pollution. That judgment can be made without consideration of means of emissions control - the issues of contribution and endangerment can readily be assessed without any consideration of the potential impacts of future controls. The scientific and technical issues involved in determining contribution and endangerment can be fully considered without any consideration of the impacts of future controls. Taking the cost, effectiveness, and impacts of future emissions controls into account when making the threshold contribution or endangerment finding short-circuits the two-step process Congress required. EPA's proposed approach requires two different "decisions" on standard setting. The first is a projection of future decisions on emissions standards based on projections of many technical and other conditions and circumstances, potentially covering many years into the future. According to EPA this provisional analysis and decision should be considered in the first threshold step. The second decision on standard setting would be based on the rulemaking process called for by Congress, involving a proposal based on detailed analyses, a comment period, and a final decision on standards for specific model years. It would result in actual standards the affected vehicles have to meet. Of course, the second decision on standards would only occur if EPA made an affirmative determination in the first step. If the provisional, projected future standards considered in the first threshold step led to a negative determination at the first step, there would be no actual future decision on standards. This is a convoluted commingling of the two separate steps Congress specified in § 202(a). This commingling effectively puts the standard setting cart in front of the contribution and endangerment determination horse.

(ii) Congress also constrained EPA's "judgment" on whether motor vehicles contribute to the air pollution and whether the air pollution endangers. The Supreme Court confirmed these points in Massachusetts v. EPA, 549 U.S. 497 (2007). In that case, EPA refused to make a determination whether emissions of GHGs from motor vehicles cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare, under § 202(a)(1) of the Act. EPA "refused to comply with this clear statutory command," relying on "a laundry list of reasons not to regulate." For example, EPA based its decision on various policy reasons – the administration preferred other ways to address climate change ("a number of voluntary Executive Branch programs already provide an effective response to the threat of global warming"), EPA considered the emissions controls that would be adopted ineffective and inappropriate as a remedial measure ("curtailing motor-vehicle emissions would reflect "an inefficient, piecemeal approach to address the climate change issue""), and adoption of emissions controls on motor vehicles would interfere with other important policies of the administration ("regulating greenhouse gases might impair the President's ability to negotiate with "key developing nations" to reduce emissions").²

The Court made clear that the use of the term "judgment" constrained EPA and was not a vehicle to go beyond the terms of the statute. The Court said:

"While the statute does condition the exercise of EPA's authority on its formation of a "judgment," 42 U.S.C. § 7521(a)(1), that judgment must relate to whether an air pollutant "cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare," [...] Put another way, the use of the word "judgment" is not a roving license to ignore the statutory text. It is but a direction to exercise discretion within defined statutory limits. [...] But once EPA has responded to a petition for rulemaking, its reasons for action or inaction must conform to the authorizing statute. Under the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do. [...] To the extent that this constrains

² 549 U.S. at 533.

agency discretion to pursue other priorities of the Administrator or the President, this is the congressional design." 549 U.S. at 532-533 (emphasis added)

The Court made clear that the various policy reasons relied upon by EPA were not relevant to the determination of cause or contribute to endangerment.

"The alternative basis for EPA's decision—that even if it does have statutory authority to regulate greenhouse gases, it would be unwise to do so at this time—rests on reasoning divorced from the statutory text. [...] Although we have neither the expertise nor the authority to evaluate these policy judgments, it is evident they have nothing to do with whether greenhouse gas emissions contribute to climate change. Still less do they amount to a reasoned justification for declining to form a scientific judgment. ... Nor can EPA avoid its statutory obligation by noting the uncertainty surrounding various features of climate change and concluding that it would therefore be better not to regulate at this time. See 68 Fed.Reg. 52930–52931. If the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment as to whether greenhouse gases contribute to global warming, EPA must say so. That EPA would prefer not to regulate greenhouse gases because of some residual uncertainty—which, contrary to Justice SCALIA's apparent belief, post, at 1466 – 1468, is in fact all that it said, see 68 Fed.Reg. 52929–52930 ("We do not believe ... that it would be either effective or appropriate for EPA to establish [greenhouse gas] standards for motor vehicles at this time" (emphasis added))—is irrelevant." 549 U.S. at 533-34. (emphasis added)

The Court was clear – policy judgments concerning the appropriateness of future emissions controls that could be adopted under the Act are irrelevant to the scientific judgment needed to determine cause or contribute and endangerment. Likewise, policy concerns over interference with other administration policies are irrelevant, as are concerns over uncertainty of the science. Scientific uncertainty is relevant only if the uncertainty is so high that a reasoned determination cannot be made.

The policy concerns EPA relies upon in the proposal are of the same nature as those rejected by the Court in *Massachusetts*. They are irrelevant to the scientific judgment required for the threshold first step determination. Since they are irrelevant, the Court decided in *Massachusetts* that they could not justify refusing to make a determination. For the same reasons, they are irrelevant for purposes of making an affirmative or negative determination on contribution or endangerment.

Coalition for Responsible Regulation, Inc. v. EPA, 684 F.3d 102 (D.C. Cir. 2012) follows the same approach. In that case, industry argued that:

"EPA improperly interpreted CAA § 202(a)(1) as restricting the Endangerment Finding to a science-based judgment devoid of considerations of policy concerns and regulatory consequences. They assert that CAA § 202(a)(1) requires EPA to consider, e.g., the benefits of activities that require greenhouse gas emissions, the effectiveness of emissions regulation triggered by the Endangerment Finding, and the potential for societal adaptation to or mitigation of climate change. They maintain that eschewing those considerations also made the Endangerment Finding arbitrary and capricious." 684 F.3d at 117. (emphasis added)

The D.C. Circuit was clear – EPA has no authority to consider such policy considerations when making the science-based judgment on contribution and endangerment.

"This language requires that the endangerment evaluation "relate to whether an air pollutant 'cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare." Massachusetts v. EPA, 549 U.S. at 532–33, 127 S.Ct. 1438. At bottom, § 202(a)(1) requires EPA to answer only two questions: whether particular "air pollution"—here, greenhouse gases—"may reasonably be anticipated to endanger public health or welfare," and whether motor-vehicle emissions "cause, or contribute to" that endangerment.

These questions require a "scientific judgment" about the potential risks greenhouse gas emissions pose to public health or welfare—not policy discussions. *Massachusetts v. EPA*, 549 U.S. at 534, 127 S.Ct. 1438. In *Massachusetts v. EPA*, the Supreme Court rebuffed an attempt by EPA itself to inject considerations of policy into its decision. At the time, EPA had "offered a laundry list of reasons not to regulate" greenhouse gases, including that a number of voluntary Executive Branch programs already provide an effective response to the threat of global warming, that regulating greenhouse gases might impair the President's ability to negotiate with "key developing nations" to reduce emissions, and that curtailing motor-vehicle emissions would reflect "an inefficient, piecemeal approach to address the climate change issue." Id. at 533, 127 S.Ct. 1438 (citations omitted). The Court noted that "these policy judgments...have nothing to do with whether greenhouse gas emissions contribute to climate change. Still less do they amount to a reasoned justification for declining to form a scientific judgment." Id. at 533–34, 127 S.Ct. 1438. In the Court's view, EPA's policy-based explanations contained "no reasoned explanation for [EPA's] refusal to decide" the key part of the endangerment inquiry: "whether greenhouse gases cause or contribute to climate change." Id. at 534, 127 S.Ct. 1438.

As in *Massachusetts v. EPA*, a "laundry list of reasons not to regulate" simply has "nothing to do with whether greenhouse gas emissions contribute to climate change." Id. at 533–34, 127 S.Ct. 1438. The additional exercises State and Industry Petitioners would have EPA undertake—e.g., performing a cost-benefit analysis for greenhouse gases, gauging the effectiveness of whatever emission standards EPA would enact to limit greenhouse gases, and predicting society's adaptive response to the dangers or harms caused by climate change—do not inform the "scientific judgment" that § 202(a)(1) requires of EPA..... The statute speaks in terms of endangerment, not in terms of policy, and EPA has complied with the statute." 684 F.3d at 117-118. (emphasis added)

The courts could not be clearer – the policy considerations that EPA proposes to rely upon to justify its proposed interpretation of contribution and endangerment are irrelevant to making these actions under § 202(a).

Congress used the same basic two-step structure employed in § 202(a) throughout various provisions of the Act addressing EPA authority to adopt federal controls on emissions sources.³ Congress used this structure to answer two different questions – do the circumstances involving emissions from sources and the risk of harm from the air pollution levels meet the criteria for authorizing EPA to adopt federal controls? If so, what kind of federal controls is EPA to adopt? The consistent use of the same basic statutory structure throughout the Act supports the interpretation discussed above.

(iii) In other provisions of the Act, Congress addressed when and to what extent EPA should require states to control certain emissions in their state implementation plans (SIPs). Unlike § 202(a), in various SIP provisions, Congress explicitly made levels of emissions control a factor in determining contribution. For example, when Congress

³ See section II.B.1.(iii) below.

addressed interstate transport of air pollution it specified that a SIP must contain provisions that prohibit sources from emitting amounts of emissions which contribute significantly to nonattainment in downwind states. The significant contribution finding in the Good Neighbor provision is distinctly different from the contribution finding in § 202(a). In the SIP provision, the contribution finding performs two functions – it identifies whether the state has to include provisions in its SIP to control emissions, and it identifies the amount of emissions that must be controlled. This is distinctly different in substance from § 202(a). The SIP provision combines two questions (duty to adopt controls and amount of reductions required by the controls), while these two questions are kept separate in § 202(a) (authority and duty to adopt controls, based on contribution/endangerment determination, and amount of reductions to achieve through the controls based on the instructions and discretion provided in the standard setting provisions of § 202).

In making the significant contribution determination under this SIP provision, EPA considered factors related to emissions control, such as cost, because EPA had to determine the amount of emissions reductions that the state had to achieve. Determining the amount of required emissions reductions is a core part of emissions standard setting, and it is logical to consider standard setting factors such as cost of emissions controls in making this kind of determination. The cases considering EPA's authority under this SIP provision recognize the dual role the significant contribution determination plays in the Good Neighbor SIP provision.

The Supreme Court addressed this as follows:

"Under the Transport Rule, EPA employed a "two-step approach" to determine when upwind States "contribute[d] significantly to nonattainment," id., at 48254, and therefore in "amounts" that had to be eliminated. At step one, called the "screening" analysis, the Agency excluded as de minimis any upwind State that contributed less than one percent of the three NAAQS to any downwind State "receptor," a location at which EPA measures air quality. See id., at 48236–48237. If all of an upwind State's contributions fell below the one-percent threshold, that State would be considered not to have "contribute [d] significantly" to the nonattainment of any downwind State. Id., at 48236. States in that category were screened out and exempted from regulation under the rule. [...]

Taken together, the screening and control inquiries defined EPA's understanding of which upwind emissions were within the Good Neighbor Provision's ambit. In short, under the Transport Rule, an upwind State "contribute[d] significantly" to downwind nonattainment to the extent its exported pollution both (1) produced one percent or more of a NAAQS in at least one downwind State (step one) and (2) could be eliminated cost-effectively, as determined by EPA (step two). See id., at 48254. Upwind States would be obliged to eliminate all and only emissions meeting both of these criteria. [...]

We conclude that the Good Neighbor Provision delegates authority to EPA at least as certainly as the CAA provisions involved in Chevron. The statute requires States to eliminate those "amounts" of pollution that "contribute significantly to nonattainment" in downwind States. 42 U.S.C. § 7410(a)(2)(D)(i) (emphasis added). Thus, EPA's task is to reduce upwind pollution, but only in "amounts" that push a downwind State's pollution concentrations above the relevant NAAQS. As noted earlier, however, the nonattainment of downwind States results from the collective and interwoven contributions of multiple upwind States. See supra, at 1593 – 1594. The statute therefore calls upon the Agency to address a thorny causation problem: How should EPA

⁴ Section 110(a)(2)(D)(i)(I).

allocate among multiple contributing upwind States responsibility for a downwind State's excess pollution? [...]

Persuaded that the Good Neighbor Provision does not dictate the particular allocation of emissions among contributing States advanced by the D.C. Circuit, we must next decide whether the allocation method chosen by EPA is a "permissible construction of the statute." Chevron, 467 U.S., at 843, 104 S.Ct. 2778. As EPA interprets the statute, upwind emissions rank as "amounts [that] ... contribute significantly to nonattainment" if they (1) constitute one percent or more of a relevant NAAQS in a nonattaining downwind State and (2) can be eliminated under the cost threshold set by the Agency. See 76 Fed.Reg. 48254. In other words, to identify which emissions were to be eliminated, EPA considered both the magnitude of upwind States' contributions and the cost associated with eliminating them. [...]

Using costs in the Transport Rule calculus, we agree with EPA, also makes good sense. Eliminating those amounts that can cost-effectively be reduced is an efficient and equitable solution to the allocation problem the Good Neighbor Provision requires the Agency to address. Efficient because EPA can achieve the levels of attainment, i.e., of emission reductions, the proportional approach aims to achieve, but at a much lower overall cost. Equitable because, by imposing uniform cost thresholds on regulated States, EPA's rule subjects to stricter regulation those States that have done relatively less in the past to control their pollution. Upwind States that have not yet implemented pollution controls of the same stringency as their neighbors will be stopped from free riding on their neighbors' efforts to reduce pollution. They will have to bring down their emissions by installing devices of the kind in which neighboring States have already invested. [...]

Obligated to require the elimination of only those "amounts" of pollutants that contribute to the nonattainment of NAAQS in downwind States, EPA must decide how to differentiate among the otherwise like contributions of multiple upwind States. EPA found decisive the difficulty of eliminating each "amount," i.e., the cost incurred in doing so. Lacking a dispositive statutory instruction to guide it, EPA's decision, we conclude, is a "reasonable" way of filling the "gap left open by Congress."" EPA v. EME Homer City Generation, L.P., 572 U.S. 489, 500-504, 513-514, 6518-520 (2014). (emphasis added)

This SIP provision and § 202(a) differ dramatically in terms of substance. Section 202(a) calls for EPA to determine contribution to air pollution that endangers. If and only if EPA makes an affirmative determination, EPA is to adopt controls that reduce emissions using the standard setting provisions of § 202. The determination of contribution to the air pollution and the determination of standard setting are two separate decisions. The SIP provision is different. The determination of significant contribution requires EPA to determine the amount of emissions from an upwind state that must be reduced. The decision on contribution and the decision on what reductions must be achieved are one and the same. This is substantively different from § 202(a), and the factors EPA can consider under the Good Neighbor SIP provision do not support their consideration under § 202(a).

It would be a different situation if § 202(a) was phrased along the lines of "EPA shall set standards that prohibit new motor vehicles from emitting amounts of an air pollutant that cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare." That would be analogous to the Good Neighbor SIP provision. Of course, in that case Congress would not have prescribed the various standard setting provisions in § 202(a) that it did. The contribution determination would have already determined what amount of emissions had to be reduced. Congress did not use this approach in §

202(a), and the substantively different Good Neighbor provision is not relevant for purposes of § 202(a). Congress also adopted other SIP provisions that took an approach somewhat similar to the Good Neighbor provision when it addressed issues of visibility transport (EPA can remove a State or portion of a State from a visibility transport region if the control of emissions will not significantly contribute to protection or enhancement of visibility in Class I areas, § 169B) and the interstate transport commission (EPA may remove a State or portion of a State from the commission where EPA determines control of emissions in the State will not significantly contribute to attainment of the national ambient air quality standards (NAAQS) in downwind areas, § 176(a).

These SIP provisions show that Congress knew how to specify when the contribution finding includes consideration of future emissions controls, such as the amount of reductions that future controls would achieve. It did not include such considerations in § 202(a)'s contribution or endangerment determinations. In a similar vein, Congress specified in § 211(c)(2)(A) that EPA was to consider the relative effectiveness and appropriateness of vehicle controls as an alternative to fuel controls when making the threshold contribution and endangerment findings under § 211(c)(1). Congress instructed EPA to consider various kinds of control strategies as part of making the threshold determination on whether EPA had the authority to adopt fuel controls as a response to an air pollution problem.

Both the SIP provisions and the fuel provision show that Congress knew how to authorize EPA to take factors relevant to the control program into account when making the threshold determinations on contribution or endangerment that would decide whether EPA had authority to adopt a control program. It did not do so in § 202(a). This absence is a telling indication that EPA has no authority to take factors relevant to the future control program into account when making the threshold contribution and endangerment findings under § 202(a).

(iv) Section 202(a) is just one of many provisions where Congress followed a two-step process, with the first step a threshold identifying whether EPA has authority to adopt federal controls on emissions, and a second step where Congress specifies what kind of controls EPA may or must adopt.

This pattern throughout the CAA clearly indicates that the two steps involved are separate and apart and involve consideration of different factors relating to standard setting that are not relevant for determining contribution or endangerment.

CAA Section	First step – threshold, identifying whether EPA has authority to adopt federal controls on emissions.	Second step - if threshold step met, identifying whether EPA must or may adopt federal controls.	Second step – specifying what kind of federal emissions controls EPA can adopt.
108	EPA lists criteria pollutants. Include on list if EPA judges cause/contribute to air pollution that endangers. 108(a)(1)(a)	If pollutant listed, EPA shall adopt NAAQS.	NAAQS must meet requirements of 109(a), (b).
112	Congress lists pollutants. EPA can add to the list based on adverse	EPA shall adopt controls.	Standard setting specified. 112(d), (f).

	health effects from exposure. 112(b)(1), (2). Area sources – 112(k)(3)(B) EPA shall identify not less than 30 hazardous air pollutants which present the greatest threat to public health. Accidental releases – EPA list substances which are known to cause		Standard setting specified. 112(r)(1), (5),
	or contribute or may reasonably be anticipated to cause death, etc., or harm environment. 112(r)(3).		(7).
122	EPA determine whether radioactive and other emissions will cause/contribute to endangerment.	If affirmative determination, list under sections 108 or 112 if cause /contribute air pollution reasonably anticipated to increase mortality. List under 111 if emitting significant amounts.	Standard setting specified in sections 109, 111, or 112.
202	EPA determine whether emissions cause/contribute to endangerment. 202(a)(1)	EPA shall adopt standards.	Congress specifies what kind of standards to adopt. In some cases, Congress specified level of standards. 202(a)(1), (a)(2), (a)(3), (b), (d), (f) –(k), (m).
	EPA conducts study of need for and feasibility of means of control of air toxics emissions from motor vehicles. 202(l)(1).	EPA shall adopt standards.	Standards specified. 202(l)(2).
211	EPA determines if emissions cause/contribute to endangerment. 211(c)(1)(A)	EPA may adopt controls, prohibitions.	Controls/prohibitions specified in 211(c). Congress specified various controls in (g) – (o).
213	EPA determines if emissions of new nonroad are significant contributors to ozone or CO levels in more than one nonattainment area. If yes, EPA adopt standards for	EPA shall adopt standards. 213(a)(3).	Standards specified 213(a)(3), (4). Standards required for locomotives, 213(a)(5).

	classes/categories which cause/contribute to such air pollution. 213(a)(1), (2).		
	EPA determine if any other emissions from new nonroad significantly contribute to endangerment. If yes, EPA determine if classes/categories cause/contribute to such air pollution. 213(a)(4)	EPA may adopt standards. 213(a)(4)	Standards specified. 213(a)(4).
231	EPA determines if emissions cause/contribute to air pollution which endangers. 231(a)(2)(A).	EPA shall adopt standards.	Standards specified. 231(a)(2)(A),(B); (b)
303	EPA determine if pollution sources present imminent, substantial endangerment. 303.	EPA may sue to enjoin persons.	EPA may sue to enjoin any person who cause/contribute to the pollution to stop emissions that cause/contribute.
602	Congress lists substances. EPA shall add to list if find cause/contribute significantly to harmful effects on the stratosphere. 602(a),(b).		Congress specifies phase out of substances. 604, 605.
615	EPA judges whether a substance, practice, etc. may reasonably be anticipated to affect the stratosphere and such effect may reasonably be anticipated to endanger PH or W.	EPA shall regulate.	EPA shall promptly regulate such substance, practice, etc.

Congress consistently set up a two-step structure in determining whether and how EPA was authorized to adopt federal controls for emissions. The first step involves identifying whether EPA has authority to adopt controls. In many cases this involves a determination whether emissions from certain sources cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. In some cases Congress specified that significant contribution was an element of the threshold test. In some cases, Congress itself made the threshold authority determination, e.g. § 112's list of hazardous air pollutants (HAPs) and § 602's list of substances.

Congress also specified whether EPA must or may adopt controls, and specified what kind of controls EPA could adopt. Typically, Congress specified factors that EPA had to consider in setting standards. In some cases, Congress went into some detail in specifying the kind of control, in other cases Congress provided EPA great discretion in determining the kind of control to adopt.

Congress' consistent use of this structure throughout the Act makes it clear that Congress was acting intentionally. Congress intended that the first threshold question was determining when EPA had authority to adopt controls, and the second step was specifying what kind of controls EPA could adopt. These steps address different questions, and different factors are relevant to answering each of those questions. In § 202(a), EPA's role is to determine whether emissions from certain sources contribute to air pollution that endangers. This determination is separate from and does not involve what kind or the impact of emissions controls EPA may adopt in the future if EPA makes an affirmative threshold determination.

2. EPA past practice.

For many decades EPA determined contribution and endangerment under a variety of provisions addressing EPA's authority to adopt emissions controls. Throughout, EPA's core focus has been evaluating contribution by considering the inventory of emissions from the relevant sources, and in many cases comparing this inventory to inventories of other relevant sources and groups of sources. EPA has evaluated endangerment by considering the science and other evidence of the air pollution and its impact on public health or welfare. In many cases for criteria pollutants, the endangerment determination has been based in large part on the NAAQS program. For example:

CAA Section, Air Pollutant,	Date Enacted			
Section 202(a)				
GHGs	74 FR 66496, 66506, 66507-508, 66515-516, 66537-540, 66541-545)	December 15, 2009		
Section 231(a)				
GHGs	81 FR 54422, 54424, 54426-427, 54434-438, 54459-4, 5446-474	August 15, 2016		
CO, HC, NOx	38 FR 19088, 19089	July 17, 1973		
Pb	88 FR 72372, 72378-385, 72393-393, 72397-402	October 20, 2023		
Sections 213(a)(2),(3),(4)				
Large CI land based >37Kw (CO, NOx, VOC, PM, smoke)	59 FR 31306 Significant contribution finding. 59 FR at 31307-310. Large CI – contribution finding, (a)(3), (a)(4). 59 FR at 31309.	June 17, 1994		
Small CI land based <37Kw (CO, NOx, VOC, PM, smoke)	63 FR 56968 Contribution finding 63 FR at 56968-969	October 23, 1998		

Large SI, Recreational (Regional haze, visibility HC, NOx, CO, PM)	67 FR 68242, 68242-249	November 8, 2002		
Nonroad Diesel (regional haze, visibility)	69 FR 38958, 38963	June 29, 2004		
Section 211(c)(1)				
Highway Diesel S (PM)	66 FR 5002, 5006-07, 5008; RIA Appendix A pp. A1-A3.	January 18, 2001		
Nonroad Diesel S (PM)	69 FR 38958, 38962, 38963 ; RIA pp2-1 – 2-3, Chpt. 5 Appendix 5A pp 5-99 – 5-101.	June 24, 2004		
Highway Gasoline S (PM)	65 FR 6698, 6703; RIA Appendix D, pp D-2 – D-3.	February 10, 2000		
RFG (NOx)	59 FR 7716, 7745, 7750-752	February 16, 1994		

The above analysis shows that the interpretation of contribution and endangerment taken by EPA in 2009 is far and away the best reading of § 202(a).⁵

C. EPA's proposed interpretation is unlawful.

1. EPA's proposed interpretation.

EPA proposes that "section 202(a) does not authorize the EPA ... to issue standalone findings that do not apply the statutory standard for regulation as a cohesive whole." EPA claims that EPA did not have "procedural discretion' to issue standalone findings without considering regulatory response and severed the finding of endangerment from the finding of contribution to that endangerment." EPA claims that it improperly "assumed that statutory silence granted discretion to construe the scope of our authority and asserted or implied that the Supreme Court's decision in Massachusetts required us to read the statute as authorizing the regulation of GHG emissions in response to global climate change concerns."8 EPA claims that it improperly "reasoned that "[t]he text of CAA section 202(a) is silent on this issue" and "invoked the procedural discretion that is provided by CAA section 202(a)'s lack of specific direction." 74 FR 66501."

EPA claims that it is unlawful to sever standard setting under § 202(a) from the determinations on contribution and endangerment. It claims § 202(a) "requires issuing emission standards together with the findings necessary to invoke our regulatory authority, rather than severing the regulatory action into separate endangerment and standards-setting proceedings...it is impermissible for the Administrator to make an

⁵ See Loper Bright Enterprises v. Raimondo, 603 U.S. 369, 394 (2024)(contemporary and consistent views of a coordinate branch of government can provide evidence of the law's meaning).

⁶ 90 FR at 36298.

⁷ Id. at 36299.

⁸ Id.

⁹ Id. at 36303.

endangerment finding without prescribing the emission standards required in response to such a finding, and conversely, that it is impermissible to prescribe emission standards without making the source- and air-pollutant specific findings required by the statute." EPA claims this approach resulted in EPA failing to consider adaptation and mitigation, costs of regulating, and the beneficial impacts of GHGs when making the endangerment finding. EPA claims this led to errors in later standard settings as well – failure to consider adaptation and mitigation, and changes in the scientific evidence concerning climate change, meaning EPA failed to analyze whether "endangerment and contribution remained accurate with respect to the source category at issue. As a result, the decision to sever meant that the EPA has never meaningfully considered or invited public comment on the cost, effectiveness, and continued propriety of its GHG regulatory program." 12

EPA also claims that it was improper to "sever" the determination of contribution from the determination on endangerment, and that EPA's interpretation of contribution and endangerment was unlawful. Contribution and endangerment must be considered in a "single causal chain," and the "emission [from the vehicles at issue in the standard setting] must cause or contribute to the danger posed by the air pollution to a sufficient extent to satisfy the standard for regulation." EPA was required to determine whether emissions from motor vehicles as a whole, as well as from classes of vehicles being regulated, had "a more than de minimis effect on the danger identified with respect to elevated concentrations of GHGs in the upper atmosphere." ¹⁴ EPA claims that background principles of "proximate cause" apply under § 202(a), such that "emissions from new motor vehicles and new motor vehicle engines in the United States do not have a sufficiently close connection to the adverse impacts identified in the Endangerment Finding to fit within the legal meaning of "cause" or "contribute." EPA claimed that "[t]he Endangerment Finding largely avoided addressing this problem by severing the question whether GHG emissions from new motor vehicle engines contribute to GHG concentrations in the atmosphere from the question whether GHG concentrations in the atmosphere endanger public health and welfare...Nevertheless, even with respect to endangerment and contribution in isolation, we propose that global climate change concerns involve analyzing causal relationships that are too uncertain, too remote, and too confounded by intervening and confounding factors to fit within the terms "cause" and "contribute" as used in CAA section 202(a)." ¹⁶

EPA proposes that "severing the endangerment and cause or contribution findings leads to untenable results and lacks any limiting principle" pointing to theoretical regulation of water vapor emissions as an example.¹⁷ EPA also proposes that severing the endangerment findings from the standard setting leads to unlawful results – failure to "consider whether emission standards for new motor vehicles would be futile as a means to address the identified dangers of GHG emissions from all anthropogenic sources." EPA claims that it also failed to consider another "foreseeable" consequence of regulation – carbon leakage. ¹⁹

EPA argues that it failed to properly consider contribution and endangerment "in context." Endangerment cannot mean "any predicted negative impact to any public health or welfare value," and EPA avoided this

¹⁰ Id. at 36302.

¹¹ Id.

¹² Id.

¹³ Id. at 36303, 304.

¹⁴ Id. at 36304.

¹⁵ Id. at 36301.

¹⁶ Id.

¹⁷ Id.

¹⁸ Id. at 36305.

¹⁹ Id.

concern by determining contribution as any amount above de minimis levels, "even if those emissions did not themselves contribute to a danger in any meaningful sense."²⁰

EPA argues that EPA compared "apples to oranges" because motor vehicles do not emit two of the gases included in the mix of gases considered as the air pollution.

Finally, EPA argues that EPA in effect read the term "new" out of the statute by using emissions for the entire fleet in a certain year as the basis for determining contribution.²¹

2. Determining contribution and endangerment separate and apart from standard setting is not a violation of a procedure required by § 202(a).

EPA appears to argue that § 202(a) establishes a procedural requirement, such that EPA has to adopt emission standards at the same time it makes the contribution and endangerment findings. EPA argues it improperly relied upon the silence in the statute and discretion under *Chevron* to exercise procedural discretion and sever the standard setting from the contribution/endangerment findings.²²

EPA did not rely on *Chevron* in determining that it had the discretion to decide contribution and endangerment in a separate, prior proceeding from subsequent standard setting proceedings. It is basic administrative law that EPA had such discretion.

"Finally, EPA's approach coheres with basic principles of administrative law. In general, the choice between various procedural channels lies within the "informed discretion of the administrative agency." SEC v. Chenery Corp., 332 U.S. 194, 203, 67 S.Ct. 1760, 91 L.Ed. 1995 (1947). That discretion properly includes judgments about the scope of rulemakings and when to relegate ancillary issues to separate proceedings: "Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop." Massachusetts, 549 U.S. at 524, 127 S.Ct. 1438; see, e.g., Grp. Against Smog & Pollution, 665 F.2d at 1292 ("... EPA cannot soundly be charged with arbitrariness merely because it chose a separate rulemaking proceeding as the process for proposing a revised standard in lieu of an undertaking to do so in the narrower context of the opacity standard proceedings as petitioners requested."). Once the agency has resolved an issue in a separate proceeding, it may defend against related criticism by "simply refer[ing]" to the other proceeding, so long as the "reasoning remains applicable and adequately refutes the challenge." Bechtel v. FCC, 10 F.3d 875, 878 (D.C. Cir. 1993). EPA reasonably reads "as appropriate," in paragraph (3)(B), to leave undisturbed these background norms of broad but reviewable procedural discretion." *Alon Refining Krotz Springs Inc. v. EPA*, 936 F.3d 628, 659 (D.C. Cir. 2019).

As EPA explained in 2009:

The text of CAA section 202(a) is silent on this issue. It does not specify the timing of an endangerment finding, other than to be clear that emissions standards may not be issued unless such a determination has been made. EPA is exercising the procedural discretion that is provided by CAA section 202(a)'s lack of specific direction. ... Since Congress was silent on this issue, and more than one procedural approach may accomplish the requirements of CAA section 202(a), EPA has the discretion to use the approach considered appropriate in this case. ... the Supreme Court has noted, the agency has 'significant latitude as to the manner, timing, [and] content * * * of its regulations . * *

²⁰ Id.

²¹ Id

²² Id. at fn.42, 36299.

*' Massachusetts v. EPA, 549 U.S. at 533. That includes the discretion to issue them in a separate rulemaking.²³

EPA's proposal imposes a restraint on EPA's discretion that the text of the provision does not contain. Section 202(a) specifies that EPA must set standards if and only if EPA makes the contribution and endangerment findings. This means EPA cannot adopt standards until those findings are final, but it fails to specify the timing by which EPA must propose or adopt the standards. Unlike various other provisions in the Act, this section does not specify or impose restraints on the timing of EPA's actions. For example, § 108 specifies that EPA must propose a NAAQS for a pollutant at the same time that it first issues air quality criteria for the pollutant and must issue final NAAQS within 90 days after proposal. Likewise, § 111 specifies that once EPA lists a category of stationary sources based on a determination of significant contribution and endangerment it must propose standards within one year and issue a final rule within one year of proposal. Section 202(a) does not contain any prescriptions or limits on the timing of the contribution and endangerment finding or on the standard setting that follows such findings. That lack of specific direction is the source of EPA's procedural discretion, not *Chevron*.

EPA's proposal would prohibit EPA from making a contribution and endangerment finding for the aggregate group of all new motor vehicles unless EPA was also ready to adopt standards for all vehicles at the same time. As EPA explained in 2009:

EPA has the discretion under CAA section 202(a) to consider classes or categories of new motor vehicles separately or together in making a contribution and endangerment determination. This discretion would be removed under commenters' interpretation, by limiting this to only those cases in which EPA was also ready to issue emissions standards for all of the classes or categories covered by the endangerment finding. However, nothing in the text of CAA section 202(a) places such a limit on EPA's discretion in determining how to group classes or categories of new motor vehicles for purposes of the contribution and endangerment findings. This limitation would not be appropriate, because the issues of contribution and endangerment are separate and distinct from the issues of setting emissions standards.²⁴

Even if EPA's proposed interpretation was right, this would not be a basis to rescind the 2009 contribution and endangerment findings. At most it would be a harmless procedural error, a difference in timing of marginal relevance with no substantial likelihood of affecting a regulatory outcome. See CAA § 307(d)(8).

EPN recognizes that the core of EPA's proposed objection to "standalone" contribution and endangerment findings is not procedural in nature. EPA's proposal is premised on its interpretation of the substantive requirements of § 202(a), that contribution, endangerment, and standard setting must occur at the same time because they are substantively interrelated. The next sections show that this interpretation is unlawful.

3. Factors relevant to standard setting under \S 202(a) are not relevant to determining contribution or endangerment.

EPA proposes that the standard setting must be done at the same time as the threshold contribution and endangerment finding, as various factors in the standard setting are relevant and must be considered in making the threshold findings of contribution and endangerment. EPA points to issues such as adaptation and mitigation, costs of regulating, and the beneficial impacts of GHGs when making the endangerment finding. EPA claims it must consider the cost, effectiveness, and continued propriety of its GHG regulatory

²³ 74 FR at 66501- 502.

²⁴ Id. at 66502.

program when it makes the required threshold determinations. In effect, EPA claims the statute must be interpreted as if Congress said:

The Administrator shall by regulation prescribe (and from time to time revise) standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. In exercising his judgment, the Administrator shall consider whether regulatory control of such emissions is reasonable and appropriate.

But Congress did not adopt such a provision. The various factors EPA says it must consider are legally irrelevant and are unlawful for EPA to consider in determining contribution and endangerment under § 202(a). We reiterate that § 202(a), like many other provisions in the Act, addresses federal authority to establish emission controls on source categories using a two-step approach. The first is a threshold step. EPA is to determine whether air pollution is reasonably anticipated to endanger public health or welfare and determine whether a source category contributes significantly to this air pollution. If and only if EPA makes an affirmative determination, EPA has authority to and must adopt emissions controls on the source category. Congress specifies the nature of appropriate emission controls in § 202(a). Under this two-step approach, contribution and endangerment are determined first and are separate and distinct from the subsequent determination of the appropriate emission controls. This is the approach taken by Congress in § 202, and it is mirrored by many other provisions throughout the Act addressing when EPA has authority to adopt emissions controls on sources. Under this approach, the factors that determine standard setting under § 202(a) and the impacts of the standards are irrelevant to the factors that determine contribution or endangerment.

Likewise, in 2009, EPA explained in detail why future adaptation to climate change is not relevant to determining endangerment from the air pollution. First, EPA was careful to distinguish involuntary adaptation from intentional or planned adaptation. EPA recognized that the environment was projected to change in many ways in response to increased global temperatures and climate change. As much as possible this was taken into account in determining endangerment.

EPA made several points in its discussion of adaptation. EPA explained that the threshold inquiry is whether the contribution and endangerment criteria are satisfied, and only if they are met do the criteria for regulatory action go into effect. This reflects the basic separation of two different decisions—is this a health and welfare problem that should be addressed, and if so, what are the appropriate mechanisms to address it? An approach considering adaptation and mitigation as part of an endangerment finding inappropriately combines two separate inquiries, changing the focus from determining how serious is the air pollution problem to determining how good a job are people and society likely to do in addressing or solving the problem. EPA recognized that such an approach would dramatically increase the complexity of the issues before EPA and would involve the agency in determinations that are different from the kinds of technical and scientific judgments inherent in the determination of risk. EPA pointed to the structure of CAA § 202(a) and the various other similar provisions, indicating Congress' intention to separate the question of is there a problem we need to address from the question of what the appropriate way is to address the problem. EPA also explained that the legislative history shows Congress was focused on issues of science and medicine, including issues at the frontiers of these fields. It referred to data, research resources, science and medicine, chemistry, biology, and statistics. There is no indication Congress envisioned exercising

²⁵ The discussion here incorporates all of the prior analysis of EPA's proposed interpretation.

judgment on the very different types of issues involved in projecting the actions involved in adaptation and mitigation.²⁶

The threshold step of contribution and endangerment addresses whether there is a problem from the air pollution. Section 202's provisions on standard setting address how to respond to the problem. Future, intentional societal adaptation is another aspect of addressing what might be done to address the endangerment. Intentional societal adaptation is like setting emissions standards for motor vehicles, a component of what can or should be done to address the endangerment. It is a distinctly different issue than the threshold issue of whether the air pollution endangers public health or welfare in the first place.²⁷

EPA claims its approach in 2009 was unlawful because EPA failed to consider adaptation and mitigation and costs of regulating. EPA also states that the endangerment finding's conclusions regarding extreme weather events was "fatally undermine[d]" due to the "decision to exclude adaptation and mitigation information from the analysis." Likewise with respect to sea level rise. EPA states that adaptation refers to "adjustments to the effects of climate change that lessen impacts," and mitigation refers to "reductions in emissions and global concentrations unrelated to CAA section 202(a) regulation." The CWG Draft Report EPA relies on refers to air conditioning as an adaptive measure to avoid heat mortality, and building codes and better weather predictions as adaptive measures for heat mortality, sea level rise, and extreme weather events. EPA relies on refers to air conditioning as an adaptive measures for heat mortality, sea level rise, and extreme weather events.

