
**In The
Supreme Court of the United States**

SOUTHEASTERN LEGAL FOUNDATION, INC., et al.,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY, et al.,

Respondents.

**On Petition For Writ Of Certiorari
To The United States Court Of Appeals
For The District Of Columbia Circuit**

PETITION FOR WRIT OF CERTIORARI

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April 19, 2013

[Additional Parties Listed On Inside Cover]

ADDITIONAL PETITIONERS

U.S. Representative Michele Bachmann; U.S. Representative Joe Barton; U.S. Representative Marsha Blackburn; U.S. Representative Kevin Brady; U.S. Representative Paul Broun; U.S. Representative Phil Gingrey; U.S. Representative Steve King; U.S. Representative Jack Kingston; U.S. Representative Tom Price; U.S. Representative Dana Rohrabacher; U.S. Representative John Shimkus; U.S. Representative Lynn Westmoreland; The Langdale Company; Langdale Forest Products Company; Langdale Timber Company; Langdale Farms, LLC; Langdale Fuel Company; Langdale Chevrolet, Inc.; Langdale Ford Company; Langboard, Inc. – MDF; Langboard, Inc. – OSB; Georgia Motor Trucking Association, Inc.; Collins Industries, Inc.; Collins Trucking Company, Inc.; Kennesaw Transportation, Inc.; J&M Tank Lines, Inc.; Southeast Trailer Mart, Inc.; Georgia Agribusiness Council, Inc.; Competitive Enterprise Institute; FreedomWorks; and Science and Environmental Policy Project

ADDITIONAL RESPONDENT

Robert Perciasepe, Acting Administrator, United States Environmental Protection Agency

QUESTIONS PRESENTED

Leveraging this Court’s opinion in *Massachusetts v. EPA*, 549 U.S. 547 (2007), the Environmental Protection Agency (“EPA”) has launched the most expansive regulatory program in the history of the United States, a program that not only regulates greenhouse gas (“GHG”) emissions from mobile sources (at issue in *Massachusetts*), but also from thousands (potentially millions) of stationary sources. By EPA’s own admission, expanding GHG regulation to stationary sources was contrary to the express terms of the Clean Air Act (“CAA” or “the Act”), was at odds with clear congressional intent, and produced a regulatory program that was “absurd” and “impossible” to administer. The U.S. Court of Appeals for the D.C. Circuit, however, affirmed the totality of EPA’s regulatory program, due in large part to that court’s view that EPA’s legal premises were compelled by *Massachusetts*.

This Petition raises three questions for this Court’s consideration:

1. May EPA exert authority over GHG emissions under the Clean Air Act where (1) EPA acknowledged that its interpretation of the Act is fundamentally inconsistent with both the express terms of the Act and the manifest intent of Congress and would lead to results that are “absurd” and “impossible” to administer, (2) there exist reasonable alternative interpretations of the Act that do not create such conflicts and absurd results, and (3) EPA’s

QUESTIONS PRESENTED – Continued

action was based on an irrational claim of scientific certainty in the face of ample contradictory and equivocal evidence in the rulemaking record?

2. Having adopted an “absurd” and “impossible” interpretation of the Act, may EPA then rewrite the statutory requirements of the CAA to substitute its own preferred “tailored” regulatory regime for stationary GHG emissions in order to avoid the absurd and impossible results of its own making?

3. Is EPA’s administrative “tailoring” of the Act to avoid the absurd results of its own interpretation beyond judicial review on the ground that no party has standing to challenge the assumed administrative power to relax statutory requirements?

PARTIES TO THE PROCEEDINGS

Challenges to 74 Fed. Reg. 66,496 (Dec. 15, 2009) (the “Endangerment Finding”):

1. Petitioners Southeastern Legal Foundation, Inc.; U.S. Representative Michele Bachmann; U.S. Representative Kevin Brady; U.S. Representative Paul Broun; U.S. Representative Phil Gingrey; U.S. Representative Steve King; U.S. Representative Jack Kingston; U.S. Representative Tom Price; U.S. Representative Dana Rohrabacher; U.S. Representative John Shimkus; U.S. Representative Lynn Westmoreland; The Langdale Company; Langdale Forest Products Company; Langdale Farms, LLC; Langdale Fuel Company; Langdale Chevrolet, Inc.; Langdale Ford Company; Langboard, Inc. – MDF; Langboard, Inc. – OSB; Georgia Motor Trucking Association, Inc.; Collins Industries, Inc.; Collins Trucking Company, Inc.; Kennesaw Transportation, Inc.; J&M Tank Lines, Inc.; Southeast Trailer Mart, Inc.; Georgia Agribusiness Council, Inc.; Competitive Enterprise Institute; FreedomWorks; and Science and Environmental Policy Project were petitioners below.

2. Respondent United States Environmental Protection Agency was a respondent below.

3. Additional petitioners below, who are nominal respondents on review, were Coalition for Responsible Regulation, Inc.; Industrial Minerals Association – North America; National Cattlemen’s Beef Association;

PARTIES TO THE PROCEEDINGS – Continued

Great Northern Project Development, L.P.; Rosebud Mining Co.; Massey Energy Company; Alpha Natural Resources, Inc.; American Iron and Steel Institute; Gerdau Ameristeel US Inc.; Peabody Energy Company; American Farm Bureau Federation; National Mining Association; Chamber of Commerce of the United States of America; Ohio Coal Association; Utility Air Regulatory Group; National Association of Manufacturers; American Petroleum Institute; Brick Industry Association; Corn Refiners Association; National Association of Home Builders; National Oilseed Processors Association; National Petrochemical & Refiners Association; Western States Petroleum Association; State of Alabama; Commonwealth of Virginia; Rick Perry, Governor of Texas; Greg Abbott, Attorney General of Texas; Texas Commission on Environmental Quality; Texas Agriculture Commission; Barry Smitherman, Chairman, Texas Public Utility Commission; and Portland Cement Association.

4. Petitioner-intervenors below, who are nominal respondents on review, were State of Alaska; Portland Cement Association; State of Nebraska; State of Florida; State of Hawaii; State of Indiana; State of Kentucky; State of Louisiana; Governor Haley Barbour, State of Mississippi; State of North Dakota; State of Oklahoma; State of South Carolina; State of South Dakota; State of Utah; State of Michigan; Glass Packaging Institute; Independent Petroleum Association of America; Louisiana Oil and Gas

PARTIES TO THE PROCEEDINGS – Continued

Association; National Electrical Manufacturers Association; Michigan Manufacturers Association; Indiana Cast Metals Association; Virginia Manufacturers Association; Colorado Association of Commerce and Industry; Tennessee Chamber of Commerce; West Virginia Manufacturers Association; Kansas Chamber of Commerce and Industry; Idaho Association of Commerce and Industry; Pennsylvania Manufacturers Association; Ohio Manufacturers Association; Wisconsin Manufacturers and Commerce; Nebraska Chamber of Commerce and Industry; Arkansas State Chamber of Commerce; Associated Industries of Arkansas; and Mississippi Manufacturers Association.

5. Respondent-intervenors below, who are respondents on review, were Commonwealth of Massachusetts; State of Arizona; State of California; State of Connecticut; State of Delaware; State of Iowa; State of Illinois; State of Maine; State of Maryland; State of New Hampshire; State of New Mexico; State of New York; State of Oregon; State of Rhode Island; State of Vermont; State of Washington; City of New York; Natural Resources Defense Council; Environmental Defense Fund; Sierra Club; National Wildlife Federation; Conservation Law Foundation, Inc.; Commonwealth of Pennsylvania, Department of Environmental Protection; State of Minnesota; and Wetlands Watch.

PARTIES TO THE PROCEEDINGS – Continued

6. A respondent below, who is a nominal respondent on review, was Lisa Perez Jackson, Administrator, United States Environmental Protection Agency. Ms. Jackson ceased to hold the office of Administrator, United States Environmental Protection Agency, on February 15, 2013; that office is currently held in an acting capacity by Robert Perciasepe, Acting Administrator, United States Environmental Protection Agency.

**Challenges to 75 Fed. Reg. 17,004 (Apr. 2, 2010)
(the “Timing Rule”):**

1. Petitioners Southeastern Legal Foundation, Inc.; U.S. Representative Michele Bachmann; U.S. Representative Marsha Blackburn; U.S. Representative Kevin Brady; U.S. Representative Paul Broun; U.S. Representative Phil Gingrey; U.S. Representative Steve King; U.S. Representative Jack Kingston; U.S. Representative Tom Price; U.S. Representative Dana Rohrabacher; U.S. Representative John Shimkus; U.S. Representative Lynn Westmoreland; The Langdale Company; Langdale Forest Products Company; Langdale Farms, LLC; Langdale Fuel Company; Langdale Chevrolet, Inc.; Langdale Ford Company; Langboard, Inc. – MDF; Langboard, Inc. – OSB; Georgia Motor Trucking Association, Inc.; Collins Industries, Inc.; Collins Trucking Company, Inc.; Kennesaw Transportation, Inc.; J&M Tank

PARTIES TO THE PROCEEDINGS – Continued

Lines; Southeast Trailer Mart, Inc.; and Georgia Agribusiness Council, Inc. were petitioners below.

2. Respondent United States Environmental Protection Agency was a respondent below.

3. Additional petitioners below, who are nominal respondents on review, were Coalition for Responsible Regulation, Inc.; Industrial Minerals Association – North America; National Cattlemen’s Beef Association; Great Northern Project Development, L.P.; Rosebud Mining Co.; Massey Energy Company; Alpha Natural Resources, Inc.; Clean Air Implementation Project; American Iron and Steel Institute; Gerdau Ameristeel US Inc.; Energy-Intensive Manufacturers’ Working Group on Greenhouse Gas Regulation; Center for Biological Diversity; Peabody Energy Company; American Farm Bureau Federation; National Mining Association; Utility Air Regulatory Group; Chamber of Commerce of the United States of America; Missouri Joint Municipal Electric Utility Commission; National Environmental Development Association’s Clean Air Project; Ohio Coal Association; National Association of Manufacturers; American Frozen Food Institute; American Petroleum Institute; Brick Industry Association; Corn Refiners Association; Glass Packaging Institute; Independent Petroleum Association of America; Indiana Cast Metals Association; Michigan Manufacturers Association; Mississippi Manufacturers Association; National Association of Home Builders; National Federation of

PARTIES TO THE PROCEEDINGS – Continued

Independent Businesses; National Oilseed Processors Association; National Petrochemical & Refiners Association; North American Die Casting Association; Specialty Steel Industry of North America; Tennessee Chamber of Commerce and Industry; Western States Petroleum Association; West Virginia Manufacturers Association; Wisconsin Manufacturers and Commerce; State of Texas; State of Alabama; State of South Carolina; State of South Dakota; State of Nebraska; State of North Dakota; Commonwealth of Virginia; Rick Perry, Governor of Texas; Greg Abbott, Attorney General of Texas; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utilities Commission; Texas Railroad Commission; Texas General Land Office; Haley Barbour, Governor of the State of Mississippi; and Portland Cement Association.

4. Petitioner-intervenors below, who are nominal respondents on review, were Louisiana Department of Environmental Quality.

5. Respondent-intervenors below, who are respondents on review, were Environmental Defense Fund; Natural Resources Defense Council; Sierra Club; Indiana Wildlife Federation; Michigan Environmental Council; Ohio Environmental Council; National Mining Association; American Farm Bureau Federation; Peabody Energy Company; Ohio Coal Association; National Environmental Development Association's Clean Air Project; National Association

PARTIES TO THE PROCEEDINGS – Continued

of Manufacturers; American Frozen Food Institute; American Petroleum Institute; Brick Industry Association; Corn Refiners Association; Glass Packaging Institute; Independent Petroleum Association of America; Michigan Manufacturers Association; Mississippi Manufacturers Association; National Association of Home Builders; National Federation of Independent Businesses; National Oilseed Processors Association; National Petrochemical and Refiners Association; Specialty Steel Industry of North America; Tennessee Chamber of Commerce and Industry; Western States Petroleum Association; West Virginia Manufacturers Association; Wisconsin Manufacturers & Commerce; Utility Air Regulatory Group; Coalition for Responsible Regulation, Inc.; Industrial Minerals Association – North America; National Cattlemen’s Beef Association; Great Northern Project Development, L.P.; Rosebud Mining Company; Alpha Natural Resources, Inc.; and Clean Air Implementation Project.

6. A respondent below, who is a nominal respondent on review, was Lisa Perez Jackson, Administrator, United States Environmental Protection Agency. Ms. Jackson ceased to hold the office of Administrator, United States Environmental Protection Agency, on February 15, 2013; that office is currently held in an acting capacity by Robert Perciasepe, Acting Administrator, United States Environmental Protection Agency.

PARTIES TO THE PROCEEDINGS – Continued**Challenges to 75 Fed. Reg. 25,324 (May 7, 2010)
(the “Light-Duty Vehicle Rule”):**

1. Petitioners Southeastern Legal Foundation, Inc.; U.S. Representative Michele Bachmann; U.S. Representative Kevin Brady; U.S. Representative Paul Broun; U.S. Representative Phil Gingrey; U.S. Representative Steve King; U.S. Representative Jack Kingston; U.S. Representative Tom Price; U.S. Representative Dana Rohrabacher; U.S. Representative John Shimkus; U.S. Representative Lynn Westmoreland; The Langdale Company; Langdale Forest Products Company; Georgia Motor Trucking Association, Inc.; Collins Industries, Inc.; Collins Trucking Company, Inc.; Kennesaw Transportation, Inc.; J&M Tank Lines, Inc.; Southeast Trailer Mart, Inc.; Georgia Agribusiness Council, Inc.; Competitive Enterprise Institute; FreedomWorks; and Science and Environmental Policy Project were petitioners below.

2. Respondent United States Environmental Protection Agency was a respondent below.

3. Additional petitioners below, who are nominal respondents on review, were Coalition for Responsible Regulation, Inc.; Industrial Minerals Association – North America; National Cattlemen’s Beef Association; Great Northern Project Development, L.P.; Rosebud Mining Co.; Massey Energy Company; Alpha Natural Resources, Inc.; American Iron and Steel Institute; Ohio Coal Association; Mark R. Levin, Landmark Legal Foundation; Gerdau Ameristeel

PARTIES TO THE PROCEEDINGS – Continued

US Inc.; Energy-Intensive Manufacturers' Working Group on Greenhouse Gas Regulation; Portland Cement Association; Chamber of Commerce of the United States of America; Utility Air Regulatory Group; National Mining Association; Peabody Energy Company; American Farm Bureau Federation; National Association of Manufacturers; American Frozen Food Institute; American Petroleum Institute; Brick Industry Association; Corn Refiners Association; Glass Packaging Institute; Michigan Manufacturers Association; National Association of Home Builders; National Federation of Independent Businesses; National Oilseed Processors Association; National Petrochemical and Refiners Association; Specialty Steel Industry of North America; Tennessee Chamber of Commerce and Industry; West Virginia Manufacturers Association; Wisconsin Manufacturers & Commerce; American Chemistry Council; American Forest & Paper Association, Inc.; Clean Air Implementation Project; State of Texas; Rick Perry, Governor of Texas; Greg Abbot, Attorney General of Texas; Texas Agriculture Commission; Texas Public Utilities Commission; Texas Railroad Commission; Texas General Land Office; State of Alabama; State of South Carolina; State of South Dakota; State of Nebraska; State of North Dakota; Commonwealth of Virginia; and Haley Barbour, Governor of the State of Mississippi.

PARTIES TO THE PROCEEDINGS – Continued

4. Petitioner-intervenors below, who are nominal respondents on review, were State of Georgia; Langdale Farms, LLC; Langdale Fuel Company; Langdale Chevorlet, Inc.; Langdale Ford Company; Langboard, Inc. – MDF and Langboard, Inc. – OSB.

5. Respondent-intervenors below, who are respondents on review, were Association of International Automobile Manufacturers; State California; State of Delaware; State of Illinois; State of Iowa; State of Maine; State of Maryland; State of Massachusetts; State of New Mexico; State of New York; State of Oregon; State of Rhode Island; State of Vermont; State of Washington; Commonwealth of Pennsylvania; Department of Environmental Protection; City of New York; Natural Resources Defense Council; Natural Resources Defense Fund; Sierra Club; and Alliance of Automobile Manufacturers.

6. A respondent below, who is a nominal respondent on review, was Lisa Perez Jackson, Administrator, United States Environmental Protection Agency. Ms. Jackson ceased to hold the office of Administrator, United States Environmental Protection Agency, on February 15, 2013; that office is currently held in an acting capacity by Robert Perciasepe, Acting Administrator, United States Environmental Protection Agency.

PARTIES TO THE PROCEEDINGS – Continued

**Challenges to 75 Fed. Reg. 31,514 (Jun. 3, 2010)
(the “Tailoring Rule”):**

1. Petitioners Southeastern Legal Foundation, Inc.; U.S. Representative Michele Bachmann; U.S. Representative Marsha Blackburn; U.S. Representative Kevin Brady; U.S. Representative Paul Broun; U.S. Representative Phil Gingrey; U.S. Representative Steve King; U.S. Representative Jack Kingston; U.S. Representative Tom Price; U.S. Representative Dana Rohrabacher; U.S. Representative John Shimkus; U.S. Representative Lynn Westmoreland; The Langdale Company; Langdale Forest Products Company; Langdale Farms, LLC; Langdale Fuel Company; Langdale Chevrolet, Inc.; Langdale Ford Company; Langboard, Inc. – MDF; Langboard, Inc. – OSB; Georgia Motor Trucking Association, Inc.; Collins Industries, Inc.; Collins Trucking Company, Inc.; Kennesaw Transportation, Inc.; J&M Tank Lines, Inc.; Southeast Trailer Mart, Inc.; and Georgia Agribusiness Council, Inc. were petitioners below.

