

INSERT ON PAGE 537, REPLACING NOTE 7:

Global warming is increasingly recognized as a threat to human welfare. Carbon dioxide is the key greenhouse gas that contributes to global warming, and reducing emissions of carbon dioxide has been the goal of international climate change agreements, most notably the Kyoto Protocol, to which the United States is not a party.

But should the EPA have to regulate carbon dioxide under the Clean Air Act? This issue has haunted the EPA since at least 1998, when President Clinton's EPA opined that it had authority to regulate carbon dioxide. That admission led to at least two petitions and several lawsuits attempting to force the EPA to regulate carbon dioxide under the Clean Air Act. Although President George W. Bush's EPA reversed the EPA's prior position on carbon dioxide, the lawsuits continued, resulting in the following decision from the D.C. Circuit.

MASSACHUSETTS
v.
ENVIRONMENTAL PROTECTION AGENCY

415 F.3d 50 (D.C. Cir. 2005)

RANDOLPH, Circuit Judge.

Petitioners are twelve states, three cities, an American territory, and numerous environmental organizations. They are opposed by the Environmental Protection Agency as respondent, and ten states and several trade associations as intervenors. The controversy is about EPA's denial of a petition asking it to regulate carbon dioxide (CO₂) and other greenhouse gas emissions from new motor vehicles under § 202(a)(1) of the Clean Air Act, 42 U.S.C. § 7521(a)(1). EPA concluded that it did not have statutory authority to regulate greenhouse gas emissions from motor vehicles and that, even if it did, it would not exercise the authority at this time. 68 Fed. Reg. 52,922 (Sept. 8, 2003).

I.

We should say a few words about our jurisdiction under the Clean Air Act to review an EPA denial of a petition for rulemaking. Section 307(b)(1), 42 U.S.C. § 7607(b)(1), gives this court exclusive jurisdiction over “nationally applicable regulations promulgated, or final action taken, by the Administrator” under chapter 85 of the Act. The district courts, on the other hand, have jurisdiction over citizen suits to compel EPA to perform nondiscretionary acts or duties. 42 U.S.C. § 7604(a)(2). Because EPA refused to promulgate “nationally applicable regulations” after being asked to do so, we have jurisdiction only if EPA thereby engaged in “final action.” * * EPA's denial of the rulemaking petition was * * * “final action,” and since the petition sought regulations national in scope, § 307(b)(1) confers jurisdiction on this court to hear these consolidated cases.

Another, related, point needs to be mentioned. Several of the petitions for judicial review treated a memorandum of EPA's General Counsel, Robert Fabricant, as "final action taken, by the Administrator" under § 307(b)(1). * * * The Fabricant memorandum, consisting of legal advice to the EPA Administrator, did not in itself constitute "final action" of the Administrator. To be sure, the Administrator adopted the "General Counsel's opinion" and relied on its analysis as one of the alternative grounds for rejecting the rulemaking petition. *See* 68 Fed. Reg. at 52,925. The Administrator's explanation incorporated many of the memorandum's passages verbatim, rephrased and reordered others, and expanded on the General Counsel's reasoning. Still, it is the Administrator's denial of the rulemaking petition, with the accompanying explanation, that represents the "final action" of the Administrator subject to judicial review under § 307(b)(1). The significance of the General Counsel's opinion, as set forth in his memorandum, is the Administrator's reliance on his reasoning in deciding the matter now before us.

There is an additional jurisdictional issue presented, but not under the Clean Air Act. EPA claims that petitioners lack standing under Article III of the Constitution. Standing exists only if the complainant has suffered an injury in fact, fairly traceable to the challenged action, and likely to be redressed by a favorable decision. *See Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992). EPA's argument is that petitioners have not "adequately demonstrated" two elements of standing: that their alleged injuries were "caused by EPA's decision not to regulate emissions of greenhouse gases from mobile sources"; and that their injuries "can be redressed by a decision in their favor" by this court.

* * * The combination of *Lujan*, *Steel Co.*, and the factual overlap of the standing issues with EPA's justifications for not regulating greenhouse gases present us with three options. The first is to refer the standing issues to a special master for a factual determination. * * * Another option would be to remand to EPA for a factual determination of causation and redressability. * * * The third option is to proceed to the merits with respect to EPA's alternative decision not to regulate on the grounds, among others, that the effect of greenhouse gases on climate is unclear and that models used to predict climate change might not be accurate.