As discussed above, both the Supreme Court and the D.C. Circuit have been clear that the factors relevant to addressing the endangerment — setting appropriate emissions standards, or how other agencies, governmental bodies, or society in general may respond to climate change — are irrelevant to the scientific judgment that EPA must make concerning contribution or endangerment. EPA may not consider the standard setting factors of cost, cost effectiveness, or cost reasonableness in determining contribution or endangerment. EPA may not consider societal adaptation or the degree of mitigation of the air pollution's harms that an appropriate emissions control might achieve. BPA may not consider other policies of the administration. EPA's authority to determine contribution and endangerment under § 202(a) is limited to factors legally relevant to air pollution. Factors relevant to standard setting come afterwards, if EPA makes an affirmative determination on contribution and endangerment. The same applies to issues of adaptation or mitigation.

The issue of how much risk air pollution presents is distinctly different from how people or society may respond to reduce or mitigate the risk. In assessing the health risk from exposure to an air toxic, such as benzene, one looks at the likelihood of cancer occurring. One does not look at how effective current and

²⁸ 90 FR at 36302.

²⁶ 74 FR at 66512-14.

²⁷ Id.

²⁹ Id. at 36309.

³⁰ Id.

³¹ Id. at 36303.

³² A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate, Climate Working Group, Department of Energy, Washington, DC, July 23, 2025. (CWG Draft Report) ix, 112-113.

³³ Coalition for Responsible Regulation, 684 F.3d at 117-118 ("As in Massachusetts v. EPA, a "laundry list of reasons not to regulate" simply has "nothing to do with whether greenhouse gas emissions contribute to climate change." Id. at 533–34, 127 S.Ct. 1438. The additional exercises State and Industry Petitioners would have EPA undertake—e.g., performing a cost-benefit analysis for greenhouse gases, gauging the effectiveness of whatever emission standards EPA would enact to limit greenhouse gases, and predicting society's adaptive response to the dangers or harms caused by climate change—do not inform the "scientific judgment" that § 202(a)(1) requires of EPA..... The statute speaks in terms of endangerment, not in terms of policy, and EPA has complied with the statute." (emphasis added)).

future treatments for leukemia may be at prolonging the life of a cancer patient, or look at how practical it would be for people to move to a different location as a way to reduce the risk from exposure to a harmful carcinogen.³⁴ Similarly, in addressing the risk to children from exposure to lead from gasoline, the D.C. Circuit looked at EPA's evaluation of the risk from exposure via inhalation and ingestion of dirt. Neither the agency nor the court considered how effective parental controls could be in keeping children indoors or keeping them from ingesting dirt while playing outside.³⁵ Likewise, when EPA determines the appropriate level for a NAAQS for ozone it considers the risk of adverse harm from exposure. EPA does not consider how effective asthma inhalers could be at reducing the harm from asthma attacks and does not consider whether people could stay indoors more often than they otherwise would to reduce the risk of harm.³⁶

EPA's proposal fails several basic administrative law requirements. EPA makes various assertions about the need to consider adaptation and mitigation but fails to provide any factual basis to explain how this is feasible or practical, or how EPA could take any such evidence into consideration. EPA fails to explain how it would answer numerous basic questions that its proposal raises. How far into the future should EPA project adaptation and mitigation? What types of adaptation and mitigation would EPA need to consider? How would it evaluate such projections (cost? effectiveness? probability of occurrence?)?³⁷ Would adaptation and mitigation have to remove all anticipation of endangerment to avoid an affirmative determination on endangerment?³⁸ How does this consideration fit with the preventive nature of the Act and this provision?

The absence of factual evidence and analysis and the absence of explanation of how adaptation and mitigation could and should be taken into account in an endangerment finding is a basic failing of reasoned decision-making. In addition to the lack of legal basis for EPA's proposed interpretation concerning adaptation and mitigation, the proposal fails basic tenets of reasoned administrative decision-making. It is a proposed interpretation based on superficial assertions with nothing underlying it or supporting it.

³⁴ See § 112(f)(2), where Congress codified prior case law and used risk from exposure as the criteria, not risk from exposure adjusted by projections of treatment measures or measures to mitigate risk. Also see *NRDC v. EPA*, 824 F. 2d 1146, 1164 (D.C. Cir. 1987) (en banc) ("We find that the congressional mandate to provide "an ample margin of safety" "to protect the public health" requires the Administrator to make an initial determination of what is "safe." **This determination must be based exclusively upon the Administrator's determination of the risk to health at a particular emission level"and "without any consideration of technologically feasible controls.**" Id. at 1163-65.) (emphasis added)

³⁵ Ethyl Corp.v. EPA, 541 F. 2d 1, 30-33(D.C. Cir. 1976).

³⁶ Murray Energy v. EPA, 936 F. 3d 597, 606, 609, 611-613 (D.C. Cir. 2019).

³⁷ One recent study projects that resilience adaptation costs for buildings from extreme weather events alone will total \$38 trillion by 2050, with \$6 trillion for mitigation needed as well. Kotz, M., Levermann, A. & Wenz, L. "The economic commitment of climate change," *Nature* 628, 551–557 (2024)("spending on building resilience to damaging weather extremes will exceed transition spending sixfold, with US\$38 trillion needed to tackle the effects of "committed" climate damages, compared to estimated mitigation costs of US\$6 trillion").

³⁸ For example, the CWG Draft Report at 113 refers to increased use of air conditioning and stronger building codes as examples of future adaptation. Consider the city of Phoenix, which has ample air conditioning. The risk of severe injury from extreme heat is nevertheless present. See https://www.nytimes.com/2024/07/14/us/heat-wave-pavement-burns.html ("In 2022, the Arizona Burn Center at Valleywise Health Medical Center in Phoenix, the largest burn center in the Southwest, admitted 85 patients for contact burns over the summer. Last year, as Phoenix sweltered through 31 straight days of temperatures above 110 degrees, that number climbed to 136 patients, 14 of whom died. This year, the center has already treated 50 patients, and four of them died") (emphasis original). Miami Beach has building codes, which, as the DOE Report notes, have been made more stringent. This doesn't change the inherent risk from climate endangerment. See https://www.businessinsider.com/coastal-properties-expensive-problem-revealed-miami-sinking-beachfront-high-rises-2025-1 ("In a study published in the journal Earth and Space Science in December, researchers found that 35 buildings along the coasts of Miami's barrier islands sunk into the ground by 2 to 8 centimeters between 2016 and 2023. This sinking phenomenon, called subsidence, is happening "almost everywhere that we look").

EPA claims that the text of § 202(a) requires that EPA take into consideration technology and other factors related to emission standards when making determinations on contribution and endangerment. This misreads the text of § 202(a).

EPA argues that "Section 202(a)(2) expressly provides that "[a]ny regulation prescribed under paragraph (1) of this subsection . . . shall" provide adequate time for "the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period." 64 CAA section 202(a)(1) authorizes the Administrator to "by regulation prescribe" standards "in accordance with the provisions of this section" and does not separately authorize standalone findings, meaning any action taken "under paragraph (1) of this subsection" is subject to the considerations in paragraph (2)." ³⁹

The regulations referred to in § 202(a)(2) are the emissions standards EPA sets under § 202(a)(1). Section 202(a)(1) directs that the Administrator "shall by regulation prescribe ... standards applicable to the emission of any air pollutant from ... new motor vehicles or new motor vehicle engines." The reference to "prescribe" "by regulation" refers to an action EPA must take – "EPA shall by regulation prescribe" – and the action that § 202(a)(1) mandates is setting emissions standards. What EPA has to "prescribe" by regulation are emission standards.

This mandate to set emission standards arises only if EPA makes affirmative determinations on contribution and endangerment. There is no mandate in § 202(a)(1) that EPA make affirmative determinations, just the opposite. The provision clearly directs EPA to use its scientific judgment in making either affirmative or negative determinations. If EPA makes affirmative determinations, then EPA's obligation to prescribe standards arises. At that point EPA must "by regulation prescribe" emission standards for the relevant air pollutant. The reference in § 202(a)(2) to a "regulation prescribed" under § 202(a)(1) refers to the emissions standards that EPA "shall ... prescribe" by regulation. It does not refer to the separate threshold action EPA takes to make determinations on contribution and endangerment.⁴⁰

EPA claims that "EPA did not consider "carbon leakage," which "refers to the situation that may occur if, for reasons of costs related to climate policies, businesses were to transfer production to other countries with laxer emission constraints . . . [and] could lead to an increase in their total emissions." Foreign governments have recognized that carbon leakage can mitigate or even lead to an increase in total emissions which would significantly impact the claimed benefits of the regulatory actions. Accordingly, we propose that refusing to consider these foreseeable consequences was inconsistent with the statutory scheme."

This claimed inconsistency derived from EPA's severing of the standard setting from the contribution and endangerment determinations. As discussed above, factors relevant to standard setting are irrelevant to determining the science-based issues of contribution and endangerment. Clearly EPA could consider this kind of issue in the standard setting for motor vehicles, but there is no reason to think it is relevant to the business of manufacturing new motor vehicles. The standards apply to the product, not the business, and apply to imported vehicles as well as vehicles produced domestically. EPA fails to provide any evidence or argument that the GHG standards for new motor vehicles would have any effect on the carbon leakage EPA refers to. This may or may not be an issue for GHG standards that apply to facilities, but it's hard to see how it has any relevance in the context here, emissions standards for new motor vehicles.

³⁹ 90 FR at 36303.

⁴⁰ EPA's reliance on *Michigan v. EPA*, 576 U.S. 743, 753 (see 90 FR 25765, fn.104) is also inapposite. That case concerns a very different statutory provision that calls for EPA to determine if regulations are "necessary and appropriate" with respect to emissions of HAPs from electric utility steam generating units.

⁴¹ 90 FR at 36305.

The courts are clear that EPA's "judgment" is constrained to only consider the factors that are legally relevant when determining contribution and endangerment. It is not permission to consider a wide range of additional factors and allegedly desirable policy considerations.

EPA's proposed interpretation is no more than a backdoor way to add to § 202(a) a criterion calling for EPA to decide whether, in EPA's judgment, it is reasonable and appropriate to regulate GHG emissions to address global climate change. Congress did not adopt such a provision in § 202(a). Congress decided that if emissions from motor vehicles contributed to air pollution that endangers, then EPA is required to establish standards applicable to such emissions. Congress gave EPA large discretion in what standards to set, but Congress decided when EPA was required to set standards. EPA's proposed interpretation takes that decision away from Congress and reserves it to EPA's judgment. That is contrary to § 202(a).

As discussed above, the Act's Good Neighbor SIP provision does not support EPA's proposed interpretation, it undermines it. The Good Neighbor provision is distinctly different from the contribution and endangerment finding in § 202(a). The contribution finding in the Good Neighbor provision performs two functions – it identifies whether the state has to include provisions in its SIP to control emissions, and it identifies the exact amount of emissions that must be controlled. This is distinctly different from § 202(a). The SIP provision combines two questions (duty to adopt controls and amount of reductions required by the controls), while these two questions are kept separate in § 202(a) (authority to adopt controls, based on contribution/endangerment determination; and achievement of emissions controls through the separate standard setting provision). The Good Neighbor provision and other SIP provisions concerning transport make it clear that Congress knew how to authorize EPA to consider factors related to emissions control when making a contribution or endangerment finding. If it wanted to, it knew how to and could have. Congress did not do so in § 202(a), and that is telling. Likewise § 211(c)(2)(A) shows that Congress knew how to direct EPA to consider and evaluate different kinds of control strategies before authorizing EPA to adopt fuel-based controls. Congress did not do that in § 202(a).

Under EPA's proposed interpretation, it is required to evaluate the effectiveness and other aspects of potential control strategies as part of deciding whether motor vehicle emissions contribute to air pollution that endangers. EPA does not explain how this would be done. For example, would EPA look only at the standards that could be adopted for the next few model years? Would EPA be required to project the potential for future advances in technology that might warrant greater emission reductions? How far out would EPA have to project the effectiveness, cost, and other factors of future standards? This interpretation calls for EPA to either make future projections that are largely speculation or to rely on no more than near-term projections that can be made with relative accuracy. Either way distorts the decision-making in ways that agency practice has shown to be wrong. EPA has almost 50 years of experience in setting standards for motor vehicles. In the 1970s, 1980s, 1990s, or even later, could EPA have accurately projected the advances in control strategies that could be achieved in aftertreatment for gasoline powered vehicles? Or the aftertreatment of particulate matter (PM) traps and selective catalytic reduction (SCR) for diesel-powered vehicles? Or the growing use of electric power to propel vehicles in whole or in part? The answer is clearly no. EPA's historical practice in this area shows that having EPA decide whether to address an air pollution problem on EPA's projection of the future costs and effectiveness and feasibility of control technologies is a futile exercise, and one that is obviously biased to produce a negative decision.

⁴² States must "prohibit[]... amounts [of any air pollutant] which will contribute significantly to [nonattainment or maintenance of attainment in a downwind State]" Section 110(a)(2)(D). See the discussion of this provision above.

That is certainly why EPA is proposing this interpretation – it is looking for any plausible or implausible argument that would allow it to say it has no authority to regulate GHGs from motor vehicles. However, the interpretation EPA has latched onto is not how Congress constructed § 202(a).

The Supreme Court has recognized this as well. In a related context, involving redressability and standing, the Court said:

"But EPA overstates its case. Its argument rests on the erroneous assumption that a small incremental step, because it is incremental, can never be attacked in a federal judicial forum. Yet accepting that premise would doom most challenges to regulatory action.

Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop. See Williamson v. Lee Optical of Okla., Inc., 348 U. S. 483, 489 (1955) ("[A] reform may take one step at a time, addressing itself to the phase of the problem which seems most acute to the legislative mind"). They instead whittle away at them over time, refining their preferred approach as circumstances change and as they develop a more nuanced understanding of how best to proceed. Cf. SEC v. Chenery Corp., 332 U. S. 194, 202 (1947) ("Some principles must await their own development, while others must be adjusted to meet particular, unforeseeable situations"). That a first step might be tentative does not by itself support the notion that federal courts lack jurisdiction to determine whether that step conforms to law." Massachusetts, 549 U.S. at 523-524. (emphasis supplied)

4. Section 202(a) does not authorize EPA to determine whether emissions from motor vehicles contribute sufficiently enough to the endangerment to warrant regulatory control.

EPA proposes that it was improper to sever the contribution and endangerment findings, and that these determinations, like the standard setting, must be implemented as a "cohesive whole." According to EPA, this means that it is not enough to determine that the air pollution is reasonably anticipated to endanger public health or welfare. EPA also must determine whether emission from motor vehicles contribute to this endangerment in a direct enough and to a large enough degree to warrant regulatory controls.

EPA claims that contribution and endangerment must be considered in a "single causal chain," and the "emission [from the vehicles at issue in the standard setting] must cause or contribute to the danger posed by the air pollution to a sufficient extent to satisfy the standard for regulation." EPA is required to determine whether emissions from motor vehicles as a whole, as well as from classes of vehicles being regulated, had "a more than de minimis effect on the danger identified with respect to elevated concentrations of GHGs in the upper atmosphere." EPA claims it is required to "consider whether emission standards for new motor vehicles would be futile as a means to address the identified dangers of GHG emissions from all anthropogenic sources."

In effect, EPA proposes that § 202(a) should be interpreted as if it were written:

The Administrator shall by regulation prescribe (and from time to time revise) standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute *sufficiently enough* to, ..., *endangerment from* air pollution which may reasonably be anticipated to endanger public health or welfare.

⁴³ 90 FR at 36303, 304.

⁴⁴ Id. at 36304.

⁴⁵ Id. at 36305.

But that is not the provision Congress adopted. Congress directed EPA to determine contribution to air pollution, not contribution to the endangerment from the air pollution.⁴⁶

At its core, this aspect of EPA's proposal is the same as the prior claim that standard setting must be considered in making contribution and endangerment findings. The only purpose in determining whether emission from motor vehicles contribute sufficiently enough to the risk from the air pollution is to determine whether it is reasonable and appropriate to set standards to control the vehicle emissions. Instead of arguing the controls are too expensive, EPA is arguing the risk added by motor vehicles emissions is not large enough to warrant regulation. This is clear from EPA's claim that it must "consider whether emission standards for new motor vehicles would be futile as a means to address the identified dangers of GHG emissions from all anthropogenic sources."

As discussed above, these standard setting factors are relevant in determining what should be done to address the climate change problem, but they are legally irrelevant in determining the threshold questions of contribution and endangerment. Congress established the contribution and endangerment criteria as the threshold test to determine whether there was an air pollution problem that EPA should address. It established the standard setting provisions to answer a different and separate question – how should EPA address the air pollution problem.

The additional role that EPA calls for the contribution determination to play – requiring EPA to decide whether motor vehicles contribute enough to the risk from the air pollution to warrant standard setting – is the same role that EPA proposes in claiming that standard setting has to be taken into account when making the contribution and endangerment findings. EPA assigns to itself the role of determining when a regulatory control program is appropriate and reasonable. Congress did not assign this role to EPA – Congress decided that standards should be set if vehicle emissions contributed to the air pollution and the air pollution endangers. Congress gave EPA broad discretion on what standards to set, but Congress decided the threshold question whether EPA was required to set standards.

EPA proposes to rescind the determinations made in 2009, but fails to explain how EPA is now evaluating the sufficiency of the risk from motor vehicles. EPA presents no modeling or any other evidence to show or argue that under its proposal the risk from motor vehicle emissions would not be sufficient enough to warrant regulation. EPA appears to rely on a claim that removing light-duty vehicles would make no measurable impact on the global warming trend. EPA states that motor vehicle emissions "did not themselves contribute to a danger in any meaningful sense" and "reducing GHG emissions from all vehicles and engines in the United States to zero would not have a scientifically measurable impact on GHG emission concentrations or global warming potential (CWG Draft Report at 130)."

The CWG Draft Report claims that "the impact of reducing the rate of global warming by eliminating U.S. [cars and light-duty trucks] CO₂ emissions would be far below the limits of measurability...Consequently, in contrast to the case of local air contaminants like particulates and ozone, even the most aggressive

⁴⁶ Congress wanted EPA to "assur[e] consideration of the cumulative impact of all sources of a pollutant in setting ambient and emission standards, not just the extent of the risk from the emissions from a single source or class of sources of the pollutant." H.R. Rep. No. 95-294 at 51. Congress mandated consideration of the cumulative impacts of all sources aggregated, and did not mandate two considerations – consideration of the impacts from all the sources that make up the air pollution plus consideration of the risk from the single class of sources for which standards are set.

⁴⁷ 90 FR at 36305.

⁴⁸ Id.

regulatory actions on GHG emissions from U.S. vehicles cannot be expected to remediate alleged climate dangers to the U.S. public on any measurable scale." This derives from the scale of the global air pollution and impact on global warming.

It is erroneous to discuss this in terms of measurability and to make claims concerning measurability. Impacts of reductions in specific amounts of GHG emission on attributes such as global temperature are not something that are directly measured. However, such impacts are quantifiable through estimation or modeling. Claiming the impact of this amount of reductions is "immeasurable" implies a near-zero effect that cannot be quantified, which is not a supportable claim and is misleading.

One measures the impact of a change in X on an attribute Y by measuring Y before and after the change in X, while keeping all other factors constant. For example, one measures the impact of adding a certain amount of salt to water on the water's boiling temperature by measuring the water's boiling temperature before adding the salt, measuring it after adding the salt, and keeping all other factors that affect boiling temperature the same, e.g., keeping the altitude/air pressure the same. One cannot follow that procedure when "measuring" the impact of a change in vehicle emissions on global temperatures. It is not a laboratory experiment that can be done. Modeling is the appropriate tool to use to try to quantify the impact of GHG reductions on global temperature.

Likewise, in almost all cases one cannot measure the health impact of a reduction in emissions. Take the case of the impact of changes in PM levels on mortality levels. Sometimes there are fortuitous circumstances that lead to an almost laboratory-like setting, such as when an industrial facility shuts down, and mortality and PM levels are measured both before and after the facility shuts down and other relevant factors are basically constant before and after. This can provide what is called a natural experiment. Due to ther than this kind of unusual real-world situation, the impact of reductions in PM or ozone or other criteria pollutants on mortality or other health attributes is modeled, not measured. The modeling is subject to close scrutiny and typically becomes more and more reliable at predicting the impact of emissions reductions as the body of empirical and other science grows and expands in depth and comprehension. Likewise the impacts of a certain reduction in emissions of GHGs on global temperature would be modeled, not measured. EPA has done this in prior motor vehicles standard setting rulemakings. One can argue about the importance or value to place on the modeled impacts, but one must accept that the appropriate approach is to model any such impact. It is not appropriate to claim something has no impact because it is not directly measurable or would have no measurable impact.

The CWG Draft Report cited by EPA states that emissions from light-duty vehicles "account for only 3.0 percent of global energy-related CO₂ emissions," and reducing all the emissions from these vehicles:

"would also reduce the overall warming trend by at most about 3 percent. For the period 1979-2023, which has the most extensive global coverage of a variety of weather data types, warming trends are determined to a precision of about ± 15 percent, so the impact of reducing the rate of global

⁴⁹ CWG Draft Report at 130.

⁵⁰ See 71 FR 61144, 61186, 61223 (October 17, 2006); EPA "Air Quality Criteria for Particulate Matter," EPA/600/P-95/0016F, April 1996, Vol. III. pp. 12-96, 12-115, 12-330.

⁵¹ See, e.g. 75 FR at 25496 (May 7, 2010).

⁵² See 90 FR at 36505, fn.70. The referenced article discusses modeled global temperature changes from various emissions reduction scenarios, and describes the author's view on the importance or value of such reductions and impacts.

warming by eliminating U.S. vehicle CO₂ emissions would be far below the limits of measurability."⁵³

The CWG Draft Report fails to cite any source for the values that it cites or further explain its analysis, but it appears that it is referring to a scenario where future emissions from these vehicles were eliminated. To determine the impact of this change in emissions on global temperatures — a key metric of climate change — one would model or estimate future global temperatures with and without the change in emissions and compare the difference in modeled temperatures. The report appears to assume that removing 3% of global energy-related CO₂ emissions would lead to a reduction in the future warming trend of up to 3% (over some time frame which is not specified), which it claims falls within the +/-15% precision for past warming trend and is therefore not measurable.

This appears faulty. The CWG Draft Report appropriately recognizes that a 3% reduction in global energy-related CO₂ emissions would reduce the future global warming trend by up to 3%. That means a future warming trend that included U.S. light-duty vehicle emissions (a projected level of global temperature with a band around it of $\pm 15\%$ would adjust downward if those emissions were removed, and there would be a new, lower warming trend (a lower projected future global temperature, lower because of the change in emissions, with a \pm 15% band around it). The change of emissions would lower the entire band of the projected warming trend. The change in the warming trend is not somehow lost in the band of the prior warming trend. It is a new warming trend, positioned lower on the graph than the prior warming trend to reflect the lower projected global temperature resulting from the change in emissions. There would be overlap between the +/-15% bands for the prior projected warming trend with the vehicle emissions and the lower projected warming trend without the emissions, but they would clearly be different warming trends. This change in the warming trend would not be measurable, because you cannot measure two future warming trends with and without the change in emissions. But there would be a clear, quantifiable, and important impact shown in the change in the modeled warming trend based on the change in emissions. In addition to this significant substantive error, we note further that the failure of the Report to disclose its methodology – leaving commenters to guess at the intended meaning – is a violation of CAA § 307(d)(3)(B), which requires proposals to set forth "the methodology used... in analyzing the data." 54

It is important to point out that EPA (and the CWG Draft Report it relies upon) fails to mention how the most recent body of science characterizes the implications of incremental emission increases or decreases and related incremental increases or decreases in global warming. The congressionally-mandated Fifth National Climate Assessment (2023) stated "[e]ach additional increment of warming is expected to lead to more damage and greater economic losses compared to previous increments of warming, while the risk of catastrophic or unforeseen consequences also increases." Likewise, the IPCC (2023) stated "[w]ith every additional increment of global warming, changes in extremes continue to become larger."

In addition, the D. C. Circuit rejected a similar claim in Catawba County, N.C v. EPA. The Court said:

⁵³ CWG Draft Report at 130.

⁵⁴ Also see Dessler, A.E. and R.E. Kopp (Ed.) (2025), "Climate Experts' Review of the DOE Climate Working Group Report." DOI: to be assigned, URL to be assigned, (Comment submitted to the U.S. Department of Energy, docket number DOE-HQ-2025-0207, in response to their report "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate") at pp. 406-416, esp. 415-416.

^{55 5}th National Climate Assessment, Report-In-Brief (2023), p. 24. https://toolkit.climate.gov/sites/default/files/2025-07/NCA5_2023_FullReport.pdf

⁵⁶ IPCC "Climate Change 2023 Synthesis Report," p.69. https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf

"[P]etitioners insist that the verb "contribute" necessarily connotes a significant causal relationship, meaning that EPA may not designate a county as contributing to nonattainment if "corrective measures in [the county] will do nothing to address the problem or help achieve compliance in the nonattainment area." We reject both the major and the minor premise. ... But even were we to think that "contribute" unambiguously means "significantly contribute," we still disagree that "significantly contribute" unambiguously means "strictly cause." Given that the statute uses the word "contribute" and that a contribution may simply exacerbate a problem rather than cause it, we see no reason why the statute precludes EPA from determining that a county's addition of PM2.5 into the atmosphere is significant even though a nearby county's nonattainment problem would still persist in its absence. In fact, a contrary interpretation of "contribute" would effectively preclude a nonattainment designation for any attaining county when the cause of the violation is metropolitan-wide. We may not interpret "contribute" in a way that does such violence to section 107(d)'s very purpose." "57

5. Section 202(a) does not authorize EPA to determine whether emissions from motor vehicles contribute in a direct enough way to the endangerment to warrant regulatory control.

EPA also claims that it must show that the emissions from motor vehicles have a direct enough causal connection to the endangerment to satisfy the contribution criterion. EPA claims that background legal principles of "proximate cause" apply under § 202(a), such that "emissions from new motor vehicles and new motor vehicle engines in the United States do not have a sufficiently close connection to the adverse impacts identified in the Endangerment Finding to fit within the legal meaning of "cause" or "contribute.""⁵⁸ EPA claimed that "global climate change concerns involve analyzing causal relationships that are too uncertain, too remote, and too confounded by intervening and confounding factors to fit within the terms cause" and "contribute" as used in CAA section 202(a)."⁵⁹ In effect, EPA proposes that § 202(a) should be interpreted as if it was written:

The Administrator shall by regulation prescribe (and from time to time revise) standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute *directly enough* to, ..., *endangerment from* air pollution which may reasonably be anticipated to endanger public health or welfare.

But that is not the provision Congress adopted. Congress directed EPA to determine contribution to air pollution, not contribution to the endangerment from the air pollution.

EPA is proposing to rescind the 2009 contribution finding. EPA did not make a finding of causation in 2009, nor has it in any subsequent GHG findings. The meaning of the term "cause" is not before EPA. The background principles of proximate causation are not relevant to evaluate contribution.

More directly, principles of proximate cause are not relevant to the judgments EPA must make under § 202(a). Proximate cause is a creature of the common law of torts. The law of torts involves determining when one person is liable to pay damages to a second person for injuries they caused to the second person. That has nothing to do with the scope of EPA's authority under § 202(a), including its obligation to determine contribution of GHG emissions from motor vehicles to global GHG air pollution. The cases

⁵⁷ Catawba County, 571 F.3d 20, 38-39 (D.C. Cir. 2009).

⁵⁸ 90 FR at 36301.

⁵⁹ Id.

cited by EPA make this clear. All of the cases involve private parties suing other parties. One party alleges the other party's conduct was prohibited by statute, that conduct caused injuries to the party, and the party now seeks monetary damages.

EPA cites various cases to support its approach. ⁶⁰ Bank of Am. Corp. v. City of Miami, 581 U.S. 189 (2017), involves a city suing a bank for damages from injuries caused by discriminatory lending practices, conduct prohibited by the Fair Housing Act. The Court said:

"The remaining question is one of causation: Did the Banks' allegedly discriminatory lending practices proximately cause the City to lose property-tax revenue and spend more on municipal services? The Eleventh Circuit concluded that the answer is "yes" because the City plausibly alleged that its financial injuries were foreseeable results of the Banks' misconduct. We conclude that foreseeability alone is not sufficient to establish proximate cause under the FHA and therefore vacate the judgment below.

It is a "well established principle of [the common] law that in all cases of loss, we are to attribute it to the proximate cause, and not to any remote cause." Lexmark, 572 U.S., at ——, 134 S.Ct., at 1390. We assume Congress "is familiar with the common-law rule and does not mean to displace it sub silentio" in federal causes of action. Ibid. A claim for damages under the FHA—which is akin to a "tort action," Meyer v. Holley, 537 U.S. 280, 285, 123 S.Ct. 824, 154 L.Ed.2d 753 (2003)—is no exception to this traditional requirement. "Proximate-cause analysis is controlled by the nature of the statutory cause of action. The question it presents is whether the harm alleged has a sufficiently close connection to the conduct the statute prohibits." Lexmark, supra, at ——, 134 S.Ct., at 1390.

In these cases, the "conduct the statute prohibits" consists of intentionally lending to minority borrowers on worse terms than equally creditworthy nonminority borrowers and inducing defaults by failing to extend refinancing and loan modifications to minority borrowers on fair terms. The City alleges that the Banks' misconduct led to a disproportionate number of foreclosures and vacancies in specific Miami neighborhoods. These foreclosures and vacancies purportedly harmed the City, which lost property-tax revenue when the value of the properties in those neighborhoods fell and was forced to spend more on municipal services in the affected areas." (emphasis added) 581 U.S. at 201-202.

Lexmark Int'l, Inc. v. Static Control Components, Inc., 572 U.S. 118 (2014) involves one business suing another for damages from injuries caused by false advertising, conduct prohibited by the Lanham Act. The Court said:

"Second, we generally presume that a statutory cause of action is limited to plaintiffs whose injuries are proximately caused by violations of the statute. For centuries, it has been "a well established principle of [the common] law, that in all cases of loss, we are to attribute it to the proximate cause, and not to any remote cause." Waters v. Merchants' Louisville Ins. Co., 11 Pet. 213, 223, 9 L.Ed. 691 (1837); see Holmes, 503 U.S., at 287, 112 S.Ct. 1311 (SCALIA, J., concurring in judgment). That venerable principle reflects the reality that "the judicial remedy cannot encompass every conceivable harm that can be traced to alleged wrongdoing." Associated Gen. Contractors, 459 U.S., at 536, 103 S.Ct. 897.

..

⁶⁰ Id. at 36301, fn. 57.

Congress, we assume, is familiar with the common-law rule and does not mean to displace it sub silentio. We have thus construed federal causes of action in a variety of contexts to incorporate a requirement of proximate causation. See, e.g., Dura Pharmaceuticals, Inc. v. Broudo, 544 U.S. 336, 346, 125 S.Ct. 1627, 161 L.Ed.2d 577 (2005) (securities fraud); Holmes, supra, at 268–270, 112 S.Ct. 1311 (RICO); Associated Gen. Contractors, supra, at 529–535, 103 S.Ct. 897 (Clayton Act). No party disputes that it is proper to read § 1125(a) as containing such a requirement, its broad language notwithstanding." (emphasis added) 572 U.S. at 132.

Univ. of Tex. Sw. Med. Ctr. v. Nassar, 570 U.S. 338 (2013) involves an employee suing their employer for damages for injuries caused by conduct prohibited by the Civil Rights Act of 1964. The Court said:

"When the law grants persons the right to compensation for injury from wrongful conduct, there must be some demonstrated connection, some link, between the injury sustained and the wrong alleged. The requisite relation between prohibited conduct and compensable injury is governed by the principles of causation, a subject most often arising in elaborating the law of torts. This case requires the Court to define those rules in the context of Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq., which provides remedies to employees for injuries related to discriminatory conduct and associated wrongs by employers. [...] This case requires the Court to define the proper standard of causation for Title VII retaliation claims. Causation in fact—i.e., proof that the defendant's conduct did in fact cause the plaintiff's injury—is a standard requirement of any tort claim, see Restatement of Torts § 9 (1934) (definition of "legal cause"); § 431, Comment a (same); § 279, and Comment c (intentional infliction of physical harm); § 280 (other intentional torts); § 281(c) (negligence). This includes federal statutory claims of workplace discrimination. Hazen Paper Co. v. Biggins, 507 U.S. 604, 610, 113 S.Ct. 1701, 123 L.Ed.2d 338 (1993) (In intentional-discrimination cases, "liability depends on whether the protected trait" "actually motivated the employer's decision" and "had a determinative influence on the outcome"); Los Angeles Dept. of Water and Power v. Manhart, 435 U.S. 702, 711, 98 S.Ct. 1370, 55 L.Ed.2d 657 (1978) (explaining that the "simple test" for determining a discriminatory employment practice is "whether the evidence shows treatment of a person in a manner which but for that person's sex would be different" (internal quotation marks omitted))." 570 U.S. at 342. (emphasis added)

All of these cases involve one party suing another party for damages, alleging injuries caused by conduct that was prohibited by a federal statute. In all of these cases the Court pointed to the common law of torts as a background to determine the causation requirement implied by the statute's federal cause of action. These cases are irrelevant to interpreting the scope of EPA's authority under § 202(a). EPA's determinations on contribution and endangerment under § 202(a) have nothing to do with someone suing someone else to collect damages for injuries caused by conduct prohibited by a federal statute. It should be obvious these cases and the tort principles they rely upon are irrelevant here.

EPA improperly relies on this tort law principle to claim the alleged uncertain link between GHG emissions from motor vehicles and damage from climate change mean the contribution criterion is not met. EPA claims that "[a]s a general matter, there is a point at which harm no longer has a sufficiently close connection to the relevant conduct to reasonably draw a causal link. We propose that emissions from new motor vehicles and new motor vehicle engines in the United States do not have a sufficiently close

connection to the adverse impacts identified in the Endangerment Finding to fit within the legal meaning of "cause" or "contribute.""61

EPA seemingly is asking whether motor vehicle emissions (the analogy to prohibited conduct under tort analysis) have a direct enough causal link to the damage caused by the air pollution (the analogy to harm to a private party under tort analysis). But this is not a tort case. This is not a case of one party suing motor vehicle owners or manufacturers for damages caused by emissions that the statute prohibits, where the directness of the link between the emissions and the injuries is relevant. Section 202(a) does not call for the kind of analysis EPA points to. Proximate cause and other aspects of tort law are of no import here.

EPA's proposal also unlawfully mixes the contribution determination and the separate endangerment determination. Section 202(a), like many other provisions in the Act, establishes a two-step analysis for determining whether EPA has authority to adopt controls for a source category. EPA must judge whether the air pollution is reasonably anticipated to endanger public health or welfare. EPA also must judge whether a source category contributes to this air pollution. These judgements are to be based on science not policy and not issues concerning the emissions controls that can only be adopted if an affirmative determination is made. The endangerment and contribution judgments are separate and distinct from each other and from the judgments involved in setting controls if an affirmative determination is made.

EPA improperly conflates the contribution and endangerment determinations in its proposal. EPA proposes that "global climate change concerns involve analyzing causal relationships that are too uncertain, too remote, and too confounded by intervening and confounding factors to fit within the terms "cause" and "contribute" as used in CAA section 202(a)."62

EPA is mixing up the issue of contribution by motor vehicles with the separate issue of endangerment from the air pollution. The uncertainties and remoteness and confounding by other factors concerns science and the evidence used to determine whether the air pollution endangers public health or welfare. That is not relevant to the separate issue of contribution to the air pollution from motor vehicles.⁶³

EPA seems to claim there needs to be a direct enough link showing that emissions from motor vehicles cause a sufficient enough degree of the endangerment to public health or welfare from the overall GHG air pollution. The issue before EPA is not whether there is a direct enough causal chain between motor vehicle emissions and the endangerment to public health and welfare. The relevant causal link is between the air pollution and the endangerment of public health or welfare. Motor vehicle emissions only come into play in the contribution determination, which does not include a criterion of causing danger or contributing to the danger to some unspecified degree.

A simple example makes this clear. Assume three sources each emit one third of the total emissions that make up the air pollution. The resulting concentration of the air pollution is high enough that it makes the air pollution dangerous, but the concentrations contributed by each source would not by itself be dangerous.

⁶¹ Id. at 36301.

⁶³ In addition, EPA fails to account for the increasing certainty in the science concerning the dangers presented by GHG air pollution levels. For example, the IPCC's 2023 Sixth Assessment Report (found at https://www.ipcc.ch/report/ar6/syr/ downloads/report/IPCC_AR6_SYR_SPM.pdf) finds clear causal linkages from emissions to damages and warns that limiting global warming to 1.5°C and 2°C involves rapid, deep and in most cases immediate greenhouse gas emission reductions from all sources and sectors, particularly from CO₂ from fossil fuel combustion.

The air pollution is dangerous, and contributing one third of the emissions is clearly a contribution to the air pollution. There is no requirement that a source's emissions by themselves in isolation be dangerous.

EPA also fails to recognize that a million metric tons (MMT) of one kind of GHG emitted by motor vehicles acts the same way as an MMT of the same kind of GHG emitted by any other source, whether domestic or global. The motor vehicle tons end up well mixed in the atmosphere along with all of the tons emitted by other domestic and international sources.⁶⁴ The endangerment comes from the aggregate concentration of GHGs in the atmosphere, the air pollution. In determining whether the emissions from motor vehicles contribute to the total amount of GHGs in the atmosphere comprising the air pollution, the location of all of the other sources of GHGs is irrelevant to making a judgment about the degree of contribution from motor vehicles.

6. EPA did not improperly assign emissions from all other sources to motor vehicles.

EPA proposes that the 2009 interpretation is not "consistent with the language of CAA section 202(a) and the structure of the CAA, which requires making distinct findings for regulating distinct types of emission sources and authorizes different regulatory tools when such standards are met," and instead of making such distinct findings "[t]he Endangerment Finding effectively attributed the total GHG emissions coming from all of these various distinct sources within the United States, as well as from all international sources, to the mobile sources regulated under CAA section 202(a) without having made the requisite determinations for any of those sources and without considering the different regulatory tools Congress authorizes for those sources as compared to CAA section 202(a) sources."