2. Respondent United States Environmental Protection Agency was a respondent below.

3. Additional petitioners below, who are nominal respondents on review, were Coalition for Responsible Regulation, Inc.; Industrial Minerals Association – North America; National Cattlemen’s Beef Association; Great Northern Project Development, L.P.; Rosebud Mining Co.; Massey Energy Company; Alpha Natural Resources, Inc.; The Ohio Coal Association;

PARTIES TO THE PROCEEDINGS – Continued

American Iron and Steel Institute; Gerdau Ameristeel US Inc.; Chamber of Commerce of the United States of America; Georgia Coalition for Sound Environmental Policy; National Mining Association; American Farm Bureau Federation; Peabody Energy Company; Center for Biological Diversity; Energy-Intensive Manufacturers' Working Group on Greenhouse Gas Regulation; South Carolina Public Service Authority; Mark R. Levin; Landmark Legal Foundation; National Alliance of Forest Owners; American Forest & Paper Association; Environmental Development Association's Clean Air Project; State of Alabama; State of North Dakota; State of South Dakota; Haley Barbour, Governor of Mississippi; State of South Carolina; State of Nebraska; Utility Air Regulatory Group; Missouri Joint Municipal Electric Utility Commission; Sierra Club; Clean Air Implementation Project; National Association of Manufacturers; American Frozen Food Institute; American Petroleum Institute; Brick Industry Association; Corn Refiners Association; Glass Association of North America; Glass Packaging Institute; Independent Petroleum Association of America; Michigan Manufacturers Association; Mississippi Manufacturers Association; National Association of Home Builders; National Oilseed Processors Association; National Petrochemical and Refiners Association; Tennessee Chamber of Commerce and Industry; Western States Petroleum Association; West Virginia Manufacturers Association; Wisconsin Manufacturers & Commerce; National

PARTIES TO THE PROCEEDINGS – Continued

Federation of Independent Businesses; Portland Cement Association; Louisiana Department of Environmental Quality; Rick Perry, Governor of Texas; Greg Abbott, Attorney General of Texas; Texas Commission on Environmental Quality; Texas Department of Agriculture; Texas Public Utilities Commission; Texas Railroad Commission; Texas General Land Office; and State of Texas.

4. Petitioner-intervenors below, who are nominal respondents on review, were National Association of Manufacturers; American Frozen Food Institute; American Petroleum Institute; Corn Refiners Association; Glass Association of North America; Independent Petroleum Association of America; Indiana Cast Metals Association; Michigan Manufacturers Association; National Association of Home Builders; National Oilseed Processors Association; National Petrochemical and Refiners Association; Tennessee Chamber of Commerce and Industry; Western States Petroleum Association; West Virginia Manufacturers Association; and Wisconsin Manufacturers & Commerce.

5. Respondent-intervenors below, who are respondents on review, were Natural Resources Defense Council; Environmental Defense Fund; Sierra Club; State of New York; State of California; State of Illinois; State of Iowa; State of Maine; State of Maryland; Commonwealth of Massachusetts; State of New Mexico; State of Oregon; Commonwealth of Pennsylvania Department of Environmental

PARTIES TO THE PROCEEDINGS – Continued

Protection; State of Rhode Island; National Association of Manufacturers; City of New York; Association of International Automobile Manufacturers; and Alliance of Automobile Manufacturers.

6. A respondent below, who is a nominal respondent on review, was Lisa Perez Jackson, Administrator, United States Environmental Protection Agency. Ms. Jackson ceased to hold the office of Administrator, United States Environmental Protection Agency, on February 15, 2013; that office is currently held in an acting capacity by Robert Perciasepe, Acting Administrator, United States Environmental Protection Agency.

Challenges to 75 Fed. Reg. 49,556 (Aug. 13, 2010) (the “Reconsideration”):

1. Petitioners Southeastern Legal Foundation, Inc.; U.S. Representative Michele Bachmann; U.S. Representative Marsha Blackburn; U.S. Representative Kevin Brady; U.S. Representative Paul Broun; U.S. Representative Phil Gingrey; U.S. Representative Steve King; U.S. Representative Jack Kingston; U.S. Representative Tom Price; U.S. Representative Dana Rohrabacher; U.S. Representative John Shimkus; U.S. Representative Lynn Westmoreland; The Langdale Company; Langdale Forest Products Company; Langdale Farms, LLC; Langdale Fuel Company; Langdale Chevrolet, Inc.; Langdale Ford Company; Langboard, Inc. – MDF; Langboard, Inc. –

PARTIES TO THE PROCEEDINGS – Continued

OSB; Georgia Motor Trucking Association, Inc.; Collins Industries, Inc.; Collins Trucking Company, Inc.; Kennesaw Transportation, Inc.; J&M Tank Lines, Inc.; Southeast Trailer Mart, Inc.; and Georgia Agribusiness Council, Inc. were petitioners below.

2. Respondent United States Environmental Protection Agency was a respondent below.

3. Additional petitioners below, who are nominal respondents on review, were Coalition for Responsible Regulation, Inc.; Industrial Minerals Association – North America; National Cattlemen’s Beef Association; Great Northern Project Development, L.P.; Rosebud Mining Co.; Alpha Natural Resources, Inc.; Peabody Energy Company; Chamber of Commerce of the United States; Rick Perry, Governor of Texas; Greg Abbott; Attorney General of Texas; Texas Commission on Environmental Quality; Texas Agriculture Commission; Barry Smitherman, Chairman of the Texas Public Utilities Commission; Pacific Legal Foundation; Commonwealth of Virginia; Utility Air Regulatory Group; and The Ohio Coal Association.

4. Petitioner-intervenors below, who are nominal respondents on review, were Chamber of Commerce for the United States of America.

5. Respondent-intervenors below, who are nominal respondents on review, were Natural Resources Defense Council; Conservation Law Foundation, Inc.;

PARTIES TO THE PROCEEDINGS – Continued

Sierra Club; National Wildlife Federation; and Wetlands Watch.

6. A respondent below, who is a nominal respondent on review, was Lisa Perez Jackson, Administrator, United States Environmental Protection Agency. Ms. Jackson ceased to hold the office of Administrator, United States Environmental Protection Agency, on February 15, 2013; that office is currently held in an acting capacity by Robert Perciasepe, Acting Administrator, United States Environmental Protection Agency.

RULE 29.6 DISCLOSURE STATEMENT

Petitioner Southeastern Legal Foundation, Inc. (“SLF”) is a non-profit Georgia corporation and constitutional public interest law firm and policy center that advocates limited government, individual economic freedom, and the free enterprise system in the courts of law and public opinion. SLF has no parent companies. No publicly held corporation has ten percent or greater ownership interest in SLF.

Petitioner The Langdale Company is a Georgia corporation and is the parent company for a diverse group of businesses, some of which are described elsewhere in this Petition. The Langdale Company has no parent companies. No publicly held corporation has ten percent or greater ownership in The Langdale Company.

Petitioner Langdale Forest Products Company is a Georgia corporation and is a leading producer of lumber, utility poles, marine piling, and fence posts. Langdale Forest Products Company is a wholly owned subsidiary of The Langdale Company. No publicly held corporation has ten percent or greater ownership in Langdale Forest Products Company.

Petitioner Langdale Farms, LLC is a Georgia Corporation in the business of producing soybeans, peanuts, cotton, pecans, tomatoes, hay, cattle, and fish. Langdale Farms, LLC is a wholly owned subsidiary of The Langdale Company. No publicly held corporation has ten percent or greater ownership in Langdale Farms, LLC.

RULE 29.6 DISCLOSURE STATEMENT – Continued

Petitioner Langdale Fuel Company is a Georgia corporation in the business of providing fuel and lubricants for The Langdale Company's needs. Langdale Fuel Company is a wholly owned subsidiary of The Langdale Company. No publicly held corporation has ten percent or greater ownership in Langdale Fuel Company.

Petitioner Langdale Chevrolet, Inc. is a Georgia corporation in the business of selling and servicing automobiles. Langdale Chevrolet, Inc. is a wholly owned subsidiary of The Langdale Company. No publicly held corporation has ten percent or greater ownership in Langdale Chevrolet, Inc.

Petitioner Langdale Ford Company is a Georgia corporation in the business of selling and servicing automobiles and trucks, including for commercial fleets. Langdale Ford Company is a wholly owned subsidiary of The Langdale Company. No publicly held corporation has ten percent or greater ownership in Langdale Ford Company.

Petitioner Langboard, Inc. – OSB is a Georgia corporation in the business of producing oriented strand board, which is used as flooring, roofing, and siding in the home construction industry. Langboard, Inc. – OSB is a wholly owned subsidiary of The Langdale Company. No publicly held corporation has ten percent or greater ownership in Langboard, Inc. – OSB.

RULE 29.6 DISCLOSURE STATEMENT – Continued

Petitioner Langboard, Inc. – MDF is a Georgia corporation in the business of producing medium density fiberboard, which is used, among other things, in the construction of molding, flooring, and furniture. Langboard, Inc. – MDF is a wholly owned subsidiary of The Langdale Company. No publicly held corporation has ten percent or greater ownership in Langboard, Inc. – MDF.

Petitioner Georgia Motor Trucking Association, Inc. is a Georgia corporation and trade association for the trucking industry in Georgia. The mission of the Georgia Motor Trucking Association is to promote: reasonable laws; evenhanded, common-sense administration; equitable and competitive fees and taxes; a market, political and social environment favorable to the trucking industry; and good citizenship among the people and companies of Georgia's trucking industry. It represents more than 400 for-hire carriers, 400 private carriers, and 300 associate members. Georgia Motor Trucking Association, Inc. has no parent corporation. No publicly held corporation has ten percent or greater ownership interest in the Georgia Motor Trucking Association, Inc.

Petitioner Collins Industries, Inc. is a Georgia corporation in the business of transporting building products. Collins Industries, Inc. has no parent corporation. No publicly held corporation has ten percent or greater ownership interest in Collins Industries, Inc.

RULE 29.6 DISCLOSURE STATEMENT – Continued

Petitioner Collins Trucking Company, Inc. is a Georgia corporation in the business of transporting pine and hardwood logs in Georgia. Collins Trucking Company, Inc. is a subsidiary of Collins Industries, Inc. No publicly held corporation has ten percent or greater ownership interest in Collins Trucking Company, Inc.

Petitioner Kennesaw Transportation, Inc. is a Georgia corporation in the business of truckload long-haul transportation of goods across the United States. Kennesaw Transportation, Inc. has no parent company. No publicly held corporation has a ten percent or greater ownership interest in Kennesaw Transportation, Inc.

Petitioner J&M Tank Lines, Inc. is a Georgia corporation in the business of transporting industrial-grade products, such as lime, calcium carbonate, cement, and sand; food-grade products, such as flour; and agricultural-grade products, such as salt. J&M Tank Lines, Inc. operates a fleet of tractors and tanks and has terminals located in Georgia, Alabama, and Texas. J&M Tank Lines, Inc. has no parent company. No publicly held corporation has a ten percent or greater ownership interest in J&M Tank Lines, Inc.

Petitioner Southeast Trailer Mart, Inc. is a Georgia corporation in the business of selling and servicing semi-trailers. Southeast Trailer Mart, Inc. has no parent company. No publicly held company

RULE 29.6 DISCLOSURE STATEMENT – Continued

has a ten percent or greater ownership in Southeast Trailer Mart, Inc.

Petitioner Georgia Agribusiness Council, Inc. is a Georgia corporation whose mission is to advance the business of agriculture and promote environmental stewardship in Georgia. The Georgia Agribusiness Council, Inc. has no parent company. No publicly held company has a ten percent or greater ownership in Georgia Agribusiness Council, Inc.

Petitioner Competitive Enterprise Institute (“CEI”) is a non-profit 501(c)(3) corporation organized under the laws of the District of Columbia for the purpose of defending free enterprise, limited government, and the rule of law. It has no parent companies. No publicly held corporation has a ten percent or greater ownership interest in it.

Petitioner FreedomWorks is a non-profit 501(c)(4) corporation organized under the laws of the District of Columbia for the purpose of promoting individual liberty, consumer choice and competition, and has over 870,000 members nationwide. It has no parent companies, and no publicly held corporation has a ten percent or greater ownership interest in it.

RULE 29.6 DISCLOSURE STATEMENT – Continued

Petitioner Science and Environmental Policy Project (“SEPP”) is a non-profit 501(c)(3) corporation organized under the laws of the State of Virginia for the purpose of promoting sound and credible science as the basis for regulatory decisions. It has no parent companies, and no publicly held corporation has a ten percent or greater ownership interest in it.

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Petitioners' Appendix ("App.") includes selected excerpts from the record below, as well as the relevant provisions of the Clean Air Act, 42 U.S.C. § 7401, *et seq.*

Petitioners also incorporate the materials contained in the Joint Appendix ("JA") filed in the proceedings below before the United States Court of Appeals for the District of Columbia.

APPENDIX

Opinion of the United States Court of Appeals for the DC Circuit dated Jun. 26, 2012	App. 1
Order on Petitions for Rehearing En Banc dated Dec. 20, 2012	App. 104
Relevant Sections of the Clean Air Act, 42 U.S.C. § 7401, <i>et seq.</i>	App. 164
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Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,324 (May 7, 2010) (codified at 40 C.F.R. pts. 85, 86, and 600; 49 C.F.R. pts. 531, 533, 536, 537, and 538).....	<i>passim</i>
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OTHER AUTHORITIES

- David Rose, *Global warming stopped 16 years ago, reveals Met Office report quietly released ... and here is the chart to prove it*, MailOnline (UK), Oct. 13, 2012, <http://www.dailymail.co.uk/sciencetech/article-2217286/Global-warming-stopped-16-years-ago-reveals-Met-Office-report-quietly-released-chart-prove-it.html> (last visited Apr. 10, 2013).....12
- Emily Hammond Meazell, *Super Deference, the Science Obsession, and Judicial Review as Translation of Agency Science*, 109 Mich. L. Rev. 733 (2011)17
- Intergovernmental Panel on Climate Change, *Fourth Assessment Report: Climate Change 2007, Working Group I: The Physical Science Basis*, 8.4.7 El Nino – Southern Oscillation, http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch8s8-4-7.html (last visited Apr. 10, 2013)*passim*
- Met Office Hadley Centre observations datasets, <http://www.metoffice.gov.uk/hadobs/hadcrut4/> (last visited Apr. 10, 2013)12
- A Sensitive Matter*, The Economist, Mar. 30, 2013, <http://www.economist.com/news/science-and-technology/21574461-climate-may-be-heating-up-less-response-greenhouse-gas-emissions> (last visited Apr. 15, 2013)12

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The opinion of the D.C. Circuit is reported at 684 F.3d 102 and reproduced at App. 1-103. The D.C. Circuit's orders denying panel rehearing and rehearing *en banc* are reproduced at App. 104-63.



JURISDICTION

The D.C. Circuit rendered its decision on June 26, 2012. App. 1. The court denied a timely petition for rehearing and rehearing *en banc* on December 20, 2012. App. 104. This Court has jurisdiction under 28 U.S.C. § 1254(1).



CONSTITUTIONAL, STATUTORY, AND REGULATORY PROVISIONS

The Constitution of the United States provides, in relevant part, that “[t]he judicial Power [of the United States] shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority . . . [and] to Controversies to which the United States shall be a party.” U.S. Const. art. III, § 2, cl. 1.

The Constitution further provides, “All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.” U.S. Const. art. I, § 1.

Relevant provisions of the Clean Air Act (“CAA”), 42 U.S.C. § 7401, *et seq.*, are reproduced at App. 166-68.

The rules challenged in the proceeding below are found in the Joint Appendix (“JA”) of the proceeding below, as follows:

Endangerment Finding: JA00001-0052

Denial of Reconsideration: JA00053-0092

Timing Rule: JA00308-0328

Tailpipe Rule: JA00666-1071

Tailoring Rule: JA01147-1242



STATEMENT OF THE CASE

On April 2, 2007, this Court decided *Massachusetts v. EPA*, 549 U.S. 497 (2007). In that case, this Court held that the “sweeping definition” of “air pollutant” in the Clean Air Act unambiguously includes substances that contribute to climate change (also known as greenhouse gases). 549 U.S. at 528. “Because greenhouse gases fit well within the Clean Air Act’s capacious definition of ‘air pollutant,’ we hold that EPA [the United States Environmental Protection Agency] has the statutory authority to regulate the emission of such gases from new motor vehicles.” 549 U.S. at 532. This Court then went on to hold that “[i]f EPA makes a finding of endangerment, the Clean Air Act *requires* the agency to regulate emissions of the deleterious pollutant from new motor vehicles.”

549 U.S. at 533 (emphasis added). Finally, this Court stated that, whatever actions EPA takes, “[w]e hold only that EPA must ground its reasons for action or inaction in the statute.” 549 U.S. at 535. This Court reserved the question “whether policy concerns can inform EPA’s actions in the event that it makes such a finding.” *Id.* at 534-35.

Ostensibly relying on this Court’s opinion in *Massachusetts*, EPA implemented in quick succession four coordinated rules:

- A finding that (1) six greenhouse gases (“GHGs”) taken in combination endanger both the public health and the public welfare, and (2) emissions of these GHGs from new motor vehicles contribute to the endangerment (the “Endangerment Finding,” JA00001-0052);
- A rule concluding that the phrase “subject to regulation” in the CAA means “each pollutant subject to either a provision in the CAA or regulation adopted by EPA under the CAA that requires actual control of emissions of that pollutant” (the “Timing Rule,” JA00308-0328);
- A rule issued jointly with the National Highway Traffic Safety Administration to regulate GHG tailpipe emissions from light-duty vehicles (the “Tailpipe Rule,” JA00666-1071); and
- A rule to mitigate (or “tailor”) the knock-on effects of the preceding three rules on

stationary sources, specifically to amend the applicability criteria that determine which stationary sources and modification projects become subject to permitting requirements for GHG emissions under the PSD and Title V programs of the CAA (the “Tailoring Rule,” JA01147-1242).

Although seemingly disjointed in their promulgation, taken together these rules create a comprehensive, integrated program that gives EPA regulatory jurisdiction over a breadth of human activity unparalleled in the history of American governance. Through the Endangerment Finding, the Timing Rule, and the Tailpipe Rule, EPA enacted a regulatory program that covers essentially every human activity that uses any appreciable amount of energy derived from fossil fuels. According to EPA, these three rules triggered a scope of stationary source regulation that, by EPA’s own acknowledgement, would make up to six million new stationary “sources” subject to EPA regulation, compared to 14,000 under the pre-GHG rules. Tailoring Rule, JA01147 at 01170. There would be more than 40,000 new permits required under the “Prevention of Significant Deterioration” (“PSD”) program, compared to approximately 300 such permits under prior rules. *Id.* The scope of “source” facilities ensnared by this new EPA oversight would be staggering: offices, apartment buildings, retail establishments, government buildings (presumably even courthouses), small farms, and restaurants.