We have decided to follow the third course. * * * We will therefore assume *arguendo* that EPA has statutory authority to regulate greenhouse gases from new motor vehicles. The question we address is whether EPA properly declined to exercise that authority.

II.

Greenhouse gases trap energy, much like the glass panels of a greenhouse. The earth's surface is warmed by absorbing solar energy (visible light). The earth, in turn, radiates infrared energy (heat) back into space. A portion of the infrared radiation is trapped by greenhouse gas molecules, resulting in additional warming of the lower atmosphere and the earth's surface. This "greenhouse effect" is a natural phenomenon, without which the planet would be significantly colder and life as we know it would not be possible. EPA, *Global Warming – Climate*, at <http://yosemite.epa.gov/oar/globalwarming.nsf/content/climate.html>.

Petitioners sought to have EPA regulate, under § 202(a)(1) of the Clean Air Act, carbon

dioxide (CO₂), and three other greenhouse gases: methane (CH₄), nitrous oxide (N₂O), and hydrofluorocarbons (HFCs). In response to EPA's request for public comments on the 1999 petition for rulemaking, the agency received nearly 50,000 submissions. 68 Fed. Reg. at 52,924. Most were short expressions of support for the petition; many were nearly identical. *Id.* The comment period closed in May 2001. In the same month, the White House requested the National Academy of Sciences to assist the Administration in its review of climate change policy. The Academy "is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research . . ." NATIONAL RESEARCH COUNCIL, CLIMATE CHANGE SCIENCE: AN ANALYSIS OF SOME OF THE KEY QUESTIONS, preface (2001). Under its congressional charter, issued in 1863, the Academy has a mandate to advise the federal government on scientific and technical matters when requested. The Academy's principal operating agency for providing such advice is its National Research Council. *Id.*

In denying the rulemaking petition, EPA found that the scientific comments petitioners and others submitted rested on information already in the public domain and did not add significantly to the body of knowledge available to the National Research Council when it prepared the report cited above. Since none of the comments caused EPA to question the Council's report, EPA decided to rely on the Council's "objective and independent assessment of the relevant science." 68 Fed. Reg. at 52,930.

* * * Relying on *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976) (*en banc*), petitioners challenge EPA's decision to forego rulemaking "[u]ntil more is understood about the causes, extent and significance of climate change and the potential options for addressing it." 68 Fed. Reg. at 52,931. In our view *Ethyl* supports EPA, not petitioners. Section 202(a)(1) directs the Administrator to regulate emissions that "in his judgment" "may reasonably be anticipated to endanger public health or welfare." Section 202(a)(1) was not at issue in *Ethyl*; the court mentioned an earlier version of that provision, in a footnote, only by way of analogy. 541 F.2d at 20 n. 37. But what the court had to say about § 202(a)(1) is instructive. In requiring the EPA Administrator to make a threshold "judgment" about whether to regulate, § 202(a)(1) gives the Administrator considerable discretion. *Id.* Congress does not require the Administrator to exercise his discretion solely on the basis of his assessment of scientific evidence. *Id.* at 20. What the *Ethyl* court called "policy judgments" also may be taken into account. By this the court meant the sort of policy judgments Congress makes when it decides whether to enact legislation regulating a particular area. *Id.* at 26.

The EPA Administrator's analysis, although it did not mention *Ethyl*, is entirely consistent with the case. In addition to the scientific uncertainty about the causal effects of greenhouse gases on the future climate of the earth, the Administrator relied upon many "policy" considerations that, in his judgment, warranted regulatory forbearance at this time. 68 Fed. Reg. at 52,929. New motor vehicles are but one of many sources of greenhouse gas emissions; promulgating regulations under § 202 would "result in an inefficient, piecemeal approach to the climate change issue." 68 Fed. Reg. at 52,931. The Administrator expressed concern that unilateral regulation of U.S. motor vehicle emissions could weaken efforts to persuade developing countries to reduce the intensity of greenhouse gases thrown off by their economies. *Id.* Ongoing research into scientific uncertainties and the Administration's programs to address