It is somewhat hard to respond to this claim as it is almost impossible to know what it means. Yes, the Act has separate provisions addressing various kinds of sources, and Congress structured those provisions similar to § 202(a) – a threshold requirement that EPA determine cause or contribute and endangerment before it has authority to adopt controls, other provisions on the nature of controls EPA was authorized to adopt if and only if the threshold determinations were made, and provision on whether or not EPA was required to adopt controls. These other provisions are separate and distinct from § 202(a), and § 202(a) makes no reference to them. They provide context, showing Congress adopted a similar approach across the Act, but nothing in § 202(a) ties them in any way to the threshold determination in § 202(a).

Nowhere in the 2009 threshold determinations of contribution and endangerment did EPA assign or attribute any emissions from any other source to motor vehicles. The contribution finding estimated GHG emissions from U.S. motor vehicles by looking at emissions from just motor vehicles. In the contribution analysis, EPA compared U.S. motor vehicle emissions to other groups of emissions — total global GHG emissions, total United States emissions and total emissions from various other countries, and emissions from other source categories in the United States. This was a comparison to motor vehicle emissions; no emissions from other sources were in any way assigned to motor vehicles. In the endangerment analysis, EPA looked at global concentrations of GHGs, past and projected global temperature trends, and analysis of current and projected impacts across numerous parts of society from the temperature trends. EPA never claimed that all identified threats to public health and welfare caused by GHG-induced climate change were solely due to U.S. vehicle emissions. Nowhere in this process did EPA assign emissions to U.S. motor vehicles.

30

⁶⁴ This comparison assumes the same pollutant is involved, e.g. an MMT of CO2 from one source compared to an MMT of CO2 from another source, or an MMT of CH4 compared to an MMT of CH4 from another source. ⁶⁵ Id. at 36304.

Since EPA's proposal refers to emissions from the aggregate of domestic and foreign sources, and the endangerment analysis concerns the global concentration of GHGs, perhaps EPA means that the air pollution considered in the endangerment analysis could not include emissions from these other sources unless and until EPA made findings under these other provisions of the Act. Nothing in the Act supports such a convoluted interpretation. EPA explained in great detail why it considered the air pollution as the global concentrations of the mix of gases. ⁶⁶ Congress specifically called for EPA's 2009 approach to endangerment when it adopted the 1977 amendments to the Act. Congress required that EPA "assur[e] consideration of the cumulative impact of all sources of a pollutant in setting ambient and emission standards, not just the extent of the risk from the emissions from a single source or class of sources of the pollutant," and "require[d] consideration of cumulative or synergistic effects of multiple pollutants to mandate evaluations of total body burden of contaminants." As EPA stated in 2009, "Finally, the phrase "cause or contribute" ensures that all sources of the contaminant which contribute to air pollution are considered in the endangerment analysis (e.g., not a single source or category of sources). It is also intended to require the Administrator to consider all sources of exposure to a pollutant (for example, food, water, and air) when determining risk. [H.R. Rep. 95–294 at 51, 4 LH at 2518]."

Perhaps this is yet another way that EPA argues that it is required to consider the various aspects of control measures as part of the process of determining contribution and endangerment. Perhaps this is another way of arguing the contribution, endangerment, and standard setting provisions are all interrelated and need to be considered together. EPA says it was unlawful for EPA to make contribution and endangerment findings without "considering the different regulatory tools Congress authorizes for those sources as compared to CAA section 202(a) sources." The response to this is the same as the response to the claim EPA must consider the aspects and impacts of motor vehicle standards as part of determining contribution and endangerment. This proposed approach is inconsistent with § 202(a)'s text and structure. Congress required a threshold determination of authority to regulate — determination of contribution and endangerment — separate and apart from the decision on appropriate standard setting if the threshold determination is affirmative. The various aspects of the regulatory control measures for motor vehicles are not legally relevant to determining the threshold requirements of contribution and endangerment. Likewise, the various aspects of potential control measures on sources other than motor vehicles (assuming the threshold determination on authority is satisfied under those separate statutory provisions) is legally irrelevant to determine whether emissions from motor vehicles contribute to air pollution that endangers.

7. EPA did not interpret endangerment to mean any negative impact on public health or welfare, and did not determine contribution as any level above de minimis.

EPA claims that the 2009 action was unlawful because it failed to properly consider contribution and endangerment "in context." EPA claims endangerment cannot mean "any predicted negative impact to any public health or welfare value," and EPA avoided this concern by determining contribution as any amount above de minimis levels, "even if those emissions did not themselves contribute to a danger in any meaningful sense." This mischaracterizes EPA's interpretation of § 202(a) and its application in 2009.

⁶⁶ 74 FR at 66517. Also see 66517-519.

⁶⁷ H.R. Rep. No. 95–294 at 51.

^{68 90} FR at 36305.

With respect to endangerment, EPA was clear that this was a complex exercise of judgment, not a simple determination requiring no more than any prediction of some harm to public health or welfare. EPA described the several aspects of determining endangerment.

"[T]he Administrator is required to protect public health and welfare, but she is not asked to wait until harm has occurred," and is to consider both current and future risks. 69 EPA's exercise of judgment involves:

"weighing risks, assessing potential harms, and making reasonable projections of future trends and possibilities. It follows that when exercising her judgment the Administrator balances the likelihood and severity of effects. This balance involves a sliding scale; on one end the severity of the effects may be of great concern, but the likelihood low, while on the other end the severity may be less, but the likelihood high. Under either scenario, the Administrator is permitted to find endangerment. If the harm would be catastrophic, the Administrator is permitted to find endangerment even if the likelihood is small."

The Administrator is called upon to recognize and take into account the range of scientific evidence including any limitations and uncertainties in the evidence.

"Because scientific knowledge is constantly evolving, the Administrator may be called upon to make decisions while recognizing the uncertainties and limitations of the data or information available, as risks to public health or welfare may involve the frontiers of scientific or medical knowledge. At the same time, the Administrator must exercise reasoned decision making, and avoid speculative inquiries."

EPA is to take into account risk across all parts of the population, not just the average or general risk to society.

"Fourth, the Administrator is to consider the risks to all parts of our population, including those who are at greater risk for reasons such as increased susceptibility to adverse health effects. If vulnerable subpopulations are especially at risk, the Administrator is entitled to take that point into account in deciding the question of endangerment. Here too, both likelihood and severity of adverse effects are relevant, including catastrophic scenarios and their probabilities as well as the less severe effects."

This describes a complex decision making process, focused on evaluating all of the evidence, including its strengths and weaknesses. It calls for looking at all elements of society in evaluating endangerment. It calls for balancing the likelihood risk of an adverse effect with the severity of the effect. It calls for evaluating current as well as future conditions. It calls for an exercise of judgment in all of these matters, employing reasoned decision making and not speculative inquiries.⁷³

EPA has provided no evidence that, in the approximately 45 years that EPA has made decisions concerning the endangerment criterion, EPA found endangerment based on a simplified prediction of any negative

⁷¹ Id. at 66505-506.

⁶⁹ 74 FR at 66505.

⁷⁰ Id.

⁷² Id. at 66506.

⁷³ Id. at 66506-509.

impact on public health or welfare, and that it did this by determining that contribution meant any level above de minimis amounts.

EPA also mischaracterizes EPA's 2009 action, claiming that "[f]ollowing the logic of the Endangerment Finding, any "air pollutant" emitted at more than de minimis volumes would trigger our authority."⁷⁴

EPA did not make any such finding and did not determine motor vehicles contributed to GHG air pollution because their contribution was more than a de minimis level. EPA rejected the idea that it had to or did establish a bright line test defining contribution, much less a bright line test determining any level above de minimis levels would meet the contribution criterion.

EPA said:

"Given this context, it is entirely reasonable for the Administrator to interpret CAA section 202(a) to require some level of contribution that, while more than de minimis or trivial, does not rise to the level of significance. ...

It is also reasonable for EPA to decline to establish a "bright-line 'objective' test of contribution." 571 F.3d at 39. As noted in the Proposed Findings, when exercising her judgment, the Administrator not only considers the cumulative impact, but also looks at the totality of the circumstances (e.g., the air pollutant, the air pollution, the nature of the endangerment, the type of source category, the number of sources in the source category, and the number and type of other source categories that may emit the air pollutant) when determining whether the emissions justify regulation under the CAA. Id. (It is reasonable for an agency to adopt a totality-of-the-circumstances test)."⁷⁵

Far from basing its contribution decision on a determination that motor vehicles contributed to GHG air pollution because their emissions levels were above a de minimis level, EPA found that:

"[e]ven if EPA agreed that a level of significance was required to find contribution, for the reasons discussed above, EPA would find that the contribution from CAA section 202(a) source categories is significant. Their emissions are larger than the great majority of emitting countries, larger than several major emitting countries, and they constitute one of the largest parts of the U.S. emissions inventory."⁷⁶

EPA's claim — that the 2009 interpretation was unlawful because it embodied anything above de minimis level — mischaracterizes EPA's actual decision. Even if correct, EPA's proposal's claim of an unlawful interpretation would not be a basis to rescind the Endangerment Finding because EPA did not apply any such interpretation.

8. EPA's claim of a lack of limiting principles for contribution and endangerment is unfounded.

EPA claims that § 202(a) mandates EPA to analyze the extent to which emissions from motor vehicles contribute to the danger from GHG air pollution. EPA says without this limitation EPA's 2009

⁷⁴ 90 FR at 36301. Also see Id. at 36304, 305, 307.

 $^{^{75}}$ 74 FR at 66542.

⁷⁶ Id.

interpretation lacks any limiting principle. It gives a hypothetical obligation to regulate water vapor emissions as an example of the unlimited nature of EPA's interpretation. This argument is specious.

EPA claims:

"Nowhere in the Endangerment Finding did the Administrator consider the extent to which emissions from CAA section 202(a) sources have a more than de minimis effect on the danger identified with respect to elevated concentrations of GHGs in the upper atmosphere—let alone whether emissions from any particular class or classes of sources that EPA intended to regulate had such an effect. . . .

We are also concerned that severing the endangerment and cause or contribution findings leads to untenable results and lacks any limiting principle. To illustrate the problem, the same logic would allow the EPA to issue emission standards for water vapor (H₂O), another substance emitted by new motor vehicles and engines that is also considered a powerful GHG. Considered in isolation, H₂O concentrations in the atmosphere can be said to endanger public health or welfare by resulting in rain that leads to slip-and-fall injuries, drownings, and damage to crops, livestock, and property, including through pools, rivers, and floodwater, although water vapor is not itself harmful and is necessary to sustain life. Also considered in isolation, CAA section 202(a) sources can be said to "contribute" to elevated H₂O concentrations in the atmosphere from all anthropogenic sources, and these emissions of water vapor would thereby assertedly "contribute" to global climate effects similar to those attributed to other GHGs. CAA section 202(a) does not contemplate prescribing emission standards for such an omnipresent, naturally occurring, and essential component of the ambient air, and stakeholders have not petitioned for such regulation, because the text requires analyzing the extent to which emissions contribute to the danger. The logic of regulating water vapor would appear to be absurd, but it is the same logic required to regulate GHGs under CAA section 202(a)."77

First, EPA's 2009 interpretation is clearly limited by the terms Congress chose to limit EPA's discretion. The phrase "reasonably anticipated to endanger public health or welfare" has extensive legislative history and a long history of implementation by EPA. Likewise, the terms cause or contribute. While these terms may be broad, they are clearly not unlimited. EPA points to no application of these or similar terms, used in numerous provisions throughout the Act, during EPA's 50-year history as evidence that they are unlimited in scope and fail to restrain EPA's actions in rational and reasoned ways. EPA's application of these terms in specific cases has often been the subject of judicial review, and no case has indicated that they are vague and unlimited in the manner suggested by EPA. Neither EPA nor any court has suggested EPA's proposed interpretation is required to avoid a standardless or unlimited grant of power to EPA.

Instead EPA relies upon a hypothetical involving water vapor. EPA says that its 2009 interpretation would require EPA to make a contribution and endangerment finding for water vapor because vehicles emit it at more than de minimis levels and its presence in the air can endanger public health and welfare. This response is illustrative of the agency's lack of command of basic climate science, as well as its failure to address prior agency reasoning and findings.

⁷⁷ 90 FR at 36304.

⁷⁸ See, e.g., Bluewater Network v. EPA, 370 F.3d 1 (D.C. Cir. 2004), Catawba County, N.C. v. EPA, 571 F.3d 20 (D.C. Cir. 2009).

Surprisingly, EPA fails to discuss or even mention that EPA addressed this specific issue in 2009 and explained why water vapor was not included in the definition of the air pollutant and air pollution and not part of the contribution and endangerment finding. EPA made clear that it was not required to include water vapor under its interpretation of § 202(a).

"A number of public comments question the exclusion of water vapor from the definition of air pollution because it is the most important greenhouse gas responsible for the natural, background greenhouse effect. The Administrator's reasoning for excluding water vapor was described in the Proposed Findings and is summarized here with additional information in Volume 10 of the Response to Comments document. First, climate change is being driven by the buildup in the atmosphere of greenhouse gases. The direct emissions primarily responsible for this are the six well-mixed greenhouse gases. Direct anthropogenic emissions of water vapor, in general, have a negligible effect and are thus not considered a primary driver of human-induced climate change. EPA plans to further evaluate the issues of emissions of water that are implicated in the formation of contrails and also changes in water vapor due to local irrigation. At this time, however, the findings of the IPCC state that the total forcing from these sources is small and that the level of understanding is low.

Water produced as a byproduct of combustion at low altitudes has a negligible contribution to climate change. The residence time of water vapor is very short (days) and the water content of the air in the long term is a function of temperature and partial pressure, with emissions playing no role. Additionally, the radiative forcing of a given mass of water at low altitudes is much less than the same mass of carbon dioxide. Water produced at higher altitudes could potentially have a larger impact. The IPCC estimated the contribution of changes in stratospheric water vapor due to methane and other sources, as well as high altitude contributions from contrails, but concluded that both contributions were small, with a low level of understanding. The report also addressed anthropogenic contributions to water vapor arising from large scale irrigation, but assigned it a very low level of understanding, and suggested that the cooling from evaporation might outweigh the warming from its small radiative contribution."⁷⁹

While EPA's proposal fails to discuss this issue, in 2009 EPA looked comprehensively at the issue of water vapor, including the different direct, anthropogenic sources of water vapor. These sources include combustion at low altitudes, high altitude contrails, and sources like local irrigation. Anthropogenic emissions of water vapor have a negligible effect on atmospheric concentrations and are short-lived. Overall direct anthropogenic emissions of water vapor have a negligible effect as a driver of climate change. Emissions from combustion at low altitudes, which would include motor vehicle emissions, have a negligible contribution to climate change. This was because the residence time of water vapor in the air was very short-term, and the water content in the air over the long-term is the result of temperature and air pressure conditions. Emissions from combustion played no role in the water content in the atmosphere over the longer terms relevant for climate change purposes.

EPA's hypothetical does not show that EPA's 2009 interpretation is overly broad and must be reined in to be lawful. Just the opposite. EPA's 2009 action shows that the interpretation it used allowed EPA to not include

⁷⁹ See 74 FR at 66520. Also see "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act: EPA's Response to Public Comments (RTC) Volume 9: The Cause or Contribute Finding" (RTC Vol. 9) at pp. 14-15, RTC Vol. 10 at 4, 9-10.

water vapor in the contribution and endangerment findings based on a reasoned and rational analysis that was fully consistent with the statute.

9. EPA properly included two gases in the definition of GHG air pollutant for purposes of the contribution finding.

EPA claims that severing the endangerment and contribution findings was inconsistent with § 202(a) because the gases emitted by vehicles do not include two of the gases included in the definition of "air pollution."

"The Administrator defined the relevant "air pollution" as the combination of six "well-mixed GHGs" but found that CAA section 202(a) sources emitted only four of them: CO2, methane, NOX, and HFCs. 74 FR 66538. As a result, the "air pollution" identified as endangering public health or welfare included PFCs and SF6, and the "air pollution" used to conclude that CAA section 202(a) sources satisfy the regulatory standard did not. Contrary to the EPA's conclusion at the time, 74 FR 66541, that difference is material, as PFCs and SF6 are asserted to have many times the global warming potential of CO2.67 Severing the endangerment and cause-or-contribute analysis allowed the Agency to compare apples and oranges in a manner the statute does not authorize." ⁸⁰

EPA fails to discuss EPA's rationale in 2009 for including these two gases and fails to show that this rationale is inconsistent with § 202(a).

EPA defined both the "air pollution" used in the endangerment finding and the "air pollutant" used in the contribution finding as the mix of six GHGs. EPA explained why it chose this specific group of six gases.

"(1) These six greenhouse gas share common properties regarding their climate effects; (2) these six greenhouse gases have been estimated to be the primary cause of human-induced climate change, are the best understood drivers of climate change, and are expected to remain the key driver of future climate change; (3) these six greenhouse gases are the common focus of climate change science research and policy analyses and discussions; (4) using the combined mix of these gases as the definition (versus an individual gas-by-gas approach) is consistent with the science, because risks and impacts associated with greenhouse gas-induced climate change are not assessed on an individual gas approach; and (5) using the combined mix of these gases is consistent with past EPA practice, where separate substances from different sources, but with common properties, may be treated as a class (e.g., oxides of nitrogen)."81

EPA does not claim that this is in any way unreasonable or inconsistent with the Act.

EPA also explained in detail why it used the same definition for the "air pollutant" when making the contribution finding, recognizing that two of the six gases were not emitted by motor vehicles. EPA explained that:

"By defining well-mixed greenhouse gases as a single air pollutant comprised of six substances with common attributes, the Administrator is giving effect to these shared attributes and how they are relevant to the air pollution to which they contribute. The fact that these six substances share these

^{80 90} FR at 36304.

⁸¹ 74 FR at 66517. Also see 66517-519.

common, relevant attributes is true regardless of the source category being evaluated for contribution."82

EPA showed that this was fully consistent with past EPA practice — defining the air pollution and air pollutant, and the associated emissions standards, as a mix of compounds, such as volatile organic compounds (VOCs), PM, and oxides of nitrogen. EPA has never required that vehicles emit all of the individual components of these mixes of compounds when it made the relevant endangerment or contributions standards or adopted emission standards for those mixes. EPA explained that:

"it is not necessarily the source category being evaluated for contribution that determines the reasonableness of defining a group air pollutant based on the shared attributes of the group."83

For example, electronics manufacturers might emit some of the mix of six gases but not CO₂ or CH₄, absent combustion of fossil fuel on site.⁸⁴

EPA explained that the Act's definition of "air pollutant" fully supported its definition of air pollutant for purposes of the contribution finding.

"Thus, the first step in analyzing whether emissions of any air pollutant from new motor vehicles cause or contribute to air pollution which endangers is to define the term "air pollutant." Section 302(g) states that as used in the CAA,

[t]he term "air pollutant" means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term "air pollutant" is used. (Emphasis added).

This language clearly contemplates that EPA may combine two or more air pollution agents into one air pollutant. Once one thinks of GHGs as air pollution agents, rather than air pollutants themselves, the concept of combining several for purposes of defining a single air pollutant under section 302(g) becomes clearer.

The language of CAA section 302(g) is quite broad, providing EPA ample discretion to determine what combination of air pollution agents are a reasonable definition of air pollutant. As the Supreme Court noted in Massachusetts v. EPA, 549 U.S. 497 (2007), this is a "sweeping" and "capacious" definition, and GHGs are "unquestionably 'agents' of air pollution." 549 U.S. at 528, 532, 529 n.26. Although the Court did not interpret the term "combination of" air pollution agents, there is no reason this phrase would be interpreted any less broadly than the definition as a whole. Congress used the term "any," which is typically given an expansive meaning, and did not qualify the kind of combinations that the agency could define as a single air pollutant."

⁸⁴ Id.

⁸² Id. at 66541. Also see RTC Vol. 10 at 2-4.

⁸³ Id

⁸⁵ RTC Vol. 10 at 1.

This analysis shows that EPA was clearly justified in the definition of air pollutant that it used in the contribution finding, and it was fully consistent with the requirements of § 202(a). EPA fails to address any of this analysis.

EPA also concluded in 2009 that it would not matter if it had defined the air pollutant to include just four of the six gases, that it would not change the decision on contribution. This is obvious. It would not change the calculation of the amount of emissions of GHGs from motor vehicles, which was done on a CO₂-equivalent perspective. Nor would it have changed any of the calculations of the emissions of GHGs from a global, country, United States, or other sectors, as they were also all done on a CO₂-equivalent perspective. Also, nothing in § 202(a) says that the air pollutant and the air pollution have to be identical. It's clear that vehicle emissions of these four gases contribute in a significant way to the global concentration of the mix of six gases, whether the air pollutant is defined as the six gases or four gases.

EPA refers to a large difference in global warming potential between the two gases and presumably CO₂, but that difference was already accounted for in developing CO₂-equivalent levels for the amount of emissions from the various sources of emissions.

EPA is not clear on what its proposed interpretation requires EPA to do. Did it require EPA to define the "air pollution" and make an endangerment finding looking solely at four of the six gases, because vehicles emit only four of the gases? That would make no sense, for all of the reasons EPA discussed in explaining why it included all six gasses in the definition of GHGs, including that the scientific community has for decades taken this approach in developing the very large body of evidence to anthropogenic emissions and climate change. It would also be inconsistent with how EPA has approached mixtures of compounds like NO_x, PM, and VOCs over many decades.

EPA's claim that the 2009 interpretation and approach was inconsistent with § 202(a) is meritless.

10. EPA's 2009 interpretation did not unlawfully limit EPA's ability to evaluate its GHG control program for motor vehicles in future standard setting.

EPA claims that failure to conduct standard setting at the same time as the contribution and endangerment findings and to take standard setting issues into account in making these findings also lead to errors in future standard setting.

"Severance also shaped all subsequent standards prescribed and revised in reliance on the Endangerment Finding in a manner we propose to conclude was unlawful. ... Nor did we consider the impacts of adaptation or mitigation or consider when prescribing standards whether, in light of more recent empirical data, the Endangerment Finding's analysis of endangerment and contribution remained accurate with respect to the source category at issue. As a result, the decision to sever meant that the EPA has never meaningfully considered or invited public comment on the cost, effectiveness, and continued propriety of its GHG regulatory program." 86

Contrary to this assertion, EPA's GHG standard settings for motor vehicles has consistently looked closely at what the science says about climate change and GHG air pollution, and EPA carefully evaluates the cost, effectiveness, and many other factors in evaluating the propriety of the GHG standards. EPA has continued

-

^{86 90} FR at 36303.

to find that climate change problems and GHG air pollution continue to warrant regulation of GHG from motor vehicles, and that the GHG standards at issue are fully appropriate under § 202(a).

One example is EPA's recent rule establishing GHG and other standards for light-duty and medium-duty vehicles for Model Year 2027 and later. EPA discussed the need for control of GHG emissions to address climate change.

"Despite the significant emissions reductions achieved by these and other rulemakings, air pollution from motor vehicles continues to impact public health, welfare, and the environment. ... In addition, the effects of climate change represent a rapidly growing threat to human health and the environment, and are caused by GHG emissions from human activity, including motor vehicle transportation. Addressing these public health and welfare needs will require substantial additional reductions in criteria pollutants and GHG emissions from the transportation sector. Recent trends and developments in vehicle technologies that reduce emissions indicate that more stringent emissions standards are feasible at reasonable cost and would lead to significant improvements in public health and welfare."

EPA discussed the magnitude of GHG emissions from vehicles, as well as the continuing scientific evidence indicating the risks from global climate change and the clear need for ongoing and additional reductions in GHG emissions from motor vehicles.

"U.S. source of GHG emissions, representing 29 percent of total GHG emissions. Within the transportation sector, light-duty vehicles are the largest contributor, at 58 percent, and thus comprise 16.5 percent of total U.S. GHG emissions, even before considering the contribution of medium-duty Class 2b and 3 vehicles which are also included under this rule. GHG emissions have significant impacts on public health and welfare as evidenced by the well documented scientific record and as set forth in EPA's Endangerment and Cause or Contribute Findings under CAA section 202(a). Additionally, major scientific assessments continue to be released that further advance our understanding of the climate system and the impacts that GHGs have on public health and welfare both for current and future generations, as discussed in section II.A of this preamble, making it clear that continued GHG emission reductions in the motor vehicle sector are needed to public health and welfare."

EPA was clear that "EPA is establishing both criteria pollutant and GHG standards in this rulemaking given the need for additional reductions in emissions of these air pollutants to protect public health and welfare and based on EPA's assessment of the suite of available control technologies for those pollutants, some of which are effective in controlling both GHGs and criteria pollutant emissions."⁸⁹

EPA "carefully" considered a wide variety of factors in setting the appropriate emission standards:

"including technological feasibility and cost of the standards and the available lead time for manufacturers to comply with them. Our analysis for this action supports the conclusion that the final standards are technologically feasible and that the costs of compliance for manufacturers will be reasonable. The standards will result in significant reductions in emissions of criteria pollutants,

⁸⁹ Id.

39

⁸⁷ 89 FR 27842, 844 (April 18, 2024).

⁸⁸ I.d

GHGs, and air toxics, resulting in significant benefits for public health and welfare. We also estimate that the standards will result in reduced vehicle operating costs for consumers and that the benefits of the program will exceed the costs. Based on EPA's analysis, it is the agency's assessment that the standards are appropriate and justified under CAA section 202(a)."

The remainder of the rulemaking record goes into exhaustive detail on all of these issues.⁹¹ This is just one of EPA's GHG standard setting rulemakings since 2009; they all take the same approach.

EPA's claim that the interpretation taken in 2009 kept EPA from "meaningfully consider[ing] or invit[ing] public comment on the cost, effectiveness, and continued propriety of its GHG regulatory program" is wrong. The record shows that EPA did consider the continued propriety of its GHG program for motor vehicles and appropriately determined that the circumstances called for continuing and strengthening the program.

11. EPA did not read "new" out of the statute and did not misread Massachusetts.

EPA claims that the 2009 contribution and endangerment findings were unlawful because it read the term "new" out of the statute.

"The Endangerment Finding also did not limit its analysis of contribution to "new motor vehicles or new motor vehicle engines" in the United States, which are the only sources covered by the EPA's CAA section 202(a) authority. Because the Administrator considered all sources in analyzing the danger posed by elevated concentrations of GHGs in the upper atmosphere, the endangerment analysis necessarily included emissions from foreign and domestic vehicles that had been in use for years or decades and were not "new." Even when analyzing contribution, the Administrator used emission estimates from "the entire fleet of motor vehicles in the United States for a certain calendar year" rather than projecting emissions from new motor vehicles and engines over time. 74 FR 66543. That decision increased the absolute contribution figure by orders of magnitude, including because newer vehicles and engines tend to be more efficient and emit less. Difficulties in disaggregating emission data from emission sources, however reasonable, do not license us to read the term "new" out of the statutory text." ⁹²

EPA sets standards for new motor vehicles that apply both when the vehicles are brand new and when they are in operation in the real world. The standards apply throughout the "useful life" of the vehicle, a period of time or mileage that is set either by the statute or by EPA. EPA can enforce the standards throughout the useful life of the vehicle, under its authority to order manufacturers to recall and remedy vehicles that fail to meet the standards during their useful life. Because of this, manufacturers design their vehicles so they will achieve the standards throughout the vehicle's useful life.

The Act requires that emissions standards apply while the vehicles are in operation in the real world. This is designed to ensure that the benefits to public health and welfare from the emissions standards are achieved in the real world and are not just a showroom artifact. For example, the corporate average fuel economy

⁹⁰ Id. at 27845.

⁹¹ See, e.g. II.A. Climate Change From GHG Emissions; IV. Technical Assessment of the Standards; V. EPA's Basis That the Final Standards are Feasible and Appropriate Under the Clean Air Act; VI. How will this rule reduce GHG emissions and their associated effects?; and VIII. Estimated Costs and Benefits and Associated Considerations.
⁹² 90 FR at 36304.

(CAFE) standards apply only at the point the vehicle is new; manufacturers are not subject to in-use standards or enforcement of in-use standards. Section 202(a)'s standards are different.

Motor vehicle emissions occur throughout the real world operation of the vehicles, not just when they are brand new and have not been sold. Emissions from the vehicle continue as long as it is operated in the real world, including the time period or mileage after the vehicle's "useful life" has expired for purposes of the emissions standard.

EPA has always calculated the emissions of vehicles by determining emissions throughout the real-world, actual life of the vehicles. Any other approach would be absurd and would not reflect the real-world impact of the emissions standards. EPA calculates the emissions benefits of a new or revised standard by projecting what emissions would be over a period of time for the entire fleet of vehicles and compares that to a projection of what the emissions would be for the same fleet and time period if the standards are adopted. The difference is the emissions impacts of the standards over time. These projections take into account the changeover in the year by year composition of the fleet as older cars are retired and new cars are added. Eventually the fleet is composed of only vehicles subject to the new standard. This changeover takes some time, but it is not that long. EPA does not determine emissions impact of adopting a standard by assuming the only vehicles in the real world are new vehicles, with more new vehicles added each year.⁹³

In 2009, EPA discussed in detail how it would determine emissions from new motor vehicles for purposes of the contribution finding. EPA discussed many of the points noted above and explained that:

"consistent with its traditional practice, it used the recent motor vehicle emissions inventory for the entire fleet as a surrogate for estimates of emissions for just new motor vehicles and engines. This was appropriate because future projected emissions are uncertain, and current emissions data are a reasonable proxy for near-term emissions.

In effect, EPA is using the inventory for the current fleet of motor vehicles as a reasonable surrogate for a projection of the inventory from new motor vehicles over the upcoming years. New motor vehicles are produced year in and year out, and over time the fleet changes over to a fleet composed of such vehicles. This occurs in a relatively short time frame, compared to the time period at issue for endangerment. Because new motor vehicles are produced each year, and continue to emit over their entire life, over a relatively short period of time the emission from the entire fleet is from vehicles produced after a certain date. In addition, the emissions from new motor vehicles are not limited to the emissions that occur only during the one year when they are new, but are emissions over the entire life of the vehicle. In such cases, EPA has traditionally used the recent emissions from the entire current fleet of motor vehicles as a reasonable surrogate for such a projection instead of trying to project and model those emissions. While this introduces some limited degree of uncertainty, the difference between recent actual emissions from the fleet and projected future emissions from the fleet is not expected to differ in any way that would substantively change the decision made concerning cause or contribution. There is not a specific numerical bright line that must be achieved, and the numerical percentages are not treated and do not need to be treated as precise values. This approach provides a reasonable and clear indication of the relative magnitudes involved, and EPA does not believe that attempting to make future projections (for both vehicles

⁹³ E.g., see 89 FR 27842, 28097-099 (April 18, 2024).

and the emissions value they are compared to) would provide any greater degree of accuracy or precision in developing such a relative comparison."⁹⁴

Far from reading the term "new" out of the statute, EPA developed an emissions inventory that is a reasonable projection of the magnitude of emission from new motor vehicles over their aggregate lifetimes. EPA explained why the surrogate EPA used is a reasonable way to determine the emissions from new motor vehicles, especially in the context of making contribution and endangerment findings. EPA explained the uncertainty and potential difference in emissions based on using a surrogate was not expected to have any substantive impact on the contribution determination.

The agency fails to discuss any of the analysis or reasoning previously provided by EPA. It does no more than allege that EPA read the term out of the statute, and claims without evidence that EPA's approach led to an erroneous estimate that was orders of magnitude higher than the actual emission level. The agency's reference to new vehicles being more efficient and emitting less fails to account for the fact that EPA was modeling emissions from vehicles that would be produced assuming no GHG standards and no change in CAFE standards – the baseline of the then current situation when EPA made the contribution finding. There is no reason to expect there would be orders of magnitude difference in the absolute level of emissions, and the agency produces no evidence to support its hyperbolic claim.

EPA also claims that in 2009 EPA misconstrued the *Massachusetts* opinion, reading it as "requir[ing] us to read the statute as authorizing the regulation of GHG emissions in response to global climate change concerns." ⁹⁵

EPA did not misread the Court's decision in *Massachusetts*. EPA explained in detail what it believed the *Massachusetts* case stood for.

EPA recognized that "[b]efore the Administrator may issue standards addressing emissions of greenhouse gases from new motor vehicles or engines under § 202(a), the Administrator must satisfy a two-step test. First, the Administrator must decide whether, in her judgment, the air pollution under consideration may reasonably be anticipated to endanger public health or welfare. Second, the Administrator must decide whether, in her judgment, emissions of an air pollutant from new motor vehicles or engines cause or contribute to this air pollution. If the Administrator answers both questions in the affirmative, she must issue standards under section 202(a)." ⁹⁶

If EPA makes an affirmative finding on contribution and endangerment, then EPA has authority to issue GHG standards for new motor vehicles.⁹⁷

EPA recognized that "[u]nder the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do." 98

EPA recognized that the Supreme Court "was not dictating EPA's action on remand and was not deciding whether or not EPA must find that greenhouse gases endanger public health or welfare. Nor did the Court

42

⁹⁴ 74 FR at 66543-544.

^{95 90} FR at 36299.

^{96 74} FR at 18888.

⁹⁷ 74 FR at 66502.

⁹⁸ Id. at 18889.

rule on "whether policy concerns can inform EPA's actions in the event that it makes such a finding." Id. at 534–35. The Court also observed that under CAA § 202(a), "EPA no doubt has significant latitude as to the manner, timing, content, and coordination of its regulations with those of other agencies." Id. at 533. Nonetheless, any EPA decisions concerning the endangerment and cause or contribute criteria must be grounded in the requirements of CAA section 202(a)."

The Court recognized the preventive nature of the endangerment criterion, citing the Ethyl case. 100

EPA understood *Massachusetts* as explaining that its "judgment in making the endangerment and contribution findings is constrained by the statute, and EPA is to decide these issues based solely on the scientific and other evidence relevant to that decision. EPA may not "rest[] on reasoning divorced from the statutory text," and instead EPA's exercise of judgment must relate to whether an air pollutant causes or contributes to air pollution that endangers." The Administrator's judgment was to be a "scientific judgment." 102

EPA recognized that *Massachusetts* rejected various arguments as a basis for refusing to make a decision on contribution and endangerment, reasons such as the projected effectiveness or appropriateness of regulatory controls to address GHG emissions from vehicles.¹⁰³

EPA understood that GHGs readily fall within the Act's definition of air pollutant. 104

EPA claims that in 2009 EPA read *Massachusetts* as requiring it to read § 202(a) as authorizing EPA to set standards for GHGs in response to global climate change concerns. Nowhere in 2009 did EPA suggest any such reading of *Massachusetts*. EPA read it for what it said – GHGs are air pollutants; EPA was required to make a judgement on whether there was an air pollution problem that was reasonably anticipated to endanger public health or welfare and on whether emissions from motor vehicles caused or contributed to this air pollution; these judgments are scientific judgments and are to be made subject to the constraints of the statute; and if EPA made affirmative findings then EPA was authorized to set emission standards for new motor vehicles applicable to this air pollutant.

EPA's claim that it did otherwise in 2009 is groundless.

D. Conclusion

For all of the reasons discussed above, EPA's 2009 interpretation of § 202(a) is far and away the best reading of that provision.

III. EPA's proposal to rescind the 2009 contribution and endangerment findings and various GHG emissions standards is contrary to the mandate of *Massachusetts*.

In Massachusetts, the Court addressed EPA's failure to determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution that is reasonably anticipated to endanger public health

100 Id. at 66506, 66507 fn.6.

⁹⁹ Id.

¹⁰¹ Id. at 66507.

¹⁰² Id. at 66515, 516.

¹⁰³ Id. at 66508.

¹⁰⁴ Id. at 66510, 66537.

or welfare. EPA advanced a "litany" of reasons why it did not need to make such a decision, which the Court rejected. The Court ruled that EPA was required to make the decisions called for by § 202(a), and the reasons advanced by EPA were irrelevant to such a decision and were no basis for refusing to decide. The Court said:

"EPA no doubt has significant latitude as to the manner, timing, content, and coordination of its regulations with those of other agencies. But once EPA has responded to a petition for rulemaking, its reasons for action or inaction must conform to the authorizing statute. Under the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do. Ibid. To the extent that this constrains agency discretion to pursue other priorities of the Administrator or the President, this is the congressional design. ...

In short, EPA has offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change. Its action was therefore "arbitrary, capricious, ... or otherwise not in accordance with law." 42 U.S.C. § 7607(d)(9)(A). We need not and do not reach the question whether on remand EPA must make an endangerment finding, or whether policy concerns can inform EPA's actions in the event that it makes such a finding. Cf. Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 843–844, 104 S.Ct. 2778, 81 L.Ed.2d 694, at 1. We hold only that EPA must ground its reasons for action or inaction in the statute." (emphasis supplied) 549 U.S at 533-535.

In response EPA proposed and finalized its determination that GHG emissions from new motor vehicles contributed to GHG air pollution that was reasonably anticipated to endanger public health and welfare. The determinations were upheld by the D.C. Circuit and the Supreme Court denied requests to review that portion of the D.C. Circuit's opinion.¹⁰⁵

In this action, EPA is proposing to rescind the 2009 determinations and vacate the emissions standards and related regulations adopted based on the 2009 determinations. This proposal fails to take the action that the Supreme Court mandated in *Massachusetts*. The proposed rescission is unlawful under *Massachusetts* because it would return the agency to the same position that the Court rejected in *Massachusetts*. A rescission would leave an absence of a decision on whether GHG emissions from new vehicles do or do not contribute to GHG air pollution that is or is not reasonably anticipated to endanger public health or welfare. EPA could propose a negative determination on contribution, and/or a negative determination on endangerment, but has not done so. That would be the lawful way to rescind the 2009 determinations. EPA's proposed approach is not lawful.