EPA admitted that its reading of the Clean Air Act would create a federal regulatory scope beyond anything Congress intended, would create “absurd consequences,” and would be “impossible” to administer. *Id.* at JA01167.

Rather than taking these admissions as a sign that its reading of the Act was off-track, EPA leveraged the very absurdity of its interpretation as the rationale for another rule, the Tailoring Rule. In the Tailoring Rule, EPA “tailored” (that is, effectively rewrote) the Clean Air Act to mitigate the absurdity it had created with the first three rules. Among other things, the Tailoring Rule changed the express numerical thresholds set forth in the Clean Air Act that define “major sources” subject to regulation. EPA replaced the Act’s specific numeric standards (100 or 250 tons per year, depending on source) with alternative values that EPA deemed more suitable (75,000 or 100,000 tons per year, depending on whether the source was already regulated). *Id.* at JA01150.¹ By rewriting these numerical thresholds, EPA reduced the number of sources subject to regulation from what would have been six million to a few hundred. *Id.* at JA01170.

Even under the “tailored” version of the Act fabricated by EPA, these rules and those to follow will

¹ In establishing these new emission thresholds, EPA also invented a new “air pollutant,” a “CO₂ – equivalent” or “CO₂e,” “the aggregate sum of six greenhouse gases [two of which are not even emitted by automobiles] that constitute the pollutant that will be subject to regulation.” Tailoring Rule, JA01147 at 01152.

impose costs on the U.S. economy that are staggering, including billions of dollars in compliance and delay costs.² The extension of these rules will cost tens, perhaps hundreds, of billions of dollars.³

Petitioners challenged all four of EPA's rules before the D.C. Circuit. Although the challenge was complicated by the fact that EPA chose to segregate the major components of the GHG program into separate rules, Petitioners argued that EPA's four rules are closely interrelated and should be reviewed together and that all four suffered from fatal legal deficiencies, both individually and

² See, e.g., Comments of the Honorable Fred Upton (Chairman, Committee on the Environment and Commerce), U.S. House of Representatives, quoted in Tom Schoenberg, *EPA Greenhouse-Gas Rules Upheld by U.S. Appeals Court*, Bloomberg News (Jun. 26, 2012), <http://www.bloomberg.com/news/2012-06-26/epa-greenhouse-gas-rules-upheld-by-u-s-appeals-court.html> (last visited Apr. 10, 2013) ("EPA's rules will impose billions of dollars in compliance and delay costs and represent an unprecedented expansion of EPA authority that has the potential to affect virtually every sector of the economy and touch every household.").

³ United States Senate Committee on Environment and Public Works, Minority Staff Report, *A Look Ahead to EPA Regulations for 2013* (Oct. 2012), http://cnsnews.com/sites/default/files/documents/A_Look_Ahead_to_EPA_Regulations_for_2013.pdf (last visited Apr. 10, 2013) ("These rules will cost more than \$300 to \$400 billion a year, and significantly raise the price of gas at the pump and energy in the home. It's not just coal plants that will be affected: under the Clean Air Act (CAA), churches, schools, restaurants, hospitals and farms will eventually be regulated.").

collectively.⁴ On June 26, 2012, the D.C. Circuit rejected all of Petitioners' challenges. App. 1-103. While the court's opinion contains more than a dozen holdings, those most salient to this petition are:

- Petitioners had not shown that EPA failed to consider the scientific evidence in a "rational manner." *Id.* at 40.
- The Tailpipe Rule survived all challenges by Petitioners: EPA was not obliged to consider the absurd consequences on stationary sources before issuing the rule (*id.* at 49); there was no requirement that EPA's rule "meaningfully address" the problem that supposedly led to its promulgation (*id.* at 53); and EPA was not obliged to consider all costs (including stationary source costs) caused by issuance of the rule. *Id.* at 54.
- Petitioners had "forfeited" any challenge to EPA's regulation of stationary sources under the Title V program. *Id.* at 73-74.
- EPA was correct in concluding that regulation of stationary sources was compelled under the Act when emissions from mobile sources were subject to regulation,

⁴ In addition, as part of the underlying administrative proceeding, Petitioners had asked EPA to reconsider the Endangerment Finding. EPA's denial of the Petition for Reconsideration was also the subject of a petition for review to the D.C. Circuit. *See* Denial of Reconsideration, JA00053-0092; Joint Opening Brief of Non-State Petitioners and Supporting Intervenors (Case No. 10-1239, Doc. No. 1341737, Nov. 14, 2011).

and there were no other interpretations available under the Act. *Id.* at 89-90.

- Petitioners lacked standing to challenge the Timing and Tailoring Rules. *Id.* at 96-97.

Petitioners timely filed motions for rehearing, and on December 20, 2012, the court denied those motions, with Judges Brown and Kavanaugh dissenting. App. 104-63.



REASONS FOR GRANTING THE PETITION

As Judge Kavanaugh noted in his dissent from the D.C. Circuit’s denial of rehearing en banc, this case “is plainly one of exceptional importance.” App. 139. The panel below agreed: “The underlying policy questions and the outcome of this case are undoubtedly matters of exceptional importance.” *Id.* at 111. Judge Kavanaugh went on to describe the EPA regulations at issue as “the most burdensome, costly, far-reaching program ever adopted by a United States regulatory agency” (*id.* at 139), and further stated, “EPA’s interpretation will impose enormous costs on tens of thousands of American businesses, with corresponding effects on American jobs and workers; on many American homeowners who move into new homes or plan other home construction projects; and on the U.S. economy more generally.” *Id.* at 149. Judge Brown, in her dissent, made a related point: “The real absurdity is that this unprecedented expansion of regulatory control, this epic overreach, may very well

do more damage to the wellbeing of Americans than GHGs could ever do.” *Id.* at 127.⁵

Against this backdrop of unprecedented regulatory expansion, which will produce crushing economic burdens and no detectable benefits, certiorari should be granted for four related reasons:

1. The conclusions of the EPA’s Endangerment Finding are irrational and cannot support such a dramatic expansion of regulatory authority;
2. The Timing and Tailoring Rules are fundamentally contrary to the express terms of the Clean Air Act and the acknowledged intent of Congress;
3. The D.C. Circuit erred in finding that none of the Petitioners had standing to challenge the Timing and Tailoring Rules; and
4. This case portends an unconstitutional and dangerous shift in the balance of power from the Legislative Branch to the Executive Branch.

⁵ *See also* note 3 to Judge Brown’s opinion (citing Joint Reply Brief for Non-State Petitioners and Supporting Intervenors at *1, (Case No. 09-1322, Doc. No. 1341738 (Nov. 14, 2011)): “Nor does [EPA] dispute that the new rules will impose massive burdens on a struggling economy, or that its program of vehicle standards will affect global mean temperatures by no more than *0.01 degree Celsius by 2100.*” App. 127 (emphasis in original).

I. EPA's conclusions in the Endangerment Finding are irrational and cannot support such a dramatic expansion of regulatory authority.

In making the Endangerment Finding, EPA simply adopted the conclusions of the Intergovernmental Panel on Climate Change ("IPCC") that not only were human GHG emissions a cause of atmospheric warming in the second half of the twentieth century, but that it is "90-99% certain" that humans caused "most" of that warming.⁶ The legal deficiency in this conclusion is that, given the current state of science, it is irrational (and therefore reversible) to make this conclusion with such certitude.

In adopting its conclusion verbatim from the IPCC, EPA claimed to rely on "three lines of evidence":

1. Temperature records;
2. Physical understanding of climate; and
3. Computer models of the climate system, which are based on the claimed physical understanding.

See JA00029.

⁶ According to EPA, "most" of the temperature increase in the second half of the twentieth century is "very likely" due to anthropogenic GHG emissions (JA03343), with "very likely" defined to mean "90 to 99% likely." App. 171, JA03355.

Petitioners demonstrated, with record evidence drawn primarily from the same assessment literature on which EPA relies, that each of these three lines of evidence is so weak and inconclusive that EPA's purported finding of "90-99% certain[ty]" meets the legal standard for vacatur of a rule that is arbitrary and capricious.⁷ 42 U.S.C. § 7607(d)(9)(A).

As to the first line of evidence, EPA claimed that the twentieth century had witnessed an "unusual" rise in average global temperature, one that supposedly could not be explained by natural variability, and one that therefore demanded an anthropogenic explanation. The scientific evidence, however, shows otherwise:

- By EPA's own acknowledgement, there has been no global warming in recent years. Brief for Respondents at 54 (Case No. 10-1035, Doc. No. 1324992, Aug. 18, 2011) ("temperatures have not risen steadily over the last 10-15 years").
- During the last documented warming period, the measured warming was regional, not global; the Northern Hemisphere warmed, the tropics had no trend, and Antarctica cooled. App. 172, JA02166; App. 173, JA05120.

⁷ This Court has not endorsed any particular view on the complicated issues related to emissions of GHGs and global warming. *American Electric Power Co. v. Connecticut*, 131 S. Ct. 2527, 2533 n.2 (2011).

- Moreover, the regional warming that did occur in various areas of the globe during the last documented warming period was not anomalous in climate history and was well within the normal range of historical variability. App. 175-76, JA02617 (Arctic); App. 177, JA01283; App. 178, JA05139 (US); JA05263-5264 (merely “plausible” that current temperatures are warmer than the Medieval Warm Period).
- While CO₂ has consistently trended upward, temperatures have not. Rather, there was a thirty-year period of cooling from the 1940s to the late 1970s, followed by twenty-one years of warming, followed by sixteen years of no global trend.⁸ Over the second half of the twentieth century, there was no consistent warming. App. 180, JA02587.

⁸ David Rose, *Global warming stopped 16 years ago, reveals Met Office report quietly released . . . and here is the chart to prove it*, MailOnline (UK), Oct. 13, 2012, <http://www.dailymail.co.uk/sciencetech/article-2217286/Global-warming-stopped-16-years-ago-reveals-Met-Office-report-quietly-released-chart-prove-it.html> (last visited Apr. 10, 2013), depicting data from Met Office Hadley Centre observations datasets, <http://www.metoffice.gov.uk/hadobs/hadcrut4/> (last visited Apr. 10, 2013); see also *A Sensitive Matter*, The Economist, Mar. 30, 2013, <http://www.economist.com/news/science-and-technology/21574461-climate-may-be-heating-up-less-response-greenhouse-gas-emissions> (last visited Apr. 15, 2013).

Therefore, the temperature line of evidence is far too equivocal to lend any logical support to EPA's overall finding to a 90-99% degree of certainty.

There are equally profound deficiencies in EPA's second line of evidence: the physical understanding of climate. If EPA's understanding of the effects of GHGs were correct, the very same causal factors supposedly responsible for anthropogenic global warming would result in certain observable physical indicators. In particular, EPA's physical understanding predicts a distinctive "hot spot" in the tropical upper troposphere. Fig. 1.3, App. 181; Fig. 1.9(f), JA05030. However, that "hot spot" is nowhere to be found. Multiple independent sets of measurements on diverse instrument platforms maintained by independent teams of scientists going back more than 40 years and comprising many millions of measurements all tell a consistent story – there is no hot spot as predicted by EPA's theory. App. 182, JA05118. The very assessment literature on which EPA relies acknowledges that this empirical refutation of EPA's theory of climate is a "potentially serious inconsistency."⁹

⁹ United States Climate Change Science Program, Temperature Trends in the Lower Atmosphere, Steps for Understanding and Reconciling Differences, Synthesis and Assessment Product 1.1, *Temperature Trends in the Lower Atmosphere, Steps for Reconciling and Understanding Differences*, <http://downloads.globalchange.gov/sap/sap1-1/sap1-1-final-all.pdf> (last visited Apr. 10, 2013).

Thus, EPA's second line of evidence does not support its high-certainty finding.

The validity of the third line of evidence, the climate models on which EPA relies, has been discredited by a panoply of failed predictions. Most notably, these models erroneously predicted steadily increasing global average surface temperature with increasing GHG concentrations. App. 183, JA02584. Numerous other failed predictions can be amassed.¹⁰ Even IPCC's lead scientists have acknowledged that the models and physical understanding on which they are based are hopelessly inadequate: "The fact is that we can't account for the lack of warming at the moment and it is a travesty that we can't." JA04309. *See Sierra Club v. Costle*, 657 F.2d 298, 333 (D.C. Cir. 1981), *rev'd on other grounds*, 463 U.S. 680 (1983) (while computer modeling "is a useful and often essential tool," an agency "must sufficiently explain the assumptions and methodology used in preparing the model" and must "*provide a complete analytic defense of its model (and) respond to each objection with a*

¹⁰ For example, IPCC AR4 WG1 § 8.4.7 explains that "serious systematic errors in both the simulated mean climate and the natural variability persist" in attempts to model the El Niño Southern Oscillation. Intergovernmental Panel on Climate Change, *Fourth Assessment Report: Climate Change 2007, Working Group I: The Physical Science Basis*, 8.4.7 El Niño – Southern Oscillation, http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch8s8-4-7.html (last visited Apr. 10, 2013).

reasoned presentation.”) (emphasis added) (internal quotation marks omitted). There must be “a rational connection between the factual inputs, modeling assumptions, modeling results and conclusions drawn from these results.” *Id.* See also *Owner-Operators Independent Drivers Ass’n v. FMCSA*, 494 F.3d 188, 203-05 (D.C. Cir. 2007).

In short, EPA’s three lines of evidence are either weak and equivocal or outright invalid: There was no consistent trend of “global” warming in the second half of the twentieth century, nor any global warming in the last 16 years, and the regional warming that did occur was not anomalous. EPA’s supposed physical understanding of GHG effects in the atmosphere is contradicted by copious empirical evidence, and the models on which EPA relies have proven to be wrong in many of their most important predictions, including current temperatures. As a result, it was irrational, arbitrary, and capricious for EPA to conclude that it was “90-99% certain” that, to the extent there has been any global warming in the second half of the twentieth century, man is the cause of most of it.¹¹

¹¹ In a related challenge, Petitioners showed that not only is EPA’s claim of near certainty irrational, EPA’s proposed remedy is ineffective and pointless. EPA admitted that the rule will, at most, reduce global temperatures by an immeasurable 0.006-0.015°C over the next century and will reduce global sea rise by an equally undetectable 0.06-0.14 centimeters. Tailpipe Rule, JA00666 at 00838. Petitioners argued that the Tailpipe Rule was therefore arbitrary and capricious for several reasons, including, first, the self-evident conclusion that any rule that

(Continued on following page)

An immense expansion of the administrative state – of which these rules are but the first step¹² – thus rests upon an arbitrary and irrational foundation. But the D.C. Circuit deferred entirely and thus improperly to EPA on the “science” issues. While Petitioners acknowledge that some deference to the agency’s judgment about scientific matters is appropriate, it is also true that deference, like scrutiny, can be carried too far. The D.C. Circuit gave “extreme” deference to EPA’s Endangerment Finding. App. 35.

has no discernible effect on the problem it addresses is arbitrary by definition, and second, it is irrational for EPA to argue that it is pursuing a solution “one step at a time,” or that “every little bit helps,” since the impossibility of empirical verification means that whether the rule has actually produced a “step” is inherently unknowable. Joint Opening Brief of Non-State Petitioners and Supporting Intervenors (Case No. 10-1094, Doc. No. 1311526, Jun. 3, 2011).

¹² Since launching the rules at issue here, EPA has promulgated GHG tailpipe standards for heavy-duty vehicles. Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles; Final Rule, 76 Fed. Reg. 57,105 (Sep. 15, 2011). EPA has also published a proposed rule establishing New Source Performance Standards for power plants, citing the Section 202 mobile source Endangerment Finding as legal justification. Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units; Proposed Rule, 77 Fed. Reg. 22,391, 22,413 (Apr. 13, 2012). The Endangerment Finding has also prompted regulatory proceedings under other federal laws, such as the National Environmental Policy Act, State and regional rulemakings, and private tort litigation. *See, e.g., WildEarth Guardians v. Salazar*, 880 F. Supp. 2d 77 (D.D.C. 2012) (challenge to coal development leases in Powder River Basin based on alleged global warming effects), *appeal docketed*, No. 12-5300 (D.C. Cir. Sep. 26, 2012).

“Extreme” deference on scientific issues derogates the role of the courts, replacing judicial review, a key restraint on the aggrandizing tendencies of the administrative state, with nothing more than a rubber stamp. It trains agencies to camouflage their policy preferences as “science” to shield them from judicial review. See Wendy E. Wagner, *The Science Charade in Toxic Risk Regulation*, 95 Col. L. Rev. 1613 (1995); Emily Hammond Meazell, *Super Deference, the Science Obsession, and Judicial Review as Translation of Agency Science*, 109 Mich. L. Rev. 733 (2011).

The D.C. Circuit was plainly reluctant to take on any meaningful review of the science behind the Endangerment Finding. Not one of Petitioners’ actual science arguments was even mentioned by the court in its opinion. Indeed, it is as if Petitioners had not raised any questions about the underlying science at all. The specific defects in EPA’s three lines of evidence identified by Petitioners, and the irrationality of EPA’s basing such a high certainty finding on such weak premises, should have received a “searching and careful” evaluation from the court, instead of a free pass. *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971). The court should have taken a hard look at the temperature records, the empirical evidence, and the validity of the models to determine whether EPA’s claims of near-certainty could survive even a deferential standard of review.

II. The Timing and Tailoring Rules are fundamentally contrary to the express terms of the Clean Air Act and the acknowledged intent of Congress.

Even without EPA's irrational certitude, the core analytical and legal deficiency of EPA's entire GHG program arises from the combined effect of the Timing and Tailoring Rules. Through these two rules, EPA uses a convoluted, strained, and implausible reading of the Clean Air Act to conclude, despite substantial evidence to the contrary, that Congress actually managed to conceal a vast multi-billion dollar regulatory program in several previously unnoticed subparagraphs of the Act. In essence, EPA's GHG program depends upon the assumption that Congress actually succeeded in hiding an elephant in a mouse hole.