climate change – including voluntary emission reduction programs and initiatives with private entities to develop new technology – also played a role in the Administrator’s decision not to regulate. 68 Fed. Reg. at 52,931-33. The Administrator pointed to efforts to promote “fuel cell and hybrid vehicles” and ongoing efforts to develop “hydrogen as a primary fuel for cars and trucks.” 68 Fed. Reg. at 52,931. The Administrator also addressed the matter of remedies. Petitioners offered two ways to reduce CO₂ from new motor vehicles: reduce gasoline consumption and improve tire performance. As to the first, the Department of Transportation – the agency in charge of fuel efficiency standards – recently issued new standards requiring greater fuel economy, as a result of which millions of metric tons of CO₂ will never reach the stratosphere. *Id.* As to tire efficiency, EPA doubted its authority to regulate this subject as an “emission” of an air pollutant. *Id.* “With respect to the other [greenhouse gases] – CH₄, N₂O, and HFCs – petitioners make no suggestion as to how those emissions might be reduced from motor vehicles.” *Id.*

It is therefore not accurate to say, as petitioners do, that the EPA Administrator’s refusal to regulate rested entirely on scientific uncertainty, or that EPA’s decision represented an “open-ended invocation of scientific uncertainty to justify refusing to regulate[.]” A “determination of endangerment to public health,” the court said in *Ethyl*, “is necessarily a question of policy that is to be based on an assessment of risks and that should not be bound by either the procedural or the substantive rigor proper for questions of fact.” *Ethyl*, 541 F.2d at 24. And as we have held, a reviewing court “will uphold agency conclusions based on policy judgments” “when an agency must resolve issues ‘on the frontiers of scientific knowledge.’” *Env’tl. Def. Fund v. EPA*, 598 F.2d 62, 82 (D.C. Cir. 1978).

We thus hold that the EPA Administrator properly exercised his discretion under § 202(a)(1) in denying the petition for rulemaking. The petitions for review in Nos. 03-1365, 03-1366, 03-1367, and 03-1368 are dismissed, and the petitions for review in Nos. 03-1361, 03-1362, 03-1363, and 03-1364 are denied.

So ordered.

SENTELLE, Circuit Judge, dissenting in part and concurring in the judgment.

As the majority’s opinion observes, courts of the United States must resolve jurisdictional questions, including “Article III standing questions, before proceeding to the merits of a case.” As the majority further observes, “[s]tanding exists only if the complainant has suffered an injury in fact, fairly traceable to the challenged action, and likely to be redressed by a favorable decision.” EPA argues “that petitioners have not ‘adequately demonstrated’ two elements of standing: that their alleged injuries were ‘caused by EPA’s decision not to regulate emissions of greenhouse gases from mobile sources’; and that their injuries ‘can be redressed by a decision in their favor’ by this court.” While I respect the majority’s thorough and accurate history of the precedents on the standing question, after consulting the same authorities I have come to a different conclusion. I conclude that EPA is correct in its assertion that the petitioners have not demonstrated the element of injury necessary to establish standing under Article III.

I. Injury

As the Supreme Court has stated quite directly and succinctly:

It is an established principle that to entitle a private individual to invoke the judicial power to determine the validity of executive or legislative action he must show that he has sustained or is immediately in danger of sustaining a direct injury as the result of that action and it is not sufficient that he has merely a general interest common to all members of the public.

Ex Parte Levitt, 302 U.S. 633 (1937) (citing *Tyler v. Judges*, 179 U.S. 405, 406 (1900); *Southern Ry. Co. v. King*, 217 U.S. 524, 534 (1910); *Newman v. Frizzell*, 238 U.S. 537, 549, 550 (1915); *Fairchild v. Hughes*, 258 U.S. 126, 129 (1922); *Massachusetts v. Mellon*, 262 U.S. 447, 488 (1923)).

* * * Petitioners' allegations and affidavits, and petitioners' argument and briefs, are all well made and sincere. Nonetheless, even in the light most favorable to the petitioners, in the end they come down to this: Emission of certain gases that the EPA is not regulating may cause an increase in the temperature of the earth – a phenomenon known as “global warming.” This is harmful to humanity at large. Petitioners are or represent segments of humanity at large. This would appear to me to be neither more nor less than the sort of general harm eschewed as insufficient to make out an Article III controversy by the Supreme Court and lower courts.