It is instructive to compare the way EPA responded in 2009 to the *Massachusetts* decision to the way EPA is responding now. In 2009, EPA proposed to make affirmative determinations on contribution and on endangerment to both public health and public welfare. EPA supported its determinations with a Technical Support Document (TSD) that provided the scientific and technical basis for EPA's determinations. The TSD itself was a long, extensive, and detailed summary of the robust, peer-reviewed, and comprehensive body of literature that had been developed over many years on the scientific issues relevant to determining contribution and endangerment. EPA described the history and content of the TSD:

¹⁰⁵ Coalition for Responsible Regulation, Inc. v. EPA, 684 F.3d 102 (D.C. Cir. 2012).

"In 2007, EPA initiated its assessment of the science and other technical information to use in addressing the endangerment and cause or contribute issues before it under CAA section 202(a). This scientific and technical information was developed in the form of a TSD in 2007. An earlier draft of this document was released as part of the ANPR published July 30, 2008 (73 FR 44353). That earlier draft of the TSD relied heavily on the IPCC Fourth Assessment Report of 2007, key NRC reports, and a limited number of then available synthesis and assessment products of the U.S. Climate Change Science Program (CCSP; now encompassed by USGCRP). EPA received a number of comments specifically focused on the TSD during the 120-day public comment period for the ANPR.

EPA revised and updated the TSD in preparing the Proposed Findings on endangerment and cause or contribute. Many of the comments received on the ANPR were reflected in the draft TSD released in April 2009 that served as the underlying scientific and technical basis for the Administrator's Proposed Findings, published April 24, 2009 (74 FR 18886). The draft TSD released in April 2009 also reflected the findings of 11 new synthesis and assessment products under the U.S. CCSP that had been published since July 2008.

The TSD that summarizes scientific findings from the major assessments of the USGCRP, the IPCC, and the NRC accompanies these Findings. The TSD is available at www.epa.gov/climate change/endangerment.html and in the docket for this action. It also includes the most recent comprehensive assessment of the USGCRP, Global Climate Change Impacts in the United States, published in June 2009. In addition, the TSD incorporates up-to-date observational data for a number of key climate variables from the NOAA, and the most up-to-date emissions data from EPA's annual Inventory of U.S. Greenhouse Gas Emissions and Sinks, published in April, 2009. And finally, as discussed in Section I.B of these Findings, EPA received a large number of public comments on the Administrator's Proposed Findings, many of which addressed science issues either generally or specifically as reflected in the draft TSD released with the April 2009 proposal. A number of edits and updates were made to the draft TSD as a result of these comments." 106

EPA described the TSD as follows:

"This document reviews a wide range of observed and projected vulnerabilities, risks, and impacts due to the elevated levels of GHGs in the atmosphere and associated climate change. Any known or expected impacts of elevated atmospheric concentrations of GHGs or of climate change are documented as well (recognizing that climate impacts can have both positive and negative consequences). The extent to which observed climate change can be attributed to anthropogenic GHG emissions is assessed. The term "climate change" in this document generally refers to climate change induced by human activities, including activities that emit GHGs. Future projections of climate change, based primarily on future scenarios of anthropogenic GHG emissions, are shown for the global and national scale. ...

This document relies most heavily on existing, and in most cases very recent, synthesis reports of climate change science and potential impacts, which have undergone their own peer-review processes, including review by the U.S. government. Box 1.1 describes this process. The information in this document has been developed and prepared in a manner that is consistent with EPA's Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of

¹⁰⁶ 74 FR at 66510.

Information Disseminated by the Environmental Protection Agency (U.S. EPA 2002). In addition to its reliance on existing and recent synthesis reports, which have each gone through extensive peer-review procedures, this document also underwent a technical review by 12 federal climate change experts, internal EPA review, interagency review, and a public comment period."¹⁰⁷

EPA prepared an extensive summary of the relevant scientific and technical information, pulling together analysis and information from numerous comprehensive and detailed public assessments of the science, reflecting the consensus work of thousands of scientists and thousands of pages of analysis and assessment. EPA took extensive public comment on the TSD twice – with the ANPRM and with the NPRM. In both cases EPA updated the TSD in light of public comments and more recent science. EPA conducted a robust peer review process for the TSD, recognizing that the numerous assessments it summarized had also received extensive and robust peer review. The technical and scientific work undergirding EPA's 2009 determinations reflected an immense amount of work by EPA and by hundreds if not thousands of scientists around the globe.

The breadth and comprehensiveness of the body of scientific information before the agency in 2009 can be seen in the broad scope of coverage by the TSD, including:

Greenhouse Gas Emissions and Concentrations

Global and U.S. Observed and Projected Effects From Elevated Greenhouse Gas

Concentrations

Direct Effects of Elevated Greenhouse Gas Concentrations

Radiative Forcing and Observed Climate Change

- a. Radiative Forcing Due to Greenhouse Gases and Other Factors
- b. Global Changes in Temperature
- c. U.S. Changes in Temperature
- d. Global Changes in Precipitation
- e. U.S. Changes in Precipitation
- f. Global Sea Level Rise and Ocean Heat Content
- g. U.S. Sea Level Rise
- h. Global Ocean Acidification
- i. Global Changes in Physical and Biological Systems
- j. U.S. Changes in Physical and Biological Systems
- k. Global Extreme Events
- l. U.S. Extreme Events

Attribution of Observed Climate Change to Anthropogenic Greenhouse Gas Emissions at the Global and Continental Scale

- a. Attribution of Observed Climate Change to Anthropogenic Emissions
- b. Attribution of Observed Changes in Physical and Biological Systems

Projected Future Greenhouse Concentrations and Climate Change

U.S. Observed and Projected Human Health and Welfare Effects from Climate Change

Human Health

- a. Temperature Effects
- b. Extreme Events
- c. Climate-Sensitive Diseases

¹⁰⁷ <u>Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section</u> <u>202(a) of the Clean Air Act at 3-5.</u>

d. Aeroallergens

Air Quality

Food Production and Agriculture

- a. Crop Yields and Productivity
- b. Irrigation Requirements
- c. Climate Variability and Extreme Events
- d. Pests and Weeds
- e. Livestock
- f. Freshwater and Marine Fisheries

Forestry

- a. Forest Productivity
- b. Wildfire and Drought Risk
- c. Forest Composition
- d. Insects and Diseases

Water Resources

- a. Water Supply and Snowpack
- b. Water Quality
- c. Extreme Events
- d. Implications for Water Uses

Sea Level Rise and Coastal Areas

- a. Vulnerable Areas
- b. Extreme Events

Energy, Infrastructure, and Settlements

- a. Heating and Cooling Requirements
- b. Energy Production
- c. Infrastructure and Settlements

Ecosystems and Wildlife

- a. Ecosystems and Species
- b. Ecosystem

U.S. Regional Climate Change Impacts

- a. Northeast
- b. Southeast
- c. Midwest
- d. Great Plains
- e. Southwest
- f. Northwest
- g. Alaska
- h. Islands

Observed and Projected Human Health and Welfare Effects From Climate Change in Other World Regions

Impacts in Other World Regions

- a. National Security Concerns
- b. Overview of International Impacts

With this vast body of peer reviewed information before it, EPA explained in detail the legal approach it was taking in making the determinations. EPA explained the approach it would take for evaluating the

¹⁰⁸ 74 FR at Section II.

evidence before it.¹⁰⁹ EPA explained in detail how it determined that GHG air pollution was reasonably anticipated to endanger public health and public welfare. This involved an extensive discussion of each of the several areas in which global climate change could impact public health or welfare. EPA evaluated both near term and long term effects. EPA evaluated the degree of uncertainty for each step, as well as the likely probability of an effect occurring. EPA considered both positive and negative impacts. EPA exercised its judgement to weigh and balance all of this and determine whether overall an affirmative endangerment determination was warranted.¹¹⁰ EPA likewise carefully evaluated all of the scientific and technical information before it concerning the level of GHG emissions from new motor vehicles and how they relate to emissions from other source categories, to total U.S. emissions, and to emissions globally and for other countries. EPA explained why this information warranted a determination that emissions from new motor vehicles contribute to the GHG air pollution.¹¹¹

In addition to responding to major comments on the ANPRM in the proposal, and throughout the final decision, EPA prepared a very large and comprehensive Response to Comments, comprising 11 volumes and numerous Appendices focused on the many varied areas and issues relevant to the determinations.

It's hard to even compare EPA's current proposal to EPA's actions in 2009. In 2009, EPA had before it an incredibly large body of scientific and technical information and evidence. EPA provided an in-depth and comprehensive evaluation of this information and evidence, and carefully and in a detailed way applied the legal structure established by § 202(a)(1) to this information and evidence, resulting in robust determinations of contribution and endangerment.

EPA's current proposal does none of this. EPA's current proposal can be summed up as (1) a long explanation of why EPA now thinks that it applied the wrong legal framework in 2009; (2) a small scattering of information from a very limited and yet-to-be-peer reviewed draft scientific assessment, prepared by five authors handpicked by DOE to "challenge the mainstream consensus;" (3) a variety of conclusory factual and scientific assertions with very limited and in many cases no support or analysis cited by EPA; and (4) various assertions that EPA has considered a wide range of evidence and information, with no evidence of any kind to support these conclusory statements. Based on this paucity of information and analysis, EPA proposes to rescind the 2009 contribution and endangerment findings, claiming EPA applied the wrong law in 2009 and EPA no longer has confidence in the validity of the science supporting the 2009 contribution and endangerment findings. (113)

The weakness of this record and the analysis supporting EPA's proposal stems from EPA's apparent view that it does not need to make an actual determination on contribution and endangerment, whether it be affirmative or negative. EPA apparently believes all it has to do is cast some degree of doubt on EPA's 2009 action, and that is enough to rescind the 2009 determinations. That flies in the face of the Court's directive in *Massachusetts*. If EPA were to propose and make final negative determinations on contribution and/or endangerment, that would amount to rescinding the 2009 determinations. Absent that EPA has no basis to rescind the 2009 determinations and leave an absence of a decision one way or the other on contribution and endangerment, the issues *Massachusetts* said EPA had to decide.

¹⁰⁹ Id. at Section III.

¹¹⁰ Id. at Section IV.A. and B.

¹¹¹ Id. at Section V.

¹¹² DOE Climate Report at x.

¹¹³ For just one example, see 90 FR at 36289 ("Upon review of the underlying actions and intervening legal and scientific developments, including recent decisions by the U.S. Supreme Court and the scientific information summarized in this preamble, the EPA no longer believes that we have the statutory authority and the record basis required to maintain this novel and transformative regulatory program.")

For similar reasons, the proposed rescission by itself does not support vacating the current or past GHG emissions standards. They were adopted pursuant to the 2009 determinations, which were upheld as legally valid by the D.C. Circuit. This would be the case even if the rescission were lawful. Absent negative determinations, the current standards were legally adopted and continue to be lawful unless and until there are valid negative determinations that displace the 2009 determinations.

Any EPA proposal and final action to make negative contribution and/or endangerment determinations would require the kind of record and analysis that EPA developed in 2009. The current proposal fails miserably to provide a lawful basis to make such determinations. EPA would need to start again.

The approach EPA is taking has also led it to make numerous failures under FCC v. Fox Television Stations, Inc., 556 U.S. 502 (2009) and subsequent cases. If an agency wants to revoke or change its prior position or action, it needs to identify that it is doing so and explain why it is changing, including explaining why the evidence, analysis, and conclusions leading to the prior action are no longer correct. EPA fails to do this in numerous areas, failing to explain what EPA did in 2009 and why EPA did it, and why EPA now believes that EPA's past analysis and judgments were wrong and why EPA's current analysis and judgment are right. Some of these matters have been discussed above, such as EPA's current assertions about regulation of water vapor or inclusion in the air pollutant of two gases that vehicles do not emit. EPA fails to explain the position EPA took in the past and the justifications EPA provided and fails to explain why that prior position and justification is no longer warranted. These are just two examples of a problem that infects the proposal throughout.

Likewise, EPA makes many conclusory assertions with no analysis or evidence to support it. For example, EPA claims that:

"[t]he Administrator reviewed available information, including the most recently available scientific information, bearing on the assumptions and conclusions in the Endangerment Finding, the impacts of global GHG concentrations on public health and welfare in the United States, and the relative contribution of domestic emissions from new motor vehicles and engines to global GHG concentrations. As previously explained, this review included the 2025 CWG Draft Report, which analyzes empirical data, peer-reviewed studies, and available scientific information bearing on direct human influence on ecosystems and climate, climate response to CO₂ emissions, and impacts on ecosystems and society. The Administrator also considered available assessments by the U.S. Government and relevant international bodies, including the Third, Fourth, and Fifth NCAs reported by the USGCRP and AR5 and AR6 by the United Nations IPCC. The Administrator also considered critiques of the NCAs, and the Fifth NCA in particular, and reviewed these analyses for consistency with OMB information quality guidelines 88 and the transparency and reliability requirements of Executive Order 14303, "Restoring Gold Standard Science." 114

There is nothing in the record to support this conclusory and superficial assertion. Compare this short, unsupported, conclusory assertion with EPA's 2009 TSD. It is arbitrary and capricious to fail to consider relevant information and evidence, and to fail to demonstrate such consideration in the record.

A. "Air pollution" in § 202(a) does not include global GHGs, limited to exposure to local, regional pollution.

¹¹⁴ 90 FR at 36307-308.

In the proposal, EPA takes the position that,

"CAA section 302(h) also provides that any reference to "effects on welfare includes, but is not limited to, effects on" the environment, property, transportation hazards, and "on economic values and on personal comfort and well-being." The EPA proposes that this statutory language is best read as authorizing the Agency to identify and regulate, as an integral part of a rulemaking prescribing emissions standards, air pollutants that cause or contribute to air pollution that itself endangers public health and welfare through local or regional exposures." ¹¹⁵

This position is not supported by the statute and is inconsistent with any previous determination by EPA in the past. It shows the weakness of EPA's argument that their quote of CAA § 302(h) has been edited to omit § 302(h)'s specific reference to both weather and climate. The section in its entirety reads:

"(h) All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, **weather**, visibility, and **climate**, damage to and deterioration of property, and hazards to 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." Emphasis added.

In addition to specifically listing weather and climate, all of the listed categories of effects are influenced and can be negatively impacted by both weather and climate. In fact, they are currently being negatively impacted by changes to both weather and climate. Instead of being a limited list, Congress has added "but not limited to," demonstrating a clear intent to make welfare as inclusive as possible, not narrowed in definition as EPA attempts to do.

It is not surprising that the Act includes weather and climate in its definition of welfare. Scientific concerns about increased levels of GHGs causing the Earth to warm go back to the late 19th century. One of the earliest official government reports on climate change was in 1965, when President Lyndon B. Johnson's science advisory committee warned of the dangers of unchecked global warming and the ultimate need to protect people from these risks: "Man is unwittingly conducting a vast geophysical experiment. Within a few generations he is burning the fossil fuels that slowly accumulated in the earth over 500 million years." The report included an entire subpanel report on Atmospheric Carbon Dioxide, which noted that there was likely warming between 1885 and 1940. The report also expressed concern over melting Antarctic ice caps with resulting sea level rise as well as ocean acidification. (All these impacts have, in fact, come to pass.) Indeed these concerns are part of the legislative history of the Act. Senator Edmund Muskie stated in the record during the CAA debate that emissions from human activities "threaten irreversible atmospheric and climatic changes" and Senator Caleb Boggs of Delaware cited CEQ's first annual report, which dealt extensively with climate. 117

"Discussion of CO2 and climate also appeared in reports and congressional hearings on environmental problems more broadly, including in relation to intentional weather modification, nuclear energy, the development of supersonic aviation, and space exploration. CO2, climate, and

¹¹⁵ Id. at 36300

¹¹⁶ White House Report, "Restoring the Quality of Our Environment," Report of the Environmental Pollution Panel, President's Science Advisory Committee, November 1965. https://nsarchive.gwu.edu/document/31937-document-2-white-house-report-restoring-quality-our-environment-report-environmental

¹¹⁷ 116 Cong. Rec. 32901(1970).

the greenhouse effect were discussed in scores of Congressional hearings, including those specifically related to the consideration and drafting of the 1970 Clean Air Act (CAA). The impact of CO2 on climate was a major subject in the first report of the Council on Environmental Quality, released in draft form in 1969 and entered into Congressional testimony as part of the hearings for the 1970 Act.10 The topic was the subject of a wide variety of scientific papers and reports, several of which were transmitted to the Executive Branch and communicated to Congress in the 1960s and in 1970, particularly but not only in the context of urban air pollution."¹¹⁸

In addition, CAA § 115 specifically deals with International Air Pollution. While that section has not been used for GHG control, it does provide a mechanism that could be used to enforce climate treaties between the U.S. and other countries.

EPA further argues that the mechanism of the harm of "air pollutants" must be the same as those of the other pollutants already regulated. EPA says that:

"CAA section 202 specifically addresses hydrocarbons (HCs), carbon monoxide (CO), oxides of nitrogen (NO_x), and particulate matter (PM), all of which harm health and the environment through exposure (e.g., inhalation and dermal contact) or by causing or contributing to air pollution that harms health and the environment through exposure (e.g., smog and acid rain). That pattern holds for the criteria pollutants identified in the CAA—CO, lead, ground-level ozone (O3), nitrogen dioxide (NO2), PM, and sulfur dioxide (SO2)—as well as the initial list of hazardous air pollutants in CAA section 112(b)(1)."

There are two major problems with this reading. First, it functionally rewrites the statute from "public health or welfare" to just "public health." To review the list of welfare impacts in § 302(h), none of them are caused by either inhalation or dermal contact, and most are not direct impacts on human beings at all. The list is: "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." EPA's restricted interpretation is inconsistent with the damage to soils, crops, wildlife, damage to and deterioration of property, hazards to transportation (such as flooding caused by increased storms and sea level rise), none of which involve a human being having any contact with a pollutant. More to the point, impacts on weather and climate obviously are not based on a person inhaling or touching any pollutant. EPA rewriting the act to remove clear statutory text cannot meet the *Loper Bright* test of best statutory interpretation.

On the basis of nothing more than not wanting to regulate, EPA is trying to draw an extremely fine distinction between various impacts to say one set is covered but another set is not. GHGs, through their interactions with infrared radiation, change the environment and thus cause negative effects on both health and welfare. EPA is taking the position that only interactions with molecules can make something an air pollutant and that interaction in the environment with energy doesn't count. If so, EPA should point to some legislative language or legislative text to support that position. In fact, the CAA has at least three provisions that regulate chemicals based on their impact on energy in the environment. Radionuclides, a listed air toxic, can cause negative impacts through the release, among other things, of gamma radiation,

¹¹⁸ Climate Change and the Clean Air Act of 1970 Part I: The Scientific Basis. Naomi Oreskes, Colleen Lanier-Christensen, Hannah Conway, and R. Ashton Macfarlane. https://www.worthingtoncaron.com/documents/Climate-Change-and-the-Clean-Air-Act-of-1970.pdf

¹¹⁹ 90 FR 36300.

which is pure energy. The Act has an entire Title, Title VI, whose sole purpose is to reduce UV radiation from entering the atmosphere. Finally, the CAA has an entire subpart on visibility protection — §§ 169A and 172 — that regulates sources of GHGs to improve visibility which ultimately impacts individuals through sunlight which is pure energy. Analogously, GHGs create most of their impact by preventing the release of infrared radiation into space. Among the many effects of this energy are its interactions with the human body.

EPA once again makes enormous and unsupported leaps of logic by saying GHGs can't be a pollutant because:

"[a]s discussed in section IV.A.2 of this preamble, the only references to GHGs in the CAA are in non-regulatory contexts in which Congress authorized funding for various forms of research and grant programs. The choice to limit such references to non-regulatory solutions further supports the conclusion that the CAA section 202(a) regulatory authority for responding to endangerment does not encompass GHG emissions on the basis of global climate change concerns." ¹²⁰

The reasoning as best as we can tell is that since the CAA doesn't regulate GHGs, they can't be pollutants. This goes against the structure of the CAA, which has multiple provisions — §§ 108, 111, 112, 202, and 602 — with the same basic structure: Congress lists a number of pollutants and allows the Administrator to add additional pollutants. More importantly, the first two purposes of the CAA are:

- (1) 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;
- (2) to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution. 121

The clear reading of the purpose of a research program under the CAA is to "achieve the prevention and control of air pollution." If Congress included research and grant programs with regards to GHGs clearly, they did so because they considered them air pollutants. Research and grants under the CAA are not just random scientific endeavors for the sake of increasing random aspects of human knowledge; their purpose is helping the Agency learn so it can better address air pollution. If GHGs were not air pollutants, the research and grants would be inappropriate. Combining the research and grants conducted on air pollutants with the Act's provisions requiring it to expand the list of pollutants when the correct information is presented means that EPA, in regulating GHG emissions from motor vehicles and other sources, is doing exactly what Congress intended, consistent with the structure of the Act. The Supreme Court directly addressed this issue in *Massachusetts* when it said, "And unlike EPA, we have no difficulty reconciling Congress' various efforts to promote interagency collaboration and research to better understand climate change with the agency's pre-existing mandate to regulate "any air pollutant" that may endanger the public welfare. See 42 U. S. C. §7601(a)(1). Collaboration and research do not conflict with any thoughtful regulatory effort; they complement it." (emphasis added)

Nonetheless, EPA seems to pin its interpretation of § 202(a) on the idea that the CAA is focused only on local or regional air pollution problems. While we do not doubt that current EPA leadership wants to believe this, the Act does not in fact say that – ever. EPA does not explain and, in fact, tries to hide why the Act lists weather and climate as welfare effects. It ignores Title VI, which deals with a different global environmental

¹²⁰ Id. Fn 49

¹²¹ CAA § 101(b)

problem (protection of the ozone layer). It also ignores § 115, which creates a structure which would allow for the implementation of an international agreement on climate change. It pretends that the CAA is not clearly and explicitly designed to add new pollutants to those already regulated. In *Bostock v. Clayton County*, 590 U.S. 644, the Supreme Court stated that "when Congress chooses not to include any exceptions to a broad rule, courts apply the broad rule." EPA has created exceptions out of whole cloth that are inconsistent with the plain language of the statute and its structure for adding new pollutants.

As the Supreme Court said in Massachusetts,

"While the Congresses that drafted § 202(a)(1) might not have appreciated the possibility that burning fossil fuels could lead to global warming, they did understand that without regulatory flexibility, changing circumstances and scientific developments would soon render the Clean Air Act obsolete. The broad language of § 202(a)(1) reflects an intentional effort to confer the flexibility necessary to forestall such obsolescence. See Pennsylvania Dept. of Corrections v. Yeskey, 524 U. S. 206, 212 (1998) ("[T]he fact that a statute can be applied in situations not expressly anticipated by Congress does not demonstrate ambiguity. It demonstrates breadth" (internal quotation marks omitted)). Because greenhouse gases fit well within the Clean Air Act's capacious definition of "air pollutant," we hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles."

But *Massachusetts v. EPA* was not the only case where the Courts have held that the CAA "authorize[s] EPA to regulate carbon-dioxide emissions," which are the most prevalent vehicle GHG emissions, under a range of CAA programs. In *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014), the Court said, "We also held, consequently, that the Environmental Protection Agency is **empowered and required** by Title II of the Act to regulate greenhouse gas emissions from mobile sources (such as cars and trucks) if it decides that greenhouse gases "contribute to . . . air pollution which may reasonably be anticipated to endanger public health or welfare." (emphasis added.) Finally, in *American Electric Power Co. v. Connecticut*, 564 U.S. 410 (2011), the Supreme Court focused on CO2 emissions from power plants instead of mobile sources but held that because the CAA covers GHGs "the Clean Air Act and the EPA actions it authorizes displace any federal common law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired power plants. . . . And we think it equally plain that **the Act "speaks directly" to emissions of carbon dioxide** from the defendants' plants." (emphasis added.)

EPA also has decided that despite the fact that GHG emissions are the cause of virtually all the clearly stated welfare impacts listed in the CAA, the connection is too extenuated to count. The link is very simple: GHGs hold heat in the atmosphere, which impacts the climate, which causes and contributes to impacts that endanger public health and welfare. While GHG emissions from the U.S. transportation sector are not the only cause of climate change, the scale of these emissions is huge and significant. Transportation emissions are the number one source of emissions from the U.S., which is the country with the second most annual emissions and largest historical GHG emissions. The level of GHG emissions from the transportation sector is larger than the emissions from all but two other countries. They certainly contribute to the air pollution at issue.

In trying to make this three-step process (emissions – heat – impact) sound so complicated that it "no longer has a sufficiently close connection to the relevant conduct to reasonably draw a causal link," EPA forgets that most of the impacts from pollutants are based on some extended chain of events. Ozone is formed by a series of complex chemical interactions in the atmosphere on a variety of chemicals, some of which come from hundreds, if not thousands of miles away, driven by the energy of the sun on hot summer days. (Days that are increasing due to climate change.) Even once the ozone is formed, the health impacts

do not occur until the ozone is breathed in and interacts with human chemistry, and these interactions lead to another series of often complex processes to result in health impacts. Air toxics do not magically cause cancer. They are ingested, interact with chemicals in the body, disrupt DNA causing mutations which may or may not ultimately lead to a cell becoming cancer cells, which then create tumors causing the disease. Other chemicals cause cancer in humans through a different set of complex chemical interactions that reduce the effectiveness of the body's repair mechanisms which result in a cancer that would have been prevented if the pollutant had not been in the body. These chains of causation are easily as complex and extended as the impact of GHGs on climate.

In summary, EPA says,

"Throughout this section, we propose that the Endangerment Finding relied on various forms of Chevron deference to depart from the best reading of the statute and exceeded the EPA's authority in several fundamental respects, any one of which would independently require rescission to conform to the best reading of the law."

However, in *Loper Bright*, the Supreme Court expressly overturned the doctrine of deference to agency statutory interpretation, ruling that statutes "have a single, best meaning" that is informed, but not dictated, by Executive Branch practice.¹²² It is EPA in 2025 that ignores the clear best reading of the statute by ignoring the plain language of the statute, the structure of the Act and the clear Supreme Court precedent interpreting § 202 to pretend that EPA does not have the authority to regulate GHGs. It is EPA in 2025 that created out of whole cloth a new test for regulation that does not exist in the statute. As best we can tell, EPA is now hoping that the Court has not made reasoned and principled decisions based on law but instead made decisions because they want to increase pollution.

Similarly, EPA misinterprets *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014). EPA acts like it invalidated EPA regulating GHG for purposes of point source determination but actually, the case only invalidated the Tailoring Rule. The Court said, "EPA may, however, continue to treat greenhouse gases as a "pollutant subject to regulation under this chapter" for purposes of requiring BACT for "anyway" sources." In other words, GHG can be regulated as part of the BACT process under New Source Review. What the Court held was that EPA had to accept the CAA as it is not as it wishes it was. The Court held that "[a]gencies must always " 'give effect to the unambiguously expressed intent of Congress." National Assn. of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 665. [...] The power to execute the laws does not include a power to revise clear statutory terms that turn out not to work in practice." Applied to this situation, EPA cannot pretend that the term "welfare" in § 202 does not include weather and climate, and EPA cannot create a local/regional test that does not exist in the statute.

EPA proposes that "air pollution" and "endangerment" in § 202(a) are limited to air pollution that endangers public health or welfare through local or regional exposure to the air pollution itself. EPA points to harm "through exposure (e.g., inhalation and dermal contact) or by causing or contributing to air pollution that harms health and the environment through exposure (e.g., smog and acid rain)." According to EPA these terms do not include concentrations of GHGs that affect public health and welfare indirectly and not by exposure to the GHGs themselves. EPA bases this on various dictionary definitions of pollutant and pollution, Congress' instructions to EPA in § 202 addressing standards for criteria pollutants like CO

^{122 603} U.S. at 400-01.

^{123 90} FR at 36300.

and PM, background principles of tort law embodied in the term proximate cause, and by EPA's past practice. 124

In effect EPA proposes that the best reading of § 202(a) is that Congress wrote it as follows:

The Administrator shall by regulation prescribe (and from time to time revise) standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, ..., ambient air pollution which may reasonably be anticipated to endanger public health or welfare through exposure to the ambient air pollution.¹²⁵

That is not the provision Congress adopted. EPA's proposal is not consistent with the text Congress adopted and is an attempt to justify reading various limitations into the text that are not there.

The dictionary definitions that EPA points to do not contain the limitations that EPA proposes. The general and broad scope of those definitions readily include concentrations of GHGs in the upper atmosphere as pollutants and pollution.¹²⁶

EPA points to various instructions from Congress in § 202(a), calling for EPA to adopt emission standards for HCs, CO, NOx, and PM. Congress did address those pollutants by mandating that EPA adopt more stringent standards for those pollutants. One can imply from this that Congress reviewed EPA's prior actions, determined that the public needed greater protection, and responded by mandating that EPA provide greater protection by setting more stringent emissions standards for motor vehicles. One cannot imply from this a Congressional intent to forbid EPA from taking other unspecified actions to protect the public health from different air pollutants, whether similar or not to the ones Congress did address. EPA takes provisions showing that Congress intended to make sure the public received adequate protection from some pollutants and infers from that a Congressional intent to make sure the public could not receive adequate protection from other pollutants that it did not specifically address. This negative implication does not follow, either from the text of § 202(a) or from the specific emissions standards that Congress mandated in § 202.

This is especially so given Congress did address GHG emissions from motor vehicles when it adopted the Renewable Fuel program in 2005, and amended it in 2007. In § 211(o), Congress mandated that motor vehicle fuel must include certain amounts of renewable fuel. Motor vehicle fuel meets the definition of renewable fuel if the lifecycle GHG emissions for the fuel are a specified percentage below the lifecycle GHGs emissions for a baseline gasoline or diesel fuel. The lifecycle emissions of the fuel include the emissions of GHGs during operation of the vehicle as well as various upstream emissions associated with the production of the fuel. The program looks at motor vehicle emissions of GHGs as well as other aspects of the lifecycle GHG emissions of the fuel used to power motor vehicles.

The goal of the program is to reduce the GHG emissions footprint from this part of the transportation sector. Congress clearly determined that GHG air pollution associated with the operation of motor vehicles

-

¹²⁴ Id. at 36300-302. The irrelevance of the tort law principle of proximate cause is addressed elsewhere in our comments. ¹²⁵ EPA's reference to exposure to local or regional air pollution, citing as examples CO, NOx, SOx, ozone, and PM, refers to ambient air pollution. Ambient air is the air in the lower atmosphere to which people and the environment can be exposed. See 40 CFR 50.1(e).

^{126 90} FR at 36300.

was an appropriate air pollution problem for EPA to address. If EPA is looking for evidence of congressional intent, this is directly on point and supports EPA's 2009 interpretation.

Congress knew how to limit the air pollution EPA had authority to address to ambient air pollution. Section 108 specifies criteria for listing air pollutants for the NAAQS program. It includes the typical requirement – it must be an air pollutant "emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare." Congress also specified that it be an air pollutant "the **presence of which in the ambient air** results from numerous or diverse mobile or stationary sources." (emphasis supplied). ¹²⁷

Congress mandated that EPA issue air quality criteria for listed pollutants, where the "[a]ir quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities." (emphasis supplied).¹²⁸

EPA is required to issue "national **ambient** air quality standards" (emphasis supplied) for each listed air pollutant, where "[n]ational primary **ambient** air quality standards ... shall be **ambient** air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health" (emphasis supplied) and "[n]ational secondary *ambient* air quality standard prescribed under subsection (a) of this section shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to **protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air.**" (emphasis supplied)¹²⁹

Congress knew how to limit EPA's authority to setting standards that address harmful exposure to local or regional air pollution. It did so for the NAAQS program but did not do so in § 202(a). The clear differences in the provisions indicate that Congress did not write into § 202(a) the restriction that EPA currently proposes to read into that provision.

Even where Congress limited EPA to addressing ambient air pollution and the problems associated with such air pollution — the NAAQS program — EPA has for many years considered the global warming impacts of air pollution. For example, EPA has typically considered the warming effects associated with PM in the air quality criteria that assesses the available scientific information on the public health and welfare effects of PM. ¹³⁰ In addition, EPA has considered the effects of ambient levels of ozone on shielding the public from harmful UV-B radiation. ¹³¹ This is an indirect effect that does not stem from exposure to ozone, contrary to EPA's proposed statutory limitation to harms deriving from exposure to local and regional air pollution. ¹³²

¹²⁸ Section 108(a)(2).

¹²⁷ Section 108(a)(1).

¹²⁹ Section 109(a),(b).

See, e.g., EPA "Air Quality Criteria for Particulate Matter and Sulfur Oxides," Vol. I Section 1.9 ("Effects on Visibility and Climate"), EPA-600/8-82-029a, December 1982; EPA "Air Quality Criteria for Particulate Matter," Vol. II Section 8.8 ("Climatic Effects"), EPA-600/P-95/0016F, April 1996; EPA "Integrated Science Assessment for Ozone and Related Photochemical Oxidants," Chapter 10 ("The Role of Tropospheric Ozone in Climate Change and UV-B Shielding Effects"), EPA 600/R-10/076F, February 2013.
 Id.

¹³² American Trucking Associations v. EPA, 175 F.3d 1027, 1051-53 (D.C. Cir., 1999) ("The reference to "all identifiable effects" would seem on its face to include beneficent effects. EPA attempts to avoid this straightforward reading in several ways. ... But the phrase "pollutant" is simply a label used to identify a substance to be listed and controlled by the statute. ... this fact of

The overall context of the Act also makes clear that Congress was fully aware that air pollution could have international or global aspects that needed to be addressed. For example, Congress addressed situations where air pollution is transported from overseas into the United States, and vice versa. ¹³³ EPA is required to address GHG emissions from the use of motor vehicle fuels, including full lifecycle GHG emissions, which includes both domestic and international emissions. ¹³⁴ Starting in 1977, Congress required EPA to address a global air pollution problem – the harm to the ozone layer in the upper atmosphere from anthropogenic emissions of pollutants such as halogens. Section 126 of the 1977 amendments to the Act added a new Part B to Title I, including new §§ 150 through 159. The purpose of the new Part was:

"(1) to provide for a better understanding of the effects of human actions on the stratosphere, especially the ozone in the stratosphere, (2) to provide for a better understanding of the effects of changes in the stratosphere, especially the ozone in the stratosphere on the public health and welfare, (3) to provide information on the progress of regulation of activities which may reasonably be anticipated to affect the ozone in the stratosphere in such a way as to cause or contribute to endangerment of the public health or welfare, and (4) to provide information on the need for additional legislation in this area, if any." ¹³⁵

EPA was to conduct a study "of the cumulative effect of all substances, practices, processes, and activities which may affect the stratosphere, especially ozone in the stratosphere. The study shall include an analysis of the independent effects on the stratosphere especially ozone in the stratosphere of— (1) the release into the ambient air of halocarbons, (2) the release into the ambient air of other sources of chlorine."

Congress adopted various provisions addressing reporting, monitoring, interagency actions, international involvement, State programs, and other relevant provisions. Congress also authorized EPA to adopt controls to address this global air pollution problem.

"If at any time...in the Administrator's judgment, 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 shall promptly promulgate regulations respecting the control of such substance, practice, process, or activity, and shall simultaneously submit notice of the promulgation of such regulations to the Congress." ¹³⁷

Congress recognized that emissions of various substances – halogens and other like substances – were polluting the air in a way that reduced the protective layer of ozone in the upper atmosphere. Congress did not need to use the general terms air pollutant and air pollution because it identified the emissions of concern, halogens and other like substances, and identified the specific air pollution problem of concern, chemical substances in the air that degraded the protective stratospheric ozone layer. Way back in 1977, Congress recognized that global air pollution problems may need to be addressed by EPA through regulatory control programs. This is yet another example that undercuts EPA's proposed negative inference

¹³⁴ Section 211(o)(1)(G),(H).

nomenclature does not visibly manifest a congressional intent to banish consideration of whole classes of "identifiable effects.") The same can be said of EPA's attempt to avoid the straightforward reading of $\S 202(a)$.

¹³³ Section 115.

¹³⁵ Section 150. This Part B was replaced with a new Title VI in the 1990 amendments to the Act.

¹³⁶ Section 153.

¹³⁷ Section 157(a).

that somehow Congress limited EPA's broad authority under § 202(a) to an unspecified, narrow subset of air pollution problems.

In addition, as noted above, the Act's definition of "welfare" also specifically references "climate." All of these provisions clearly indicate that Congress was aware of the international and global aspects of air pollution, and the need to address them in the appropriate circumstances. In § 202(a), Congress relied upon the broad and general terms that it used there and in § 302, terms which readily encompass the GHG air pollutants and air pollution EPA addressed in the 2009 contribution and endangerment findings. Congress did not limit § 202(a) to ambient air pollution, as it did for the NAAQS program. Congress made clear, in the Renewable Fuel provisions, that it recognized that motor vehicles and their fuels are part of our nation's greenhouse gas emissions, are part of the greenhouse gas air pollution problem, and recognized that this was a problem that needed to be addressed. Nowhere in § 202(a) did Congress indicate, expressly or impliedly, that EPA's authority was limited in the way EPA proposes. All of the indications are to the contrary.

Finally, EPA's proposal is nothing more than a repackaging of Justice Scalia's dissent in the *Massachusetts* case. ¹³⁹ The dissent's analysis was rejected by the Supreme Court, with good reason. ¹⁴⁰ The same result applies here – EPA's proposed interpretation is contrary to the best reading of § 202(a).