The path to EPA's outcome is tortured. At the outset, EPA used the Timing Rule to invoke jurisdiction over GHG emissions from stationary sources on the grounds that any substance regulated under any provision of the Clean Air Act must automatically and inevitably be regulated under all provisions of the Clean Air Act. That interpretation, however, produced a scope of regulation that even EPA had to admit was "absurd" and administratively "impossible." So, having launched an absurd and impossible regulatory program under its own interpretation of the CAA, EPA used the Tailoring Rule to rewrite the statute in order to dial back the self-inflicted absurdity to a

level that the agency judged would be more administratively and politically tolerable.

This misguided regulatory framework stands on two flimsy footings: first, a reading of the Clean Air Act that was contrary to its express terms and failed to comport with ordinary rules of statutory interpretation, and, second, an overly literal reading of this Court's holding in *Massachusetts*. Neither footing can bear the weight placed upon it.

1. The first error is that the regulatory program promulgated by EPA is inconsistent with the express terms of the Clean Air Act. Indeed, EPA conceded that it was ignoring congressional intent and purpose: “[T]hese results are not consistent with – and, indeed, undermine – congressional purposes set forth for PSD and title V provisions.” Tailoring Rule, JA01147 at 01181. EPA further concluded that “applying PSD requirements literally to GHG sources at the present time . . . would result in a program that would have been unrecognizable to the Congress that designed PSD.” *Id.* at 01189.

In this respect, at least, EPA was right: EPA's program to regulate stationary sources of GHGs cannot be reconciled with a proper reading of the Act. EPA erred in concluding that it could fix this problem by “tailoring” the provisions of the Act itself. In point of fact, no “tailoring” can fix the underlying problem: GHGs cannot be “air pollutants” for stationary sources because the statutory mechanisms for regulating emissions of air pollutants from stationary

sources cannot be lawfully or logically applied to GHG emissions:

- PSD provisions apply only to areas designated under Clean Air Act § 107(d), 42 U.S.C. § 7407(d) (App. 164), that meet ambient air quality standards. There are no ambient air quality standards for GHGs, nor can there be because the regionally focused PSD provisions cannot logically be applied to what EPA contends are globally “well-mixed” pollutants like GHGs.
- Congress established the 100/250 tons per year thresholds for those “major sources” in the PSD program requiring permits on the expectation that the permitting program would apply to a “relatively small number of large industrial sources.” Tailoring Rule, JA01147 at 01189. The number of sources that would be subject to regulation under the EPA’s GHG program, however, is anything but a “relatively small number.”
- Congress expressly specified an emission threshold for sources that must obtain a Title V permit at 100 tons per year. Clean Air Act section 501, 42 U.S.C. § 7661, App. 167. Even on Savile Row, no one could conceivably “tailor” 100 to mean 75,000. Beyond setting an express numerical threshold, Congress expressly forbade EPA to deviate from that threshold. Clean Air Act § 502(a), 42 U.S.C.

§ 7661a, App. 167-68. But by EPA’s own admission, these mandatory statutory thresholds (100 or 250 tons per year), with no possibility of exception, lead to absurd results when applied to emissions of GHGs from stationary sources. At these levels, more than six million sources would suddenly be subject to regulation,¹³ an interpretation all acknowledge is far outside the bounds of congressional intent.

For both the PSD and Title V programs, EPA admits that regulating GHGs at the statutory thresholds would create absurd and impossible regulatory requirements (Tailoring Rule, JA01147 at 01150-01151), an admission Petitioners contend invalidates the statutory construction that produced this result.

¹³ The D.C. Circuit held that “none of Petitioners’ alternative interpretations applies to Title V” and therefore Petitioners “forfeited any challenges to EPA’s greenhouse gas-inclusive interpretation of Title V.” App. 73-74. It is true that Petitioners did offer three plausible interpretations of the CAA that would not produce EPA’s “absurd” results when applied to the PSD program. However, Petitioners never limited their arguments solely to PSD. Petitioners specifically argued (1) that Congress never envisaged that the Title V program would be applied to GHGs (Joint Reply Brief of Non-State Petitioners and Supporting Intervenors at 1 (Case No. 10-1131, Doc. No. 1342386, Nov. 16, 2011)), (2) that regulating GHGs as “air pollutants” for stationary sources would unlawfully subject millions of sources to Title V requirements (*id.* at 27), (3) that Petitioners’ Title V arguments were timely made (*id.* at 31), and (4) that the Tailoring Rule violated the prohibition in Section 502(a) on exempting major sources from Title V. *Id.* at 35.

But instead of drawing the obvious conclusion that its reading of the Act was wrong, EPA acted to “tailor” the “inconvenient truth” out of existence.

EPA justified this regulatory frolic and detour by arguing that there was no other possible interpretation of the Act that would permit it to do otherwise. But the Clean Air Act does not compel its own repudiation, and there are reasonable alternative interpretations that do no violence to the Act’s terms.

- For example, the Clean Air Act’s definition of a “major emitting facility” in the PSD program logically means a facility that emits more than the threshold quantity of pollutants *regulated under that program*. In other words, the term “air pollutant” for the PSD program means a “pollutant” for which there is a “National Ambient Air Quality Standard” (“NAAQS”). Joint Opening Brief of Non-State Petitioners and Supporting Interveners at 22 (Case No. 10-1083, Doc. No. 1314204, Jun. 20, 2011).
- As another example, Petitioners showed that the term “air pollutant,” whatever its meaning for mobile sources, should have a meaning for PSD purposes consistent with the entirety of the PSD program. For example, under Section 165(a) of the Act (preconstruction requirements) (42 U.S.C. § 7475, App. 166), permits are required only for major sources in “any area to which this part applies.” “[T]his part” applies to *areas* that are in

attainment (or unclassified) for the NAAQS. Clean Air Act § 161, 42 U.S.C. § 7471, App. 165. In other words, the PSD provisions make no sense except in terms of the attainment/nonattainment status of specific areas, for which a NAAQS has been established for specific criteria pollutants.

There are other reasonable interpretations of the phrase “air pollutant” and other permissible constructions of the stationary source provisions that similarly do not lead to absurd, impossible outcomes. The key point is that EPA was faced with several possible interpretations of the term “air pollutant” in the context of stationary sources, yet chose the only interpretation that led to absurd results, was concededly contrary to clear congressional intent, and radically expanded EPA’s regulatory authority. That, Petitioners argued, rendered the interpretation unlawful.

2. The second deficiency is that the havoc wreaked on the Clean Air Act arose from an overly literal, and erroneous, reading of this Court’s holding in *Massachusetts*. This Court held in *Massachusetts* that GHGs met the “capacious” definition of “air pollutant” for purposes of emissions from mobile sources. 549 U.S. at 532. What was not before this Court and what the Court did not decide in *Massachusetts* was whether the definition of “air pollutant” encompassed GHGs from stationary sources under the PSD and Title V permitting programs.

Nevertheless, EPA read the Court's holding as a mandate to expand the regulation of GHGs from mobile sources to stationary sources. In issuing the Timing Rule, EPA essentially concluded that this Court's holding in *Massachusetts* established an "in-for-one/in-for-all" definition of "air pollutant," such that if GHGs are pollutants subject to regulation for mobile sources, GHGs must be *ipso facto* an air pollutant everywhere else in the Act, no matter how absurd that outcome. "We do not believe that this term is ambiguous with respect to the need to cover GHG sources under either the PSD or title V program." Tailoring Rule, JA01147 at 01182 n.31. This enormously consequential result ultimately rests on a reading of the definition of "air pollutant" so broad that even air itself is an "air pollutant." Such an incontinent meaning cannot be read as a mandate to override the meticulous statutory architecture of stationary source regulation.

This Court's decision in *Massachusetts* did not compel EPA to apply the same definition of "air pollutant" everywhere the term occurred in the Act. Nor did it compel EPA to read "subject to regulation" to require regulations that are obviously contrary to congressional intent, or to rewrite the statute to provide more convenient terms. It is axiomatic that any regulation "contrary to clear congressional intent" is unlawful. *Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 843 n.9 (1984). If applying the *Massachusetts* definition of "air pollutant" to stationary sources leads to an outcome "contrary to clear congressional

intent,” EPA should have opted for another permissible interpretation of the statute. This Court directed EPA to comply with the statute, not to “tailor” it.

EPA’s error is similar to that presented in *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1980), where EPA had defined “major emitting facility” so broadly that it had no choice but to “tailor” the definition to exempt certain sources from PSD review. There, the D.C. Circuit held that EPA had no authority to “tailor” the statute to exempt certain sources, and EPA’s only lawful choice was to interpret the statute to avoid the overbreadth in the first place. *Id.* at 353, 356-57.

It is relatively common in complex statutes for the same term to apply differently in different contexts. See, e.g., *Environmental Defense v. Duke Energy*, 549 U.S. 561, 574 (2007) (“the natural presumption that identical words used in different parts of the same act are intended to have the same meaning is not rigid and readily yields whenever there is such variation in the connection in which the words are used as reasonably to warrant the conclusion that they were employed in different parts of the act with different intent.”). Nothing in *Massachusetts* compelled EPA to disregard this ordinary rule of statutory interpretation.¹⁴

¹⁴ Not even EPA thinks that the definition of “air pollutant” in the Act should be read with mindless literalism. EPA itself admits that the definition of “air pollutant” (namely “any physical
(Continued on following page)

Fundamentally, if an agency's interpretation of a statute or of a controlling court decision produces an absurd outcome, the first and most obvious conclusion is that the agency, not Congress and not this Court, has gone awry. That should have been all the more apparent in this case. Here, the putative absurdity arose not from anything in the Clean Air Act itself. The stationary source provisions of the Act have operated just fine for several decades. Nor did this Court create the absurdity in *Massachusetts*, where the Court made no determination respecting stationary sources, since the issue was not before the Court. Rather, the absurdity arose only from the way EPA chose to read the Act. As Judge Kavanaugh said, the ultimate clincher in this case is one simple point: EPA chose an admittedly absurd reading over a perfectly natural reading of the relevant statutory text.

or chemical substance emitted into air") cannot possibly be taken literally; doing so, for example, would require PSD pre-construction permits for substances that are utterly harmless and not regulated under the Clean Air Act at all. For that reason, even EPA applies a limiting construction to the term "air pollutant," meaning not "*any* physical or chemical substance emitted into air," but only those substances "*regulated under the Act.*" See D.C. Circuit Court opinion, App. 69-70. Therefore, it is beyond dispute that some kind of context-dependent reading to the term "air pollutant" must be applied. The issue is how far the agency may go in applying context. EPA ignores a rational approach to context and necessarily trips over itself, ending up with absurd results.

III. The D.C. Circuit erred in concluding that none of the Petitioners had standing to challenge the Timing and Tailoring Rules.

To appreciate the error of the holding that Petitioners lacked standing to challenge the Timing and Tailoring Rules, it is useful to consider how EPA partitioned its GHG rules to immunize this massive regulatory program from judicial review. The ultimate impact on stationary sources arose not directly from the Endangerment Finding or the Tailpipe Rule's regulation of mobile sources, but from the follow-on effects of the Timing Rule (which supposedly triggered the regulation of emissions from stationary sources) and the Tailoring Rule (which used the "absurdity" rationale to permit the exercise of regulatory jurisdiction far beyond congressional authorization). But EPA asserted that no one had standing to challenge these rules, even though these rules provided the mechanism by which Petitioners' harms arose. Specifically, EPA asserted that no one was aggrieved by the Timing Rule, since all it did was restate a long-standing interpretation (long-since past challenging); and that no one was aggrieved by the Tailoring Rule, since all it did was relax otherwise applicable standards, and no one can possibly be harmed by the relaxation of regulatory obligations that would otherwise apply. Final Brief for Respondents at 76-96 (Case No. 10-1083, Doc. No. 1347529, Dec. 14, 2011). In sum, EPA claimed that it could launch the most massive regulatory program in American history, imposing billions of dollars in compliance costs

on the U.S. economy and burdening millions of American citizens in the process, and no one had standing to challenge the program.

This argument should not have detained the D.C. Circuit, but the court nevertheless held that none of the Petitioners had standing to challenge the Timing and Tailoring Rules. The court held that Petitioners had failed to establish an “injury in fact” resulting from these rules. App. 96. In support of this conclusion, the court stated that Petitioners’ harms arise “not because of anything EPA did in the Timing and Tailoring Rules, but by the automatic operation of the statute.” *Id.* at 96-97. “Indeed,” the court continued, “the Timing and Tailoring Rules actually mitigate Petitioners’ purported injuries.” *Id.* at 97.

This error demands certiorari review by this Court for several reasons. First, the so-called “automatic operation of the statute” is not automatic at all – Petitioners’ harms result instead from EPA’s deliberate choice to read the statute to yield absurd results that are contrary to congressional intent instead of a perfectly natural reading that does not. Second, the court’s holding ensured an inadequate piecemeal review of EPA’s GHG program, allowing EPA to evade scrutiny of that program through a justiciability shell game.

Finally, the decision below on standing conflicts with the precedents of this Court. The D.C. Circuit’s conclusion on standing assumed that Petitioners had already lost on their challenges to the other rules. In essence, the court held that because it found no basis

for overturning the Endangerment Finding or Tailpipe Rule, Petitioners had no standing to challenge a relaxation of the resulting regulatory requirements for stationary sources. Under clear precedent from this Court, though, this is not the proper test. There are only three prerequisites for standing: An injury in fact that is concrete and actual; causation – a fairly traceable connection between the injury and the conduct of the defendant; and redressability – a likelihood that the requested relief will redress the alleged injury. *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992). Petitioners undeniably satisfy these tests when EPA’s GHG program is considered as a whole. The court erred by artificially segmenting its analysis of the legality of the program into separate components and by deciding the merits of challenges to some components before considering petitioners’ standing to challenge others. But the components are inextricably linked – a positive Endangerment Finding inevitably led to mobile source regulation under the Tailpipe Rule, which (via the Timing Rule) inevitably led to stationary source regulation. That being so, the court’s determination on the merits of the Endangerment Finding and the Tailpipe Rule cannot control standing to challenge the inevitable consequences of those results for stationary sources. In essence, the court erroneously allowed a merits determination to control standing. *See Steel Co. v. Citizens for a Better Environment*, 523 U.S. 83, 91-92 (1998) (whether a cause of action exists goes to the merits of the case and not standing). The D.C. Circuit’s approach improperly denied effective judicial review of the full program.

IV. This case portends an unconstitutional and dangerous shift in the balance of power from the Legislative Branch to the Executive Branch.

Both the scope and the method of EPA's dramatic expansion of its regulatory authority warrant certiorari review because they implicate fundamental issues of governance and separation of powers. Judge Kavanaugh captured the point in his dissent from the Order denying rehearing:

[I]f this case stands as a precedent that influences other agency decisionmaking, the future consequences likewise could be significant: Agencies presumably could adopt absurd or otherwise unreasonable interpretations of statutory provisions and then edit other statutory provisions to mitigate the unreasonableness. Allowing agencies to exercise that kind of statutory re-writing authority could significantly enhance the Executive Branch's power at the expense of Congress's and thereby alter the relative balance of powers in the administrative process.

App. 144-45. Agencies that can re-write or ignore statutes that stand in their way are essentially unconstrained by law, resulting in an unbridled rearrangement of power contrary to the constitutional order.

As Judge Kavanaugh correctly noted, the shift in the balance of power authorized by the D.C. Circuit goes far beyond this one case. Congress did not

authorize EPA to go forth and do good – Congress specified particular areas where it deemed regulation to be warranted. Regulating GHG emissions from stationary sources was obviously not one of them, with even EPA recognizing the “absurd” results that such regulation would produce. Yet the D.C. Circuit has validated an assertion of agency power that clearly goes well beyond the congressional delegation of administrative authority. Such an outcome portends dangers to the American system of government that dwarf the serious implications under the Clean Air Act.

Both EPA and the D.C. Circuit point to this Court’s opinion in *Massachusetts* as somehow mandating this outcome. This petition, therefore, presents the opportunity for this Court to specify exactly what *Massachusetts* did and did not authorize with respect to EPA’s regulation of GHGs under the Clean Air Act. That clarification will likely entail revisiting the application of *FDA v. Brown & Williamson*, 529 U.S. 120 (2000), to the regulation of GHGs under the CAA. In *Massachusetts*, this Court distinguished *Brown & Williamson* in affirming EPA’s power to regulate GHG emissions from mobile sources under the CAA for two reasons: (1) jurisdiction over GHGs would not lead to “extreme measures” (549 U.S. at 530) and was not counterintuitive (*id.* at 531); and (2) there was no unbroken series of congressional enactments incompatible with EPA authority to regulate GHGs under the Act. *Id.*

However, in light of EPA's GHG program as promulgated since *Massachusetts*, both reasons for distinguishing *Brown & Williamson* should be revisited with a fresh perspective. EPA has asserted that *Massachusetts* forced it to implement measures that even EPA acknowledges are "extreme" (or in EPA's exact parlance, "absurd" and "impossible") and that are overtly contrary to how Congress intended the Clean Air Act to operate for stationary sources. In addition, the backdrop of congressional action and inaction on GHGs for more than twenty years leads to the inescapable conclusion that Congress did not intend to grant EPA authority to regulate GHGs, particularly for stationary sources. As pointed out in the dissenting opinions of Judges Kavanaugh and Brown, over the past several years, Congress has repeatedly considered and refused to enact precisely the kinds of GHG controls at issue here. In 2009, the House of Representatives passed a global warming bill, supported by the President, which failed in the Senate. Numerous other bills have been introduced over the years, but none has been passed into law. *See* App. 161 n.5. In drafting the 1990 Clean Air Act Amendments, Congress considered, and expressly rejected, proposals authorizing EPA to regulate GHGs under the CAA. By one estimate, Members of Congress proposed more than 400 bills concerning GHGs between 1990 and 2009. App. 119.

In other words, the history of congressional action and inaction, when viewed in light of the absurd

consequences of applying GHG emission limitations to stationary sources, makes it abundantly clear that Congress did not intend for EPA to have the authority to regulate emissions of GHGs from stationary sources. In this broader context, as opposed to the narrow definitional reading of the Act in *Massachusetts*, the applicability of *Brown & Williamson* is clear.