* * * Therefore, I would reject and dismiss all the petitions before us. This is not to say that petitioners' complaints are wrong. This is not to say they are without redress. This is to say only that the question is not justiciable in its present form with its present champions in the present forum. A case such as this, in which plaintiffs lack particularized injury is particularly recommended to the Executive Branch and the Congress. Because plaintiffs' claimed injury is common to all members of the public, the decision whether or not to regulate is a policy call requiring a weighing of costs against the likelihood of success, best made by the democratic branches taking into account the interests of the public at large. There are two other branches of government. It is to those other branches that the petitioners should repair. * * *

TATEL, Circuit Judge, dissenting in Nos. 03-1361, 03-1362, 03-1363, and 03-1364.

Petitioners claim that motor vehicle emissions of greenhouse gases contribute to global warming and that global warming in turn is causing a host of serious problems, likely including increased flash flood potential in the Appalachians, degraded water quality and reduced water supply in the Great Lakes, sea-ice melting and permafrost thawing in Alaska, reduced summer snow-pack runoff in the Rockies, extreme water resource fluctuations in Hawaii, and rising sea levels combined with higher storm surges along the coasts of Puerto Rico, the Virgin Islands, and some eastern states. Concerned about such problems, petitioners asked EPA to regulate these emissions under Clean Air Act section 202(a)(1), which provides: “The Administrator shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from . . . new motor vehicles . . . which in his judgment cause, or contribute to, air pollution which may

reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7521(a)(1). EPA denied the petition on two grounds – that it lacked statutory authority to regulate such emissions and that even given such authority it would not exercise it – and petitioners sought review in this court.

My colleagues agree that the petitions for review should not be granted, but they do so for quite different reasons. * * * I have yet a different view. Unlike Judge Sentelle, I think at least one petitioner has standing, as I explain in Part II. Unlike Judge Randolph, I think EPA’s order cannot be sustained on the merits. EPA’s first given reason – that it lacks statutory authority to regulate emissions based on their contribution to welfare-endangering climate change, 68 Fed. Reg. 52,922, 52,925-29 (Sept. 8, 2003) – fails, as I explain in Part III, because the statute clearly gives EPA authority to regulate “*any* air pollutant” that may endanger welfare, 42 U.S.C. § 7521(a)(1), with “air pollutant” defined elsewhere in the statute as “including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air,” *id.* § 7602(g). EPA’s second given reason – the one accepted by Judge Randolph – is that even if it has statutory authority, it nonetheless “believes” that “it is inappropriate to regulate [greenhouse gas] emissions from motor vehicles” due to various policy reasons. As I explain in Part IV, however, none of these policy reasons relates to the statutory standard – “cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare,” *id.* § 7521(a)(1) – and the Clean Air Act gives the Administrator no discretion to withhold regulation for such reasons.

In short, EPA has failed to offer a lawful explanation for its decision. I would accordingly grant the petitions for review and send the matter back to EPA either to make an endangerment finding or to come up with a reasoned basis for refusing to do so in light of the statutory standard.

I.

“Greenhouse gases are accumulating in Earth’s atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise.” So begins page one of the National Research Council’s 2001 report, *Climate Change Science: An Analysis of Some of the Key Questions* (“NRC Report”), the scientific document EPA “rel[ied]” on in denying the petition for rulemaking, *see* 68 Fed. Reg. at 52,930.

As the NRC Report explains, greenhouse gases (GHGs) trap heat radiated from earth, and their atmospheric concentrations are increasing “as a result of human activities.” NRC Rep. at 1, 9. For example, “[h]uman activities . . . responsible for the increase” in atmospheric concentrations of carbon dioxide (CO₂) – the chief GHG – include “[t]he primary source, fossil fuel burning,” as well as “[t]ropical deforestation.” *Id.* at 2; *see also id.* at 10, 12. The resulting increases are striking. In the 400,000 years prior to the Industrial Revolution, atmospheric CO₂ concentrations “typically ranged between 190” parts per million by volume (ppmv) “during the ice ages to near 280 ppmv during the warmer ‘interglacial’ periods.” *Id.* at 11. By 1958, atmospheric concentrations were 315 ppmv (12.5% above the pre-Industrial-Revolution high of 280 ppmv), and by 2000 they had risen to 370 ppmv (17% above the 1958 level). *Id.* at 10. Similarly, prior to the Industrial Revolution, atmospheric concentrations of methane (CH₄),