B. The Major Question Doctrine Does Not Apply Congress Directly Commanded EPA to Develop Standards for Vehicular Air Pollutant Emissions Which Contribute to Endangerment

The agency maintains that the major question doctrine applies and supports its determination to rescind the Endangerment Finding. Specifically, the agency states that the doctrine applies when agency action touches on economically and politically significant issues, ¹⁴¹ and where the agency claims an "unheralded power" resulting in "transformative expansion" of its heretofore exercised delegated powers. ¹⁴² The agency also notes that Congress has preferred a carrot of incentives to address the issue of global climate change, not the stick of standards, and has disapproved certain GHG control measures via the Congressional Review Act. ¹⁴³ The agency further claims *Massachusetts* dealt only with the issue of whether GHGs are pollutants, not with the question of what resulting standards might be once EPA made a decision to find endangerment, although the agency solicited comment on whether the decision also dealt with the major question doctrine in some manner. ¹⁴⁴

The specific transformative authorities the agency claims are at issue are an "electric vehicle (EV) mandate," and a determination of how much gasoline can be used per vehicle. The agency finds these purported mandates analogous to the vacated cap-and-trade scheme of the Clean Power Plan which the *West Virginia* Court noted had EPA determining the nationwide appropriate electricity generating mix. 146

The agency further asserts that § 202 (a)(1)'s command for EPA to "prescribe.... 'standards' for certain air pollutants" does not "clearly authorize the EPA to decide the Nation's response to climate change

¹³⁹ 549 U.S. at 555-561.

¹³⁸ Section 302(h).

¹⁴⁰ 549 U.S. at 528-533, and 529 fn. 26.

¹⁴¹ 90 FR at 36299 /1.

¹⁴² Id. at 36306.

¹⁴³ Id.

¹⁴⁴ Id. at 36307.

¹⁴⁵ Id. at 36306-37.

¹⁴⁶ Id.

concerns." The upshot, according to the agency, is that EPA is "preclude[d] from asserting authority to regulate in response to global climate change concerns." ¹⁴⁸

The agency misstates both the law and the facts. The major question doctrine has no applicability here, and if it does, §§ 202(a)(1) and (2) clearly authorize the agency to find that GHG air pollution endangers, and that EPA may develop technology-based standards to address vehicular emissions which contribute to that endangerment.

1. The elements of the major question doctrine

The agency properly states that the major question doctrine could apply when an agency regulates in areas of high economic and political significance, and that congressional action or inaction in these areas can be suggestive. But it errs in suggesting that these are the sole, or determinative, criteria for the doctrine's applicability.

For the major question doctrine to apply, an agency must not only be asserting unheralded power, but doing so using an authority "discovered in a long-extant statute" and resulting in an "unprecedented change from past agency practice." Not only must an agency be claiming heretofore never-asserted power based on some ancillary, never previously-invoked authority, but the agency must be acting outside its normal area of expertise: "There is little reason to think Congress assigned such decisions to the Agency. For one thing, as EPA itself admitted when requesting special funding, "Understand[ing] and project[ing] system-wide ... trends in areas such as electricity transmission, distribution, and storage" requires "technical and policy expertise *not* traditionally needed in EPA regulatory development." [...] "When [an] agency has no comparative expertise" in making certain policy judgments, we have said, "Congress presumably would not" task it with doing so." ¹⁵⁰

None of these elements are satisfied here.

2. There is no Transformative Expansion in Agency Power.

(i) The Supreme Court has Held Repeatedly that EPA Possess Authority to Develop Standards Addressing Global Climate Change. Contrary to the agency's assertions, the Court in Massachusetts was categorical: "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. (stating that '[EPA] shall by regulation prescribe ... standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles')." And, in answer to whether Massachusetts considered the major question doctrine, the plain answer is that it didn't need to, since, as just quoted, it found clear congressional delegation to EPA to promulgate standards for pollutants contributing to the climate air pollution which endangers public health and welfare.

If this were not enough, the Court further addressed the question in *American Electric Power v. Connecticut*, 564 U.S. 410 (2011), stating without any hedging language that: "the Clean Air Act and the EPA actions it

¹⁴⁹ West Virginia, 597 U.S. 697, 700 (2022). See also id. at 724 noting a "newfound power in the vague language of an ancillary statutory provision."

¹⁴⁷ Id. at 36299/3.

¹⁴⁸ Id.

¹⁵⁰ Id. at 729 (citations omitted).

¹⁵¹ Massachusetts, 549 U.S. at 533; see also Coal. for Resp. Regulation, 684 F. 3d at 126 (same).

authorizes displace any federal common-law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired powerplants. *Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the Act. 549 U.S., at 528–529, 127 S.Ct. 1438. And it is equally plain that the Act "speaks directly" to emissions of carbon dioxide from the defendants' plants." (emphasis added).

This holding is decisive. EPA is provided authority to address global climate change by the CAA, and this authority obviously (and necessarily) extends to the implementing standards which EPA must again, necessarily, promulgate.

The agency also ignores that the *West Virginia* Court approvingly noted EPA's prior regulatory regime based on "ensuring the efficiency of pollution performance of each individual source." Putting this together with the holding of *American Electric Power* (which preceded *West Virginia*) results in the principle that EPA can regulate GHG emissions at the emitting source.

Moreover, the agency's assertions that the implementing standards' impact on EPA's authority to find that GHG air pollution endangers public health and welfare is logically fallacious. The statute sets out a two-step process, and the first part of which – unrelated to any resulting standards – is a scientific determination of whether type of air pollution endangers public health and welfare, and whether vehicular emissions cause or contribute to that endangerment. EPA's assertion at 90 FR 36299 that standards impact on that initial determination has it exactly backwards.

EPA's statement that response to climate change is beyond the purview of the Act is further belied by the requirement in § 109(b) that EPA adopt secondary NAAQS to protect public welfare from adverse effects. Public welfare includes adverse effects on climate. The renewable fuel provision of § 211(o) is likewise premised on achieving positive GHG emission balance for vehicular fuels, as explained earlier.

In short, the Supreme Court has twice held both that EPA has authority to make an endangerment finding respecting global climate change, and the authority to issue standards addressing pollutant contributions to that air pollution. The agency's assertions that the nature of resulting standards impacts the authority to find endangerment reflects a logical fallacy. The agency's authority to find endangerment from GHG air pollution is unmistakably clear.¹⁵⁵

(ii) The standards are not transformative or unheralded. As to the standards themselves, the § 202(a)(1) and (2) standards for the vehicular GHG emissions contributing to endangerment assert the same authority as asserted in earlier § 202(a) rules for both criteria pollutants and GHGs, and are premised on technical and policy judgments regarding motor vehicle pollution control that lie in the heartland of EPA's expertise. As in prior CAA § 202(a) rulemakings, EPA assessed the availability of potential technologies to reduce the pollutant at issue, the lead time necessary for development and deployment of those technologies, the cost of compliance with the standards, the cost to purchasers, and the broader societal, energy security and economic impacts. And as in those prior rules, EPA exercised its policy judgment and technical expertise to

¹⁵² Id. at 424.

^{153 597} U.S. at 727.

¹⁵⁴ CAA § 302(h) (definition of "effects on welfare").

¹⁵⁵ If, against our view, the agency is correct on this point, then it has no authority over GHG emissions from aircraft, and must revoke the section 231 aircraft GHG standards, which would expose U.S. aircraft to substantial restrictions and financial penalties potentially including loss of landing rights in all European Union venues.

determine the final standards giving due consideration to the enumerated statutory and other relevant criteria.

EPA and Congress have been controlling emissions from the transportation sector since the beginning of the CAA. EPA's own website 156 includes a long list of emission controls of vehicle and other mobile sources starting with the 1970 CAA which required a 90% reduction of emissions. Every decade since the 1970s has seen its share of new and increasingly stringent standards. Control of vehicle emission is hardly a "little used gap filler;" it is literally one of the CAA's signature programs at the heart of the Act.

As it has in the five plus decades of exercising its § 202(a) authorities, for GHG control, EPA evaluated the control technologies to further control emissions of the contributing pollutant emissions from new motor vehicles and engines, their feasibility, and effectiveness at controlling GHGs. Although the specific facts surrounding each standard vary, these are all among the kinds of considerations that EPA regularly evaluates in its motor vehicle rules, including in all of EPA's prior criteria pollutant rules: the nature of the industry and the regulated vehicles, the availability of control technologies, costs, emissions impacts, health and welfare impacts, economic and other impacts, cost-benefits analysis, and of course the resulting emission standards. Indeed, many of the standards EPA now proposes to rescind are premised on the use of control technologies that are common for criteria pollutant control, including exhaust gas recirculation, variable valve actuation, and turbo downsizing. 157 Other mundane potential control technologies are better tires and aerodynamic body designs. To say that standards - which include all of the first two phases of light- and heavy-duty GHG standards - premised on these run-of-the-mill common technologies are transformative borders on nonsense.

What the agency apparently regards as transformative are the most recent sets of standards, the light- and medium-duty multi-pollutant standards commencing in model years 2027-2032, and the Phase 3 standards for heavy-duty vehicles commencing in model year 2027 and also extending to model year 2032. This is a gross mischaracterization.

First, looking at the forest instead of the trees, if the GHG standards are transformative-including the most recent ones which are the only ones that were even premised in part on use of electrified powertrains – one would have expected strident opposition from the regulated industry. Instead, regulated industry supports both the light-, medium-, and heavy-duty 2027-2032 model year rules. 159

Second, the standards are performance-based and do not mandate anything. Manufacturers are free to meet the standards in any way they choose. For example, there have been hundreds of thousands of successful certifications of compliance for meeting the Phase 2 heavy-duty GHG standards, and not one used EPA's

¹⁵⁶ https://www.epa.gov/transportation-air-pollution-and-climate-change/timeline-major-accomplishments-transportation-air

¹⁵⁷ See 76 FR at 57119, 57139, and 57173-74 (Sept. 15, 2011) (phase 1 heavy duty GHG standards, and standards for heavy duty pickups and vans premised on use of aerodynamic improvements, lower rolling resistance tires, extended idle reduction, low friction lubricants, electrified power steering, downweighting, turbocharging); 81 FR at 73612-618, 73696-705 (Oct. 25, 2016) and Phase 2 RIA at 2-56 to 78 (phase 2 heavy duty GHG standards and standards for heavy duty pickups and vans based on these same improvements, and engine improvements including cooled exhaust gas recirculation, variable valve timing, engine friction reduction. Phase 2 standards for heavy duty pickups and vans were premised, in one of EPA and NHTSA's joint analyses, on some modest penetration of strong hybrids, but EPA also showed that these standards were achievable without any use of strong hybrids. 81 FR at 73803/2 and 804/1.

¹⁵⁸ See 90 FR at 36307 referring to an "electric vehicle mandate."

¹⁵⁹ See 89 FR 27854-54 (light and medium duty), 89 FR 29448-49 (heavy duty). Compare 985 F. 3d 914, 940-41 (D.C. Cir. 2021), reversed in West Virginia (fierce opposition from regulated industry to Clean Power Plan).

modelled compliance pathway.¹⁶⁰ Not only are the standards performance-based rather than mandates, but the standards are met by means of fleetwide averaging (that can also include banking and trading of credits). This means that individual vehicles do not have to meet any particular standard.¹⁶¹ In no way do the standards announce what the market share of any vehicle type, be it electrified or internal combustion engine (ICE), will be.¹⁶²

Moreover, EPA demonstrated that these standards are achievable without any addition of BEVs (battery electric vehicles, operating entirely on electric power trains) to the existing light-, medium-, or heavy duty fleets. 163 Even in each rule's principal technological compliance pathway – an analysis EPA must prepare to show that the technology-based performance standards are feasible at reasonable cost in the lead time provided 164 – BEVs make up a small percentage of vehicles in the respective fleets. For light duty vehicles, BEVs remain a minority of the fleet until model year 2031, and even in the final year of the program are a slight majority of vehicles (56% of the light duty fleet). 165 For heavy duty vehicles, BEVs are projected to remain a small minority of the fleet for all subcategories for the entirety of the program, with the only exception being for light heavy-duty vocational vehicles in the program's final model year, when the percentage in the modelled compliance pathway rises from 46% to 60%. 166 For all of the initial phases of the light-, medium-, and heavy-duty standards – that is, for every vehicular GHG standards before those commencing in model year 2027 - no BEVs at all were projected as part of the modelled technological compliance pathways. How can these conceivably be considered to be "EV mandates"? And despite the agency's assertions, EPA did not decide how much gasoline is used in America. In the analysis of impact of the standard EPA noted that the percentage of cars that use gasoline for all/some of their energy ranged from 65% to 44%, and EPA demonstrated for all vehicle classes that the standards were achievable without resort to any utilization of BEVs.

These modest incremental additions, reflecting technology already well-integrated in the light-, medium-, and heavy-duty fleets, are not 'transformative' by vehicle number or percentage. They are, for example, far less transformative than the criteria pollutant standards premised on use of a catalytic converter, an innovative technology not even commercialized at the time of the standards, which was adopted uniformly by manufacturers, and which necessitated significant changes to every fuel and engine control system for every ICE. ¹⁶⁷ Nor are the standards transformative because infrastructure is needed for charging BEVs. NOx control via SCR, a nearly-uniform means of vehicular NOx control, requires a nationwide network of urea dispensaries (including dedicated storage tanks). And of course, gasoline for ICE vehicles requires nationwide supporting refueling infrastructure as well.

The agency states that these latest vehicle GHG standards (the agency does not differentiate among the various vehicle GHG standards, but, as explained above, it is impossible to regard the earlier standard

¹⁶⁰ Phase 3 Response to Comments (RTC) at 117-118.

¹⁶¹ Individual vehicles are certified to a Family Emission Limit, but this Limit is determined solely by the manufacturer and can be at whatever level the manufacturer chooses, consistent with the manufacturer's fleet, on average, meeting the promulgated standard. See generally, Phase 3 RTC at 1349-60.

¹⁶² Compare West Virginia, 549 U.S. at 731 n. 4.

¹⁶³ See 89 FR at 28082-085 (light- and- medium duty); see also 89 FR at 27856 (alternative compliance pathways for light- and medium-duty vehicles showing feasible compliance pathways with lower BEV penetration rates than premised in the agency's principal compliance pathway demonstration).

¹⁶⁴ See NRDC v. EPA, 655 F. 2d at , 328, 333-34 (D.C. Cir. 1981); see also Phase 3 RTC at 116.

¹⁶⁵ 90 FR at 27856.

¹⁶⁶ See 89 FR at 29452

 $[\]frac{167}{\text{https://edu.rsc.org/feature/the-evolution-of-catalytic-converters/2020252.article\#:} \sim : text = The \% 20 engine \% 20 was \% 20 calib rated \% 20 to, fuel \% 20 for \% 20 the \% 20 combustion \% 20 reaction$

phases when they are premised on garden variety engine and vehicle controls, rather than on electrified power trains and are not remotely analogous to the type of scheme vacated by the Court in *West Virginia*), are analogous to the feature of the Clean Power Plan vacated in *West Virginia*. Specifically, the agency asserts that including BEVs as part of a modelled compliance pathway is analogous to nationwide determinations of amounts of electricity-generating fuels – regulations extending outside the boundaries of the emitting facilities. Even if one puts aside the drastic factual differences between standards that mandate nothing and are achievable without use of electrified power trains to a nationwide allocation of electricity fuels, the analogy is grossly misplaced. A proper analogy would be if EPA had premised these standards on use of mass transit, bicycling, or some means other than direct control of the emissions of the contributing pollutant at the emission source. Instead, the standards are actually analogous to direct CO₂ control of utility stack emissions, which, as noted above, the *West Virginia* Court found to be permissible. The Court observed that a wide range of technologies could fall under this regime, including stack-based controls, as noted above, which again are directly analogous to the tailpipe emission standards for GHGs.

3. The standards also are not economically transformative, unheralded, or otherwise out of the ordinary.

In evaluating whether a regulation is of vast economic and political significance, the Supreme Court has typically compared the effects of the current rule with those of prior exercises of the agency's authority. In particular, the Court has paid special attention to the number of directly affected entities and the costs of complying with the regulation—whether in the form of dollars or other economic consequences such as forced plant closures or permitting delays. In some cases, the Court has also considered the costs to customers of the regulated entity. Under these principles, the major question doctrine has no applicability here.

First, both the Phase 3 rule and the multi-pollutant light and medium-duty rule regulate the same community of regulated entities as earlier rules: light-, medium- and heavy-duty vehicle manufacturers. Congress provided explicit textual authorization for regulating these entities, which EPA has been doing for five decades, and they comprise "a relative handful of large sources capable of shouldering heavy substantive and procedural burdens" of § 202(a) regulation, a far cry from the millions of regulated entities that the Court found to give rise to major questions in other cases. Indeed, the estimated cost of the Phase 3 rule is less than that estimated for EPA's Heavy Duty NOx rule. ¹⁷⁰

Nor does either rule impose the kinds of other economic disruptions that the Supreme Court has noted in prior cases. For example, the rule does not require, legally or practically, any vehicle manufacturers to shut down or even to reduce their production. Nor does the rule create any or excessive delays in their ability to continue to produce vehicles.

As for purchaser costs, the statute does not require consideration of such costs. Congress, of course, recognized that pollution control would entail costs, and the technologies used to meet EPA's motor vehicle emission standards have historically increased costs for purchasers. There are a subset of pollution control technologies, however, that "pay back" the increased upfront costs to purchasers through operating savings.

U

¹⁶⁸ 90 FR at 36636-37.

¹⁶⁹ See also *West Virginia*, 597 U.S. at 726-27, approvingly noting how a "technology-based" approach to regulation traditionally "focuses upon the control technologies that are available to industrial entities and requires the agency to ensure that regulated firms adopt the appropriate cleanup technology." Further similar approving language is found at 597 U.S. at 726, 727, and 734. ¹⁷⁰ Compare 88 FR at 4311 (Jan. 24, 2023) (estimated cost of heavy duty NOx rule over the life of the program as \$4.7 billion) with estimated cost of HD GHG Phase 3 standards over life of the program (\$1.1 billion). 90 FR at 29456/3.

When such technologies are available, they will obviously be of greater interest to purchasers. In the final rules, EPA considered the upfront costs associated with purchasing less polluting vehicles, including (for compliance pathways involving BEVs) the costs of any charging infrastructure where applicable, as well as the costs of operating such vehicles over their lifetime. EPA also evaluated whether the incremental upfront cost would "pay back" over time through operating savings, which we find to be a particularly useful metric for ascertaining willingness to purchase. EPA found that the standards, and specifically zero-emission vehicle (ZEV) technologies, do pay back within the usual period of first ownership of the heavy-duty vehicle. Indeed, purchaser fuel cost savings far exceed the rules' costs such that both the rules show net benefits from fuel savings alone, before one even considers the pollution control benefits. For light- and medium-duty plug-in hybrid vehicles (not even for a BEV), EPA estimated that over the average period of first ownership of eight years, a MY 2032 PEV owner will on average save more than \$8,000 on purchase and operating costs compared to a gasoline vehicle that meets these standards - far in excess of the estimated \$2,100 increase in vehicle purchase price attributable to the pollution control technology. 171 Focusing on the light- and medium-duty rule, the rule's costs are not so vast as to be unprecedented or transformative. Even without considering the associated fuel savings, the per-vehicle costs are small relative to what Congress itself accepted in enacting § 202.¹⁷²

The total costs of compliance for the light- and medium-duty rule is greater than for prior rules. This is partly because, notwithstanding the significant emissions reductions achieved through compliance with prior GHG rules, manufacturers are projected to produce more vehicles than ever before to meet increasing consumer demand. And even these kinds of metrics reflect an iterative strengthening of the program, not the kind of unprecedented and transformative change that gives rise to a major question. They are a far cry, for instance, from the multiple order-of-magnitude increases in the number of regulated entities and in costs that the Court found in *Utility Air*.¹⁷³ The size of the impacts, moreover, is largely a product of the large size of the vehicle market, as well as EPA's choice to assess impacts through 2055, which allows the agency to consider the long-term impacts of the rule in light of the gradual turnover of the motor-vehicle fleet.

These rules do not create vast economic impacts of an unprecedented kind. The rules build upon the market's transition to ZEVs—in response to emerging technological developments. And contrary to the agency's flamboyant assertions, the rules are not a ZEV mandate as a manufacturer can comply with the standards without producing additional ZEVs.

4. The standards are based on a central CAA provision, are in the wheelhouse of EPA's expertise, and reflect consistent past agency practice

As noted above, *West Virginia* stressed that the Court's skepticism was heightened by EPA's reliance on an obscure, hitherto largely unused ancillary provision of the Act, which EPA was implementing in a way utterly at odds with its consistent past practice.¹⁷⁴

¹⁷¹ See <u>Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles RIA</u>, Section 4.2.2.

¹⁷² See *Motor & Equip. Mfrs. Ass'n, Inc. v. EPA*, 627 F.2d 1095, 1118 (D.C. Cir. 1979) ("Congress wanted to avoid undue economic disruption in the automotive manufacturing industry and also sought to avoid doubling or tripling the cost of motor vehicles to purchasers.").

¹⁷³ See 573 U.S. 302, 322 (2014).

¹⁷⁴ 597 U.S. at 724.

The opposite is true here. Section 202(a)(1) and (2) are core provisions of the Act. As explained above, EPA implemented these provisions for GHG emissions in precisely the same manner as it has been doing for over 50 years for all other vehicular pollutants whose emission contributes to endangering air pollution.

Moreover, unlike the Clean Power Plan, the vehicular GHG standards fall squarely within EPA's area of expertise. Since the Act's inception in 1970, EPA has regulated vehicular pollutant emissions using its delegated § 202(a) authority. Though the individual facts vary per rule, EPA's basic methodology, reflecting NRDC v. EPA, ¹⁷⁵ is to promulgate technology-based standards by evaluating available control technologies, their feasibility and performance considering inherent variability, their cost, how quickly they can be commercialized into the new motor vehicle fleet, impacts on vehicle price to consumers, energy security, safety, and other related factors. The ultimate object is to show, often via a potential compliance pathway, the major steps needed for technology development, at what cost, and how any technological difficulties may be resolved within the lead time provided. 176 EPA's expertise in this area is colossal, although little to none of it is evident in the present proposal.

5. Congressional Actions

Normally, failed legislation "offers a particularly dangerous basis on which to rest an interpretation of an existing law a different and earlier Congress" adopted. ¹⁷⁷ The situation in West Virginia was an exception to this general principle due to the strong correspondence in both substance and timing to the regulatory scheme of the Clean Power Plan. Specifically, the Court in West Virginia noted that Congress had both specifically and repeatedly rejected legislation that would have authorized the same cap-and-trade regime EPA adopted in the Clean Power Plan, and also, in the 1990 amendments, had adopted a cap-and-trade program for acid rain but not for § 111 sources. 178

There is no such correspondence between legislative efforts and EPA vehicle standards. In the multiple Congresses serving since EPA promulgated the Endangerment Finding, there has been no failed legislation regarding how EPA is to regulate GHG emissions from new motor vehicles, no failed legislation addressing any of the vehicle GHG standards themselves, and no failed legislation addressing the Endangerment Finding. Nor have there been any congressional repeals of the vehicle standards, well within congressional authority under the Congressional Review Act. ¹⁷⁹ In fact, unlike a cap-and-trade program for CO₂ emissions, since the 1973 energy crisis, Congress has included EPA within overall goals of reducing gasoline consumption. As noted above, Congress mandated in § 211(o) that motor vehicle fuel must include certain amounts of renewable fuel based on the lifecycle GHG emissions for the fuel being a specified percentage below the lifecycle GHGs for a baseline gasoline or diesel fuel. The lifecycle emissions of the fuel include the emissions of GHGs during operation of the vehicle as well as various upstream emissions associated with the production of the fuel. Congress also charged EPA with adopting the fuel economy test protocols for determining a vehicle's miles per gallon of gasoline, which information in turn is used to enforce Corporate Fuel Economy standards. EPA also used this information for the Fuel Economy labelling program, which posts fuel economy ratings on all new ICE vehicles.

¹⁷⁶ See 655 F. 2d at 328, 333-34.

¹⁷⁵ NRDC v. EPA, 655 F. 2d

¹⁷⁷ Bostock v. Clayton, 140 S Ct 1731, 1747 (2020).

¹⁷⁸ 597 U.S. at 733.

¹⁷⁹ The agency points to CRA actions involving different rules involving non-vehicular emissions, and to CRA actions respecting certain section preemption waivers for particular California programs including for ZEVs. 90 FR at 36307. These are inapposite since they do not involve the federal § 202 (a) GHG standards. All of the GHG vehicle standards were subject to the CRA, and no resolutions to rescind these rules were even introduced, much less adopted.

Rather than point to non-existent specific correspondences, EPA references the "One Big Beautiful Bill": "We propose that this legislation, which was the product of substantial national debate and revised and rescinding funding for provisions of the IRA that were themselves the product of substantial national debate, indicates that the EPA erred in attempting to resolve significant policy issues on its own accord in the Endangerment Finding." But Congress did nothing that impacted either the Endangerment Finding or the auto rules. Congress revoked some of the "carrot[s]" from the Inflation Reduction Act. This situation is nothing like the series of correspondences noted by the Court in *West Virginia*.

Separately, the agency references Congress' support for research and incentives for ZEVs as undermining EPA's CAA authority. ¹⁸² But such efforts do not constitute a "distinct regulatory scheme" that displaces the agency's authority. Rather, "[c]ollaboration and research do not conflict with any thoughtful regulatory effort; they complement it." ¹⁸³

6. Statutory text provides clear authorization

The statute clearly authorizes EPA to consider ZEV technologies in setting emission standards under § 202(a). Section 202(a)(2) requires the Administrator to establish emission standards for classes of motor vehicles based on the "development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period." "Motor vehicles" are defined broadly to mean "any self-propelled vehicle designed for transporting persons or property on a street or highway." 184 ZEV technologies are "technologies" that reduce emissions and apply to "motor vehicles." Thus, EPA may consider such technologies in determining the emissions standards. The statutory context, purpose, and history, as well as administrative precedent, support this conclusion. Indeed, the statute unambiguously mandates EPA to consider ZEVs based on the voluminous records for each of the standards, as they are highly effective pollution control technologies available during the timeframe of the rules and at a reasonable cost. There is not even any dispute on this point. In addition: (1) in § 202(a), Congress made the major policy decision to regulate air pollution from motor vehicles and appropriately delegated to EPA the interstitial judgments of identifying available pollution control technologies—like ZEV technologies—and the level of the standards; (2) the statutory language is clear, and does not rely on modest or vague terms; and (3) the statutory provision is central to controlling motor vehicle emissions, not some ancillary or backwater enactment.

First, in enacting § 202(a), Congress itself made the relevant major policy decision: to regulate dangerous air pollution from motor vehicles—a term which Congress broadly defined to include "any self-propelled vehicle designed for transporting persons or property on a street or highway." ¹⁸⁵ Granting the Executive Branch such authority was a decision of enormous import. To that point, Congress' prior forays into air pollution control had largely focused on research, funding, and study. Motivated by recent environmental crises and a growing awareness of the dangers of air pollution to public health and welfare, Congress in 1965 conferred upon the agency authority to regulate motor vehicle emissions.

66

¹⁸⁰ 90 FR at 36606-07.

¹⁸¹ 90 FR at 36606.

^{182 90} FR at 36294.

¹⁸³ Massachusetts 549 U.S. at 530.

¹⁸⁴ CAA section 216(2).

¹⁸⁵ CAA Section 216 (2).

Congress also made the key policy decision that motor vehicle emissions control would be achieved through a technology-based approach: EPA is to identify the available control technologies and establish emission standards based on the performance of such technologies, their costs, and the lead-time necessary for their development and application. It charged the agency with technical determinations and policy judgments of an interstitial nature: what kind of pollution is harmful to public health and welfare, which classes of motor vehicles cause or contribute to such pollution, what technologies exist to mitigate such pollution, the rate and costs at which such technologies can be adopted, the appropriate stringency of the emissions standards in light of findings on technology and costs, and how such standards should be complied with and enforced. Congress conferred on the Administrator the authority to make these subsidiary, but also significant, judgments, recognizing both his expertise in this area, as well as the need to confer "regulatory flexibility" absent which "changing circumstances and scientific developments would soon render the Clean Air Act obsolete." These sorts of technical and policy determinations were well within Congress power to delegate, and such delegations are ubiquitous throughout the CAA.

In subsequent amendments to the Act, Congress made clear the reach of § 202(a): it could be used to drive not merely modest reductions in motor vehicle emissions, but order-of-magnitude reductions. For example, in the 1970 CAA amendments, Congress mandated that the Administrator issue regulations to reduce emissions of certain pollutants by 90% over a five-year period. The 1990 Amendments required 100% phase-in of a new set of demanding standards over a six to seven model-year period. Congress further clarified that EPA should not view even such enormous reductions as the full extent of Congress' pollution-control intentions, but expressly empowered the agency to go still further.

The agency fails to seriously question this beyond suggesting that the final rule is unlawful absent an explicit legislative command to consider ZEVs or (conversely) to only consider technologies applicable to ICE vehicles. 187 But Congress did not limit EPA's authority to ICE vehicles, which is the necessary implication of the agency's present assertions. Instead, Congress made the major policy decision here to control motor vehicle pollution via a technology-based approach and delegated to the Administrator the responsibility to implement that policy. Were this not so, any time a significant new pollution control technology has come along—and many have over the years—Congress would need to pass a new statute. There is no good reason for why Congress must turn into a perpetual monitor of new technological developments in the field of motor vehicle emissions control, as opposed to delegating such technical matters to the expert agency.

Second, the statutory language is clear, and does not use modest words, vague terms, or subtle devices. ¹⁸⁸ On the contrary, the statute is replete with clear language. Among other things, § 202(a)(1) directs the Administrator to regulate emissions from "motor vehicles," which, we reiterate, the statute defines as "any self-propelled vehicle designed for transporting persons or property on a street or highway." Unlike other statutory provisions, Congress intentionally abstained from using limiting language such as "internal combustion engine" or "gasoline" or "diesel" engine vehicles. 189 Section 202(a)(2) then directs EPA to establish the standards based on the "development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period," and does not confine the agency to consider any specific technology, but rather contains explicitly expansive language on the types of eligible technology. Again, Congress made the major policy decision to regulate air pollution from motor vehicles and entrusted the means of achieving such regulation to the Administrator's judgment. "The broad language

¹⁸⁶ Massachusetts, 549 U.S. at 532.

¹⁸⁷ See 90 FR at 36299/3 ("Congress did not clearly decide the nation's response to global climate change concerns by empowering the Agency to 'prescribe ...standards' for certain air pollutants emitted by new motor vehicles and engines" (emphasis original).) ¹⁸⁸ West Virginia, 597 U.S. at 723.

¹⁸⁹ Compare CAA section 216(10) defining "nonroad engine" to be "an internal combustion engine".

of § 202(a)(1) reflects an intentional effort to confer the flexibility necessary to forestall such obsolescence." ¹⁹⁰

Third, as noted above, § 202(a) is not a mere "ancillary" or backwater provision, but rather has been the cornerstone of motor vehicle emissions regulation since its enactment in 1965. Section 202(a)(1) confers on EPA the "general regulatory power" to regulate motor vehicle emissions. Additionally, over the course of the CAA Amendments of 1970, 1977, and 1990, Congress directed EPA to exercise this authority to promulgate many specific and stringent standards for controlling motor vehicle emissions. Congress also enacted numerous other provisions providing for compliance with and enforcement of such standards in CAA §§ 203-208.

In sum, there is clear Congressional authorization for the GHG standards. In § 202(a), Congress made the major policy decision to control air pollution from motor vehicles and directed EPA to do so through a technology-based approach. The determination of what technology is available for achieving this policy is a subsidiary technical and policy judgment that Congress plainly entrusted to the Administrator's expertise. The statutory text of \(\) 202(a), read in its context, is clear. And decades of legislative and administrative precedent specifically support the Administrator's authority to consider ZEVs, a highly effective pollution control technology. Even were a Court to apply the major questions framework, no major question exists. The final light- and medium-duty multi-pollutant and Phase 3 rules represent an iterative strengthening of the heavy-duty GHG standards based on the agency's evaluation of updated data within its technical expertise. The impacts of these rules are analogous to and, in many instances, less significant than their predecessors. And while the indirect impacts of the rule are not a suitable basis for assessing a major question, the agency performed a comprehensive assessment of such effects, finding that the final rules do not cause significant indirect harms, have the potential for indirect benefits, and create huge net benefits for society. Additional factors considered by the courts also counsel against application of the major questions doctrine. In these rules, EPA did what it has been doing for over fifty years: evaluating updated data on pollution control technologies and setting emissions standards accordingly. These rules are not an extraordinary and unprecedented assertion of agency power that implicates the major questions doctrine.

C. The agency lacks authority to revoke the vehicle standards.

Section 202(a)(1)-(2) does not authorize EPA to revoke standards. Instead, Congress enacted a comprehensive scheme for EPA to "prescribe (and from time to time revise) in accordance with the provisions of this section" motor vehicle emission standards. The word "revise" means "to make a new, amended, improved, or up-to-date version of", ¹⁹³ or "to change or modify." The meaning of the word "revise" is to give the agency power to change the standards, but not to repeal or waive them. This meaning is supported by the modifying statutory phrase "from time to time," which evinces Congress's expectation that EPA will regularly revisit the standards to amend, improve, and update them, an expectation that makes the most sense if the standards remain in existence.

¹⁹⁰ Massachusetts, 549 U.S. at 532.

¹⁹¹ NRDC v. EPA, 655 F. 2d at 322.

¹⁹² See, e.g. §§ 202(b), 202(g) through (j), and 202(l).

¹⁹³Websters 3d New Intl. Dict 1944 (1966). The authority to "revise" standards was expressly added in the 1970 Amendments. Pub. L. No. 91-604, 84 Stat. 1676, 1690 (1970) (adding "revise" to Clean Air Act § 202(a)).

¹⁹⁴The American Heritage Dictionary of the English Language 1112(1st ed. 1969); see also Black's Law Dictionary 1484 (4th ed. 1968) (defining "REVISE" as "To review, re-examine for correction; to go over a thing for the purpose of amending, correcting, rearranging, or otherwise improving it; as, to revise statutes, or a judgment.").

This meaning is further supported by the lead time requirement in § 202(a)(2), which states that "any revision" of a § 202(a)(1) standard "shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period." This provision indicates that revisions mean different standards that require regulated manufacturers to develop and apply emissions technology on a specific time frame. It is rendered meaningless if standards are revoked. Likewise, in 42 USC § 17013 Congress established an "Advanced technology vehicles manufacturing incentive program," to support the manufacture of advanced technology vehicles, which the statute defines as including certain vehicles that exceed "125 percent of the greenhouse gas emissions and fuel efficiency standards established by the final rule of the Environmental Protection Agency entitled "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2" (81 Fed. Reg. 73478 (October 25, 2016))." This provision would lose its meaning if those standards were revoked. Finally, Congress knew how to authorize EPA to eliminate existing motor vehicle standards. See § 202(a)(6) (authority to "revise or waive the application" of certain requirements relating to motor vehicle vapor recovery). It did not do so on § 202(a)(1)-(2).

Repeal of the standards also fails to promote the Act's anti-backsliding purpose. The D.C. Circuit has found that the CAA "[c]onsidered as a whole ... reflects Congress's intent that air quality should be improved until safe and never allowed to retreat thereafter." Section 202(b)(1)(c) reflects this purpose; it states that "[a]ny revised standard shall require a reduction of emissions from the standard that was previously applicable" (emphasis added). Previously, EPA has stated that this provision does not apply to GHG standards due to the reference in § 202(b)(1)(A) to CO and HC standards, but the final sentence of § 202(b)(1)(C) refers to standards outside of subsection (b) and involving pollutants beyond those enumerated in § 202(b)(1)(A), indicating that the provision's reach is not limited in the way EPA has indicated. Given the overarching anti-backsliding goal of the Act, the omission of authority in § 202(a)(1) to revoke standards is best understood as intentional.

IV. Climate Science

A. EPA's use of the DOE CWG Draft Report fails to meet OMB and EPA Information Quality Standards

EPA requested comments on "All aspects of this proposal, including legal and scientific developments that are being subject to public comment for the first time (C–1)."

The report published by the U.S. Department of Energy (DOE), "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate," has not been peer reviewed by an external, objective body and is being subject to public comment for the first time. ¹⁹⁷ The report claims to review "scientific certainties and uncertainties in how anthropogenic carbon dioxide (CO₂) and other greenhouse gas emissions have affected, or will affect, the Nation's climate, extreme weather events, and selected metrics of societal well-being." The report, referred to here as the Climate Working Group (CWG) Report, was authored by five people hand-selected by the DOE political appointee. In casting climate science as either uncertain or uncompelling, the CWG Draft Report thereby seeks to ignore the state of knowledge that has culminated from decades of scientific understanding regarding the causes and consequences of climate change.

¹⁹⁵S. Coast Air Quality Mgmt. Dist. v. EPA, 472 F.3d 882, 900 (D.C. Cir. 2006).

¹⁹⁶77 FR at 62784-785 n. 440 (Oct. 15, 2012).

¹⁹⁷ https://www.energy.gov/articles/department-energy-issues-report-evaluating-impact-greenhouse-gasses-us-climate-invites

1. The purpose of the CWG Report means it must be subject to EPA's information quality guidelines.

The CWG Draft Report is subject to the Information Quality Guidelines (IQGs) issued by EPA. As stated in EPA's Information Quality Guidelines, EPA guidelines apply when it "distributes information prepared or submitted by an outside party in a manner that reasonably suggests that EPA endorses or agrees with it." There is no question that EPA endorses and agrees with the information contained within the CWG Draft Report. As stated in the proposed rule's preamble, "the Administrator received and evaluated the draft report submitted by the U.S. DOE CWG to Secretary of Energy Christopher Wright on May 27, 2025, titled 'Impacts of Carbon Dioxide Emissions on the U.S. Climate' (2025 CWG Draft Report)." The DOE announcement stated that the CWG Draft Report "was published today as part of the U.S. Environmental Protection Agency's (EPA) proposed rule repealing the 2009 Endangerment Finding." Because the CWG's stated purpose is to support the proposed EPA rule and EPA is using the CWG as its primary source of scientific information, the IQGs are applicable.