In essence, there are two analytical directions presented by current circumstances. First, if this Court was correct that the holding in *Massachusetts* would not produce counterintuitive and extreme consequences, then EPA and the D.C. Circuit misinterpreted *Massachusetts* and had no lawful basis to approve regulations with plainly extreme and counterintuitive consequences. Alternatively, if EPA and the D.C. Circuit were correct that the regulation of GHG emissions from stationary sources was compelled by the holding in *Massachusetts*, then this Court was wrong in assuming that no counterintuitive, extreme measures would result from its decision.¹⁵ In either event, the profound importance of

¹⁵ Both Judge Brown and Judge Kavanaugh identified this tension between the course of EPA's regulatory onslaught and the assumption in *Massachusetts* that there would be no extreme or counterintuitive consequences as a result of the decision. As Judge Brown said, "[B]ound as I am by *Massachusetts*, I reluctantly concur with the Panel's determination that EPA may regulate GHGs in tailpipe emissions. But I do not choose to go quietly. Because the most significant regulations of recent memory rest on the shakiest of foundations, Part I of this

(Continued on following page)

this case, and the enormous and unprecedented regulatory burdens inflicted by the rules at issue, provide the strongest grounds for certiorari review. This case presents an exceptionally important opportunity for this Court to revisit the question of whether GHGs should be regulated under the Clean Air Act at all and to clarify that nothing in *Massachusetts*, as decided then or as clarified in this matter, mandates an unconstitutional shift of power from Congress to EPA.

If the program here is allowed to stand, it will validate a rationale that creates an avenue for regulatory authority unprecedented in American history. That cannot possibly be what this Court envisioned in *Massachusetts*, so it is now appropriate for this Court to grant the petition to clarify the boundaries between legislative and executive authority.

Admittedly, the arguments raised by Petitioners suggest that under the only reasonable interpretation of the CAA, emissions of GHGs from stationary sources could be subject to no regulation at the present time. And it would leave in place the messy stalemate between a Congress that has declined to act and an executive agency driven to address what it believes to be an important problem. But such

statement engages *Massachusetts's* interpretive shortcomings in the hope that either Court or Congress will restore order to the CAA.” App. 113.

dilemmas inhere in the nature of the American system of government.

[W]hile a government of opposite and rival interests may sometimes inhibit the smooth functioning of administration . . . [t]he Framers recognized that, in the long term, structural protections against abuse of power were critical to preserving liberty. . . . [Global warming] may be a pressing national problem, but a judiciary that licensed extra-constitutional government with each issue of comparable gravity would, in the long run, be far worse.

Free Enterprise Fund v. Public Company Accounting Oversight Board, 130 S. Ct. 3138, 3157 (2010) (internal quotation marks omitted).



CONCLUSION

In petitioning for a writ of certiorari in *Massachusetts*, the State of Massachusetts asserted that there can be no reasonable debate about the importance of climate change. In fact, there can be such a debate. As shown above, EPA's certitude is irrational, the costs of the GHG regulations are immense, and the benefits of any regulatory program are acknowledged to be so *de minimis* that they are literally undetectable. Any program with all costs and no benefits is certainly worthy of debate.

There should be no debate, however, that our country must be governed with a respect for constitutional

separation of powers, congressional prerogatives, and limitations on executive usurpations of legislative power. These principles are of the greatest importance for the jurisprudence and role of this Court. The rules at issue in this case pose a momentous threat to those principles.

For these reasons, the petition for certiorari should be granted.

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App. 1

**United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

Argued Feb. 28 and 29, 2012 Decided June 26, 2012

No. 09-1322

COALITION FOR RESPONSIBLE REGULATION, INC., ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

STATE OF MICHIGAN, ET AL.,
INTERVENORS

Consolidated with 10-1024,10-1025, 10-1026,
10-1030, 10-1035, 10-1036, 10-1037, 10-1038,
10-1039, 10-1040, 10-1041, 10-1042, 10-1044,
10-1045, 10-1046, 10-1234, 10-1235, 10-1239,
10-1245, 10-1281, 10-1310, 10-1318, 10-1319,
10-1320, 10-1321

On Petitions for Review of Final Actions
of the Environmental Protection Agency

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Greg Abbott, Attorney General, Office of the Attorney General for the State of Texas, Bill Cobb,

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Christian J. Ward, Scott A. Keller, and April L. Farris were on the brief for *amici curiae* Scientists in support of Petitioners.

Derek Schmidt, Attorney General, Office of the Attorney General for the State of Kansas, and John Campbell, Chief Deputy Attorney General, were on the brief for *amicus curiae* State of Kansas in support of Petitioners.

Martin R. Levin, Michael J. O'Neill, Donald M. Falk, Mark S. Kaufman, Steven J. Lechner, and Richard P. Hutchison were on the brief for *amici curiae* Landmark Legal Foundation, et al. in support of Petitioners.

Jon M. Lipshultz and Angeline Purdy, Attorneys, U.S. Department of Justice, argued the causes for respondent. With them on the brief were John Hannon, Carol Holmes, and Steven Silverman, U.S. Environmental Protection Agency, Attorneys. Thomas A. Lorenzen, Attorney, U.S. Department of Justice, entered an appearance.

Carol Iancu, Assistant Attorney General, Office of the Attorney General for the Commonwealth of

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Deborah Sivas, Douglas A. Ruley, Edward Lloyd, and Susan J. Kraham were on the brief for *amici curiae* America's Great Waters Coalition, et al. in support of respondent. James K. Thornton entered an appearance.

App. 7

No. 10-1073

COALITION FOR RESPONSIBLE REGULATION, INC., ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

AMERICAN FROZEN FOOD INSTITUTE, ET AL.,
INTERVENORS

Consolidated with 10-1083, 10-1099, 10-1109,
10-1110, 10-1114, 10-1118, 10-1119, 10-1120,
10-1122, 10-1123, 10-1124, 10-1125, 10-1126,
10-1127, 10-1128, 10-1129, 10-1131, 10-1132,
10-1145, 10-1147, 10-1148, 10-1199, 10-1200,
10-1201, 10-1202, 10-1203, 10-1206, 10-1207,
10-1208, 10-1210, 10-1211, 10-1212, 10-1213,
10-1216, 10-1218, 10-1219, 10-1220,
10-1221, 10-1222

On Petitions for Review of Final Actions
of the Environmental Protection Agency

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General, Luther Strange, Attorney General, Office of the Attorney General for the State of Alabama, Herman Robinson, Donald Trahan, Kathy M. Wright, Gary C. Rikard, John Bruning, Attorney General, Office of the Attorney General for the State of Nebraska, Katherine J. Spohn, Special Counsel, Wayne Stenehjem, Attorney General, Office of the Attorney General for the State of North Dakota, Margaret Olson, Assistant Attorney General, Alan Wilson, Attorney General, Office of the Attorney General for the State of South Carolina, J. Emory Smith, Jr., Assistant Deputy Attorney General, Marty Jackley, Attorney General, Office of the Attorney General for the State of South Dakota, Roxanne Giedd, Chief, and Kenneth T. Cuccinelli, II, Attorney General, Office of the Attorney General for the Commonwealth of Virginia. Mark W. DeLaquil, Earle D. Getchell, Jr., Assistant Attorney General, Office of the Attorney General for the Commonwealth of Virginia, Andrew M. Grossman, David B. Rivkin, Jr., and Robert D. Tambling, Assistant Attorney General, Office of the Attorney General for the State of Alabama, entered appearances.

F. William Brownell and Peter Keisler argued the causes for Non-State Petitioners and Supporting Intervenors. With them on the briefs were Norman W. Fichthorn, Henry V. Nickel, Allison D. Wood, Charles H. Knauss, Shannon S. Broome, Timothy K. Webster, Roger R. Martella, Eric Groten, Patrick R. Day, John A. Bryson, Matthew G. Paulson, John P. Elwood, Paul D. Phillips, James A. Holtkamp, Shannon L.

Goessling, Harry W. MacDougald, William H. Lewis, Jr., Ronald J. Tenpas, Gordon R. Alphonso, Edward A. Kazmarek, Chet M. Thompson, Neal J. Cabral, Scott C. Oostdyk, Richard P. Hutchison, John J. McMackin, Jr., Robin S. Conrad, Sheldon Gilbert, Michael W. Steinberg, Levi McAllister, Jeffrey A. Rosen, Robert R. Gasaway, Jeffrey Bossert Clark, William H. Burgess, Ashley C. Parrish, Cynthia A.M. Stroman, Ellen Steen, Leslie Sue Ritts, Peter Glaser, Mark E. Nagle, Terry J. Satterlee, Thomas J. Grever, Margaret Claiborne Campbell, Bryon W. Kirkpatrick, Quentin Riegel, Elizabeth Gaudio, Elizabeth Henry Warner, Harry Moy Ng, Michele Marie Schoeppe, Thomas J. Ward, and Peter H. Wyckoff. Mark A. Behrens, Paul D. Clement, Matthew Dukes, Virginia L. Hudson, and David B. Salmons entered appearances.

Jonathan S. Massey was on the brief for *amicus curiae* Municipal Gas Commission of Missouri.

John G. Horne, II, Samuel B. Boxerman and Leslie A. Hulse were on the brief for *amici curiae* the Commonwealth of Kentucky and the American Chemistry Council in support of petitioners. Angus Macbeth entered an appearance.

Amanda Shafer Berman and Perry M. Rosen, Attorneys, U.S. Department of Justice, argued the causes for respondents. With them on the briefs were Howard Hoffman, Elliott Zenick, Brian Doster, and David Orlin, Counsel, U.S. Environmental Protection Agency. Thomas A. Lorenzen and Kim N. Smaczniak, Attorneys, U.S. Department of Justice, and John D.

Gunter, II and Michele L. Walter, Counsel, U.S. Environmental Protection Agency, entered appearances.

Sean H. Donahue and Michael J. Myers argued the causes for State and Environmental Intervenors in support of respondents. With them on the briefs were Vickie L. Patton, Pamela A. Campos, Megan Ceronsky, Petere [sic] Zalzal, Eric T. Schneiderman, Attorney General, Office of the Attorney General for the State of New York, Barbara D. Underwood, Solicitor General, Morgan A. Costello, Assistant Attorney General, Monica Wagner, Howard I. Fox, David S. Baron, Lisa Madigan, Attorney General, Office of the Attorney General for the State of Illinois, Gerald T. Karr, Assistant Attorney General, Joanne Spalding, Nathan Matthews, Craig Holt Segall, Kamala D. Harris, Attorney General, Office of the Attorney General for the State of California, Kathleen A. Kenealy, Senior Assistant Attorney General, Susan Durbin, Raissa Lerner, Marc N. Melnick, and Nicholas Stern, Deputy Attorneys General, Martha Coakley, Attorney General, Office of the Attorney General for the Commonwealth of Massachusetts, William L. Pardee and Carol Iancu, Assistant Attorneys General, David Doniger, Meleah Geertsma, William J. Schneider, Attorney General, Office of the Attorney General for the State of Maine, Gerald D. Ried, Assistant Attorney General, Ann B. Weeks, Helen D. Silver, Thomas J. Miller, Attorney General, Office of the Attorney General for the State of Iowa, David R. Sheridan, Assistant Attorney General,

Douglas F. Gansler, Attorney General, Office of the Attorney General for the State of Maryland, Mary Raivel, Deputy Attorney General, Michael A. Delaney, Attorney General, Office of the Attorney General for the State of New Hampshire, K. Allen Brooks, Senior Assistant Attorney General, Barbara Baird, William B. Wong, Peter F. Kilmartin, Attorney General, Office of the Attorney General for the State of Rhode Island, Gregory S. Schultz, Special Assistant Attorney General, Frank Rambo, Morgan Butler, Gary K. King, Attorney General, Office of the Attorney General for the State of New Mexico, Stephen Farris, Assistant Attorney General, John Kroger, Attorney General, Office of the Attorney General for the State of Oregon, Paul Logan, Assistant Attorney-in-Charge, Roy Cooper, Attorney General, Office of the Attorney General for the State of North Carolina, and J. Allen Jernigan and Marc Bernstein, Special Deputy Attorneys General. Kenneth P. Alex and Gavin G. McCabe, Deputy Assistant Attorneys General, Office of the Attorney General for the State of California, entered appearances.

App. 12

No. 10-1092

COALITION FOR RESPONSIBLE REGULATION, INC., ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

LANGBOARD, INC.-MDF, ET AL.,
INTERVENORS

Consolidated with 10-1094, 10-1134, 10-1143,
10-1144, 10-1152, 10-1156, 10-1158, 10-1159,
10-1160, 10-1161, 10-1162, 10-1163, 10-1164,
10-1166, 10-1182

On Petitions for Review of Final Actions
of the Environmental Protection Agency

Peter Glaser argued the cause for petitioners. With him on the briefs were John P. Elwood, Eric Groten, Patrick R. Day, John A. Bryson, Shannon L. Goessling, Harry W. MacDougald, Paul D. Phillips, James A. Holtkamp, Edward A. Kazmarek, Chet M. Thompson, Sam Kazman, Hans Bader, Gordon R. Alphonso, Richard P. Hutchison, Neal J. Cabral, Scott C. Oostdyk, Ronald J. Tenpas, Michael W. Steinberg, Levi McAllister, John J. McMackin Jr., Robin S. Conrad, Rachel L. Brand, Sheldon Gilbert, F. William Brownell, Norman W. Fichthorn, Henry V. Nickel, Allison D. Wood, Ashley C. Parrish, Cynthia A.M.

Stroman, Mark E. Nagle, Michael Higgins, Ellen Steen, Timothy K. Webster, Roger R. Martella, Matthew G. Paulson, Charles H. Knauss, Shannon S. Broome, Quentin Riegel, Elizabeth Gaudio, Thomas J. Ward, Harry Moy Ng, and Michele Marie Schoeppe.

Greg Abbott, Attorney General, Office of the Attorney General for the State of Texas, Bill Cobb, Deputy Attorney General for Civil Litigation, Jonathan F. Mitchell, Solicitor General, J. Reed Clay Jr., Special Assistant and Senior Counsel to the Attorney General, Michael P. Murphy, Assistant Solicitor General, Luther Strange, Attorney General, Office of the Attorney General for the State of Alabama, Samuel S. Olens, Attorney General, Office of the Attorney General for the State of Georgia, John E. Hennelly, Senior Assistant Attorney General, Gary C. Rikard, Jon C. Bruning, Attorney General, Office of the Attorney General for the State of Nebraska, Katherine J. Spohn, Special Counsel to the Attorney General, Wayne K. Stenehjem, Attorney General, Office of the Attorney General for the State of North Dakota, Margaret Olson, Assistant Attorney General, Alan Wilson, Attorney General, Office of the Attorney General for the State of South Carolina, J. Emory Smith, Jr., Assistant Deputy Attorney General, Marty Jackley, Attorney General, Office of the Attorney General for the State of North Dakota, Roxanne Giedd, Chief, Civil Litigation Division, and Kenneth T. Cuccinelli, II, Attorney General, Office of the Attorney General for the Commonwealth of Virginia,

were on the briefs for State Petitioners and Supporting Intervenor. Paul D. Clement, James W. Coleman, Wayne J. D'Angelo, Mark W. DeLaquil, E. Duncan Getchell Jr., Solicitor General, Office of the Attorney General for the Commonwealth of Virginia, Andrew M. Grossman, Virginia L. Hudson, David B. Rivkin Jr., and Robert D. Tambling, Assistant Attorney General, Office of the Attorney General for the State of Alabama, entered appearances.

Samuel B. Boxerman and Leslie A. Hulse were on the brief for *amicus curiae* American Chemistry Council in support of petitioners. Angus Macbeth entered an appearance.

Eric G. Hostetler, Attorney, U.S. Department of Justice, argued the cause for respondents. With him on the brief were John Hannon and Steven Silverman, Attorneys, U.S. Environmental Protection Agency.

Raymond B. Ludwiszewski argued the cause for intervenors Association of Global Automakers, et al. With him on the brief were Kathleen M. Sullivan, Sanford I. Weisburst, and William B. Adams.

Gavin G. McCabe, Deputy Attorney General, Office of the Attorney General for the State of California, argued the cause for intervenor State of California. On the brief were Kamala D. Harris, Attorney General, Kathleen A. Kenealy, Senior Assistant Attorney General, Marc N. Melnick and Nicholas Stern, Deputy Attorneys General, Sean H. Donahue, Howard I. Fox, David S. Baron, Pamela Campos,

Megan Ceronsky, Vickie L. Patton, Peter Zalzal, Joseph R. Biden, III, Attorney General, Office of the Attorney General for the State of Delaware, Valerie M. Satterfield, Deputy Attorney General, Thomas J. Miller, Attorney General, Office of the Attorney General for the State of Iowa, David R. Sheridan, Assistant Attorney General, Douglas F. Gansler, Attorney General, Office of the Attorney General for the State of Maryland, Roberta R. James, Assistant Attorney General, Lisa Madigan, Attorney General, Office of the Attorney General for the State of Illinois, Gerald T. Karr, Assistant Attorney General, William T. Schneider, Attorney General, Office of the Attorney General for the State of Maine, Gerald D. Reid, Assistant Attorney General, Martha Coakley, Attorney General, Office of the Attorney General for the Commonwealth of Massachusetts, Carol Iancu, Tracy Triplett, and William L. Pardee, Assistant Attorneys General, Gary K. King, Attorney General, Office of the Attorney General for the State of New Mexico, Stephen R. Farris, Assistant Attorney General, John Kroger, Attorney General, Office of the Attorney General for the State of Oregon, Paul Logan, Assistant Attorney-in-Charge, William H. Sorrell, Attorney General, Office of the Attorney General for the State of Vermont, Thea J. Schwartz, Assistant Attorney General, Eric T. Schneiderman, Attorney General, Office of the Attorney General for the State of New York, Michael J. Myers and Yueh-Ru Chu, Assistant Attorneys General, Peter F. Kilmartin, Attorney General, Office of the Attorney General for the State

of Rhode Island, Gregory S. Schultz, Special Assistant Attorney General, Robert M. McKenna, Attorney General, Office of the Attorney General for the State of Washington, Leslie R. Seffern, Assistant Attorney General, Christopher King, Assistant Corporation Counsel, Corporation Counsel for the City of New York, Joanne Spalding, Craig Holt Segall, David Doniger and Meleah Geertsma. Judith A. Stahl Moore, Assistant Attorney General, Office of the Attorney General for the State of New Mexico, and John D. Walke entered appearances.