another GHG, ranged from .3 ppmv to .7 ppmv; now, “current values are around 1.77 ppmv.” *Id.* at 11. Atmospheric concentrations of other GHGs like nitrous oxide (N₂O) have also risen. *Id.* at 2. Notably, GHGs not only disperse throughout the lower atmosphere, but also linger there at length: “Reductions in the atmospheric concentrations of these gases following possible lowered emissions rates in the future will stretch out over decades for methane, and centuries and longer for carbon dioxide and nitrous oxide.” *Id.* at 10.

* * * Turning to the practical effects of GHG climate forcings, the NRC Report observes that a “diverse array of evidence points to a warming of global surface temperatures.” *Id.* at 16. Though the “rate of warming has not been uniform,” measurements “indicate that global mean surface air temperature warmed by about .4-.8° C (.7-1.5° F) during the 20th century.” *Id.* The report notes that “[t]he Northern Hemisphere as a whole experienced a slight cooling from 1946-75,” – a statement Judge Randolph erroneously reads for the proposition that “*global* temperatures decreased between 1946 and 1975[.]” – possibly due to the widespread burning of high sulfur coal and resultant sulfate emissions or to changes in ocean circulation in the Atlantic. NRC Rep. at 16. The report also observes that, as the IPCC report points out, the “warming of the Northern Hemisphere during the 20th century is likely to have been the largest of any century in the past thousand years.” *Id.*

* * * With this warming will come secondary effects. Predicted impacts in the United States include increased likelihood of drought, greater heat stress in urban areas, rising sea levels, and disruption to many U.S. ecosystems. *Id.* at 19-20. The likelihood and scope of these impacts vary depending on the magnitude of future temperature increases. *See id.; see also id.* at 4. Because the “predicted temperature increase is sensitive to assumptions concerning future concentrations of greenhouse gases and aerosols,” which in turn depend on future emissions, “national policy decisions made now and in the longer-term future will influence the extent of any damage suffered by vulnerable human populations and ecosystems later in this century.” *Id.* at 1.

II.

EPA claims petitioners lack standing to bring this case. To reach the merits, however, we need determine only that one petitioner has standing. In my view, declarations submitted by petitioners clearly establish that the Commonwealth of Massachusetts has satisfied each element of Article III standing – injury, causation, and redressability, *see, e.g., Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

Among other things, Massachusetts claims injury – the “substantial probability that local conditions will be adversely affected,” *Sierra Club v. EPA*, 292 F.3d 895, 898 (D.C. Cir. 2002) (internal quotation marks omitted) – resulting from rising sea levels. The declaration of Paul Kirshen, a professor at Tufts University’s Civil and Environmental Engineering Department, details how projected rises in sea levels in the metropolitan Boston area would lead both to permanent loss of coastal land and to “more frequent and severe storm surge flooding events along the coast.” “[I]f sea level rises .3 meters (11.8 inches) – which is near the lower end of the likely range – that would mean the future 10-year flood surge elevation would be at the level of the current 100-year flood elevation and the future 100-year flood surge elevation would be at

that of the current 500-year flood elevation.” As other declarations make clear, such changes would lead to serious loss of and damage to Massachusetts’s coastal property.

Given these declarations, I disagree that no petitioner suffers “harm particularized to” itself. The Commonwealth of Massachusetts claims an injury – namely, loss of land within its sovereign boundaries – that “affects [it] in a personal and individual way,” *Lujan*, 504 U.S. at 560 n. 1. This loss (along with increased flood damage to the Massachusetts coast) undeniably harms the Commonwealth in a way that it harms no other state. Other states may face their own particular problems stemming from the same global warming – Maine may suffer from loss of Maine coastal land and New Mexico may suffer from reduced water supply – but these problems are different from the injuries Massachusetts faces. Massachusetts’s harm is thus a far cry from the kind of generalized harm that the Supreme Court has found inadequate to support Article III standing, i.e., “harm to [its] and every citizen's interest in proper application of the Constitution and laws,” or put another way “relief that no more directly and tangibly benefits [it] than it does the public at large,” *id.* at 573-74.