EPA's IQGs state that "major scientifically and technically based work products (including scientific, engineering, economic, or statistical documents) related to Agency decisions should be peer-reviewed."²⁰¹ Even more critically, the Office of Management and Budget (OMB) Guidelines mandate peer review.²⁰² Peer review of such work products, including those from sources outside EPA, is guided by the EPA Peer Review Handbook.²⁰³ The EPA Peer Review Handbook derives from OMB's peer review guidelines and provides guidance for review of influential scientific information (ISI) and highly influential scientific assessments (HISAs).

2. EPA's use of the Draft CWG Report means it must meet the criteria of a highly influential scientific assessment and, per the OMB Guidelines and EPA's own procedural rules, must therefore undergo rigorous external peer review.

The CWG Draft Report is a highly influential scientific assessment, based on OMB's and EPA's criteria that a HISA: "(i) could have a potential impact of more than \$500 million in any year, or (ii) is novel, controversial, or precedent-setting or has significant interagency interest."²⁰⁴ Use of the CWG Draft Report in the proposed rule meets both these criteria. Peer review prior to dissemination is mandatory. See section IV.A.6.(i) in these comments.

There has been no process that remotely satisfies the requirement of external peer review prior to dissemination of a HISA. A critical characteristic of external peer reviewers is independence, that is,

USEPA (2002). Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information
 Disseminated by the Environmental Protection Agency, EPA/260R-02-008, Washington, DC October 2002, p. 24.
 USEPA (2025). Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards, Federal Register 90, 36292. Christy, J. et al. (2025). A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate Working
 Group, Department of Energy, Washington, DC, July 23, 2025, https://energy.gov/sites/default/files/2025-07/DOE/Critical Review of Impacts of GHG Emissions on the US Climate July 2025.pdf.

https://www.energy.gov/articles/department-energy-issues-report-evaluating-impact-greenhouse-gasses-us-climate-invites

²⁰¹ USEPA. (2002). Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency, Section 4.2.

²⁰² See section IV.A.6 in these comments.

²⁰³ LISEI

²⁰³ USEPA. (2015). *Peer Review Handbook*, 4th Edition. U.S. Environmental Protection Agency, EPA/100/B-15/001, Washington, DC, October 2015.

²⁰⁴ USEPA. (2015). Peer Review Handbook, 4th Edition, Section 3.2.3.

reviewers "are generally not employed by the agency or office producing the document." The CWG Draft Report was reviewed only by DOE employees. The review of the CWG Draft Report did not follow best practices to ensure transparency, including publication of reviewers' names and positions, charge questions to the reviewers, reviewers' comments, or the CWG authors' responses to review comments. Contrary to the EPA peer review guidelines, the review did not provide opportunities for public participation in the peer review process – hardly surprising, given that there has been no peer review process.

EPA's Peer Review Handbook states that the "Administrator may waive or defer the peer review provisions of the OMB Peer Review Bulletin for ISI (including HISAs) if there is a compelling rationale for the waiver or deferral."206 The Handbook also notes that "The use of waivers is expected to be limited to unusual and compelling situations not otherwise covered by the exemptions, such as situations in which unavoidable legal deadlines prevent full implementation of the OMB Peer Review Bulletin's peer review provisions." Even if one assumes that this language can countermand explicit requirements in the OMB Guidelines, there are no "unavoidable legal deadlines" or similar situations that would meet the criteria of "unusual and compelling situations."208

In summary, HISA's must undergo external peer review prior to dissemination, and the absence of the peer review process here is highly prejudicial.²⁰⁹ This violates CAA §§ 307(d)(9)(A) and 307(d)(9)(D).²¹⁰ Any final action that relies in any way on this improperly disseminated HISA is void for this reason alone.

3. The CWG Report demonstrates a lack of objectivity and comprehensiveness, making its conclusions unsuitable for use in an EPA rulemaking of this magnitude

The Information Quality Act (IQA) directs OMB to issue government-wide guidelines that "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies." ²¹¹ Per OMB, objectivity "includes whether disseminated information is being presented in an accurate, clear, complete, and unbiased manner."212 The CWG Draft Report not only fails to demonstrate processes to maximize objectivity, its development and content makes plain its intent to present a biased and predetermined view of climate science. As one climate scientist explained, "Their goal is not to weigh the evidence fairly but to build the strongest possible case for [carbon dioxide's] innocence. This is a fundamental departure from the norms of science."213

The foundation upon which this biased Report is built begins with the intentional selection of five authors, each of whom has an extensive public record expressing views contrary to the consensus on the causes and consequences of climate change. Although there is value in including contrarian perspectives in an

²⁰⁵ OMB. (2004). Final Information Quality Bulletin for Peer Review.

https://www.epa.gov/sites/default/files/2015-01/documents/omb final info quality bulletin peer review 2004 1.pdf

²⁰⁶ USEPA. (2015). Peer Review Handbook, 4th Edition, Section 3.3.3.

²⁰⁷ USEPA. (2015). Peer Review Handbook, 4th Edition, Section 3.3.3.

²⁰⁸ OMB. (2004). Final Information Quality Bulletin for Peer Review.

https://www.epa.gov/sites/default/files/2015-01/documents/omb final info quality bulletin peer review 2004 1.pdf

²⁰⁹ See section IV.A.6.(ii) in these comments.

²¹¹ Public Law No. 106–554 (2001). Treasury and General Government Appropriations Act for Fiscal Year 2001, § 515(a).

²¹² OMB. (2001). Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies. https://www.govinfo.gov/content/pkg/FR-2002-02-22/pdf/R2-59.pdf

Voosen, P. (2025). "Contrarian climate assessment from U.S. government draws swift pushback," Science, July 30, 2025, doi: 10.1126/science.zknz5jm.

assessment of the science, excluding other perspectives leads to biased conclusions that fail to meet the standards of objectivity and completeness – to say nothing of the legal obligation to base conclusions consistent with the evidence of record.²¹⁴ DOE's failure to conduct a meaningful, independent peer review of the draft document adds to the biased conclusions. That such biased conclusions were the aim is demonstrated by the complete lack of transparency in the review process and the wholesale disregard of requirements to conduct external peer review before dissemination of highly influential scientific assessments.

It is clear from its failure to meaningfully consider EPA's characterization of the science for the 2009 Endangerment Finding and in more recent rulemakings, as well as the most recent consensus science, that DOE sought a characterization of climate science that presented only narrow, contrarian views. The CWG Draft Report and EPA's proposed rule seek to ignore and sidestep decades of scientific inquiry and debate by innumerable scientists around the world, published in national and international assessments that have been transparently reviewed by hundreds of independent experts and by governments, including the U.S. government, around the world. A shift in the science of such magnitude would reasonably take months of evaluation from EPA and independent experts, additional analysis of the consequences of such a major shift, and appropriately, engagement with the National Academies of Science, Engineering, and Medicine (NASEM). In other words, EPA was obligated to do here what it did in 2009, which was to explain what it considered the best available sources of widely-vetted scientific information (namely the assessments of the Intergovernmental Panel on Climate Change (IPCC), U.S. Global Change Research (USGCRP) and NASEM), place the key findings of those assessments in a technical support document, peer review that technical support document, and meticulously explain how the information from the assessments led to the findings that the directly-emitted GHGs endanger public health and welfare.

The Administrator's (and DOE Secretary's) apparently unquestioning acceptance of the Draft CWG Report and its preeminent role in EPA's proposed rule is further evidence that the Report was written for the express purpose of supporting the Administrator's predetermined policy.

Not only does this bias violate the norms of high quality, objective science to inform policy decisions, it undermines the institutional scientific integrity of both DOE and EPA. Looking beyond DOE and EPA, the disbanding of the USGCRP and shutting down the USGCRP website along with access to previous National Climate Assessments, combined with deep reductions in funding and staff to conduct climate research across all agencies signal a government-wide effort to eradicate objective climate information and elevate whatever "alternative facts" are needed to justify desired policies. No deference is owed to such flagrantly biased and outright suppression of actual agency expertise.

4. DOE's dismissal of the CWG Draft Report authors casts doubt upon the ability of DOE to adequately respond to public comments

After receiving 59,563 public comments,²¹⁵ DOE dismissed the authors of the CWG Draft Report.²¹⁶ This action calls into question whether DOE will prepare a serious and valid response to the public comments. EPA's Peer Review Handbook states that, "Adequate documentation is needed to show whether comments

72

²¹⁴ Motor Veb. Mfr's v. State Farm Mutual Automobile Ins. Co., 463 U.S. 29, 43 (1983) ("offered an explanation for its decision that runs counter to the evidence before the agency").

²¹⁵ DOE (2025). "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate (Rulemaking Docket)," https://www.regulations.gov/docket/DOE-HO-2025-0207, accessed September 15, 2025.

²¹⁶ Tollefson, J. (2025). "Trump team disbands controversial US climate panel," Nature, Sep. 11, 2025, https://www.nature.com/articles/d41586-025-02942-8.

were accepted or rejected."²¹⁷ To meet EPA's peer review requirements, that documentation should not only show whether comments were accepted or rejected, but also describe the response to peer review comments, including how accepted comments were incorporated into the Report.

5. The Report fails to meet the standards of scientific information quality demanded for use in highly impactful EPA actions and further fails even to meet the standards of good scientific practice.

EPA should not rely upon the CWG Draft Report in any manner unless (1) it is finalized, and (2) EPA fully responds to all significant adverse comments submitted to DOE on the draft report. Failure to do so would remove any reasoned basis to rely on the report as a credible source of information.

To remedy this problem EPA must:

- Remove the CWG Draft Report and its conclusions from use in EPA's rulemaking process unless
 and until the Report has been revised to adequately address significant adverse public comments,
 including issues raised by the recent NASEM report;²¹⁸ and
- Ensure a revised report meets EPA's IQGs, including adequately responding to issues raised by the NASEM report and the public review, and publishing the public comments and the authors' responses to those comments.
 - 6. Violations of Information Quality Act and Implementing Regulations

The proposal contains wholesale violations of the Information Quality Act and implementing regulations. In particular, it disseminates a Highly Influential Scientific Assessment (HISA) in disregard of all applicable requirements necessary to ensure and maximize quality, objectivity, and integrity — all aspects sadly lacking in the disseminated information.

- (i) Text of Act and Regulations. The Information Quality Act, (Pub. L. No. 106-554, § 515, 114 Stat. 2763, 2763A-153-154 (2000)), provides:
 - (a) In General. The Director of the Office of Management and Budget shall, by not later than September 30, 2001, and with public and Federal agency involvement, issue guidelines ... that provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies ...
 - (b) Content of Guidelines. The guidelines under subsection (a) shall
 - (1) apply to the sharing by Federal agencies of, and access to, information disseminated by Federal agencies; and
 - (2) require that each Federal agency to which the guidelines apply
 - (A) issue guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency, ...".

_

²¹⁷ USEPA (2015). Peer Review Handbook, 4th Edition. U.S. Environmental Protection Agency, EPA/100/B-15/001, Washington, DC, October 2015.

²¹⁸ National Academies of Sciences, Engineering, and Medicine. 2025. Effects of Human-Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare. Washington, DC: The National Academies Press. https://doi.org/10.17226/29239.

Of particular importance here are the OMB's implementing regulations dealing with dissemination of Influential Scientific Information (ISI) and (most important) HISA. ISI are "scientific information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions a significant precedent, model or methodology." ²¹⁹ Indicia include:

- Is likely to have an annual effect on the economy of \$100 million or more.
- Is likely to adversely affect in a material way the economy; a sector of the economy; productivity; competition; jobs; the environment; public health or safety; or state, tribal or local governments or communities.
- Addresses significant controversial issues.
- Focuses on significant emerging issues.
- Has significant cross-Agency/interagency implications.
- Involves a significant investment of Agency resources.
- Considers an innovative approach for a previously defined problem/process/methodology.

A scientific assessment — an evaluation of a body of scientific/technical knowledge that typically synthesizes multiple inputs, data, models and assumptions and/or applies best professional judgment to bridge uncertainties in available information — is considered "highly influential" if, in addition to meeting criteria of ISI, "an agency or the OIRA Administrator determines that the dissemination could have a potential impact of more than \$500 million in any one year on either the public or private sector or that the dissemination is novel, controversial, or precedent-setting, or has significant interagency interest."²²⁰

The CWG Draft Report is a HISA: it addresses significant controversial and emerging issues; it is avowedly innovative (see, e.g., DOE Sec. Wright's statements at viii of the Review²²¹); and is likely to contribute to adverse environmental effects and to enormous effects on the economy. EPA has provided its own flamboyant imprimatur by its iterative use throughout the proposed preamble.

The OMB Guidelines mandate peer review of a HISA: "To the extent permitted by law, each agency shall conduct peer reviews on all information subject to this Section [HISAs]. The peer reviews shall satisfy the requirements of Section II of this Bulletin [for Influential Scientific information], as well as the additional requirements found in this Section."

"Shall conduct" is an explicit requirement.

That peer review of HISAs is a mandated requirement is emphasized throughout the Bulletin:

"This Bulletin also applies stricter minimum requirements for the peer review of highly influential scientific assessments, which are a subset of influential scientific information. ... To ensure that the Bulletin is not too costly or rigid, these requirements for more intensive peer review apply only to the more important scientific assessments disseminated by the federal government. Even for these highly influential scientific assessments, the Bulletin leaves significant

²¹⁹ OMB Information Quality Bulletin, 70 FR at 2667 (Jan. 15, 2005).

²²⁰ OMB Information Quality Bulletin (December, 2004), 70 FR 2664, 2667 (Jan. 15, 2005); also printed as Appendix B to <u>EPA's</u> Peer Review Handbook.

https://www.energy.gov/sites/default/files/2025-07/DOE_Critical_Review_of_Impacts_of_GHG_Emissions_on_the_US_Climate_Iulv_2025.pdf

²²² 70 FR at 2675-76.

discretion to the agency formulating the peer review plan. In general, an agency conducting a peer review of a highly influential scientific assessment **must ensure that** the peer review process is transparent by making available to the public the written charge to the peer reviewers, the peer reviewers' names, the peer reviewers' report(s), and the agency's response to the peer reviewers' report(s)²²³;

"Section III requires a more rigorous form of peer review for highly influential scientific assessments. The requirements of Section II of this Bulletin apply to Section III, but Section III has some additional requirements, which are discussed below...

If information is covered by Section III, an agency is required to adhere to the peer review procedures specified in Section III..."²²⁴

Indeed, even ISI is required to be peer reviewed:

"This section applies to influential scientific information that the agency or the Administrator determines to be a scientific assessment that: (i) could have a potential impact of more than \$500 million in any year, or (ii) is novel, controversial, or precedent-setting or has significant interagency interest. 2. In General: To the extent permitted by law, each agency shall conduct peer reviews on all information subject to this section. The peer reviews shall satisfy the requirements of Section II of this Bulletin, as well as the additional requirements found in this section."

The Guidelines do afford agencies discretion in determining the precise manner of peer review of HISAs (and ISIs as well), but do not give discretion to ignore peer review altogether, nor to ignore basic parameters of that review. Of importance here, among those basic parameters is a requirement that peer review of a HISA (or ISI) **must precede any dissemination** of the HISA by the agency. Inclusion of a HISA as a prominent aspect of an agency proposed action most certainly qualifies as dissemination:

"This Bulletin **establishes minimum standards f**or when peer review is **required** for scientific information and the types of peer review that should be considered by agencies in different circumstances. ...Section II requires each agency to subject "influential" scientific information to peer review **prior to dissemination**."²²⁶

"The term "dissemination" means agency initiated or sponsored distribution of information to the public. ... In the context of this Bulletin, the definition of "dissemination" modifies the definition in OMB's government-wide information quality guidelines to address the need for peer review prior to official dissemination of the information product."

"As a matter of effective agency information resources management, agencies shall develop a process. for reviewing the quality (including the objectivity, utility, and integrity) of information before it is disseminated. Agencies shall treat information quality as integral to every step of an agency's development of information, including creation, collection, maintenance, and

²²³ EPA Peer Review Handbook at B-3 (emphasis added).

²²⁴ EPA Peer Review Handbook at B-23 (emphasis added).

²²⁵ EPA Peer Review Handbook at B-39 (emphasis added).

²²⁶ EPA Peer Review handbook at B-12 (emphasis added).

²²⁷ EPA Peer review handbook at B-35 (emphasis added).

dissemination. This process shall enable the agency to substantiate the quality of the information it has disseminated through documentation or other means appropriate to the information."²²⁸

OMB reiterated in 2019 that "[t]he IQA requires agencies conduct pre-dissemination review of their information products," and "[f]or the subset of scientific information that is "influential," peer review is a required component of pre-dissemination review, as described in OMB's Final Information Quality Bulletin for Peer Review (Bulletin). The Bulletin's purpose is to increase the quality and credibility of scientific information used by the government.²²⁹

Other mandated parameters of the pre-dissemination peer review process are opportunities for public participation in that process via comments to the reviewers on the HISA (or ISI), and public meetings of the peer review panel.

The OMB Guidelines contain a disclaimer that the Guidelines do not create legal rights or obligations:

"This Bulletin is intended to improve the internal management of the executive branch, and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity, against the United States, its agencies or other entities, its officers or employees, or any other person."230

As discussed below, this means that neither the Information Quality Act (IQA) or the OMB Guidelines themselves create a private right of action. However, as also explained below, this does not insulate agency action violating or ignoring its provisions from judicial review under the CAA's judicial review provisions (or under the APA for non-CAA actions).

EPA's own Peer Review Handbook contains all of these same provisions and expands upon them, with one caveat: the Handbook does not use mandatory language, but rather couches everything with qualifiers like "should," "generally," and the like. 231 Again, this does not insulate agency action which ignores Handbook practices from review.

(ii) Violations of IQA. EPA's use of the CWG Draft Report violates every requirement set out: no peer review, no dissemination prior to peer review, and none of the (many) further mandated steps for HISA peer review set out in the Guidelines. It should be noted that the Climate Report itself maintains, without explanation, that it is in compliance with DOE's information quality guidelines.²³² Whether or not this is the case, the issue is EPA's use of the CWG Draft Report, not DOE's, and EPA's use of the review disregards each and every applicable requirement.

Although the IQA and Guidelines themselves do not create a cause of action for their violation, violation of their requirements violates the CAA. First, there is the violation of substantive requirements of the OMB Guidelines. This is "action...not in accordance with law." CAA § 307(d)(9)(A), and the OMB Guidelines provide "meaningful standards for defining the limits of [the agency's] discretion," giving us "law to apply"

²²⁸ Guidelines, sec. III.2, 67 FR at 8459 (an earlier iteration of the Guidelines).

²²⁹ Memorandum M-19-15 (April 24, 2019) at 2, 4. (emphasis added).

²³¹ https://www.epa.gov/sites/default/files/2020-08/documents/epa_peer_review_handbook_4th_edition.pdf

²³² CWG Draft Report at iii.

under § 701(a)(2)." Heckler, 470 U.S. at 834, 105 S.Ct. 1649."²³³ For the same reason, there is "law to apply" for purposes of the CAA analogue to APA § 701(a)(2).

The fact that EPA's own version of the Guidelines is not mandatory is no defense. These statements do not override the express requirements of the OMB Guidelines.²³⁴ The court held there that the EPA Guidelines and Peer Review Handbook are written conditionally and so are not automatically violated by deviation therefrom, but stated further that "[s]uch a [conditional] statement would not override a specific commitment made elsewhere in the document."²³⁵ Even if the OMB Guidelines are considered to be superseded by EPA's non-binding Guidelines and Handbook, agencies must comply even with their own non-binding regulations.²³⁶

Moreover, it is axiomatic that "An agency may not, for example, depart from a prior policy *sub silentio* or simply disregard rules that are still on the books." Any such deviation requires some type of reasoned explanation. ²³⁷

Physicians for Soc. Resp. v. Wheeler applies these principles to a situation similar to the one here. EPA took action (via Memorandum) changing certain advisory panel eligibility requirements. It took this action without acknowledgement (or evident awareness) of Office of Governmental Ethics regulations and its own past practices. The court found that this violated fundamental administrative law tenets both to provide reasonable explanations for changes of position, and to consider all significant aspects of the contemplated action:

"[C]ore principles of administrative law dictate that "an agency changing its course must supply a reasoned *analysis* indicating that prior policies and standards are being deliberately changed, not casually ignored," *Lone Mountain Processing, Inc. v. Secretary of Labor*, 709 F.3d 1161, 1164 (D.C. Cir. 2013) (emphasis added) (internal quotation marks omitted). That "analysis" is entirely missing from the Directive and its accompanying Memorandum. **An agency's wholesale failure to address** "past practice and formal policies regarding [an issue], let alone to explain its reversal of course ... [is] arbitrary and capricious." *American Wild Horse Preservation Campaign v. Perdue*, 873 F.3d 914, 927 (D.C. Cir. 2017)." ²³⁸

That neither the Office of Governmental Ethics regulations nor EPA's applicable policies were binding²³⁹ (i.e. not absolute requirements), did not alter this analysis.²⁴⁰ The Office of Governmental Ethics regulations still were a body of law to apply, making EPA's action justiciable²⁴¹ and rendering the agency's failure to acknowledge (much less explain) the deviation arbitrary and capricious. The court further found that this violation was prejudicial.

77

²³³ Physicians for Soc. Resp. v. Wheeler, 956 F.3d 634, 644 (D.C. Cir. 2020).

²³⁴ See *API v. EPA*. 684 F. 3d 1342, 1348 (D.C. Cir. 2012).

²³⁵ 684 F. 3d at 1348.

²³⁶ See, e.g. National Developmental Ass'n v. EPA, 752 F. 3d 999, 1009 (D.C. Cir. 2014); Steenholdt v. FAA, 314 F. 3d 633, 639 (D.C. Cir. 2003); Environmentel, LLC v. FCC, 661 F. 3d 80, 85 (D.C. Cir. 2011).

²³⁷ FCC v. Fox Television Station, 556 U.S. 502, 515 (2009).

²³⁸ 956 F. 3d at 644.

²³⁹ The Office of Governmental Ethics regulations included a provision giving implementing agencies discretion to establish alternative procedures, and so there was no substantive violation for EPA deviating from those rules. 684 F. 3d 644. The OMB Information Quality Act Guidelines do not contain such a blanket carte blanche to implementing agencies; key provisions relating to HISA's, in particular, are unqualified and written as mandates. These provisions are quoted above. ²⁴⁰ 956 F. 3d at 644.

²⁴¹ Id.

Similarly here, EPA blithely disseminated the CWG Draft Report without any acknowledgement of IQA requirements, OMB Guidelines pertaining to dissemination of scientifically influential and highly influential assessments, and EPA's own exhaustive policies regarding outside peer review, in advance of agency action, of such significant information and assessments. The absence of any awareness of these requirements, much less the reasoned explanation required for this radical disregard of IQA, OMB Implementing Guidelines, and agency procedures, renders this an action "without observance of procedure required by law." CAA § 307 (d)(9)(D) requires that agency procedural violations are reversible only if "there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made." That showing of prejudice is readily apparent:

- The CWG Draft Report is a HISA, and plays a significant part of the agency's proposal to rescind the Endangerment Finding; as set out in excruciating detail in both the OMB Guidelines and EPA's Peer Review Handbook, peer review of such documents is ordinarily essential; after all, these requirements are considered essential to the purpose of the IQA of "ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency, ..."
- Pre-proposal review is critical to the integrity of the process: "When an information product is a critical component of rule-making, it is important to obtain peer review before the agency announces its regulatory options so that any technical corrections can be made before the agency becomes invested in a specific approach or the positions of interest groups have hardened. If review occurs too late, it is unlikely to contribute to the course of a rulemaking." The D.C. Circuit likewise has spoken to the critical importance of peer review to the scientific integrity of agency decision making. The public was denied that integrity here due to the agency's disregard of the mandated peer review process.
- Public comment on a rule, and on its critical scientific underpinnings, is not an adequate substitute for the mandated peer review (which, as just noted, should precede any proposal as well).²⁴⁵
 - 7. Violation of the Environmental Research Development Demonstration Authorization Act

The Environmental Research Development Demonstration Authorization Act (ERDDA), 42 USC § 4365 (c)(1), requires the Administrator to submit to the Science Advisory Board (SAB) — "shall make available to" the SAB — any "proposed criteria document, standard, limitation, or regulation, … together with relevant scientific and technical information in the possession of the (EPA)…on which the proposed action is based" at the time it provides that proposal to another agency of the government for formal review. The SAB is then to review and comment on the proposal, which the Administrator is to consider, although the Administrator is not required to obtain SAB approval for any final action.

EPA and the SAB have adopted procedures to implement this statutory requirement, whereby EPA provides SAB with a description (including a pertinent summary of potential issues of scientific concern) of

_

²⁴² CAA § 307(d)(9)(D).

²⁴³ OMB Bulletin, op cit, at B-14 (emphasis added).

²⁴⁴ See, e.g. New Mexico Cattle Growers' Ass'n n. United States Fish & Wildlife Sern., No. 24-5075, 2025 WL 2423596, at 7 (D.C. Cir. Aug. 22, 2025) where the court stated "[b]ut the fact that study results are influenced by discretionary decisions regarding data inputs and study design does not shield researchers' conclusions from scrutiny or invite agencies to baselessly rely on shoddy studies. Rather, the peer review process and the discipline provided by competing research studies guard against cherry-picking or poor design by forcing scientists to identify, explain, and submit for public scrutiny the discretionary choices that are inevitable in research design."

²⁴⁵ EPA Peer Review Handbook at section 1.2.12, 1.2.13; OMB Bulletin at B-4.

planned major actions not yet proposed and the SAB determines, in a public forum, which of these actions merits its consideration and comment. Among other things, there is to be "EPA transmittal to the SAB Staff Office of all proposed actions sent to the Office of Management and Budget for interagency review, as well as the relevant supporting scientific and technical information;" and "identif[ication of] aspects ... of the scientific and technical basis supporting the planned actions that may warrant review, or not, by the full SAB;" and "prepar[ation of] a report to the full SAB with recommendations for or against peer review for each planned action."

In addition to reviewing proposed regulations themselves, the SAB is also to review HISAs:

"The EPA's SAB is a statutorily established committee with a broad mandate to provide advice and recommendations to the Agency on scientific and technical matters. ... In a complementary semiannual process coordinated by the EPA Office of Policy, the SAB also considers review of science supporting major planned Agency actions (Tier 1 and Tier 2 actions) that are in the pre-proposal stage. HISAs or other scientific work products associated with highly visible or controversial environmental issues, or products that include novel scientific methods or approaches, are most suited to review by the SAB."

ERDDAA applies to "regulations." Whether or not rescission of the Endangerment Finding is a regulation, the amendment of all of the vehicle GHG emission standards indisputably is.²⁴⁸

ERDDAA applies "at the time any proposed ... regulation under the Clean Air Act ... is provided to any other Federal agency for formal review and comment." The SAB-EPA memorandum quoted above assumes that ERDDA applies when EPA transmits draft regulations to OMB for inter-agency review, and SAB review is premised on that assumption.

As with its disregard of the IQA, EPA ignored every one of ERDDA's mandatory requirements ("shall make available"): no notice to SAB either of the agency action, or of the scientific and technical information — notably the HISA CWG Draft Report. Like the IQA violations, this is action "without observance of procedure required by law." It also is potentially arbitrary and capricious for failing to consider the need for SAB review of "HISAs or other scientific work products associated with highly visible or controversial environmental issues, or products that include novel scientific methods or approaches." 251

These errors, like those of the IQA violations, are "so serious and related to matters of central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such

²⁵⁰ CAA § 307 (d)(9) (D)

²⁴⁶ Memorandum from Associate Administrator for Policy Victoria Arroyo, Deputy Assistant Administrator for the Office of Research and Development Christopher Frey, and Director of the SAB Staff Office Thomas Brennan issued on February 28, 2022. https://sab.epa.gov/ords/sab/sab_apex/r/files/static/v403/Science%20Supporting%20EPA%20Decisions.pdf.

²⁴⁷ EPA Peer Review handbook, section 4.7.2. (emphasis added).

²⁴⁸ See e.g. Cent. Texas Tel. Co-op., Inc. v. F.C.C., 402 F.3d 205, 211 (D.C. Cir. 2005) ("a 'second rule repudiates or is irreconcilable with [a prior legislative rule], the second rule must be an amendment of the first; and, of course, an amendment to a legislative rule must itself be legislative." Am. Mining Cong. v. Mine Safety & Health Admin., 995 F.2d 1106, 1109 (D.C.Cir.1993), quoting Nat'l Family Planning & Reprod. Health Ass'n v. Sullivan, 979 F.2d 227, 235 (D.C.Cir.1992).")

²⁴⁹ 42 USC § 4365(c)(1)

²⁵¹ EPA Peer Review Handbook section 4.7.2., and CAA section 307 (d)(9) (D) (i).

errors had not been made."²⁵² For many of the reasons noted with respect to the previous violations, prejudice is evident here:

- The CWG Draft Report is a HISA, and plays a significant part of the agency's proposal to rescind the Endangerment Finding; "In a complementary semiannual process coordinated by the EPA Office of Policy, the SAB also considers review of science supporting major planned Agency actions (Tier 1 and Tier 2 actions) that are in the pre-proposal stage. HISAs or other scientific work products associated with highly visible or controversial environmental issues, or products that include novel scientific methods or approaches, are most suited to review by the SAB."253
- "Scientific and technical peer review is essential to assessing the quality of the science supporting EPA decisions and maintaining the integrity of the agency's regulatory and policy processes. The SAB provides independent scientific and technical peer review and advice to the EPA Administrator" pursuant to the directive of ERDDA.²⁵⁴
- Pre-proposal review is critical to the integrity of the process: "When an information product is a critical component of rule-making, it is important to obtain peer review before the agency announces its regulatory options so that any technical corrections can be made before the agency becomes invested in a specific approach or the positions of interest groups have hardened. If review occurs too late, it is unlikely to contribute to the course of a rulemaking."²⁵⁵
- Public comment on a rule, and on its critical scientific underpinnings, is not an adequate substitute for the mandated SAB review (which, as just noted, should precede any proposal as well).²⁵⁶

The proposal must be withdrawn, the CWG Draft Report submitted for the mandated peer review following the procedures set out in the OMB IQA Guidelines and echoed (and expanded upon) in EPA's own Peer Review handbook, and the Review submitted to the SAB for review.

B. EPA must demonstrate why its interpretation of the science underpinning the proposed rule is valid

EPA requested comments on their assertion that "The scientific underpinnings of the Endangerment Finding are weaker than previously believed and contradicted by empirical data, peer-reviewed studies, and scientific developments since 2009 (C-2)."

The EPA's proposal asserts that the "Administrator considered the assessments of the IPCC and the National Climate Assessment" as part of its science review. However, EPA does not demonstrate and explain how it considered those assessments or the broad body of scientific evidence relied upon in the 2009 Endangerment Finding. Instead, EPA's proposal relies entirely upon the science presented in the CWG Draft Report published by DOE, which remains in draft form.

Numerous adverse comments submitted to DOE and now in the public record have strongly and comprehensively contested the validity of the scientific opinions and assessment contained in that Report.

²⁵² CAA § 307 (d)(9) (D) (iii) (referring back to final sentence of section 307 (d)(8); see also Coalition for Responsible Regulation, 684 F. 3d at 124 (applying this CAA prejudicial error test to purported violation of ERDDAA).

²⁵³ EPA Peer Review Handbook at section 4.7.2.

²⁵⁴ 2022 Memorandum op cit., at 1.

²⁵⁵ OMB Bulletin, op cit, at B-14 (emphasis added).

²⁵⁶ EPA Peer Review Handbook at section 1.2.12, 1.2.13; OMB Bulletin at B-4.

Those comments demonstrate that the Report neglects to incorporate the findings of major assessments. It ignores broad bodies of literature. It refers to studies that have been shown to be wrong. It omits information from other references that would contradict the Report's conclusions.

In contrast, the 2009 Endangerment Finding devoted seven pages of the preamble to a discussion of EPA's approach to evaluating the evidence. The section covered five topics relevant to the science: (1) the science on which the decisions were based; (2) the appropriate role of adaptation and mitigation issues; (3) the geographical scope of impacts; (4) the temporal scope of impacts; and (5) the impacts of potential future regulations and processes that generate greenhouse gas emissions. Furthermore, EPA developed and published a 210-page Technical Support Document (TSD) to provide further detailed information regarding how EPA interpreted the then-existing body of science in the context of the Endangerment Finding.

EPA fails to explain why it now is abandoning its previous approach of relying primarily on the major well-vetted assessments of the IPCC, USGCRP, and NASEM. These assessments represented the work of thousands of authors, prepared over multiple years. This approach was thoroughly explained and documented in the 2009 Endangerment Finding and the TSD and has been fully reviewed and found to be scientifically and legally sound. EPA fails to explain why now it relies on a single, non-peer-reviewed report written within two months by just five scientists farmed out to DOE. EPA's failure to explain why it is taking a new approach is even more striking when considering the enormous body of science that has been developed in the time since the 2009 Endangerment Finding.

Far from weakening the scientific underpinnings of the 2009 Endangerment Finding, the body of science developed since 2009 has substantially reduced the major uncertainties regarding the causes and consequences of climate change. In 2007, the IPCC concluded in its Fourth Assessment Report that, "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations." By 2023, the IPCC's conclusion stated that, "Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming." More directly, the NASEM report evaluated how the body of relevant science has changed since 2009 and concluded not only that EPA was correct in its assessment of the science in 2009, but that the 2009 Finding "is now reinforced by even stronger evidence."

Regardless of how or whether DOE revises the CWG Draft Report, EPA is responsible for demonstrating that the scientific background upon which the proposed rule is based meets necessary information quality standards and appropriately considers and reflects the full body of knowledge. This demonstration must explain why the CWG Draft Report and proposed rule both omit major aspects of the understanding of the causes and consequences of climate change.

The 2009 Endangerment Finding TSD examined the direct effects of elevated GHG concentrations, radiative forcing and observed climate change, attribution of observed climate change to anthropogenic emissions, and projected future climate change. The TSD also considered the impacts to human health, air quality, food production and agriculture, forestry, water resources, sea level rise and coastal areas, energy, infrastructure and settlements, ecosystems and wildlife, and regional climate change impacts. In contrast,

_

²⁵⁷ IPCC, 2007: Summary for Policymakers. In: Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp. https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_spm.pdf
²⁵⁸ IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001

neither the proposed rule nor the CWG Draft Report address air quality, water quality, energy, infrastructure and settlements, or ecosystems and wildlife. Both the proposed rule and the CWG Draft Report omit numerous aspects of the impacts of climate change on human health, food production, forestry, and coastal areas. This omission is despite enormous advances in understanding by the scientific community and climate adaptation practitioners.

The CWG Draft Report also contains numerous instances in which the authors, whether knowingly or due to unfamiliarity with the topic, mischaracterized the research they cited as evidence for their conclusions. The Report relies upon cherry-picked data and parameters that ignore the broader context and other results to reach erroneous conclusions. A more comprehensive evaluation of research results and assessments consistently demonstrates conclusions contrary to those made in the Report.

These serious scientific shortcomings have been identified in detail by the Dessler and Kopp review, a compendium of public technical comments on the Report.²⁵⁹ Even if DOE revises the CWG Draft Report to adequately address these issues, as well as other issues that may be identified by the public and NASEM reviews, it remains EPA's responsibility to both ensure that the proposed rule is based upon high quality scientific information and to respond to the Dessler and Kopp review which we are incorporating by reference into our comments.

EPA must fulfill this responsibility by conducting its own meaningful evaluation of the currently available science, which it has yet to do. Simply stating that the Administrator "reviewed available information" is a woefully insufficient demonstration of a meaningful evaluation. As an example of such a demonstration, the 2009 Endangerment Finding extensively described how the available science was considered in both the rule preamble and the associated TSD. EPA drew from multi-volume Assessment Reports published by IPCC, Synthesis and Assessment Products published by USGCRP, and consensus reports published by the National Research Council (NRC, then part of the NASEM). Each of these organizations followed practices to ensure the development of high-quality scientific information, including broad authorship, independent and rigorous peer review to facilitate objectivity of conclusions, and (in the case of IPCC and USGCRP) public input and transparent processes.

Even though EPA drew from these sources of high-quality scientific information in 2009, it still conducted its own evaluation to ensure the science was applicable to the specific policy questions. EPA has failed to conduct such a meaningful evaluation to determine the applicability of the CWG Draft Report, the most recent major assessments, the NASEM report, and other studies to its current proposal.

To remedy this problem, EPA must publish its own evaluation of the current scientific understanding of the causes and consequences of climate change before proceeding with the rulemaking.

C. EPA is responsible for adequately responding to public comments submitted to the DOE docket for the CWG Report

Although EPA cannot take responsibility for revising the CWG Draft Report in response to comments submitted to DOE, EPA is responsible for addressing any significant adverse comments that may affect the

82

²⁵⁹ Andrew Dessler, Robert E. Kopp. *Climate Experts' Review of the DOE Climate Working Group Report*. Comment submitted to the U.S. Department of Energy, docket number DOE-HQ-2025-0207, in response to their report "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate" ESS Open Archive. September 09, 2025. https://drive.google.com/file/d/19wAR819YYmPhbO6CRekHkroIGMbibX71/view.

scientific basis for the proposed rule. After receiving 59,563 public comments,²⁶⁰ DOE dismissed the authors of the CWG Report.²⁶¹ This dismissal calls into question whether DOE will prepare a serious and valid response to the public comments. For the 2009 Endangerment Finding, public comments were accepted for 60 days and the responses to comments were published six months later with the publication of the final Finding. The CAA requires that the "promulgated rule shall also be accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period."²⁶² Given the dismissal of the Report's authors, it is difficult to see how DOE intends to adequately respond to the 60,000 comments in a reasonable period. If EPA relies upon the draft report in any manner, then it is incumbent on EPA to respond to all of the numerous, significant comments submitted to DOE that provide a comprehensive and in-depth analysis of the many scientific shortcomings of the Report.