Richard E. Ayres, Jessica L. Olson, and Kristin L. Hines were on the brief for *amicus curiae* Honeywell International, Inc. in support of respondents.

Richard L. Revesz, Michael A. Livermore, and Jennifer S. Rosenberg were on the brief for *amicus curiae* Institute for Policy Integrity at New York University School of Law in support of respondents.

App. 17

No. 10-1167

AMERICAN CHEMISTRY COUNCIL,
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY AND
LISA PEREZ JACKSON, ADMINISTRATOR,
U.S. ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENTS

CHAMBER OF COMMERCE OF THE
UNITED STATES OF AMERICA, ET AL.,
INTERVENORS

Consolidated with 10-1168, 10-1169, 10-1170,
10-1173, 10-1174, 10-1175, 10-1176, 10-1177,
10-1178, 10-1179, 10-1180

On Petitions for Review of a Final Action
of the Environmental Protection Agency

Timothy K. Webster, Roger R. Martella, Jr.,
James W. Coleman, William H. Lewis, Jr., Ronald J.
Tenpas, Charles H. Knauss, Shannon S. Broome,
Bryan M. Killian, and Matthew G. Paulson were on
the briefs for petitioners. Peter D. Keisler, Leslie A.
Hulse, and Quentin Riegel entered appearances.

Amanda Shafer Berman and Perry M. Rosen,
Attorneys, U.S. Department of Justice, and Elliott
Zenick and Howard J. Hoffman, Counsel, U.S. Envi-
ronmental Protection Agency, were on the brief for

respondents. Jon M. Lipshultz, Senior Counsel, U.S. Department of Justice, entered and [sic] appearance.

Ann Brewster Weeks, Sean H. Donahue, Vickie Patton, Peter Zalzal, Joanne Spalding, Craig Segall, David Doniger, and Meleah Geertsma were on the brief of intervenors in support of respondents. David S. Baron, Pamela A. Campos, Colin C. O'Brien, and John D. Walke entered appearances.

Vera P. Pardee, Brendan R. Cummings, and Kevin P. Bundy were on the brief for *amicus curiae* Center for Biological Diversity in support of respondents.

Before: SENTELLE, Chief Judge; ROGERS and TATEL, Circuit Judges.

Opinion for the Court filed PER CURIAM.

PER CURIAM: Following the Supreme Court's decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007) – which clarified that greenhouse gases are an “air pollutant” subject to regulation under the Clean Air Act (CAA) – the Environmental Protection Agency promulgated a series of greenhouse gas-related rules. First, EPA issued an Endangerment Finding, in which it determined that greenhouse gases may “reasonably be anticipated to endanger public health or welfare.” See 42 U.S.C. § 7521(a)(1). Next, it issued the Tailpipe Rule, which set emission standards for cars and light trucks. Finally, EPA determined that the CAA requires major stationary sources of greenhouse gases to obtain construction and operating

permits. But because immediate regulation of all such sources would result in overwhelming permitting burdens on permitting authorities and sources, EPA issued the Timing and Tailoring Rules, in which it determined that only the largest stationary sources would initially be subject to permitting requirements.

Petitioners, various states and industry groups, challenge all these rules, arguing that they are based on improper constructions of the CAA and are otherwise arbitrary and capricious. But for the reasons set forth below, we conclude: 1) the Endangerment Finding and Tailpipe Rule are neither arbitrary nor capricious; 2) EPA's interpretation of the governing CAA provisions is unambiguously correct; and 3) no petitioner has standing to challenge the Timing and Tailoring Rules. We thus dismiss for lack of jurisdiction all petitions for review of the Timing and Tailoring Rules, and deny the remainder of the petitions.

I.

We begin with a brief primer on greenhouse gases. As their name suggests, when released into the atmosphere, these gases act “like the ceiling of a greenhouse, trapping solar energy and retarding the escape of reflected heat.” *Massachusetts v. EPA*, 549 U.S. at 505. A wide variety of modern human activities result in greenhouse gas emissions; cars, power plants, and industrial sites all release significant amounts of these heat-trapping gases. In recent decades “[a] well-documented rise in global temperatures has coincided

with a significant increase in the concentration of [greenhouse gases] in the atmosphere.” *Id.* at 504-05. Many scientists believe that mankind’s greenhouse gas emissions are driving this climate change. These scientists predict that global climate change will cause a host of deleterious consequences, including drought, increasingly severe weather events, and rising sea levels.

The genesis of this litigation came in 2007, when the Supreme Court held in *Massachusetts v. EPA* that greenhouse gases “unambiguous[ly]” may be regulated as an “air pollutant” under the Clean Air Act (“CAA”). *Id.* at 529. Squarely rejecting the contention – then advanced by EPA – that “greenhouse gases cannot be ‘air pollutants’ within the meaning of the Act,” *id.* at 513, the Court held that the CAA’s definition of “air pollutant” “embraces *all* airborne compounds of whatever stripe.” *Id.* at 529 (emphasis added). Moreover, because the CAA requires EPA to establish motor-vehicle emission standards for “*any* air pollutant . . . which may reasonably be anticipated to endanger public health or welfare,” 42 U.S.C. § 7521(a)(1) (emphasis added), the Court held that EPA had a “statutory obligation” to regulate harmful greenhouse gases. *Id.* at 534. “Under the clear terms of the Clean Air Act,” the Court concluded, “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.” *Id.* at 533. The Court

thus directed EPA to determine “whether sufficient information exists to make an endangerment finding” for greenhouse gases. *Id.* at 534.

Massachusetts v. EPA spurred a cascading series of greenhouse gas-related rules and regulations. First, in direct response to the Supreme Court’s directive, EPA issued an Endangerment Finding for greenhouse gases. *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* (“Endangerment Finding”), 74 Fed. Reg. 66,496 (Dec. 15, 2009). The Endangerment Finding defined as a single “air pollutant” an “aggregate group of six long-lived and directly-emitted greenhouse gases” that are “well mixed” together in the atmosphere and cause global climate change: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. *Id.* at 66,536-37. Following “common practice,” EPA measured the impact of these gases on a “carbon dioxide equivalent basis,” (CO₂e) which is based on the gases’ “warming effect relative to carbon dioxide . . . over a specified timeframe.” *Id.* at 66,519. (Using the carbon dioxide equivalent equation, for example, a mixture of X amount of nitrous oxide and Y amount of sulfur hexafluoride is expressed as Z amount of CO₂e). After compiling and considering a considerable body of scientific evidence, EPA concluded that motor-vehicle emissions of these six well-mixed gases “contribute to the total greenhouse gas air pollution, and thus to the climate change problem,

which is reasonably anticipated to endanger public health and welfare.” *Id.* at 66,499.

Next, and pursuant to the CAA’s requirement that EPA establish motor-vehicle emission standards for “any air pollutant . . . which may reasonably be anticipated to endanger public health or welfare,” 42 U.S.C. § 7521(a)(1), the agency promulgated its Tailpipe Rule for greenhouse gases. *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule* (“Tailpipe Rule”), 75 Fed. Reg. 25,324 (May 7, 2010). Effective January 2, 2011, the Tailpipe Rule set greenhouse gas emission standards for cars and light trucks as part of a joint rulemaking with fuel economy standards issued by the National Highway Traffic Safety Administration (NHTSA). *Id.* at 25,326.

Under EPA’s longstanding interpretation of the CAA, the Tailpipe Rule automatically triggered regulation of stationary greenhouse gas emitters under two separate sections of the Act. The first, the Prevention of Significant Deterioration of Air Quality (PSD) program, requires state-issued construction permits for certain types of stationary sources – for example, iron and steel mill plants – if they have the potential to emit over 100 tons per year (tpy) of “any air pollutant.” *See* 42 U.S.C. §§ 7475; 7479(1). All other stationary sources are subject to PSD permitting if they have the potential to emit over 250 tpy of “any air pollutant.” *Id.* § 7479(1). The second provision, Title V, requires state-issued operating permits for stationary sources that have the potential to emit

at least 100 tpy of “any air pollutant.” *Id.* § 7602(j). EPA has long interpreted the phrase “any air pollutant” in both these provisions to mean any air pollutant that is regulated under the CAA. *See Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans* (“1980 Implementation Plan Requirements”), 45 Fed. Reg. 52,676, 52,711 (Aug. 7, 1980) (PSD program); *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* (“Tailoring Rule”), 75 Fed. Reg. 31,514, 31,553-54 (June 3, 2010) (discussing history of Title V regulation and applicability). And once the Tailpipe Rule set motor-vehicle emission standards for greenhouse gases, they became a regulated pollutant under the Act, requiring PSD and Title V greenhouse permitting.

Acting pursuant to this longstanding interpretation of the PSD and Title V programs, EPA issued two rules phasing in stationary source greenhouse gas regulation. First, in the Timing Rule, EPA concluded that an air pollutant becomes “subject to regulation” under the Clean Air Act – and thus subject to PSD and Title V permitting – only once a regulation requiring control of that pollutant takes effect. *Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs* (“Timing Rule”), 75 Fed. Reg. 17,004 (Apr. 2, 2010). Therefore, EPA concluded, major stationary emitters of greenhouse gases would be subject to PSD and Title V permitting regulations

on January 2, 2011 – the date on which the Tailpipe Rule became effective, and thus, the date when greenhouse gases first became regulated under the CAA. *Id.* at 17,019.

Next, EPA promulgated the Tailoring Rule. In the Tailoring Rule, EPA noted that greenhouse gases are emitted in far greater volumes than other pollutants. Indeed, millions of industrial, residential, and commercial sources exceed the 100/250 tpy statutory emissions threshold for CO₂e. Tailoring Rule, 75 Fed. Reg. at 31,534-36. Immediately adding these sources to the PSD and Title V programs would, EPA predicted, result in tremendous costs to industry and state permitting authorities. *See id.* As a result, EPA announced that it was “relieving overwhelming permitting burdens that would, in the absence of this rule, fall on permitting authorities and sources.” *Id.* at 31,516. Departing from the CAA’s 100/250 tpy emissions threshold, the Tailoring Rule provided that only the largest sources – those exceeding 75,000 or 100,000 tpy CO₂e, depending on the program and project – would initially be subject to greenhouse gas permitting. *Id.* at 31,523. (The Tailoring Rule further provided that regulated sources must also emit greenhouse gases at levels that exceed the 100/250 tpy emissions threshold on a *mass* basis. That is, they must emit over 100/250 tpy of actual pollutants, in addition to exceeding the 75,000/100,000 tpy carbon dioxide equivalent. *Id.* at 31,523.)

A number of groups – including states and regulated industries – filed petitions for review of EPA’s

greenhouse gas regulations, contending that the agency misconstrued the CAA and otherwise acted arbitrarily and capriciously. This appeal consolidates the petitions for review of the four aforementioned rules: the Endangerment Finding, the Tailpipe Rule, the Timing Rule, and the Tailoring Rule.

“The Clean Air Act empowers us to reverse the Administrator’s action in rulemaking if it is ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.’” *Med. Waste Inst. & Energy Recovery Council v. EPA*, 645 F.3d 420, 424 (D.C. Cir. 2011) (quoting 42 U.S.C. § 7607(d)(9)(A)). Questions of statutory interpretation are governed by the familiar *Chevron* two-step: “First . . . if the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” *Chevron, U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984). But “if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency’s answer is based on a permissible construction of the statute.” *Id.* at 843.

This opinion proceeds in several steps. Part II explains why the Endangerment Finding was neither arbitrary nor capricious, while Part III does the same for the Tailpipe Rule. Turning to stationary source regulation, Part IV examines whether any petitioners may timely challenge EPA’s longstanding interpretation of the PSD statute. Because we conclude that they may, Part V addresses the merits of their

statutory arguments, and explains why EPA's interpretation of the CAA was compelled by the statute. Next, Part VI explains why petitioners lack standing to challenge the Timing and Tailoring Rules themselves. Finally, Part VII disposes of several arguments that have nothing to do with the rules under review, and thus are not properly before us.

II.

We turn first to State and Industry Petitioners' challenges to the Endangerment Finding, the first of the series of rules EPA issued after the Supreme Court remanded *Massachusetts v. EPA*. In the decision ordering the remand, the Supreme Court held that EPA had failed in its statutory obligations when it "offered no reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change." *Massachusetts v. EPA*, 549 U.S. at 534. On remand, EPA compiled a substantial scientific record, which is before us in the present review, and determined that "greenhouse gases in the atmosphere may reasonably be anticipated both to endanger public health and to endanger public welfare." Endangerment Finding, 74 Fed. Reg. at 66,497. EPA went on to find that motor-vehicle emissions of greenhouse gases "contribute to the total greenhouse gas air pollution, and thus to the climate change problem, which is reasonably anticipated to endanger public health and welfare." *Id.* at 66,499.

State and Industry Petitioners challenge several aspects of EPA’s decision, including (1) EPA’s interpretation of CAA § 202(a)(1), which sets out the endangerment-finding standard; (2) the adequacy of the scientific record supporting the Endangerment Finding; (3) EPA’s decision not to “quantify” the risk of endangerment to public health or welfare created by climate change; (4) EPA’s choice to define the “air pollutant” at issue as an aggregate of six greenhouse gases; (5) EPA’s failure to consult its Science Advisory Board before issuing the Endangerment Finding; and (6) EPA’s denial of all petitions for reconsideration of the Endangerment Finding. We ultimately conclude that the Endangerment Finding is consistent with *Massachusetts v. EPA* and the text and structure of the CAA, and is adequately supported by the administrative record.

A.

Industry Petitioners contend 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.

These contentions are foreclosed by the language of the statute and the Supreme Court's decision in *Massachusetts v. EPA*. Section 202(a) of the CAA states in relevant part that EPA's Administrator

shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, 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 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. 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. 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 (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. 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.

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. 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. Instead of focusing on the question whether greenhouse gas emissions may reasonably be anticipated to endanger public health or welfare, the factors State and Industry Petitioners put forth only address what might happen were EPA to answer that question in the affirmative. As EPA stated in the Endangerment Finding, such inquiries “muddle the rather straightforward scientific judgment about whether there may be endangerment by throwing the potential impact of responding to the danger into the initial question.” 74 Fed. Reg. at 66,515. To be sure, the subsection following § 202(a)(1), § 202(a)(2), requires that EPA address limited questions about the cost of compliance with new emission standards and the availability of technology for meeting those standards, *see infra* Part III, but these judgments are not part of the § 202(a)(1) endangerment inquiry. The Supreme Court made clear in *Massachusetts v. EPA* that it was not addressing the question “whether policy concerns can inform EPA’s actions in the event that it makes such a finding,” 549 U.S. at 534-35, but that policy concerns were not part of the calculus for the determination of the endangerment finding in the first instance. The Supreme Court emphasized that it was holding “that EPA must ground its reasons for action or inaction in

the statute.” *Id.* at 535. The statute speaks in terms of endangerment, not in terms of policy, and EPA has complied with the statute.

State and Industry Petitioners insist that because statutes should be interpreted to avoid absurd results, EPA should have considered at least the “absurd” consequences that would follow from an endangerment finding for greenhouse gases. Specifically: having made an endangerment finding, EPA will proceed to promulgate emission standards under § 202(a)(1). Issuing those standards triggers regulation – under EPA’s PSD and Title V programs – of stationary sources that emit greenhouse gases at levels above longstanding statutory thresholds. Because greenhouse gases are emitted in much higher volumes than other air pollutants, hundreds of thousands of small stationary sources would exceed those thresholds. This would subject those sources to PSD and Title V permitting requirements despite what Petitioners claim was Congress’s clear intent that the requirements apply only to large industrial sources. Petitioners assert that even EPA believed such overbroad regulation to be an absurd result, which it attempted to rectify by adopting the Tailoring Rule to raise the statutory thresholds, *see infra* Part VI.

However “absurd” Petitioners consider this consequence, though, it is still irrelevant to the endangerment inquiry. That EPA adjusted the statutory thresholds to accommodate regulation of greenhouse gases emitted by stationary sources may

indicate that the CAA is a regulatory scheme less-than-perfectly tailored to dealing with greenhouse gases. But the Supreme Court has already held that EPA indeed wields the authority to regulate greenhouse gases under the CAA. *See Massachusetts v. EPA*. The plain language of § 202(a)(1) of that Act does not leave room for EPA to consider as part of the endangerment inquiry the stationary-source regulation triggered by an endangerment finding, even if the degree of regulation triggered might at a later stage be characterized as “absurd.”

B.

State and Industry Petitioners next challenge the adequacy of the scientific record underlying the Endangerment Finding, objecting to both the type of evidence upon which EPA relied and EPA’s decision to make an Endangerment Finding in light of what Industry Petitioners view as significant scientific uncertainty. Neither objection has merit.

1.

As an initial matter, State and Industry Petitioners question EPA’s reliance on “major assessments” addressing greenhouse gases and climate change issued by the Intergovernmental Panel on Climate Change (IPCC), the U.S. Global Climate Research Program (USGCRP), and the National Research Council (NRC). Endangerment Finding, 74 Fed. Reg. at 66,510-11. These peer-reviewed assessments

synthesized thousands of individual studies on various aspects of greenhouse gases and climate change and drew “overarching conclusions” about the state of the science in this field. *Id.* at 66,511. The assessments provide data and information on, *inter alia*, “the amount of greenhouse gases being emitted by human activities”; their continued accumulation in the atmosphere; the resulting observed changes to Earth’s energy balance, temperature and climate at global and regional levels, and other “climate-sensitive sectors and systems of the human and natural environment”; the extent to which these changes “can be attributed to human-induced buildup of atmospheric greenhouse gases”; “future projected climate change”; and “projected risks and impacts to human health, society and the environment.” *Id.* at 66,510-11.