As to causation, the declaration of Michael MacCracken, the senior scientist on global change at the Office of the U.S. Global Change Research Program from 1993-2002, states that global warming is causing sea level increases like those in Massachusetts. “[T]he warming of the oceans and the increased melting of many mountain glaciers around the world . . . were the major contributions to the rise in global sea level by 10-20 cm (4 to 8 inches) observed over the past century” and the “environmental impacts of projected global warming will include . . . an increase in sea level at an average rate of about .5 to 3.5 inches per decade, reaching 4-35 inches by the end of the century (with the most likely value being, in my expert opinion, near or above the middle of this range).” MacCracken further states that global warming is chiefly triggered by human-caused GHG emissions, with “the U.S. transportation sector (mainly automobiles) . . . responsible for about 7% of global fossil fuel emissions[.]”

Finally, as to redressability, MacCracken emphasizes that “[a]chievable reductions in emissions of CO₂ and other [GHGs] from U.S. motor vehicles would . . . delay and moderate many of the adverse impacts of global warming.” Elaborating, he states that “[g]iven the large emissions of CO₂ and other [GHGs] from motor vehicles in the United States and the lead time needed to economically introduce changes into the motor vehicle fleet, emission reductions must be initiated in the near future in order to significantly reduce and delay the impacts of global warming.” Because the extent of damage to the Massachusetts coastline depends on the magnitude of the rise in sea level, a reduction in this projected adverse consequence of global warming would partially redress Massachusetts’s injury. Nowhere disputing this proposition, EPA instead claims that MacCracken’s conclusion depends upon the assumption that other countries will follow the U.S. lead and regulate motor vehicle GHG emissions. Even were this reading of the declaration correct – a dubious premise given MacCracken’s unqualified language focusing on U.S. emissions reduction – the uncontested declaration of Michael Walsh, a consultant on motor vehicle pollution technology and at one point director of EPA’s motor vehicle pollution control efforts, provides a basis for concluding that other countries would come to mandate technology developed in response to U.S. regulation. Describing how in the past other countries have come to require such technology, Walsh concludes that “[o]n the basis of my experience with the control of other pollutants . . . I have no doubt that establishing emissions

standards for pollutants that contribute to global warming would lead to investment in developing improved technologies to reduce those emissions from motor vehicles, and that successful technologies would gradually be mandated by other countries around the world.”

* * * Given that the burdens of production here are comparable to those at summary judgment, if EPA wants to challenge the facts petitioners have set forth in their affidavits, it has an obligation to respond to the petitioners by “citing any record evidence relevant to . . . standing and, if necessary, appending to its filing additional affidavits or other evidence,” *see id.* at 900-01. EPA makes no such challenge.

* * * Because EPA nowhere challenges petitioners’ declarations, I see no reason to consider what we would do if it had done so. Thus, unlike Judge Randolph, I think it unnecessary to address whether we can carve out exceptions to the Supreme Court’s seemingly unqualified holding that “a merits question cannot be given priority over an Article III question,” *Steel Co. v. Citizens for a Better Env’t*, 523 U.S. 83, 97 n. 2 (1998). The Commonwealth of Massachusetts has adequately demonstrated its standing, and our jurisdiction is plain.

III.

As to the merits, the threshold question is this: does the Clean Air Act authorize EPA to regulate emissions based on their effects on global climate? Taking a constricted view, EPA insists it has no authority to regulate GHG emissions even if they contribute to substantial and harmful global warming. By contrast, petitioners claim that Congress has plainly given EPA the authority it says it lacks.

* * * The inquiry “begin[s], as always, with the plain language of the statute in question.” *Consumer Elecs. Ass’n v. FCC*, 347 F.3d 291, 297 (D.C. Cir. 2003) (quoting *Citizens Coal Council v. Norton*, 330 F.3d 478, 482 (D.C. Cir. 2003)). CAA section 202(a)(1), added by Congress in 1965 and amended in 1970 and 1977, provides,

The Administrator shall by regulation prescribe ... 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.