Furthermore, unlike the 2009 Finding, the responses to comments will be prepared by a third party, rather than by EPA. It is entirely unclear what, if any, formal relationship now exists between DOE and the CWG Report authors. The authors are (apparently) no longer contractually obligated to DOE, which raises questions about responsibility and accountability of the DOE response to comments and any possible revision of the Report.

Simply shifting sponsorship of the CEG Draft Report from EPA to DOE does not absolve EPA of the responsibility for the scientific information presented in the Report and used as the scientific basis for the proposed rule. The circumstances (as noted earlier in these comments) make it clear that the sole purpose of DOE's establishment of the Climate Working Group was to prepare the CWG Draft Report on EPA's behalf. In essence, DOE has provided the equivalent of the TSD that accompanied EPA's proposed Endangerment Finding in 2009 and provided for public comment concurrent with the proposal itself. This shift of agency cannot be used to avoid the requirements of the CAA to develop and publish a response to each of the significant comments on the Report.

D. EPA fails to demonstrate how the scientific bases for the 2009 Endangerment Finding have been weakened or contradicted

EPA asserted that "[t]he scientific underpinnings of the Endangerment Finding are materially weaker than previously believed and contradicted by empirical data, peer-reviewed studies, and scientific developments since 2009."²⁶³

However, EPA ignores most of the scientific record available when the 2009 Endangerment Finding was published and fails to consider how EPA then evaluated the science to determine whether such a finding was necessary and appropriate. There are numerous examples in the DOE CWG Draft Report and the current proposal that demonstrate a surprising amount of ignorance or apathy about how EPA characterized the state of the science in the 2009 Finding and TSD. A thorough evaluation of EPA's previous characterization of the science is a reasonable and necessary foundation of support for the assertion that the Finding's scientific underpinnings are weaker or have been contradicted.

²⁶⁰ DOE (2025). "A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate (Rulemaking Docket)," https://www.regulations.gov/docket/DOE-HO-2025-0207, accessed September 15, 2025.

²⁶¹ Tollefson, J. (2025). "Trump team disbands controversial US climate panel," Nature, Sep. 11, 2025, https://www.nature.com/articles/d41586-025-02942-8.

²⁶² CAA § 307(d)(6)(B).

^{263 90} FR at 36292

The CWG Draft Report and the proposed rule both mischaracterize or omit numerous detailed evaluations EPA presented in the TSD on topics including the effects of CO₂ on plant growth, use of emission scenarios, the frequency and magnitude of extreme events, and sea level rise and ocean acidification. The Report and proposed rule are entirely silent regarding numerous impacts of climate change that were addressed in the 2009 Finding and TSD, as noted above.

The Report and proposed rule also ignore an explicit evaluation of the scientific basis for the 2009 Finding. Duffy et al. evaluated the scientific evidence as of 2018 to determine whether and how the scientific bases for the 2009 Endangerment Finding may have changed. They found that, "Newly available evidence about a wide range of observed and projected impacts strengthens the association between the risk of some of these impacts and anthropogenic climate change, indicates that some impacts or combinations of impacts have the potential to be more severe than previously understood, and identifies substantial risk of additional impacts through processes and pathways not considered in the Endangerment Finding." ²⁶⁴

Finally, the recently released NASEM report²⁶⁵ explicitly concludes that "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." The NASEM report was expressly developed to evaluate the change in scientific understanding of the causes and consequences of climate change since the Endangerment Finding in response to EPA's claim that the science has been weakened or contradicted in the intervening years.

EPA must demonstrate in detail how this peer-reviewed report, prepared by a panel with relevant and diverse expertise in climate science and impacts, has wrongly concluded that the scientific basis for the 2009 Endangerment Finding has been weakened or contradicted by the scientific findings since the Finding.

Far from being weaker or contradictory, the scientific basis for the Endangerment Finding has become stronger over the years. EPA now relies on the deeply flawed CWG Report and fails to consider the broader body of science that directly contradicts their assertion that the scientific evidence supporting the 2009 Finding is now weaker or contradictory to that used to support the Finding.

E. EPA's discussion of emissions scenarios fails to acknowledge projections used to support the Endangerment Finding

The proposal states, "The Endangerment Finding relied primarily on IPCC AR4 to predict global temperature increases between 1.8 and 4 degrees Celsius by 2100". This statement further demonstrates EPA's current failure to evaluate the scientific basis of support for the 2009 Endangerment Finding. The proposal's emphasis on the representative concentration pathway (RCP8.5) is misplaced and largely irrelevant. In 2009, EPA looked at both current conditions and projected future conditions. The stated reasons supporting the findings of endangerment to public health and welfare regarding future conditions did not rest solely on estimated outcomes under the high-end RCP 8.5 scenario. Directionally and qualitatively, many of the future identified risks are very similar under all considered future scenarios, especially over the next few decades. EPA previously described an independent set of emissions scenarios that fell between the extremes reported in IPCC's fourth assessment report (AR4). The TSD for the

84

²⁶⁴ Duffy, P.B. et al. "Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases," *Science* 363, 5982(2019). DOI:10.1126/science.aat5982

²⁶⁵ "Effects of Human-Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare" National Academies of Sciences, Engineering, and Medicine. 2025. The National Academies Press. https://doi.org/10.17226/29239. ²⁶⁶ 90 FR at 36308.

Endangerment Finding presented the emission scenarios used in its analysis in Figure 6.2. ²⁶⁷ Emissions projected by EPA's central scenario in 2009 were within 1% of observed global emissions of CO₂ from fossil fuel combustion and industrial processes for 2024. ²⁶⁸ Likewise, the increase in U.S. mean surface temperature in 2023 relative to a 1900-1950 baseline fell almost exactly in the center of the temperature range projected in the 2009 TSD. ²⁶⁹ EPA's current proposal is remiss in its failure to consider the emission scenarios actually used in policy formulation and how projected emissions and associated projected temperatures anticipated observed conditions. The focus on RCP8.5 in the current proposal draws attention away from the fact that actual policy formulation relied on by EPA in the Endangerment Finding was both reasonable and resulted in remarkably accurate projections.

F. EPA mischaracterizes the Endangerment Finding's evaluation of evidence regarding impacts of increasing CO₂ on agricultural yields

The proposal states that, "the Administrator is concerned that the Endangerment Finding did not adequately balance the projected adverse impacts attributed to global climate change with the potential benefits to the United States of increased GHG concentrations, and increased CO₂ concentrations in particular."²⁷⁰

Again, this demonstrates EPA's failure to adequately examine how it considered the body of science when developing the Endangerment Finding. Contrary to the above statement in the proposal, in 2009 EPA stated that "The Administrator acknowledges that plants including agricultural crops respond to carbon dioxide positively based on numerous well-documented studies. However, previous assessments of food production and agriculture have been modified to highlight increasing vulnerability, stress, and adverse impacts from climate change over time, based on improvements in the understanding of plant physiology, concern over impacts on plant pests and pathogens, and the implications of changes in average temperatures for temperature extremes and for changes in the patterns of precipitation and evaporation." EPA's efforts in 2009 to compare projected adverse impacts with the potential benefits were far more extensive than the one-sided effort made in the CWG Draft Report, which focused only on studies that evaluated the effects of elevated CO₂ concentrations alone and ignored the substantial body of literature showing that changes in temperature and precipitation patterns, including changes in extreme weather events, are likely to overwhelm CO₂'s benefits. 272

G. EPA provides no substantive evidence that the Fifth National Climate Assessment failed to meet OMB information quality guidelines

Concerns regarding whether the Fifth National Climate Assessment (NCA5) met the requirements of OMB guidelines on quality, objectivity, utility, and integrity of information disseminated by Federal agencies are wholly invalid. First, NCA5 cannot possibly have been subject to Executive Order 14303, which was published May 29, 2025, 18 months after the publication of NCA5.

²⁶⁷ USEPA. (2009). Technical Support Document for the Endangerment and Cause or Contribute Findings for Greenhouse Gases. https://www.epa.gov/climate-change/technical-support-document-endangerment-and-cause-or-contribute-findings-greenhouse

²⁶⁸ IEA. (2025). Global Energy Review 2025. https://www.iea.org/reports/global-energy-review-2025/co2-emissions
USEPA. (2024). Climate change indicators in the United States (Fifth ed., EPA 430-R-24-003). www.epa.gov/climate-indicators

²⁷⁰ 90 FR at 36309.

²⁷¹ 74 FR at 66536.

²⁷² CWG Report at 105-106.

Second, the Administrator provides no examples of the substance of his concerns, raising the possibility that his request for comments is no more than a fishing expedition for critical comments regarding NCA5's information quality. The statement that "several public watchdog organizations have raised concerns" is, while literally true, a gross exaggeration. A thorough search for public documents raising concerns about the information quality of NCA5 revealed but a single document: a June 11, 2025, letter from Protect the Public Trust and the CO2 Coalition to the Director of the Office of Science and Technology Policy, Michael Kratsios, and Acting Administrator of the Office of Information and Regulatory Affairs, Jeffrey Clark. ²⁷³

The letter bases its claims that NCA5 failed to meet OMB information quality guidelines entirely on a 47-page document written by Richard Lindzen and William Happer, well-known deniers of climate science. ²⁷⁴ The document recycles tiresome and long-debunked claims regarding climate science as detailed by Dr. Michael MacCracken's response to this document submitted to EPA's docket for this rulemaking. ²⁷⁵ The document's claims that NCA5 fails to meet OMB information quality guidelines rest entirely on the fact that the authors, Lindzen and Hopper, disagree with the conclusions of NCA5. That this letter was sent less than three weeks before the publication of the proposed rule raises concerns that the letter was submitted with the explicit purpose of deflecting criticisms of the information quality of the CWG Draft Report, which is prominently cited in the proposed rule (that, as noted, violates each and every one of the OMB IQA Guidelines respecting dissemination of HISAs).

NCA5 meets every criterion specified by OMB in its information quality guidelines: quality, an encompassing term comprising objectivity, utility, and integrity. Appendix 2 (Information Quality) of NCA5 describes the processes and actions taken by the NCA5 development team to ensure adherence to the OMB information quality guidelines.²⁷⁶ These actions include the transparent and fully independent review of the draft NCA5 by NASEM,²⁷⁷ a step explicitly recognized by OMB as meeting their information quality guidelines.²⁷⁸ The NASEM review included an explicit Statement of Task to guide the review. USGCRP, the lead in development of NCA5, had no input on membership of the NASEM review panel. NCA5 included four opportunities for public input and review.²⁷⁹ It relied upon a large and diverse author team to ensure diversity of perspectives and limit the potential for influence of individual bias. It was reviewed by agency experts who were not involved in writing the report. Until the Executive Office of the President of the

_

²⁷³ Michael Chamberlain and Gregory R. Wrightstone, (2025). Letter to Michael J.K. Kratsios and Jeffrey B. Clark, Re: Request for Correction under EO 14303 and the Information Quality Act Concerning the 5th. National Climate Assessment Published by the U.S. Global Change Research Program, June 11, 2025, https://www.regulations.gov/document/EPA-HQ-OAR-2025-0194-0019.

²⁷⁴ Lindren P. and Hopper W. (2025). Creathouse Class and Facil Engls Climate Spines Appendix to Chemberlain and Clerk letter.

²⁷⁴ Lindzen, R. and Hopper, W. (2025). *Greenhouse Gases and Fossil Fuels Climate Science*, Appendix to Chamberlain and Clark letter, https://www.regulations.gov/document/EPA-HQ-OAR-2025-0194-0019.

²⁷⁵ Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards, https://www.regulations.gov/docket/EPA-HQ-OAR-2025-0194.

²⁷⁶ Champion, S.M. et al. (2023). Appendix 2. *Information quality, in: Fifth National Climate Assessment* (Crimmins, A.R. et al., eds.) U.S. Global Change Research Program, Washington, DC.

²⁷⁷ National Academies of Sciences, Engineering, and Medicine. 2023. Review of the Draft Fifth National Climate Assessment. Washington, DC: The National Academies Press. https://doi.org/10.17226/26757.

²⁷⁸ Office of Management and Budget (2005). Final Information Quality Bulletin for Peer Review, Section IV. Alternative Procedures, Federal Register, 70, 2672, Friday, January 14, 2005.

²⁷⁹ National Oceanic and Atmospheric Administration (2020). Request for Comment on the Draft Prospectus of the Fifth National Climate Assessment, Federal Register, 85, 41567, Friday, July 10, 2020. National Aeronautics and Space Administration (2020). Request for Public Nominations for Authors and Scientific/Technical Inputs and Notice of Planned Public Engagement Opportunities for the Fifth National Climate Assessment, Federal Register, 85, 65433, October 15, 2020. National Oceanic and Atmospheric Administration (2022). Public Comment on the Annotated Outline of the Fifth National Climate Assessment, Federal Register, 87, 940, January 7, 2022. National Oceanic and Atmospheric Administration (2022). Availability for Public Comment on the Draft Fifth National Climate Assessment (NCA5) United States Global Change Research Program (USGCRP), Federal Register, 87, 67873, Thursday, November 10, 2022.

Trump Administration shut down the website, summaries of public and NASEM review comments and NCA5 author responses to those comments were publicly available.

In contrast, the CWG Draft Report followed none of these information quality processes. The CWG Draft Report has only authors, hand-picked by the Secretary of Energy, and all with well-known biases against the consensus of climate science. There was no independent peer review (all reviewers were DOE employees). There is no public record of review comments and author responses. There was no opportunity for public input prior to publication and use in a major policy action. In short, the CWG Draft Report is exactly the type of biased, opaque, poor-quality information the OMB information guidelines were designed to prevent Federal agencies from disseminating or using in agency actions.

Seeking comments to suggest the reverse is true is not just disingenuous, it is a bad faith effort to read shoddy science into the public record, undermine confidence in agency scientific processes, and libel the efforts of hundreds of dedicated authors and agency experts involved in the development of NCA5.

V. Proposed Repeal of GHG Emission Standards

A. Requisite Technology

As an alternative ground of decision, the agency proposes that, assuming that air pollution from the six well-mixed greenhouse gases endangers public health and welfare and that emissions from new motor vehicles contribute to that endangerment, there is no "requisite technology" for new light-, medium-, or heavy-duty vehicles which meaningfully addresses those identified dangers.²⁸⁰ The agency maintains that even if all emissions from these vehicles were eliminated, the effect on global warming trends would be "below the scientific threshold for measurability" because within the precision range (+/- 15%) for global warming trends, and thus "not a reliable measure for regulatory purposes." The agency further states that only technologies which physically remove greenhouse gases from the ambient air would have the "requisite" meaningful effect, and such technologies would not be emission standards for purposes of \(\) 202(a).²⁸²

This alternative has been rejected by the D.C. Circuit, in an opinion binding on the agency. It is also atextual, and inconsistent with the CAA's structure and purpose. Furthermore, the agency's purported measurability metric is factually in error.

1. This alternative was rejected by the Court.

The agency neglects to mention that the Court rejected this alternative in Coalition for Resp. Regulation v. EPA, 684 F. 3d 102, 127-128 (D.C. Cir. 2012). The Supreme Court denied certiorari on this issue.²⁸³ Since the agency appears oblivious to this applicable law, we quote it in full:

"Turning to the APA, Industry Petitioners contend, relying on Small Refiner Lead Phase–Down Task Force v. EPA, 705 F.2d 506, 525 (D.C.Cir.1983), and Ethyl Corp. v. EPA, 541 F.2d 1 (D.C.Cir.1976), that EPA failed both to justify the Tailpipe Rule in terms of the risk identified in the Endangerment

²⁸⁰ 90 FR at 36311-12.

²⁸¹ Id. at 36311/2.

²⁸³ 571 U.S. 951 (2013).

Finding and to show that the proposed standards "would meaningfully mitigate the alleged endangerment," Industry Tailpipe Br. 35. Instead, they maintain that EPA "separated these two integral steps," *id.* at 11, and "concluded that it had no obligation to show ... 'the resulting emissions control strategy or strategies will have some significant degree of harm reduction or effectiveness in addressing the endangerment," *id.* at 11–12 (quoting Endangerment Finding, 74 Fed. Reg. at 66,508). **These contentions fail.**

Petitioners' reliance on Small Refiner, 705 F.2d at 525, is misplaced; the court there laid out guidelines for assessing EPA's discretion to set numerical standards and Petitioners do not challenge the substance of the emission standards. In Ethyl, 541 F.2d at 7, the court assessed the scope of EPA's authority, under CAA § 211(c)(1), 42 U.S.C. § 1857f–6c(c)(1) (1970) (currently codified as amended at 42 U.S.C. § 7545(c)(1)), to regulate lead particulate in motor-vehicle emissions. The court rejected the argument that the regulations had to "be premised upon factual proof of actual harm," Ethyl, 541 F.2d at 12, and instead deferred to EPA's reasonable interpretation that regulations could be based on a "significant risk of harm," id. at 13. Nothing in Ethyl implied that EPA's authority to regulate was conditioned on evidence of a particular level of mitigation; only a showing of significant contribution was required. EPA made such a determination in the Endangerment Finding, concluding that vehicle emissions are a significant contributor to domestic greenhouse gas emissions. See, e.g., Endangerment Finding, 74 Fed. Reg. at 66,499. Further, in the preamble to the Tailpipe Rule itself, EPA found that the emission standards would result in meaningful mitigation of greenhouse gas emissions. For example, EPA estimated that the Rule would result in a reduction of about 960 million metric tons of CO2e emissions over the lifetime of the model year 2012–2016 vehicles affected by the new standards. See Tailpipe Rule, 75 Fed. Reg. at 25,488–90. Other precedent is likewise unhelpful to Petitioners: in Chemical Manufacturers Association v. EPA, 217 F.3d 861, 866 (D.C.Cir.2000), "nothing in the record" indicated that the challenged regulatory program would "directly or indirectly, further the Clean Air Act's environmental goals," whereas here the record is fulsome, see supra Part II." (emphasis supplied).

The agency's disregard of applicable law here is unfortunate. In any case, for the agency's purposes, this issue is settled law binding on the agency, certiorari having been denied on this issue.²⁸⁴ Moreover, failure to cite plainly relevant authorities raises attorney ethical questions regarding duty of competence, as well as obligation not to make meritless arguments.²⁸⁵

2. The agency's alternative is without merit.

First, the text of § 202(a)(1) is clear: "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. [CAA section 202 (a)(1)] (stating that '[EPA] shall by regulation prescribe ... standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles')." Massachusetts, 549 U.S. at 533; see also Coal. for Resp. Regulation, 684 F. 3d at 126 (same).

²⁸⁴ 571 U.S. 951 (2013)). See also *Heartland Plymouth Court MI v. NLRB*, 838 F. 3d 16, 21-22 (D.C. Cir. 2016) (non-acquiescence cannot be invoked where agency has not contemporaneously sought Supreme Court review, and candidly and transparently indicated its disagreement with the court decision.)

²⁸⁵ See e.g. American Bar Ass'n, Model Rules of Professional Conduct, Rule 1.1(duty of competence) and see also *U.S. v. Booze*, 293 F. 3d 516 at 519 n. 2 (D.C. Cir. 2002) ("The omission is all the more egregious Apparently government counsel either cited the case without reading all of it or knowingly ignored its holding"); *Caudel v. District of Columbia*, 707 F. 354, 363 (D.C. Cir. 2013) ("Counsel has an obligation—as Justice Holmes put it—to 'play the game according to the rules.").

The standards EPA is obligated to issue are technology-based: EPA is to consider cost and lead time for "requisite technology", and standards must be applicable for vehicles' useful life. CAA \(\) 202(a)(1) and (2); see NRDC v. EPA, 655 F. 2d 318, 324-27 and 328 (D.C. Cir. 1981) construing \(\) \(202(a)(1) \) and (2) as being technology-forcing. "Requisite" means "needed for a particular purpose" and the statute specifies what that purpose is: the technology that is needed to meet the standard being set under § 202(a)(1).

There is no language tying the §§ 202(a)(1) and (2) standards to an environmental outcome. Congress knew how to write such standards, including in provisions with a two-step process one of whose steps includes technology-based standards.²⁸⁷ Congress did not adopt this approach in §§ 202(a)(1) and (2). EPA must promulgate technology-based standards upon finding endangerment and contribution. Technology-based standards represent a congressional choice to use the best technology to reduce pollutant emissions.²⁸⁸

The agency's proposed alternative negates this congressional scheme. Instead of using available, cost-effective technology to reduce emissions of pollutants contributing to endangerment, the agency would decide not to issue any standards, notwithstanding that there are enormous reductions to be had at reasonable cost and within reasonable lead times. This is antithetical to the statutory text, and to its precautionary and preventative purpose.²⁸⁹

The agency points to the term "requisite technology" in § 202(a)(2), indicating that it gives the agency license to consider the non-enumerated factor of contribution to an environmental result. But, under the associated words canon of statutory construction (noscitur a sociis), "a general phrase can be given a more focused meaning by the terms linked to it."290 Here, all of the associated terms involve availability of control technology and its technological feasibility. Similarly, the reference to "such pollution" in § 202(a)(1) appears in the context of consideration of standards' useful life. Again, this reference relates exclusively to technological means of controlling vehicular pollutant emissions. Moreover, reading these two fleeting terms divorced from their context to authorize wholesale negation of the Congressional scheme makes no sense.²⁹¹

In addition, "requisite" is used in § 109(b) "requisite to protect the public health." It was interpreted by the Supreme Court in Whitman: "Requisite, in turn, "mean[s] sufficient, but not more than necessary.""292

²⁸⁶ Merriam Webster.

²⁸⁷ See, e.g. CAA § 112 (f)(2)(A) (EPA must further promulgate standards to remove residual risk if that quantum of risk remains after application of technology-based standards); 110(a)(1)(a), 172(c)(1), 189(b)(1)(B) (States must submit plans providing for implementation, maintenance, and enforcement of primary NAAQS which Plans must provide for implementation of Reasonably Available Control Measures or Best Available Control Measures depending on circumstances); 110(a)(2)(D) (i) (State plans must prohibit emissions which contribute significantly to non-attainment or maintenance of primary or secondary NAAQS in other States); 209(b)(1) and (2) (determination that State standards must be at least as protective of public health and welfare as applicable federal standards).

²⁸⁸ See, e.g. Nat. Res. Def. Council v. E.P.A., 529 F.3d 1077, 1079 (D.C. Cir. 2008) ("Instead of basing its regulations on health risks (the "ample margin of safety"), EPA was required by the 1990 amendments to adopt technology-based standards in the first instance. That is to say, in the first round of regulation, the agency was obliged to look to the best available control technology to control emissions for each category of major sources that emits one or more of the listed hazardous air pollutants..."). ²⁸⁹ See, e.g. Mexichem Specialty Resins v. EPA, 758 F. 3d 544, 567 (D.C. Cir. 2015) ("We have consistently held that, in situations in which an agency must make a judgment in the face of a known risk of unknown degree, the 'agency has some leeway reasonably to resolve uncertainty, as a policy matter, in favor of more regulation or less." "citing Ctr. for Auto Safety v. Fed. Highway Admin., 956 E2d 309, 316 (D.C.Cir.1992); Lead industries Ass'n v. EPA, 647 E2d 1130, 1153 (D.C. Cir. 1980) (recognizing the "precautionary nature" of the law requires the EPA to "err on the side of caution").

²⁹⁰ Fischer v. United States, 603 U.S. 480, 489 (2024).

²⁹¹ American Trucking Ass'n v. Whitman, 531 U.S. 457, 468 (2001) ("Congress does not hide elephants in mouseholes"). ²⁹² 531 U.S. at 473.

Under the same meaning canon of statutory construction, "requisite" should have this same meaning in § 202(a)(2).²⁹³ Thus, "requisite technology" must be referring to technology sufficient, but not more than necessary, to meet the technology based § 202(a)(1) and (2) standards. Again, it is not a free standing directive turning a technology-based standard into a risk-based standard.

The agency makes much of the Supreme Court's statement in *Massachusetts* that it was not addressing the question of "whether policy concerns can inform EPA's actions in the event that it makes such a finding," This language cannot be read as an affirmative authorization to consider factors other than those Congress authorized, much less to effectively usurp the Congressional judgment about the way to go about reducing emissions of pollutants emissions found to be contributing to endangerment of public health and welfare.

This is not to say that §§ 202 (a)(1) and (2) mandate standards where the standards would not directly or indirectly further statutory goals. But that is not the case here. The Supreme Court spoke to this issue, in the context of standing, in *Massachusetts*:

"EPA nevertheless maintains that its decision not to regulate greenhouse gas emissions from new motor vehicles contributes so insignificantly to petitioners' injuries that the Agency cannot be haled into federal court to answer for them. For the same reason, EPA does not believe that any realistic possibility exists that the relief petitioners seek would mitigate global climate change and remedy their injuries. That is especially so because predicted increases in greenhouse gas emissions from developing nations, particularly China and India, are likely to offset any marginal domestic decrease.

But EPA overstates its case. Its argument rests on the erroneous assumption that a small incremental step, because it is incremental, can never be attacked in a federal judicial forum. Yet accepting that premise would doom most challenges to regulatory action.

Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop. ... That a first step might be tentative does not by itself support the notion that federal courts lack jurisdiction to determine whether that step conforms to law.

And reducing domestic automobile emissions is hardly a tentative step. Even leaving aside the other greenhouse gases, the United States transportation sector emits an enormous quantity of carbon dioxide into the atmosphere—according to the MacCracken affidavit, more than 1.7 billion metric tons in 1999 alone. ... That accounts for more than 6% of worldwide carbon dioxide emissions. *Id.*, at 232 ... To put this in perspective: Considering just emissions from the transportation sector, which represent less than one-third of this country's total carbon dioxide emissions, the United States would still rank as the third-largest emitter of carbon dioxide in the world, outpaced only by the European Union and China. Judged by any standard, U.S. motor-vehicle emissions make a meaningful contribution to greenhouse gas concentrations and hence, according to petitioners, to global warming....

While it may be true that regulating motor-vehicle emissions will not by itself *reverse* global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to *slow* or *reduce* it. ...Because of the enormity of the potential consequences associated with

²⁹³ See *Azar v. Allina Health Services*, 587 U.S. 566, 574 (2019) (recounting the usual rule that a word carries the same meaning throughout a single statute).

²⁹⁴ 549 U.S. at 534–35.

manmade climate change, the fact that the effectiveness of a remedy might be delayed during the (relatively short) time it takes for a new motor-vehicle fleet to replace an older one is essentially irrelevant. Nor is it dispositive that developing countries such as China and India are poised to increase greenhouse gas emissions substantially over the next century: A reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere." Massachusetts v. EPA, 549 U.S. 497, 525–26 (emphasis added).

And, as noted above, in rejecting the argument the agency now puts forward, the *Coal. for Resp. Regulation* court found that:

Nothing in *Ethyl* implied that EPA's authority to regulate was conditioned on evidence of a particular level of mitigation; only a showing of significant *contribution* was required. ... Further, in the preamble to the Tailpipe Rule itself, EPA found that the emission standards would result in meaningful mitigation of greenhouse gas emissions. For example, EPA estimated that the Rule would result in a reduction of about 960 million metric tons of CO2e emissions over the lifetime of the model year 2012–2016 vehicles affected by the new standards.²⁹⁵

The emissions reductions in the standards at issue here, just for forthcoming model years, far exceed those cited in binding precedent as emphatically meaningful and congruent with the requirements of §§ 202(a)(1) and (2).²⁹⁶

As noted in section II.C.4 above, EPA (as well as the CWG Draft Report) also has disregarded the urgency of avoiding incremental emissions on global warming trends: "[e]ach additional increment of warming is expected to lead to more damage and greater economic losses compared to previous increments of warming, while the risk of catastrophic or unforeseen consequences also increases." Likewise, the IPCC (2023) stated "[w]ith every additional increment of global warming, changes in extremes continue to become larger." As also explained in detail above, the proposal's reference to measurability reflects a fundamental fallacy: it is not appropriate to claim something has no impact because it is not directly measurable or would have no measurable impact. As discussed, there would in fact be a clear, quantifiable, and important impact shown in the change in the modeled warming trend based on the change in emissions.

B. Regulatory Impact Analysis

The draft Regulatory Impact Analysis (RIA) is fatally flawed and inadequate to support this proposed action. The slim document pales in comparison to EPA's extensive past analyses. At 60 pages and 15 short tables, it includes no automotive technology feasibility, cost, or efficiency analysis, and includes no alternative regulatory scenarios whatsoever. In contrast, the Office of Transportation and Air Quality (OTAQ) RIAs for previous light-duty GHG rulemakings were typically 500-1000 pages long, with hundreds of detailed tables of results and citations for every important data set and assumption, and included multiple alternative regulatory scenarios.

_

²⁹⁵ 684 F. 2d at 128.

²⁹⁶ See 89 FR at 27858 (7.2 billion metric tons cumulative net GHG reductions from light- and medium-duty vehicles); 89 FR at 29454 (1.025 billion metric tons cumulative GHG reductions from heavy duty vehicles).

²⁹⁷ 5th National Climate Assessment, Report-In-Brief (2023), p. 24. https://toolkit.climate.gov/sites/default/files/2025-07/NCA5 2023 FullReport.pdf

²⁹⁸ IPCC "Climate Change 2023 Synthesis Report," p.69.

The RIA ignores economic reality and the increased pollution and resulting disease and death this action will cause, as many as 2,500 lives a year. It imagines a bizarre world of economics where, even though individuals would save roughly \$6,000 over the lifetime of owning an electric car or light truck, it instead concludes that consumers will save money by buying gas vehicles. It takes the position that rescinding a series of rules that all have order of magnitude positive net benefits will result in net costs. The three most recent rules proposed to be rescinded by this action had between \$198 billion - \$252 billion in net benefits, including between \$17 billion - \$22 billion in health benefits. If EPA has a detailed analysis showing that EPA's earlier analysis was wrong, it should show it and let the public comment on it. This is especially true of the health benefits, which EPA reduces by an order of magnitude without justification.

The RIA claims the existing rules will result in increased pollution as people hold on to their existing gas cars longer, resulting in increased emissions. This shows a fundamental misunderstanding of the car market; in the real-world, cars that work are driven by someone, whether that means they are sold one or more times. This is the reality of the existing car market in which only the top 20% of individuals by income can afford a new car. In addition, new cars will not have a better emission profile if EPA eliminates all the rules that require reduced emissions in the future. EPA cannot simultaneously take credit for improved emissions based on standards that it is actively working to rescind.

1. EPA's Scenarios in the RIA show Net Costs of this Action Unless They Ignore Gas Savings

There are seven vehicle GHG repeal scenarios analyzed (all with 3% or 7% discount rates):

- 1. Inputs from 2024 rules (except no social cost of carbon)
- 2. Same as #1 and no IRA tax credits or California Advanced Clean Truck program
- 3. Same as #2 and assuming \$1 lower gasoline and \$0.25 lower diesel
- 4. Same as #2 and only counting the first 2.5 years of fuel savings
- 5. Same as #3 and only counting the first 2.5 years of fuel savings
- 6. Same as #1 and zero fuel savings
- 7. Same as #6 and with much higher vehicle costs

First, we must point out again that the RIA is inaccurate in all its scenarios by assuming that there is no benefit from decreased GHG emissions. The RIA does not include any climate science, and instead uses the CWG Draft Report for climate science. We have already explained what the report is a flawed basis of a regulation. But here we note that numerous adverse comments submitted to DOE have strongly and comprehensively contested the validity of the scientific opinions and assessment contained in CWG's Draft Report. EPA should not rely upon the CWG Draft Report in any manner unless (1) it is finalized, if it is finalized, and (2) EPA fully responds to all significant adverse comments submitted to DOE on the draft report. EPA must also respond to the scientific criticism of the report that parties submit to EPA. Failure to do so would remove any reasoned basis to rely on the report as a credible source of information. Alternatively EPA can produce and propose its own document explaining its position on climate science for public review and comment.

It is noteworthy that only scenarios 1 and 2 have semi-reasonable accounting of consumer fuel savings by using the 2023 Annual Energy Outlook (AEO) fuel prices, updated to reflect inflation. These scenarios show that this action has net costs to society. Scenario 2 has a net cost of \$350 billion through 2055, or annualized cost of \$18 billion per year (3% discount rate) and a net cost of \$50 billion through 2055, or annualized cost of \$4 billion per year (7% discount rate). It is odd that Scenario 2 did not use AEO 2025 Alt Transportation (no GHG/CAFE standards, ACT, and fewer tax credits) fuel prices, since EPA specifically asked AEO to conduct this analysis. We can only guess that EPA was trying to ignore the large increase in

gasoline prices. According to the analysis, this action will increase gas prices by 5 cents per gallon by 2030, 25 cents per gallon by 2035, 44 cents per gallon by 2040, 67 cents per gallon by 2045 and 76 cents per gallon by 2050. The Energy Information Administration (EIA) finds that Americans will pay \$4.1 trillion (non-discounted) more for gasoline by 2050.

Scenarios 3 and 5 assume gasoline to be \$1 cheaper and diesel is assumed to be \$0.25 cheaper than adjusted AEO 2023. This is unjustifiable since the AEO includes an analysis of all the actions of the Trump Administration, including this action and how they increase gasoline prices for all Americans. This increase is basic economics. The law of supply and demand tells us that if you increase the demand for a product, in this case gasoline, by reducing the number of EVs and increasing the number of gas vehicles, that increased demand will result in increased prices. If EPA wants to take the position that the law of supply and demand is incorrect, it should lay out that argument and allow the public to comment on it.

Scenarios 4 and 5 only count fuel savings for the first 2.5 years, on the theoretical claim that the value of all other fuel savings must be countered by some other unidentified loss of value to the consumer. This is flawed since the fuel savings continue far beyond the first 2.5 years. Just because people are not perfectly rational economic actors who can properly discount long term savings does not mean those savings don't exist. People will continue to save money for the full life of the car. It is a well-known principle of behavioral economics that people are imperfect economic actors. For example, "the lowest price at which consumers agree to part from a good (selling price) is often considerably higher than the highest price at which they agree to acquire the same item (buying price);" even though those prices should be the same.²⁹⁹ More importantly, EPA cannot simply manufacture some unjustified loss of value so they can pretend that this action has benefits. Finally, as stated above, gasoline prices will rise for all Americans as gasoline demand rises. Those costs are excluded from these scenarios.

Scenarios 6 and 7 completely exclude fuel savings, extending the theoretical speculation to a ridiculous extreme. EPA rejected both of these claims in the past and concluded that "a dollar saved is a dollar saved" and that OTAQ would only account for other "lost value" if and when a defensible, quantifiable argument could be made for such lost value. The current RIA does not present a defensible and quantifiable argument. If EPA were to come up with one, it should present it to the public for comment.

2. The RIA Uses an Inadequate and Outdated Vehicle Technology Arguments

Since the RIA did not include any automotive technology feasibility, cost, or efficiency updates whatsoever, it inherently ignores ongoing technology improvements made by automotive engineers and forces the RIA to rely on the technology feasibility, cost, and efficiency assumptions in past EPA rules. Interestingly, the RIA (page 28) stipulates that, even by deleting the consumer electric vehicle tax credits from the Inflation Reduction Act, manufacturers are projected to be able to comply with the existing light-duty GHG standards for all but one future year, model year (MY) 2032. In other words, even with light-duty electric vehicles being more expensive for consumers in the absence of the tax credits, manufacturers would be able to comply in MY 2026-2031 and MY 2033 and later. The RIA also stipulates that one way to address any compliance deficits in MY 2032 would be to take advantage of the average, banking, and trading flexibilities that are longstanding pillars of the light-duty GHG program.

93

²⁹⁹ Carmon, Z., & Ariely, D. (2000). Focusing on the forgone: How value can appear so different to buyers and sellers. Journal of consumer research, 27(3), 360-370. https://web.mit.edu/ariely/www/MIT/Papers/bb.pdf.

Of course, this finding of the RIA, that the light-duty GHG standards are feasible for all but a single year, also begs the very obvious question, Why does EPA not define and analyze an alternative regulatory scenario where the MY 2032 standards would be slightly modified? All previous EPA light-duty GHG rulemakings have included multiple alternative regulatory scenarios so that the public can consider and comment on the alternative scenarios. This RIA does not bother to provide the public with this opportunity because, of course, EPA's mind is made up.

3. The RIA Presents an Unrealistic Portrait of Electric Cars

As we said elsewhere in our comments, EPA's proposal and the RIA continuously denigrate electric vehicles, ignoring that they have improved power over gas vehicles and that their initial sales costs are expected to come down over time. Regardless of higher initial costs, which are partially offset by more features and improved power (which EPA also ignores), EVs save money in the long run. Administration Zeldin acknowledged this when he had the goal of making it "cheaper for Americans to buy cars" – not *own* cars. EPA repeats many of the myths that exist around EVs: that charging takes too long, lack of range, there's nowhere to charge, electricity is too expensive and others – none of these claims are true. ³⁰⁰ While EPA focuses on EVs in its claim that sales are dropping (which is incorrect, sales are still increasing albeit at a slower rate), it is ignoring the fact that compliance with the standard is expected to include hybrids and plug-in hybrids and that, as a group, sales of the three types of vehicles are increasing. ³⁰¹

The lack of technical analysis in the RIA helps explain why recent events during the comment period show how incorrect EPA is about its claims about EVs. As stated in our comments section discussing how rescinding the GHG rules will not improve public health and welfare, Ford recently announced that they will build a \$30,000 electric truck for sale in 2027, and the DOT announced that they will release billions of dollars to further build out a charging infrastructure in the US. This charging infrastructure will solve the biggest concern for consumers – how to charge their EV on long trips. Further good news for the future of EVs is the announcement by Chinese company BYD that it has a new system for EVs that will allow the cars to be charged in 5 minutes – roughly the time it takes to fuel a gas-powered vehicle. Mercedes currently can charge an EV in 10 minutes. This announcement is consistent with the Chinese EV industry which is producing EVs at the same price and with improved performance over gas cars. Additionally, during the comment period, ChargePoint and Eaton have introduced a new innovative system that delivers up to 600kW for passenger EVs and supports megawatt charging for commercial fleets. The system needs 30% less space with as much as a 30% reduction in both capital and operating costs.