State and Industry Petitioners assert that EPA improperly “delegated” its judgment to the IPCC, USGCRP, and NRC by relying on these assessments of climate-change science. *See U.S. Telecom Ass’n v. FCC*, 359 F.3d 554, 566 (D.C. Cir. 2004). This argument is little more than a semantic trick. EPA did not delegate, explicitly or otherwise, any decision-making to any of those entities. EPA simply did here what it and other decision-makers often must do to make a science-based judgment: it sought out and reviewed existing scientific evidence to determine whether a particular finding was warranted. It makes no difference that much of the scientific evidence in large part consisted of “syntheses” of individual studies and

research. Even individual studies and research papers often synthesize past work in an area and then build upon it. This is how science works. EPA is not required to re-prove the existence of the atom every time it approaches a scientific question.

Moreover, it appears from the record that EPA used the assessment reports not as substitutes for its own judgment but as evidence upon which it relied to make that judgment. EPA evaluated the processes used to develop the various assessment reports, reviewed their contents, and considered the depth of the scientific consensus the reports represented. Based on these evaluations, EPA determined the assessments represented the best source material to use in deciding whether greenhouse gas emissions may be reasonably anticipated to endanger public health or welfare. Endangerment Finding, 74 Fed. Reg. at 66,510-11. It then reviewed those reports along with comments relevant to the scientific considerations involved to determine whether the evidence warranted an endangerment finding for greenhouse gases as it was required to do under the Supreme Court's mandate in *Massachusetts v. EPA*.

2.

Industry Petitioners also assert that the scientific evidence does not adequately support the Endangerment Finding. As we have stated before in reviewing the science-based decisions of agencies such as EPA, “[a]lthough we perform a searching and

careful inquiry into the facts underlying the agency's decisions, we will presume the validity of agency action as long as a rational basis for it is presented." *Am. Farm Bureau Fed'n v. EPA*, 559 F.3d 512, 519 (D.C. Cir. 2009) (internal quotation marks omitted). In so doing, "we give an extreme degree of deference to the agency when it is evaluating scientific data within its technical expertise." *Id.* (internal quotation marks omitted).

The body of scientific evidence marshaled by EPA in support of the Endangerment Finding is substantial. EPA's scientific evidence of record included support for the proposition that greenhouse gases trap heat on earth that would otherwise dissipate into space; that this "greenhouse effect" warms the climate; that human activity is contributing to increased atmospheric levels of greenhouse gases; and that the climate system is warming.

Based on this scientific record, EPA made the linchpin finding: in its judgment, the "root cause" of the recently observed climate change is "very likely" the observed increase in anthropogenic greenhouse gas emissions. Endangerment Finding, 74 Fed. Reg. at 66,518. EPA found support for this finding in three lines of evidence. First, it drew upon our "basic physical understanding" of the impacts of various natural and manmade changes on the climate system. For instance, EPA relied on evidence that the past half-century of warming has occurred at a time when natural forces such as solar and volcanic activity likely would have produced cooling. Endangerment

Finding, Response to Comments (RTC) Vol. 3, at 20. Other evidence supports EPA's conclusion that the observed warming pattern – warming of the bottom-most layer of the atmosphere and cooling immediately above it – is consistent with greenhouse-gas causation. *Id.*

EPA further relied upon evidence of historical estimates of past climate change, supporting EPA's conclusion that global temperatures over the last half-century are unusual. Endangerment Finding, 74 Fed. Reg. at 66,518. Scientific studies upon which EPA relied place high confidence in the assertion that global mean surface temperatures over the last few decades are higher than at any time in the last four centuries. Technical Support Document for the Endangerment Finding (TSD), at 31. These studies also show, albeit with significant uncertainty, that temperatures at many individual locations were higher over the last twenty-five years than during any period of comparable length since 900 A.D. *Id.*

For its third line of evidence that anthropogenic emissions of greenhouse gases spurred the perceived warming trend, EPA turned to computer-based climate-model simulations. Scientists have used global climate models built on basic principles of physics and scientific knowledge about the climate to try to simulate the recent climate change. These models have only been able to replicate the observed warming by including anthropogenic emissions of greenhouse gases in the simulations. Endangerment Finding, 74 Fed. Reg. at 66,523.

To recap, EPA had before it substantial record evidence that anthropogenic emissions of greenhouse gases “very likely” caused warming of the climate over the last several decades. EPA further had evidence of current and future effects of this warming on public health and welfare. Relying again upon substantial scientific evidence, EPA determined that anthropogenically induced climate change threatens both public health and public welfare. It found that extreme weather events, changes in air quality, increases in food- and water-borne pathogens, and increases in temperatures are likely to have adverse health effects. *Id.* at 66,497-98. The record also supports EPA’s conclusion that climate change endangers human welfare by creating risk to food production and agriculture, forestry, energy, infrastructure, ecosystems, and wildlife. Substantial evidence further supported EPA’s conclusion that the warming resulting from the greenhouse gas emissions could be expected to create risks to water resources and in general to coastal areas as a result of expected increase in sea level. *Id.* at 66,498. Finally, EPA determined from substantial evidence that motor-vehicle emissions of greenhouse gases contribute to climate change and thus to the endangerment of public health and welfare.

Industry Petitioners do not find fault with much of the substantial record EPA amassed in support of the Endangerment Finding. Rather, they contend that the record evidences too much uncertainty to support that judgment. But the existence of some

uncertainty does not, without more, warrant invalidation of an endangerment finding. If a statute is “precautionary in nature” and “designed to protect the public health,” and the relevant evidence is “difficult to come by, uncertain, or conflicting because it is on the frontiers of scientific knowledge,” EPA need not provide “rigorous step-by-step proof of cause and effect” to support an endangerment finding. *Ethyl Corp. v. EPA*, 541 F.2d 1, 28 (D.C. Cir. 1976). As we have stated before, “Awaiting certainty will often allow for only reactive, not preventive, regulation.” *Id.* at 25.

Congress did not restrict EPA to remedial regulation when it enacted CAA § 202(a). That section mandates that EPA promulgate new emission standards if it determines that the air pollution at issue “may reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7521(a)(1). This language requires a precautionary, forward-looking scientific judgment about the risks of a particular air pollutant, consistent with the CAA’s “precautionary and preventive orientation.” *Lead Indus. Ass’n, Inc. v. EPA*, 647 F.2d 1130, 1155 (D.C. Cir. 1980). Requiring that EPA find “certain” endangerment of public health or welfare before regulating greenhouse gases would effectively prevent EPA from doing the job Congress gave it in § 202(a) – utilizing emission standards to prevent reasonably anticipated endangerment from maturing into concrete harm. *Cf. id.* (“[R]equiring EPA to wait until it can conclusively demonstrate that a particular effect is adverse to

health before it acts is inconsistent with both the [CAA]’s precautionary and preventive orientation and the nature of the Administrator’s statutory responsibilities. Congress provided that the Administrator is to use his judgment in setting air quality standards precisely to permit him to act in the face of uncertainty.”).

In *Massachusetts v. EPA* the Supreme Court confirmed that EPA may make an endangerment finding despite lingering scientific uncertainty. Indeed, the Court held that the existence of “some residual uncertainty” did not excuse EPA’s decision to decline to regulate greenhouse gases. *Massachusetts v. EPA*, 549 U.S. at 534. To avoid regulating emissions of greenhouse gases, EPA would need to show “scientific uncertainty . . . so profound that it precludes EPA from making a reasoned judgment as to whether greenhouse gases contribute to global warming.” *Id.* Clearly, then, EPA may issue an endangerment finding even while the scientific record still contains at least “some residual uncertainty.” Industry Petitioners have shown no more than that.

In the end, Petitioners are asking us to re-weigh the scientific evidence before EPA and reach our own conclusion. This is not our role. As with other reviews of administrative proceedings, we do not determine the convincing force of evidence, nor the conclusion it should support, but only whether the conclusion reached by EPA is supported by substantial evidence when considered on the record as a whole. *See, e.g., New York v. EPA*, 413 F.3d 3, 30 (D.C. Cir. 2005).

When EPA evaluates scientific evidence in its bailiwick, we ask only that it take the scientific record into account “in a rational manner.” *Am. Petroleum Inst. v. Costle*, 665 F.2d 1176, 1187 (D.C. Cir. 1981). Industry Petitioners have not shown that EPA failed to do so here.

C.

State Petitioners, here led by Texas, contend that the Endangerment Finding is arbitrary and capricious because EPA did not “define,” “measure,” or “quantify” either the atmospheric concentration at which greenhouse gases endanger public health or welfare, the rate or type of climate change that it anticipates will endanger public health or welfare, or the risks or impacts of climate change. According to Texas, without defining these thresholds and distinguishing “safe” climate change from climate change that endangers, EPA’s Endangerment Finding is just a “subjective conviction.”

It is true that EPA did not provide a quantitative threshold at which greenhouse gases or climate change will endanger or cause certain impacts to public health or welfare. The text of CAA § 202(a)(1) does not require that EPA set a precise numerical value as part of an endangerment finding. Quite the opposite; the § 202(a)(1) inquiry necessarily entails a case-by-case, sliding-scale approach to endangerment because “[d]anger . . . is not set by a fixed probability of harm, but rather is composed of reciprocal

elements of risk and harm, or probability and severity.” *Ethyl*, 541 F.2d at 18. EPA need not establish a minimum threshold of risk or harm before determining whether an air pollutant endangers. It may base an endangerment finding on “a lesser risk of greater harm . . . or a greater risk of lesser harm” or any combination in between. *Id.*

Ethyl is instructive. There, EPA made an endangerment finding for airborne lead. During its endangerment inquiry, EPA initially tried to do what Texas asks of it here: find a specific concentration of the air pollutant below which it would be considered “safe” and above which it would endanger public health. *Id.* at 56. However, EPA abandoned that approach because it failed to account for “the wide variability of dietary lead intake” and lacked predictive value. EPA substituted a “more qualitative” approach, which relied on “predictions based on uncertain data” along with clinical studies. *Id.* at 56-57. This court upheld the endangerment finding that used that qualitative approach despite the lack of a specific endangerment “threshold.”

In its essence, Texas’s call for quantification of the endangerment is no more than a specialized version of Industry Petitioners’ claim that the scientific record contains too much uncertainty to find endangerment. EPA relied on a substantial record of empirical data and scientific evidence, making many specific and often quantitative findings regarding the impacts of greenhouse gases on climate change and the effects of climate change on public health and

welfare. Its failure to distill this ocean of evidence into a specific number at which greenhouse gases cause “dangerous” climate change is a function of the precautionary thrust of the CAA and the multivariate and sometimes uncertain nature of climate science, not a sign of arbitrary or capricious decision-making.

D.

EPA defined both the “air pollution” and the “air pollutant” that are the subject of the Endangerment Finding as an aggregate of six greenhouse gases, which EPA called “well mixed greenhouse gases”: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Industry Petitioners argue that EPA’s decision to include PFCs and SF₆ in this group of greenhouse gases was arbitrary and capricious primarily because motor vehicles generally do not emit these two gases.

No petitioner for review of the Endangerment Finding has established standing to make this argument. Industry Petitioners concede that EPA’s decision to regulate PFCs and SF₆ along with the other four greenhouse gases does not injure any motor-vehicle-related petitioner. Nor has any non-motor-vehicle-related petitioner shown an injury-in-fact resulting from EPA’s inclusion of these two gases in the six-gas amalgam of “well-mixed greenhouse gases.” At oral argument, Industry Petitioners asserted for the first time that certain utility companies –

members of associations that petitioned for review of the Endangerment Finding – own utility transformers that emit SF₆. However, they never demonstrated or even definitively asserted that any of these companies would not be subject to regulation or permitting requirements but for EPA’s decision to include SF₆ as part of the “well-mixed greenhouse gases” that are the subject of the Endangerment Finding. *See Sierra Club v. EPA*, 292 F.3d 895, 898-900 (D.C. Cir. 2002) (requiring that a petitioner seeking review of agency action demonstrate standing by affidavit or other evidence if standing is not “self-evident” from the administrative record). Absent a petitioner with standing to challenge EPA’s inclusion of PFCs and SF₆ in the “air pollution” at issue, this court lacks jurisdiction to address the merits of Industry Petitioners’ contention.

E.

EPA did not submit the Endangerment Finding for review by its Science Advisory Board (SAB). Industry Petitioners claim that EPA’s failure to do so violates its mandate to “make available” to the SAB “any proposed criteria document, standard, limitation, or regulation under the Clean Air Act” at the time it provides the same “to any other Federal agency for formal review and comment.” 42 U.S.C. § 4365(c)(1); *see Am. Petroleum Inst.*, 665 F.2d at 1188.

To begin with, it is not clear that EPA provided the Endangerment Finding “to any other Federal agency for formal review and comment,” which triggers this duty to submit a regulation to the SAB. EPA only submitted a draft of the Endangerment Finding to the Office of Information and Regulatory Affairs pursuant to Executive Order 12,866. EPA contends that this was merely an *informal* review process, not “formal review and comment” – at least when compared with a statutory review-and-comment requirement in which other agencies are given the opportunity to provide written comments about the impacts of a proposed regulation on the reviewing agency’s universe of responsibility. *See, e.g.*, 49 U.S.C. § 32902(j). Industry Petitioners failed to respond to this contention.

In any event, even if EPA violated its mandate by failing to submit the Endangerment Finding to the SAB, Industry Petitioners have not shown that this error was “of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made.” 42 U.S.C. § 7607(d)(8); *see Am. Petroleum Inst.*, 665 F.2d at 1188-89 (applying this standard to EPA’s failure to submit an ozone standard to the SAB).

F.

Lastly, State Petitioners maintain that EPA erred by denying all ten petitions for reconsideration of the

Endangerment Finding. Those petitions asserted that internal e-mails and documents released from the University of East Anglia's Climate Research Unit (CRU) – a contributor to one of the global temperature records and to the IPCC's assessment report – undermined the scientific evidence supporting the Endangerment Finding by calling into question whether the IPCC scientists adhered to “best science practices.” *EPA's Denial of the Petitions To Reconsider the Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* (“Reconsideration Denial”), 75 Fed. Reg. 49,556, 49,556-57 (Aug. 13, 2010). The petitions pointed to factual mistakes in the IPCC's assessment report resulting from the use of non-peer-reviewed studies and several scientific studies postdating the Endangerment Finding as evidence that the Endangerment Finding was flawed. *Id.*

On August 13, 2010, EPA issued a denial of the petitions for reconsideration accompanied by a 360-page response to petitions (RTP). *Id.* at 49,556. It determined that the petitions did not provide substantial support for the argument that the Endangerment Finding should be revised. According to EPA, the petitioners' claims based on the CRU documents were exaggerated, contradicted by other evidence, and not a material or reliable basis for questioning the credibility of the body of science at issue; two of the factual inaccuracies alleged in the petitions were in fact mistakes, but both were “tangential and minor” and did not change the key IPCC conclusions;

and the new scientific studies raised by some petitions were either already considered by EPA, misinterpreted or misrepresented by petitioners, or put forth without acknowledging other new studies. *Id.* at 49,557-58.

1.

EPA is required to convene a proceeding for reconsideration of a rule if a party raising an objection to the rule

can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.

42 U.S.C. § 7607(d)(7)(B). For the purpose of determining whether to commence reconsideration of a rule, EPA considers an objection to be of “central relevance to the outcome” of that rule “if it provides substantial support for the argument that the regulation should be revised.” Reconsideration Denial, 75 Fed. Reg. at 49,561.

State Petitioners have not provided substantial support for their argument that the Endangerment Finding should be revised. State Petitioners point out that some studies the IPCC referenced in its assessment were not peer-reviewed, but they ignore the fact that (1) the IPCC assessment relied on around 18,000

studies that were peer-reviewed, and (2) the IPCC's report development procedures expressly permitted the inclusion in the assessment of some non-peer-reviewed studies ("gray" literature).

Moreover, as EPA determined, the limited inaccurate information developed from the gray literature does not appear sufficient to undermine the substantial overall evidentiary support for the Endangerment Finding. State Petitioners have not, as they assert, uncovered a "pattern" of flawed science. Only two of the errors they point out seem to be errors at all, and EPA relied on neither in making the Endangerment Finding. First, as State Petitioners assert, the IPCC misstated the percentage of the Netherlands that is below sea level, a statistic that was used for background information. However, the IPCC corrected the error, and EPA concluded that the error was "minor and had no impact," and the Endangerment Finding did not refer to the statistic in any way. *Id.* at 49,576-77. Second, the IPCC acknowledged misstating the rate at which Himalayan glaciers are receding. EPA also did not rely on that projection in the Endangerment Finding. *Id.* at 49,577.

State Petitioners also contend that a new study contradicts EPA's reliance on a projection of more violent storms in the future as a result of climate change, but the study they cite only concerns past trends, not projected future storms. The record shows that EPA considered the new studies on storm trends and concluded that the studies were consistent with the Endangerment Finding. In sum, State Petitioners

have failed to show that these isolated “errors” provide substantial support for their argument to overturn the Endangerment Finding.

2.

State Petitioners’ further argument that EPA erred in denying reconsideration fails as well. These Petitioners claim EPA erred by failing to provide notice and comment before denying the petitions for reconsideration because EPA’s inclusion of a 360-page RTP amounted to a revision of the Endangerment Finding, and revision of a rule requires notice and comment. The RTP, however, appears to be exactly what EPA called it – a response to the petitions for reconsideration, not a revision of the Endangerment Finding itself. EPA certainly may deny petitions for reconsideration of a rule and provide an explanation for that denial, including by providing support for that decision, without triggering a new round of notice and comment for the rule.

III.

State and Industry Petitioners contend that in promulgating the Tailpipe Rule, EPA relied on an improper interpretation of CAA § 202(a)(1), and was arbitrary and capricious in failing to justify and consider the cost impacts of its conclusion that the Rule triggers stationary-source regulation under the PSD and Title V provisions. They do not challenge the substantive standards of the Rule and focus

principally on EPA's failure to consider the cost of stationary-source permitting requirements triggered by the Rule. Positing an absurd-consequences scenario, Petitioners maintain that if EPA had considered these costs it "would have been forced" to exclude carbon dioxide from the scope of the emission standards, to decline to issue greenhouse gas emission standards at all, or "to interpret the statute so as not to automatically trigger stationary source regulation." Industry Tailpipe Br. 17; *see also* Industry Tailpipe Reply Br. 8-9. Both the plain text of Section 202(a) and precedent refute Petitioners' contentions.