42 U.S.C. § 7521(a)(1). This language plainly authorizes regulation of (1) any air pollutants emitted from motor vehicles that (2) in the Administrator’s judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. EPA’s claimed lack of authority relates to the first of these two elements. According to EPA, GHGs like CO₂, CH₄, N₂O, and hydrofluorocarbons (HFCs) “are not air pollutants.” 68 Fed. Reg. at 52,928.

Congress, however, left EPA little discretion in determining what are “air pollutants.” Added in 1970 and amended in 1977, CAA section 302(g) defines the term as follows:

The term ‘air pollutant’ means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air.

42 U.S.C. § 7602(g). This exceedingly broad language plainly covers GHGs emitted from motor vehicles: they are “physical [and] chemical . . . substance[s] or matter . . . emitted into . . . the ambient air.” Indeed, in one CAA provision, added in 1990, Congress explicitly included CO₂ in a partial list of “air pollutants.” Section 103(g) instructs the Administrator to research “nonregulatory strategies and technologies for preventing or reducing multiple air pollutants, including sulfur oxides, nitrogen oxides, heavy metals, PM-10 (particulate matter), carbon monoxide, and *carbon dioxide*.” *Id.* § 7403(g) (emphasis added). Faced with such language, a court – as well as an agency – would normally end the analysis here and conclude that GHGs are “air pollutants,” since “[w]e ‘must presume that a legislature says in a statute what it means and means in a statute what it says When the words of a statute are unambiguous . . . this first canon is also the last: judicial inquiry is complete.’” *Teva Pharm. Indus. Ltd. v. Crawford*, 410 F.3d 51, 53 (D.C. Cir. 2005) (quoting *Conn. Nat’l Bank v. Germain*, 503 U.S. 249, 253-54 (1992)) (omissions in original).

* * * EPA offers four reasons for abandoning the Act’s text. First, it suggests that since the 1965, 1970, and 1977 Congresses were not specifically concerned with global warming, the Act cannot apply to GHGs. Second, it claims that for both practical and policy reasons, global pollution should be tackled through specific statutory provisions rather than general ones. Third, relying on *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000), it argues that Congress’s passage of legislation calling for study of climate change, along with Congress’s failure to pass any provisions tailored solely to regulating GHGs, demonstrates that the CAA cannot apply to GHGs. Finally, EPA suggests that Congress couldn’t have intended the definition of “air pollutant” to cover CO₂, since EPA regulation of CO₂ emissions from automobiles would overlap with Department of Transportation (DOT) authority over fuel economy standards under a different act. None of these reasons provides a convincing justification – let alone an “extraordinarily convincing” one – for EPA’s counter-textual position.

* * * In sum, GHGs plainly fall within the meaning of “air pollutant” in section 302(g) and therefore in section 202(a)(1). If “in [the Administrator’s] judgment” they “cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare,” 42 U.S.C. § 7521(a)(1), then EPA has authority – indeed, the obligation – to regulate their emissions from motor vehicles.

IV.

EPA’s second reason for refusing to act – what EPA’s counsel termed “the fallback argument[.]” – is that even if GHGs are air pollutants, the agency gave appropriate reasons and acted within its discretion in denying the petition for rulemaking. EPA stresses that our “arbitrary and capricious” standard of review is particularly deferential in reviewing an agency refusal to institute rulemaking. * * *

In my view, EPA has failed to satisfy this standard. Indeed, reading the relevant sections

of EPA's petition denial – one titled “No Mandatory Duty,” another “Different Policy Approach,” and a third “Administration Global Climate Change Policy,” *see* 68 Fed. Reg. at 52,929, 52,931 – I find it difficult even to grasp the basis for EPA's action. * * *

* * * Given this framework, it is obvious that none of EPA's proffered policy reasons justifies its refusal to find that GHG emissions “contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.” * * * EPA's proffered reasons for refusing to make an endangerment finding have no connection to the statutory standard. Instead, * * * EPA has “ventured into a zone of impermissible action” by “simply substitut[ing]” freestanding policy concerns for the sort of evaluation required by the statute. *See* 824 F.2d at 1163. A look at these policy concerns proves the point.