EPA needs to explain and present for public comment an analysis why in six years American car companies cannot build cars that are equal to the cars that Chinese car companies are producing today. If EPA thinks, despite recent technological advances, that meeting the standard in six years is too soon and the industry needs more time, EPA needs to analyze regulatory options (as it normally does) to delay or otherwise ease the standards by a few years, rather than remove them. If EPA did a proper, forward-looking analysis it

³⁰⁰ Threewit, C. (2025). Reasons People Don't Buy Electric Cars (and Why They're Wrong). U.S. News. https://cars.usnews.com/cars-trucks/advice/why-people-dont-buy-electric-cars#:~:text=EVs%20Are%20Too%20Expensive,now%20than%20they%20once%20were.

³⁰¹ USEIA. (2024). U.S. share of electric and hybrid vehicle sales reached a record in the third quarter. https://www.eia.gov/todavinenergy/detail.php?id=63904

³⁰² Lee, D. (2025). BYD unveils battery system that charges EVs in five minutes. Fortune. https://fortune.com/2025/03/17/byd-battery-system-charging-5-minutes-tesla-superchargers/

³⁰³ The EV Report. (2025). Eaton and ChargePoint Unveil Ultrafast EV Chargers. https://theevreport.com/eaton-and-chargepoint-unveil-ultrafast-ev-chargers

would not be surprised by multiple announcements during the very short comment period that show that the assumptions of automotive technology and costs that EPA relied on are incorrect and outdated.

This lack of forward-looking analysis is not only arbitrary and capricious, it is illegal. In adopting standards under CAA § 202(a), EPA need not consider "solely technology in being" in assessing feasibility, but may also consider "the probable or likely sequence of the technology already experienced." Congress has embraced this consistent view of § 202 and directed EPA to push technologies further. In the 1977 CAA amendments, Congress, impatient with the lack of progress in controlling truck pollution, imposed technology-forcing standards requiring, for specified pollutants, the "greatest degree of emission reduction achievable through the application of technology which [EPA] determines will be available." EPA is "expected to press for the development and application of improved technology rather than be limited by that which exists today." In the 1990 amendments, Congress reaffirmed EPA's authority to adopt standards more protective and technologically ambitious than those Congress prescribed.

Overall, the reality of both electric cars and the car market show that EPA's made-up and unjustified Vehicle Composition and Vehicle Quality "costs" of this rule are imaginary. Especially projecting forward to 2032 when the standards go into effect. This means that 83 to 92% of the supposed benefits of this proposal simply do not exist.

4. The RIA Ignored Increases in the Cost of Gasoline and the Loss of Jobs

Most conveniently for this action, EPA ignores the massive increases in the cost of gasoline that will result from this action. According to the analysis of the EIA, this action will increase gas prices by 5 cents per gallon by 2030, 25 cents per gallon by 2035, 44 cents per gallon by 2040, 67 cents per gallon by 2045 and 76 cents per gallon by 2050—an amazing \$4 trillion in non-discounted increased costs to all consumers. This increase in gas prices is to be expected based on the law of supply and demand; significantly increasing the demand for gasoline has to result in a significant increase in its cost. EPA also needs to explain how the public benefits from a rule that according to the same AEO analysis that EPA requested shows a net loss of 3,760,000 jobs between 2025 and 2050. The same AEO analysis that EPA requested shows a net loss of 3,760,000 jobs between 2025 and 2050.

5. RIA Ignores the Benefits of GHG Reduction

The RIA is also flawed because it imagines that there are no benefits at all for reductions in GHG emissions. This is false. EPA seems to be following the same chain of logic it uses in its proposal to Repeal Greenhouse Gas Emissions Standards for Fossil Fuel-Fired Electric Generating Units. The agency claims in its proposal that there is a "particularly demanding analytical task by evaluating the significance of contribution to global, well-mixed air pollution that results from a combination of pollutants from a large and diverse array of sources that in turn, creates elevated global concentrations that, in turn, the Agency determined play a causal role in environmental phenomena that, in turn, the Agency determined adversely affect the public

95

³⁰⁴ Int'l Harvester Co. v. Ruckelshaus, 478 F.2d 615, 628 (D.C. Cir. 1973)

³⁰⁵ Pub. L. No. 95-95, § 224, 91 Stat. 685, 765 (codified at 42 U.S.C. § 7521(a)(3)(A)(i))

³⁰⁶ Nat. Res. Def. Council, Inc. v. EPA, 655 F.2d 318, 328 (D.C. Cir. 1981). See also NRDC v. Thomas, 805 F.2d 410, 414-16 (D.C. Cir. 1986).

³⁰⁷ See 42 U.S.C. § 7521(i)(1)-(2), (i)(3)(B)-(C) (affirming that EPA retained "authority under subsection (a) to promulgate more stringent standards" than those prescribed in § 7521(g)).

³⁰⁸ USEIA. (2025). Annual Energy Outlook 2025. https://www.eia.gov/outlooks/aeo/

³⁰⁹ Id.

^{310 90} FR 25752

health and welfare." This results in an "attenuated chain of causation" involving "multiple intervening actors, uncertainties, and extrapolations necessary to draw a connection between emissions by a source category and dangerous air pollution in the form of adverse effects in the U.S. from anthropogenic climate change."311 Our earlier comments focused on how this view is irrelevant to that deregulatory action. 312 Not only is this view of climate change legally irrelevant, it is also factually unsupported and false, and indeed, found already to be illegal. 313 There is a clear scientific link between emissions and damages and the fact that increased emissions increase damages. Multiple administrations, including the first Trump Administration, have come up with estimates of the Social Cost of Carbon (SCC). The SCC is an estimate of the cost, in dollars, of the damage done by each additional ton of carbon emissions. As such it is a determination of the chain of causation from emissions — such as those from EGUs — to damage suffered by Americans and people around the world. It also serves as an estimate of the benefit of any action taken to reduce a ton of carbon emissions. For purposes of this discussion, it actually doesn't matter what that number is as long as it is positive. Any positive number shows that the chain of causation is not too attenuated to connect EGU GHG emissions to damage. We also point to our earlier comments showing that the chain of causation is not unusually long or attenuated and that the chain of causation from pollution is at least as long and complex for many other pollutants.

The federal government is not the only organization that has determined a positive SCC. Many other organizations and governments including (and this is a small sample) the Canadian government, 314 New York Department of Environmental Conservation, 315 William Nordhaus and his team at Yale, 316 and Resources for the Future, 317 have all come up with estimates. In fact, as additional scientific evidence of the damage caused by increased concentrations of GHGs in the atmosphere comes in, these estimates have increased over time. 318 If EPA has actual facts and data as opposed to hand waving it should present that data and allow the public to comment on it.

We note that while the current administration has determined to no longer use a SCC, that determination provided no scientific support to the decision, similar to what is being done in this proposed rulemaking. Whether the EPA wants to establish or use a SCC or not, the fact remains that it can and has, as others have, connected GHG emissions to harm to the American public.

EPA is also discounting the benefits of the transition to a low carbon economy. NASEM's 2021 Report "Accelerating Decarbonization of the U.S. Energy System" determined: If done right, a transition to decarbonization can provide more and better-quality jobs, and economic benefits that exceed costs. The energy transition provides an opportunity to build a more competitive U.S. economy and to increase the availability of high-quality jobs. A transition to decarbonization in the United States could prevent half a

³¹¹ Id. at 25767

https://www.environmentalprotectionnetwork.org/wp-content/uploads/2025/08/EPN-Comments-on-Repeal-of-GHG-Stand ards-for-EGUs.pdf

³¹³ Center for Biological Diversity v. NHTSA, 538 F. 3d 1172 (9th Cir. 2008).

³¹⁴ Government of Canada. (2023). Social Cost of Greenhouse Gas Estimates – Interim Updated Guidance for the Government of Canada. https://www.canada.ca/en/environment-climate-change/services/climate-change/science-research-data/social-cost-ghg.html 315 New York State. (2025). Climate Change Guidance Documents. https://dec.nv.gov/regulatory/guidance-and-policy-documents/ climate-change-guidance-documents

³¹⁶Barrage, L., & Nordhaus, W. (2024). Policies, projections, and the social cost of carbon: Results from the DICE-2023 model. Proceedings of the National Academy of Sciences. https://economics.yale.edu/sites/default/files/2024-03/barrage-nordhaus-2024-policiesprojections-and-the-social-cost-of-carbon-results-from-the-dice-2023-model.pdf

Resources for the Future. (n.d.). Social Cost of Carbon. https://www.rff.org/topics/scc/

³¹⁸ Tol, R. S. (2023). Social cost of carbon estimates have increased over time. Nature climate change, 13(6), 532-536. https://research.vu.nl/ en/publications/social-cost-of-carbon-estimates-have-increased-over-time

million premature deaths or more over the next decade from pollution from the production and use of fossil fuels. The U.S. could save so much money in health and fossil-fuel costs by decarbonizing its economy, that it makes financial sense to do it regardless of climate change.³¹⁹

Others have also found that decarbonizing the economy of which the Endangerment Finding and related motor vehicle rules which EPA proposes to rescind in this action are part of that process is a clear loser for the U.S. The World Resource Institute found that without new policies, the United States will face economic damages from climate change equivalent to 1-3% of GDP per year by 2100. In a worst-case scenario, the damage could reach 3.7-10%. 320 The Union of Concerned Scientists, in their 2023 report, "Accelerating Clean Energy Ambition,"321 write:

"Fully decarbonizing the economy results in even greater health benefits. Achieving the long[1]term climate targets results in even greater reductions in major air pollutants and more than twice as many avoided premature deaths and avoided health care costs. These additional benefits are due primarily to phasing out coal in the power sector by 2030 and significantly reducing oil and gas use between 2030 and 2050. These public health benefits yield additional near-term savings and exceed the long-term costs of decarbonizing the US economy. The avoided costs of climate impacts significantly boost the overall benefits. Over the past five years, the United States has experienced 90 extreme weather and climate-related disasters, with damages exceeding \$1 billion each time; climate change worsened many of these events. Together, the disasters have caused more than \$620 billion in total damages and 1,750 deaths (NOAA 2023). Using the social cost of carbon, we estimated that the avoided climate damages from reducing CO2 emissions to meet US climate goals will exceed \$400 billion by 2035 under the IRA Reference case and nearly \$1.3 trillion by 2050 under the Net Zero cases (EPA 2022)."

It is not only advocacy groups who are concerned about the financial impact of climate change. In his 2020 letter to CEOs, 322 Larry Fink, the CEO of Blackrock (the world's largest asset management firm) stated:

"Climate change has become a defining factor in companies' long-term prospects. ... But awareness is rapidly changing, and I believe we are on the edge of a fundamental reshaping of finance. The evidence on climate risk is compelling investors to reassess core assumptions about modern finance. Research from a wide range of organizations – including the UN's Intergovernmental Panel on Climate Change, the BlackRock Investment Institute, and many others, including new studies from McKinsey on the socioeconomic implications of physical climate risk – is deepening our understanding of how climate risk will impact both our physical world and the global system that finances economic growth. [...]

³¹⁹ National Academies of Sciences, Engineering, and Medicine. (2021). Accelerating decarbonization of the US energy system. https://nap.nationalacademies.org/catalog/25932/accelerating-decarbonization-of-the-us-energy-system

³²⁰ Jaeger, J., & Saha, D. (2020). 10 charts show the economic benefits of US climate action. World Resources Institute. https://www.wri.org/

blog/2020/07/economic-benefits-climate-action-us

³²¹ Clemmer, S., Cleetus, R., Martin, J., de Moura, M. C. P., Arbaje, P., Chavez, M., & Sattler, S. (2023). Accelerating Clean Energy Ambition: How the US Can Meet Its Climate Goals While Delivering Public Health and Economic Benefits. https://www.ucs.org/sites/ default/files/2023-11/accelerating-clean-energy-ambition-report.pdf

³²² Fink, L. (2020). Larry Fink's 2020 letter to CEOs: A Fundamental Reshaping of Finance. https://www.blackrock.com/corporate/investor-relations/2020-larry-fink-ceo-letter

Investors are increasingly reckoning with these questions and recognizing that climate risk is investment risk. Indeed, climate change is almost invariably the top issue that clients around the world raise with BlackRock. From Europe to Australia, South America to China, Florida to Oregon, investors are asking how they should modify their portfolios. They are seeking to understand both the physical risks associated with climate change as well as the ways that climate policy will impact prices, costs, and demand across the entire economy. [...] [G]overnment must lead the way in this transition."

The reinsurance company Swiss Re, one of the world's largest providers of insurance to other insurance companies, analyzed the financial impact of climate change and discovered that "the effects of climate change can be expected to reduce global economic output by 11 percent to 14 percent by 2050 compared with growth levels without climate change," amounting to as much as \$23 trillion in reduced annual global economic output as a result of climate change.³²³

Of course, the impacts are not just international. The McKinsey Global Institute looked at impacts on the Florida real estate market as an example of impacts of Climate Change in the U.S. 324 They found:

- Climate change is projected to exacerbate flooding due to storm surges, precipitation intensity, and rising sea levels that increase tidal flooding. For example, the frequency of tidal flooding from rising sea levels is expected to grow from a few days a year to 30 to 60 times per year in 2030 and more than 200 times per year in 2050 for stations near Florida's coast, according to First Street Foundation.
- Average annual damage from storm surges in Florida's residential real estate market total \$2 billion today, a figure that could increase to \$3 billion to \$4.5 billion, by midcentury depending on whether the exposure is expected as constant or as seeing some buildup.
- Individual counties can see more extreme increases. Examples are Volusia, St. Johns, and Broward counties, which could see their average annual losses grow by approximately 80 percent by 2050.
- Rising sea levels also increase the damage caused by "tail" events in all counties. Florida's real estate losses during storm surge from a 100-year event are expected to be \$35 billion today and projected to grow to \$50 billion to \$75 billion by 2050.
- Projected increase in tidal flooding frequency and severity could result in a \$10 billion to \$30 billion devaluation in exposed properties by 2030, and \$30 billion to \$80 billion by 2050, all else being equal.

Deloitte's Global Turning Point Report³²⁵ laid out the cost of inaction:

- A 5.4°F/3° C increase in global temperature will result in economic damages that grow and compound affecting every industry and region. Resulting in \$14.5 trillion (present value \$) in US economic losses over the next 50 years.
- \$1.5 trillion in economic losses in the US in the year 2070 alone.
- This means a lifetime loss of \$70,000 for every American.

³²³ Flavelle, C. (2021). Climate change could cut world economy by \$23 trillion in 2050, insurance giant warns. The New York Times, 22. https://www.nytimes.com/2021/04/22/climate/climate-change-economy.html

³²⁴ Woetzel, J., Pinner, D., Samandari, H., Engel, H., Krishnan, M., Kampel, C., & Vasmel, M. (2020). Will mortgages and markets stay afloat in Florida. McKinsey Global Institute.

https://www.mckinsey.com/business-functions/sustainability/our-insights/will-mortgages-and-markets-stay-afloat-in-florida

³²⁵ Deloitte. (2022). The turning point: a Global Summary.

https://www.deloitte.com/global/en/issues/climate/global-turning-point.html

They also laid out the benefits of action:

- By accelerating decarbonization the US could by the late 2040's complete a transformation that delivers huge economic gains \$3 trillion added to the US economy over the next 50 years
- In 2070 the annual economic gain would be \$885 billion

As stated in the report, "A loss of \$14.5 trillion or a gain of \$3 trillion the choice is ours." In this action and other actions EPA is taking such as its rescinding GHGs for EGUs EPA is choosing but ignoring trillions in costs.

In addition, EPA ignores the climate risks for the federal government including the Department of Defense (DOD). Federal funding for disaster assistance since 2005 has totaled at least \$450 billion and will likely increase due to climate change. The January 2019, during the first Trump Administration, DOD stated that the effects of a changing climate are a national security issue with potential impacts to the department's missions, operational plans, and installations. Since 2010, DOD has identified climate change as a threat to its operations and its almost \$1.2 trillion global real-estate portfolio. For example, six DOD installations in the Alaskan Arctic are threatened by permafrost thaw. DOD's 2018 (also during the first Trump Administration) preliminary assessment of extreme weather and climate effects at installations was based on the installations' reported past experiences with extreme weather rather than an analysis of future vulnerabilities based on climate projections. Size to the federal government including the Department of Dod will likely increase \$450 billion and will likely increase \$450 billion and

The development of improved electric vehicles, which the Endangerment Finding and related rules encourage, can help save soldiers' lives. Between 2003 and 2007 in the Iraq War, there were 2,858 resupply convoy casualties. Half of all casualties resulted from the transport of fuel. The transport of fuel was the cause of 5-6% of all US casualties during that time.³²⁹

Among the costs of the rule that the RIA ignores is the costs of adaptation and mitigation of the effects of climate change that will result from this and other actions of EPA such as EPA's effort to repeal GHG standard for Electric Generating Units. In this action, EPA criticizes the Endangerment Finding for failing to account for adaptation and mitigation for reducing the effects of climate change. Specifically, the federal register notice says:

The Administrator further notes that the risks anticipated in the Endangerment Finding resulted, in part, from the Agency's decision at the time to *categorically exclude consideration of adaptation and mitigation that should have been incorporated into the analysis as credible and relevant information*. We propose that the data on weather events, coupled with the Agency's decision to exclude mitigation and adaptation information from the analysis, fatally undermines the Endangerment Finding's conclusions in this respect. FR Notice at p 36309 (emphasis added).

³²⁷ U.S. Government Accountability Office. (2019). Climate Resilience: DOD Needs to Assess Risk and Provide Guidance on Use of Climate Projections in Installation Master Plans and Facilities Designs. https://www.gao.gov/assets/700/699680.pdf

³²⁶ U.S. Government Accountability Office. (2019). *Climate Resilience: A Strategic Investment Approach for High-Priority Projects Could Help Target Federal Resources*. https://www.gao.gov/assets/gao-20-127-highlights.pdf

Wallace, J. (2021). *Melting permafrost puts military on unstable ground*. Greenwire. https://www.eenews.net/greenwire/2021/05/21/stories/1063732977?utm_campaign=edition&utm_medium=email&utm_source=eenews%3Agreenwire

³²⁹ National Defense Center for Energy and Environment (NDCEE). (2009). Sustain the mission project: Casualty factors for fuel and water resupply convoys (No. NDCEE0545). https://apps.dtic.mil/sti/citations/ADB356341

If the Endangerment Finding is flawed for not considering the benefits of adaptation and mitigation, then this action and the RIA are fatally flawed for not considering the costs of adaptation and mitigation in their analysis of this action. Adaptation and mitigation are not free. Actions such as building seawalls and moving communities and roads to higher ground have costs, and those costs should be accounted for. EPA also ignores that mitigation and adaptation is not always available. The lobster fisherman will lose that market altogether if the lobsters continue to move as they already have to Canadian waters in search of the colder water.

6. This Rule Damages the Long-term future of the American Auto Industry

The U.S. auto industry would be at an international disadvantage if it doesn't move quickly to produce electric vehicles. As the National Academy of Science stated:

Additionally, for U.S. automakers, a potential negative outcome of other countries enacting these ZEV regulations prior to the United States is that these countries will have the opportunity to establish and shape relevant supply chains, which may put them in a stronger position to supply the U.S. market if ZEV policy is enacted. For instance, China is the biggest market for vehicle sales in the world and a jurisdiction that has staked out an ambitious program to convert its fleets to electric vehicles.³³⁰

In fact, automakers have committed to producing electric vehicles, (this information from May 2025).³³¹ These plans of the major automotive companies show that by 2030, 2 years in advance of the standards, most car companies plan on being half electric (including hybrids) or more. EPA should acknowledge that automobile company public plans are better than their guesses on future sales. This shows that EPA is being unjustifiably pessimistic in their analysis.

In addition, EPA is undermining the significant investments already made by the private sector. When regulating against the backdrop of an existing regulatory structure, agencies must "be cognizant that longstanding policies may have 'engendered serious reliance interests that must be taken into account." For decades, companies have depended on the regulatory stability provided by EPA's consistent recognition of technological advances that support more stringent vehicle emission standards. The electric vehicle supply chain has been ramping up to support a growing fleet of zero-emission vehicles. Existing EPA standards have recognized that the private sector has already made "billions of dollars' worth of investments" in electric vehicle technologies and has "significant plans to transition to a zero-carbon fleet over the next ten to fifteen years." These investments in electric vehicle technology and supporting infrastructure create genuine reliance interests that weigh in favor of maintaining EPA's existing standards. The private sector reasonably relied on the overwhelming evidence of the impact of GHG emissions on public health and welfare supporting the Endangerment Finding, multiple court cases, EPA's longstanding unchallenged authority to adopt innovation-enabling standards that consider electric vehicles. EPA now

National Academies of Sciences, Engineering, and Medicine. (2021). Assessment of technologies for improving light-duty vehicle fuel economy—2025-2035. Chapter 12.4.1, p. 12-401. https://www.nap.edu/catalog/26092/assessment-of-technologies-for-improving-light-duty-vehicle-fuel-economy-2025-2035

³³¹ Kwon, A. (2025). EVs are still charging ahead (pun intended). Autoblog. https://www.autoblog.com/features/every-major-automakers-ev-roadmap-what-to-expect-by-2030

³³² Encino Motorcars, LLC v. Navarro, 579 U.S. 211, 222 (2016) (quoting FCC v. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009)). ³³³ 89 Fed. Reg. at 29,445.

³³⁴ See Ky. Mun. Energy Agency v. FERC, 45 F.4th 162, 182 (D.C. Cir. 2022) ("[I]nvest[ing] hundreds of millions of dollars" after an agency decision is "substantial evidence of reliance.").

seeks to upset a well-established regulatory program and harm other private companies that acted under the reasonable assumption that EPA's authority to regulate in this manner was a settled question.

7. Conclusion: The RIA is Wholly Inadequate

Our comments clearly show the inadequacy of EPA's analysis, which does not include:

- 1. A serious forward-looking review of vehicle technology or economics consistent with the kind of analysis that has been done for years on motor vehicle regulations.
- 2. A basic understanding of the power/efficiency tradeoff with EVs and how it differs from internal combustion vehicles.
- A substantive review of the non-GHG health impacts of vehicle emissions (VOCs, NOx, PM, and toxics).
- 4. An analysis of the costs of mitigation and adaptation. A topic that the proposal faults the Endangerment Finding for not doing.
- 5. The increases in the cost of gasoline that naturally result from an increase in gasoline demand.
- 6. The net job losses that result from this proposed action.
- 7. Any scientific, detailed, and independent analysis of the impact of GHG emissions and increased temperature on public health and welfare.
- 8. Any analysis of potential alternative regulatory options such as extending the MY32 deadline or reducing the stringency of the standard. Instead EPA takes an all or nothing approach as though regulatory options do not exist.

As a result EPA needs to redo the RIA and make it available for public comment.

C. Rescinding motor vehicle (MV) GHG standards will harm public health and welfare.

EPA is taking the position that rescinding the MV GHG standard will improve public health and welfare. We strongly disagree with EPA's assertion. All of the rules that EPA is rescinding in this action have positive net benefits. The Clean Car Rule avoids over 3,000 deaths and has annual net benefits of \$96 billion. The Clean Truck Rule (phase 3) will save over 100 lives and has annual net benefits of over \$10 billion. The has a detailed analysis that shows why the previous analyses and assessments are incorrect they should produce it and let the public comment on it, as EPA did when the original rules were written.

EPA claims that this rescission has net positive benefits, mostly from so-called "Vehicle Composition" damages. The agency cherry-picked the data from the U.S. Energy Information Agency's most recent Annual Energy Outlook (AEO), but ignored the very real \$4 trillion in additional gasoline costs that the report found would result from the repeal of the Endangerment Finding and associated rules. The AEO analysis determined that these actions will increase gas prices by 5 cents per gallon by 2030, 25 cents per gallon by 2035, 44 cents per gallon by 2040, 67 cents per gallon by 2045, and 76 cents per gallon by 2050. Apparently, EPA imagines a world in which the law of supply and demand is no longer in force and significantly increasing the demand for gasoline would not significantly increase its costs.

³³⁵ https://www.environmentalprotectionnetwork.org/epafacts/facts-rollbacks-of-pollution-rules-will-cost-over-200k-lives/

³³⁶ Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards Draft Regulatory Impact Analysis, Table RIA-1

https://www.eia.gov/outlooks/aeo/

While we will address the many problems with the draft Regulatory Impact Analysis (RIA) in another section, we do want to address a number of the other fallacies in the proposal.

In attacking GHG regulation, EPA continually plays the game of slicing up the contribution of any source to world GHG emissions. EPA believes that if they can slice the pie into small enough pieces, they can forget that the pie exists.³³⁸ This approach is inconsistent with § 202(a), which says "cause or **contribute to**" – contribution counts. The legislative history of the revisions in the 1977 CAA § 202(a)(1) are meant to "assur(e) consideration of the *cumulative impacts of all sources of a pollutant* in setting ambient and emissions, not just the extent of the risk from the emissions from a single source or class of sources of the pollutant." (emphasis added.)

More importantly, this argument was already made by EPA and rejected by the Supreme Court in *Massachusetts*,

"But EPA overstates its case. Its argument rests on the erroneous assumption that a small incremental step, because it is incremental, can never be attacked in a federal judicial forum. Yet accepting that premise would doom most challenges to regulatory action. Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop. See Williamson v. Lee Optical of Okla., Inc., 348 U. S. 483, 489 (1955) ("[A] reform may take one step at a time, addressing itself to the phase of the problem which seems most acute to the legislative mind"). They instead whittle away at them over time, refining their preferred approach as circumstances change and as they develop a more-nuanced understanding of how best to proceed. Cf. SEC v. Chenery Corp., 332 U. S. 194, 202 (1947) ("Some principles must await their own development, while others must be adjusted to meet particular, unforeseeable situations"). That a first step might be tentative does not by itself support the notion that federal courts lack jurisdiction to determine whether that step conforms to law.

And reducing domestic automobile emissions is hardly a tentative step. Even leaving aside the other greenhouse gases, the United States transportation sector emits an enormous quantity of carbon dioxide into the atmosphere—according to the MacCracken affidavit, more than 1.7 billion metric tons in 1999 alone. ¶30, Stdg. App. 219. That accounts for more than 6% of worldwide carbon dioxide emissions. Id., at 232 (Oppenheimer Decl. ¶3); see also MacCracken Decl. ¶31, at 220. To put this in perspective: Considering just emissions from the transportation sector, which represent less than one-third of this country's total carbon dioxide emissions, the United States would still rank as the third-largest emitter of carbon dioxide in the world, outpaced only by the European Union and China. [Footnote 22] Judged by any standard, U. S. motor-vehicle emissions make a meaningful contribution to greenhouse gas concentrations and hence, according to petitioners, to global warming.

While it may be true that regulating motor-vehicle emissions will not by itself reverse global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to slow or reduce it. See also Larson v. Valente, 456 U. S. 228, 244, n. 15 (1982) ("[A] plaintiff satisfies the redressability requirement when he shows that a favorable decision will relieve a discrete injury to himself. He need not show that a favorable decision will relieve his every injury"). Because of the enormity of the potential consequences associated with man-made climate change, the fact that the effectiveness of a remedy might be delayed during the (relatively short) time it takes for a new motor-vehicle fleet to replace an older one is essentially irrelevant. [Footnote 23] Nor is it

³³⁸ This reminds us of one definition of irresponsibility – no raindrop thinks it is responsible for the flood.

dispositive that developing countries such as China and India are poised to increase greenhouse gas emissions substantially over the next century: A reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere." 549 U.S. at 524.

EPA also ignores other actions it takes under the CAA, that address very small contributions to environmental problems. In reality there is no other way to address the problem. As the old saying goes, a journey of 1,000 miles begins with a single step. Specific examples include the implementation of the Good Neighbor provisions of the CAA EPA set 1% contribution as significantly contributing to nonattainment of the NAAQS. EPA has numerous Control Technology Guidelines which form the basis of RACT controls on sources, many of which contribute a very small percentage of VOC emissions in a metro area.

The proposal says that significant increases in GHG emissions from other countries, particularly China and India, will swamp any reductions in U.S. GHG emissions. Besides being irrelevant (both legally and morally as we cannot excuse the pollution we create by saying they do it, too), the facts are that world emissions are peaking. The World Economic Forum reports that world "[e]nergy-related emissions are on the cusp of a prolonged period of decline for the first time since the Industrial Revolution. Peak energy emissions is here." This means that if the administration goes forward with all its plans, U.S. motor vehicles will have an increasing percentage of world GHG emissions.

EPA's analysis is based on incorrect assumptions. EPA overstates the cost differential between EVs and gas sport utility vehicles (SUVs). As would be expected with new technology, car manufacturers are building EVs as more expensive models as they build economies of scale that will bring down costs. Take the best-selling electric SUV, the Tesla model Y, and the most popular gas SUV, the Toyota RAV4. First, we would point out that the Tesla is the second-best selling SUV in the U.S. in 2025 and is the bestselling SUV made by an American car company.³⁴⁰ Second, while the Tesla is more expensive, it is a luxury car compared to the Toyota. It has multiple features that the Toyota doesn't have and the Tesla has a higher overall rating from Edmunds including a rating of 8.5 (out of 10) for driving experience compared to a score of 7 for the Toyota. (All comparisons are for the most popular model of each car.) Among the features that it has as standard features are parking assistance, heated and cooled seats, and a sunroof, some of which are not available on the RAV4. EPA notes that Americans have shown that they highly value performance and power at the expense of fuel economy. What EPA does not note is that since EVs have instant torque they are more powerful than ICE vehicles. Model Y has 295 horsepower and goes from 0 to 60 in 6.5 seconds while the RAV4 has 203 horsepower and takes 8 seconds to go from 0 to 60. Moving from an ICE vehicle to an EV does not reduce performance and power, it improves it, so to the extent that the public values performance they are getting a benefit not a cost from EVs. This is not surprising when one looks at the history of energy efficient cars. Since 1970 cars have been slightly more than twice as efficient in miles per gallon and have almost twice as much horsepower.

3

https://www.weforum.org/stories/2024/11/peak-energy-emissions-a-historic-moment-overshadowed-by-the-endurance-of-fossil-fuels/ Emissions from China are peaking, while India just recently hit the 50% of non-fossil power milestone ahead of its 2030 target. See also: https://www.carbonbrief.org/analysis-clean-energy-just-put-chinas-co2-emissions-into-reverse-for-first-time/ and https://www.reuters.com/business/energy/india-hits-50-non-fossil-power-milestone-ahead-2030-clean-energy-target-2025-07-14/?utm_source=cbnewsletter&utm_medium=email&utm_term=2025-07-15&utm_campaign=Daily+Briefing+India+hits+energy+milestone+EU-China+summit+Catastrophe+bond+sales.

https://www.visualcapitalist.com/best-selling-cars-us-h1-2025/

EPA has a long history of overestimating the costs of control technologies and this action is no exception. 341,342,343,344 In this proposal, EPA works hard to manufacture analyses to show net costs. In the RIA, five of the seven modeling scenarios fail to account for trillions of dollars of higher fuel costs that consumers will bear due to both less-efficient new vehicles and higher gasoline prices for all drivers of both new and used vehicles. Despite ignoring GHG costs, Scenarios 1 and 2 still show that repealing the existing standards results in a net cost to society, under both the 3% and 7% discount rates (because at least they account for increased lifetime consumer fuel costs, even as they ignore the higher fuel prices).

Ford recently announced that it will sell a \$30,000 electric truck in 2027. (The cheapest Ford F-150 gas model sold today has an MSRP of over \$45,000.) The key to the reduced price is changes in the manufacturing process. As to additional benefits to the consumer, the truck will be able to power a home for up to 6 days – something no current ICE could do. If Ford can do it, other manufacturers can do it as well. Not only can U.S. manufacturers do it, they need to as the Chinese auto industry is currently producing EVs that are price equivalent to ICE vehicles and offer superior performance. If China can do it today, EPA would need to produce actual evidence to show why U.S. car makers can't.

The biggest issue that is slowing the adoption of EV is range anxiety. That will quickly fade as more chargers are built across the U.S. The proposal assumes that the Trump Administration's freeze of federal funds for vehicle charging would be permanent and takes credit for that as a savings. But since the proposal was published, the U.S. Department of Transportation, after losing in court, has agreed to lift the freeze and will release the money to states to begin charger projects.³⁴⁸

EPA is also wrong when it says that EVs don't reduce pollution. There are numerous analyses that show that EVs reduce GHG even with the current grid, 349 including the agency's own analysis. 350 If EPA has a detailed analysis to challenge these reports, it should present it to the public for comment. EPA is also incorrect when it says that if cars are more expensive people will continue to drive older cars with worse mileage. First of all, if EPA removes the standards requiring cars to be more efficient, as it proposes to do, then new cars will not actually be more efficient. More importantly, EPA ignores the real world situation where cars that work will be driven by someone and will even be sold one or more times during their functional lifetime. This is the reality of the existing car market in which only the top 20% of individuals can afford a new car. Operating cars are simply too valuable an asset not to be utilized.

EPA also ignores the broader benefits from reducing GHG gas emissions. As a 2021 The National Academies of Science, Engineering, and Mathematics report determined: If done right, a transition to decarbonization can provide more and better-quality jobs, and economic benefits that exceed costs. The energy transition provides an opportunity to build a more competitive U.S. economy and would increase the

³⁴¹ Morganstern, Richard, William Pizer, and Jhih-Shyang Shih. 1997. "Are We Overestimating the Real Cost of Economic Costs of Environmental Protection," Discussion Paper 97-36-REV. Washington, D.C.: Resources for the Future.

³⁴² http://www.4cleanair.org/Documents/EPAsBoilerMACTControllingEmissionsofHazardousAirPollutantspdf.pdf.p.9

https://smallbusinessmajoritv.org/sites/default/files/research-reports/Benefits of CAA 100410.pdf

³⁴⁴ Anderson, J.F., and T. Sherwood. 2002. Comparison of EPA and Other Estimates of Mobile Source Rule Costs to Actual Price Changes. SAE Technical Paper 2002-01-1980. Warrendale, PA: Society of Automotive Engineers.

³⁴⁵ https://www.motortrend.com/news/ford-universal-ev-platform-affordable-pickup-truck-preview

https://www.theatlantic.com/technology/archive/2025/08/ford-china-electric-cars/683880/

³⁴⁷ See also our discussion of the RIA and the other technological advancements announced during the comment period alone that are not included in EPA's analysis of the costs and benefits of EVs.

³⁴⁸ https://www.washingtonpost.com/climate-solutions/2025/08/15/electric-vehicle-chargers-federal-infrastructure/

https://valeclimateconnections.org/2023/09/electric-vehicles-reduce-carbon-pollution-in-all-u-s-states/

https://www.epa.gov/greenvehicles/electric-vehicle-myths

availability of high-quality jobs. A transition to decarbonization in the United States could prevent half a million premature deaths or more over the next decade from pollution from the production and use of fossil fuels. The U.S. can save so much money in health and fossil-fuel costs by decarbonizing its economy that it makes financial sense to do it regardless of climate change.³⁵¹

D. EPA cannot take the position that the CAA does not cover GHGs but at the same time take the position that the CAA covers GHG emissions so Federal Common Law Litigation is preempted.

In its action EPA takes the position that

"[t]he CAA would continue to preempt Federal common-law claims for GHG emissions because "Congress delegated to EPA the decision whether and how to regulate" such emissions. Am. Elec. Power Co. v. Connecticut, 564 U.S. 410, 426 (2011)." [EPN points out that this quote proves our larger point that the CAA does cover GHG emissions.] ... The bases for repeal proposed in this action would not foreclose us from regulating CO₂, methane, NOX, HFCs, PFCs, or SF6 emissions from new motor vehicles or engines if the Administrator determines that one or more of those gases meet the requirements for regulation under CAA section 202(a), as discussed herein. As noted above, we seek comment on the continued preemptive effect of the CAA in the event that the EPA finalizes the proposed rescission or otherwise concludes that it lacks authority to regulate GHG emissions under CAA section 202(a) or any other specific regulatory provision of the CAA." 90 FR 36315

But EPA in section IV of the preamble EPA also says:

"In this section, the EPA proposes to rescind the Endangerment Finding by concluding, based on multiple, independent alternative legal rationales, that the Agency's unprecedented foray into regulating GHG emissions from new motor vehicles and engines is inconsistent with the best reading of CAA section 202(a). Under any proposed alternative, the **EPA would lack authority to retain existing GHG emission standards for new motor vehicles and engines**. [...] Our primary proposal to rescind the Endangerment Finding by concluding that **CAA section 202(a) does not authorize the EPA to prescribe standards for GHG emissions based on global climate change concerns**. [...]

Next, we propose that the Nation's response to global climate change concerns generally, and specifically whether that response should include regulating GHG emissions from new motor vehicles and engines, is an economically and politically significant issue that triggers the major questions doctrine under UARG and West Virginia, and that Congress did not clearly authorize the EPA to decide it by empowering the Administrator to "prescribe . . . standards" under CAA section 202(a)." Emphasis added. 352

EPA cannot say that they cannot regulate GHG because they are not covered by the CAA and at the same time say that the CAA preempts common law litigation because the CAA does cover GHGs and the Administrator could use the CAA to regulate them. EPA can say that the CAA doesn't cover GHGs so legally it can't regulate, or EPA can say the CAA does cover GHGs so other actions are preempted but they can't say both. EPA's effort to have its cake and to eat it too is illegitimate, EPA must choose.

_

https://nap.nationalacademies.org/catalog/25932/accelerating-decarbonization-of-the-us-energy-system

^{352 90} FR 26398-9