First, EPA claims that global warming still has many scientific uncertainties associated with it. *See* 68 Fed. Reg. at 52,930-31; In this regard, EPA makes much of the NRC's statements that a link between human-caused atmospheric GHG concentration increases and this past century's warming “cannot be unequivocally established”; that “a wide range of uncertainty” remains “inherent in current model predictions”{ due to imprecise variables like future emissions rates, climate sensitivity, and the forcing effects of aerosols; and that “current estimate [sic] of the magnitude of future warming should be regarded as tentative and subject to future adjustments (either upward or downward).” *See* 68 Fed. Reg. at 52,930 (quoting NRC Rep. at 1, 17). But the CAA nowhere calls for proof. It nowhere calls for “unequivocal” evidence. Instead, it calls for the Administrator to determine whether GHGs “contribute to air pollution which *may reasonably be anticipated* to endanger” welfare. EPA never suggests that the uncertainties identified by the NRC Report prevent it from determining that GHGs “may reasonably be anticipated to endanger” welfare. In other words, * * * the agency has failed here to explain its refusal to find endangerment in light of the statutory standard.

* * * EPA similarly fails to link its second policy justification – that setting fuel economy standards represents the only currently available way to regulate CO₂ emissions and petitioners “make no suggestion[s]” for how to reduce CH₄, N₂O, and HFC emissions, 68 Fed. Reg. at 52,931 – with the statutory standard. As discussed earlier, the fact that DOT sets fuel economy standards pursuant to the EPCA in no way prevents EPA from setting standards pursuant to the CAA. It is true that DOT has recently increased fuel economy standards for light trucks, *see* 68 Fed. Reg. at 52,931 – a fact EPA did not even bother to mention in its brief – but unless DOT's action affects whether GHGs “contribute to air pollution which may reasonably be anticipated to endanger public health or welfare,” it provides no support for EPA's decision.

* * * EPA's final policy reasons likewise fail. Because other domestic and foreign sources contribute to atmospheric GHG concentrations, GHG regulation might well “result in an inefficient, piecemeal approach to addressing the climate change issue,” 68 Fed. Reg. at 52,931. But again, Congress has expressly demanded such an approach. Section 202(a)(1) requires EPA to regulate if it judges that U.S. motor vehicle emissions “cause, or *contribute to*, air pollution,” 42 U.S.C. § 7521(a)(1) (emphasis added); *see also Ethyl*, 541 F.2d at 29-31 (holding that the same language from section 211 plainly means that emissions merit regulation even if they are not the only source of air pollution). EPA (understandably) offers no basis for thinking that U.S. automobile emissions are not *contributing* to global warming. Indeed, why would the

“Administration’s global climate change policy plan support[] increasing automobile fuel economy,” *see* 68 Fed. Reg. at 52,933, if motor vehicle emissions were contributing nothing to global warming? Similarly, EPA’s concern that regulation could weaken U.S. negotiating power with other nations has nothing at all to do with whether GHGs contribute to welfare-endangering air pollution. Finally, while EPA obviously prefers nonregulatory approaches to regulatory ones, *see id.* at 52,932-33, Congress gave the Administrator discretion only in assessing whether global warming “may reasonably be anticipated to endanger” welfare, not “free[dom] to set policy on his own terms,” *Ethyl*, 541 F.2d at 29.

In short, EPA has utterly failed to relate its policy reasons to section 202(a)(1)’s standard. Indeed, nowhere in its policy discussion does EPA so much as mention this standard – “may reasonably be anticipated to endanger public health or welfare.” EPA apparently dislikes the fact that section 202(a)(1) says the Administrator “shall” regulate – rather than “may” regulate – on making an endangerment finding. But EPA cannot duck Congress’s express directive by declining to evaluate endangerment on the basis of policy reasons unrelated to the statutory standard. Although EPA is free to take its policy concerns to Congress and seek a change in the Clean Air Act, it must obey the law in the meantime.

* * * V.

Although this case comes to us in the context of a highly controversial question – global warming – it actually presents a quite traditional legal issue: has the Environmental Protection Agency complied with the Clean Air Act? For the reasons given above, I believe that EPA has both misinterpreted the scope of its statutory authority and failed to provide a statutorily based justification for refusing to make an endangerment finding. I would thus grant the petitions for review.