A.

Section 202(a)(1) 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). By employing the verb "shall," Congress vested a non-discretionary duty in EPA. *See Sierra Club v. Jackson*, 648 F.3d 848, 856 (D.C. Cir. 2011). The plain text of Section 202(a)(1) thus refutes Industry Petitioners' contention that EPA had discretion to defer issuance of motor-vehicle emission standards on the basis of stationary-source costs. Neither the adjacent text nor the statutory context

otherwise condition this clear “language of command,” *id.* (citation omitted). Having made the Endangerment Finding pursuant to CAA § 202(a), 42 U.S.C. § 7521(a), EPA lacked discretion to defer promulgation of the Tailpipe Rule on the basis of its trigger of stationary-source permitting requirements under the PSD program and Title V.

The Supreme Court’s decision in *Massachusetts v. EPA* compels this interpretation of Section 202(a)(1). “If EPA makes a finding of endangerment, the Clean Air Act requires the [a]gency to regulate emissions of the deleterious pollutant from new motor vehicles.” 549 U.S. at 533. “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.” *Id.* (emphasis added). In the Endangerment Finding, EPA determined that motor-vehicle emissions contribute to greenhouse gas emissions that, in turn, endanger the public health and welfare; the agency therefore was in no position to “avoid taking further action,” *id.*, by deferring promulgation of the Tailpipe Rule. Given the non-discretionary duty in Section 202(a)(1) and the limited flexibility available under Section 202(a)(2), which this court has held relates only to the motor-vehicle industry, *see infra* Part III.C, EPA had no statutory basis on which it could “ground [any] reasons for” further inaction, *Massachusetts v. EPA*, 549 U.S. at 535.

The plain text of Section 202(a)(1) also negates Industry Petitioners' contention that EPA had discretion to defer the Tailpipe Rule on the basis of NHTSA's authority to regulate fuel economy. The Supreme Court dismissed a near-identical argument in *Massachusetts v. EPA*, rejecting the suggestion that EPA could decline to regulate carbon-dioxide emissions because the Department of Transportation (DOT) had independent authority to set fuel-efficiency standards. *Id.* at 531-32. "[T]hat DOT sets mileage standards in no way licenses EPA to shirk its environmental responsibilities," because EPA's duty to promulgate emission standards derives from "a statutory obligation wholly independent of DOT's mandate to promote energy efficiency." *Id.* at 532. Just as EPA lacks authority to refuse to regulate on the grounds of NHTSA's regulatory authority, EPA cannot defer regulation on that basis. A comparison of the relevant statutes bolsters this conclusion. *Compare* 49 U.S.C. § 32902(f) ("When deciding maximum feasible average fuel economy . . . , the Secretary of Transportation shall consider . . . the effect of other motor vehicle standards of the Government on fuel economy. . . ."), *with* 42 U.S.C. § 7521(a) (including no such direction). Nor, applying the same reasoning, was EPA required to treat NHTSA's proposed regulations as establishing the baseline for the Tailpipe Rule. Furthermore, the Tailpipe Rule provides benefits above and beyond those resulting from NHTSA's fuel-economy standards. *See, e.g.*, Tailpipe Rule, 75 Fed. Reg. at 25,490 (Table III.F.1-2), 25,636 (Table

IV.G.1-4). Petitioners' related contentions regarding the PSD permitting triggers are addressed in Part V.

B.

Turning to the APA [sic], 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 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.

C.

Petitioners also invoke Section 202(a)(2) as support for their contention that EPA must consider stationary-source costs in the Tailpipe Rule. Section 202(a)(2) provides:

Any regulation prescribed under paragraph (1) of this subsection . . . 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.

42 U.S.C. § 7521(a)(2). State Petitioners maintain the reference to compliance costs encompasses those experienced by stationary sources under the PSD program, while Industry Petitioners maintain stationary-source costs are a relevant factor in EPA's Section 202(a)(1) rulemaking. This court, however, has held that the Section 202(a)(2) reference to compliance costs encompasses only the cost to the motor-vehicle industry to come into compliance with the new emission standards, and does not mandate consideration of costs to other entities not directly subject to the proposed standards. *See Motor & Equip. Mfrs. Ass'n, Inc. v. EPA*, 627 F.2d 1095, 1118 (D.C. Cir. 1979).

D.

Petitioners' remaining challenges to the Tailpipe Rule fail as well. In Part II, the court rejects the

contention that the Tailpipe Rule fails due to flaws in the underlying Endangerment Finding. The record also refutes Industry Petitioners' suggestion that EPA "employed a shell game to avoid," Industry Tailpipe Reply Br. 9 (capitalization removed), responding to comments regarding stationary-source costs. Industry Tailpipe Br. 19-20; *see also* Industry Tailpipe Reply Br. 14-15. EPA adequately responded to "significant comments," 42 U.S.C. § 7607(d)(6)(B). *See, e.g.,* Tailpipe Rule, 75 Fed. Reg. at 25,401-02; Tailpipe Rule, Response to Comments at 7-65 to 7-69. And, assuming other statutory mandates provide a basis for judicial review, *see* Industry Tailpipe Br. 21-22 (listing mandates); *see, e.g., Small Refiner*, 705 F.2d at 537-39, the record shows EPA's compliance, *see* Tailpipe Rule, 75 Fed. Reg. at 25,539-42, and that EPA was not arbitrary and capricious by not considering stationary-source costs in its analyses. *See, e.g., Michigan v. EPA*, 213 F.3d 663, 689 (D.C. Cir. 2000); *Mid-Tex Elec. Coop., Inc. v. FERC*, 773 F.2d 327, 341-42 (D.C. Cir. 1985). EPA's economic impact assessment conducted pursuant to CAA § 317, 42 U.S.C. § 7617, does not provide grounds for granting the petitions because Petitioners' contentions that EPA, "[i]n defiance of these requirements, . . . refused to estimate or even consider the costs of the [Tailpipe Rule] for stationary sources," Industry Tailpipe Br. 22, are no more than another attempt to avoid the plain text of Section 202(a). *See also* 42 U.S.C. § 7617(e).

IV.

We turn next to the stationary source regulations. As noted *supra* in Part I, EPA's interpretation of the CAA requires PSD and Title V permits for stationary sources whose potential emissions exceed statutory thresholds for *any* regulated pollutant – including greenhouse gases. Industry Petitioners now challenge EPA's longstanding interpretation of the scope of the permitting requirements for construction and modification of major emitting facilities under CAA Sections 165(a) and 169(1), 42 U.S.C. §§ 7475(a) & 7479(1) (“the PSD permitting triggers”). EPA maintains that this challenge is untimely because its interpretation of the PSD permitting triggers was set forth in its 1978, 1980, and 2002 Rules.

In 1978, EPA defined “major stationary source” as a source that emits major amounts of “any air pollutant regulated under the [CAA].” *Part 51 – Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Prevention of Significant Air Quality Deterioration* (“1978 Implementation Plan Requirements”), 43 Fed. Reg. 26,380, 26,382 (June 19, 1978). Industry petitioners’ challenge to the 1978 Rule in *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1980) reflected their understanding that EPA would apply the PSD permitting program to both pollutants regulated pursuant to National Ambient Air Quality Standards (NAAQS) and other regulated pollutants. *See* Br. for Industry Pet’rs on Regulation of Pollutants other than Sulfur Dioxide and Particulates, No. 78-1006 (and consolidated

cases) (Dec. 19, 1978) at 10, 12. In the 1980 Rule, EPA highlighted that to be subject to PSD review, a “source need only emit *any* pollutant in major amounts (i.e., the amounts specified in [CAA § 169(1)]) and be located in an area designated attainment or unclassifiable for that or any other pollutant.” 1980 Implementation Plan Requirements, 45 Fed. Reg. at 52,711 (emphasis in original). EPA explained that “*any* pollutant” meant “both criteria pollutants, for which national ambient air quality standards have been promulgated, and non-criteria pollutants subject to regulation under the Act.” *Id.* The same explanation of EPA’s interpretation appeared in the 2002 Rule. *Prevention of Significant Deterioration and Nonattainment New Source Review*, 67 Fed. Reg. 80,186, 80,239-40, 80,264 (Dec. 31, 2002).

CAA Section 307(b)(1) provides that a petition for review of any promulgated nationally applicable regulations:

“shall be filed within sixty days from the date notice of such promulgation . . . appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review . . . shall be filed within sixty days after such grounds arise.”

42 U.S.C. § 7607(b)(1). The exception encompasses the occurrence of an event that ripens a claim. *See Chamber of Commerce v. EPA*, 642 F.3d 192, 208 n.14 (D.C. Cir. 2011); *Am. Rd. & Transp. Builders Ass’n v.*

EPA, 588 F.3d 1109, 1113 (D.C. Cir. 2009). EPA acknowledges this precedent, but maintains that the “new grounds” exception is narrow and inapplicable because Industry Petitioners’ challenge to EPA’s interpretation of the PSD permitting triggers is based on legal arguments that were available during the normal judicial review periods for the 1978, 1980, and 2002 Rules, and the “new ground” on which they now rely is a factual development, namely the regulation of greenhouse gases by the Tailpipe Rule. This is correct so far as it goes, but fails to demonstrate that Industry Petitioners’ challenge is untimely.

Industry Petitioners point out that two petitioners – the National Association of Home Builders (NAHB) and National Oilseed Processors Association (NOPA) – have newly ripened claims as a result of the Tailpipe Rule, which had the effect of expanding the PSD program to never-regulated sources:

- NAHB’s members construct single family homes, apartment buildings, and commercial buildings. According to the Vice President of Legal Affairs, prior to the Tailpipe Rule, no member of NAHB was a major source of any regulated pollutant, and thus no member was ever required to obtain a PSD permit. Decl. of Thomas J. Ward, Vice President of Legal Affairs for NAHB, ¶ 6 (May 10, 2011). Since the Tailpipe Rule rendered greenhouse gases a regulated pollutant, it is now certain that NAHB members that engage in construction projects that emit greenhouse gases in major amounts will have to obtain PSD

permits sometime in the future. *Id.* at ¶¶ 7, 8. Indeed, EPA estimated that 6,397 multi-family buildings and 515 single family homes would trigger PSD review annually absent the Tailoring Rule. *See Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule; Proposed Rule* (“Proposed Tailoring Rule”), 74 Fed. Reg. 55,292, 55,338 (Oct. 27, 2009).

- NOPA’s members are large companies that monthly produce millions of tons of vegetable meals and over a billion pounds of oils from oilseeds, such as soybeans. *See, e.g.,* NOPA, January 2012 Statistical Report (Feb. 14, 2012) *available at www.nopa.org*; NOPA, February 2012 Statistical Report (Mar. 14, 2012), *available at www.nopa.org*. According to the Executive Vice President of Regulatory Affairs, NOPA members operate facilities that are major sources of criteria pollutants and, for this reason, are subject to PSD review. Decl. of David C. Ailor, Executive Vice President of Regulatory Affairs of NOPA, ¶ 8 (May 10, 2011). Prior to promulgation of the Tailpipe Rule, no member’s facility had triggered PSD review by virtue of emissions of a non-criteria pollutant. *Id.* Now that greenhouse gases are a regulated non-criteria pollutant, many NOPA members will have to obtain PSD permits as result of their facilities’ emissions of a non-criteria pollutant. *Id.* at ¶¶ 9, 10. For some NOPA members this time is not far off because renovations to their facilities will result in greenhouse gas emissions above the significance thresholds

set by the Tailoring Rule, 75 Fed. Reg. at 31,567. *Id.* at ¶ 9.

Industry Petitioners thus maintain that because NAHB and NOPA filed their petitions on July 6, 2010, within 60 days of the promulgation of the Tailpipe Rule in the Federal Register on May 7, 2010, their challenges are timely.

“Ripeness, while often spoken of as a justiciability doctrine distinct from standing, in fact shares the constitutional requirement of standing that an injury in fact be certainly impending.” *Nat’l Treasury Emp. Union v. United States*, 101 F.3d 1423, 1427 (D.C. Cir. 1996). During an initial review period, although purely legal claims may be justiciable and, thus, prudentially ripe, a party without an immediate or threatened injury lacks a constitutionally ripe claim. *See Baltimore Gas & Elec. Co. v. ICC*, 672 F.2d 146, 149 (D.C. Cir. 1982). EPA’s position would conflate the constitutional and prudential considerations. Constitutional ripeness exists where a challenge “involve[s], at least in part, the existence of a live ‘Case or Controversy.’” *Duke Power Co. v. Carolina Envtl. Study Group*, 438 U.S. 59, 81 (1978). Prudential considerations embodied in the ripeness doctrine relate to “the fitness of the issues for judicial decision and the hardship to the parties of withholding court consideration.” *Abbott Labs. v. Gardner*, 387 U.S. 136, 149 (1967); *see Duke Power*, 438 U.S. at 81. Standing to challenge agency action exists where a petitioner can demonstrate an “injury in fact” that is fairly traceable to the challenged action and is likely to be redressed

by a favorable judicial decision. *Reytblatt v. NRC*, 105 F.3d 715, 721 (D.C. Cir. 1997) (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992)).

Had NAHB and NOPA challenged EPA's interpretation of the PSD permitting triggers in 1978, 1980, or 2002, as EPA suggests, the court would have lacked jurisdiction under Article III of the Constitution because their alleged injuries were only speculative. *See, e.g., Occidental Permian Ltd. v. FERC*, 673 F.3d 1024, 1026 (D.C. Cir. 2012); *Baltimore Gas & Elec. Co.*, 672 F.2d at 149. At that time, NAHB and NOPA could have shown only the possibility that their members would be injured if EPA were someday to determine that greenhouse gases were a pollutant that endangers human health and welfare and to adopt a rule regulating the greenhouse gas emissions of stationary sources. EPA does not challenge the assertions in the NAHB and NOPA declarations, which establish no such rule was promulgated prior to the Tailpipe Rule.

The NAHB and NOPA challenges ceased to be speculative when EPA promulgated the Tailpipe Rule regulating greenhouse gases and their challenges ripened because of the "substantial probability" of injury to them. *See Baltimore Gas & Elec. Co.*, 672 F.2d at 149. Although, as EPA notes, other Industry Petitioners' challenges to EPA's interpretation of the PSD permitting triggers ripened decades earlier, this court has assured petitioners with unripe claims that "they will not be foreclosed from judicial review when the appropriate time comes," *Grand Canyon Air Tour*

Coalition v. FAA, 154 F.3d 455, 473 (D.C. Cir. 1998), and that they “need not fear preclusion by reason of the 60-day stipulation [barring judicial review],” *Baltimore Gas & Elec. Co.*, 672 F.2d at 149-50. EPA expresses concern that allowing NAHB and NOPA to litigate their newly ripened claims will have far-reaching implications for finality of agency actions, but “the ripeness doctrine reflects a judgment that the disadvantages of a premature review that may prove too abstract or unnecessary ordinarily outweigh the additional costs of – even repetitive – . . . litigation.” *Ohio Forestry Ass’n, Inc. v. Sierra Club*, 523 U.S. 726, 735 (1998). Some limitations inhere in doctrines such as *stare decisis* or the law-of-the-circuit doctrine, see *LaShawn A. v. Barry*, 87 F.3d 1389, 1395 (D.C. Cir. 1996) (en banc).

Because petitioners NAHB and NOPA’s challenges to EPA’s PSD permitting triggers are newly ripened upon promulgation of the Tailpipe Rule and they filed petitions for review within sixty days thereof, their challenge to EPA’s interpretation of the PSD permitting triggers is timely.

V.

Having established that Industry Petitioners’ challenges to the PSD permitting triggers are both timely and ripe, we turn to the merits of their claims.

A.

CAA Title I, Part C – entitled “Prevention of Significant Deterioration of Air Quality” (PSD) – largely focuses on the maintenance of national ambient air quality standards (NAAQS). Under the PSD program, EPA designates specific pollutants as “NAAQS pollutants” and sets national ambient air quality standards for those pollutants – requiring, for example, that the concentration of a given NAAQS pollutant may not exceed more than a certain number of parts per billion in the ambient air. *See generally* 42 U.S.C. § 7407. Thus far, EPA has designated six NAAQS pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution, and sulfur dioxide. None of these NAAQS pollutants is one of the six well-mixed greenhouse gases defined as an “air pollutant” in the Endangerment Finding. *See* Environmental Protection Agency, National Ambient Air Quality Standards, *available at* <http://www.epa.gov/air/criteria.html> (last visited May 3, 2012); Endangerment Finding, 74 Fed. Reg. 66,536-37.

Acting upon information submitted by states, EPA then determines whether each region of the country is in “attainment” or “nonattainment” with the promulgated air quality standard for each NAAQS pollutant, or, alternatively, whether a region is “unclassifiable” for that pollutant. 42 U.S.C. § 7407(d)(1)(A). An area in attainment for a NAAQS pollutant is “any area . . . that meets the . . . ambient air quality standard for the pollutant.” *Id.* § 7407(d)(1)(A)(ii). By contrast, an area in nonattainment for a NAAQS pollutant is “any

area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national . . . ambient air quality standard for the pollutant.” *Id.* § 7407(d)(1)(A)(i). Finally, an unclassifiable area is any area that “cannot be classified on the basis of available information as meeting or not meeting the . . . ambient air quality standard for the pollutant.” *Id.* § 7407(d)(1)(A)(iii).

The PSD program applies to those areas of the United States designated as in “attainment” or “unclassifiable” for any NAAQS pollutant, *see id.* § 7471, and requires permits for major emitting facilities embarking on construction or modification projects in those regions. *Id.* § 7475(a). A separate part of Title I of the CAA, Part D, governs the construction and modification of sources in nonattainment regions. *See id.* §§ 7501, 7502. It bears emphasis that attainment classifications are pollutant-specific: depending on the levels of each NAAQS pollutant in an area, a region can be designated as in attainment for NAAQS pollutant A, but in nonattainment for NAAQS pollutant B. If a major emitting facility in such a region wishes to undertake a construction or modification project, both Part C and Part D’s substantive requirements apply – that is, the source must obtain a general PSD permit and must also abide by Part D’s more stringent, pollutant-specific requirements for any NAAQS pollutants for which the area is in nonattainment. *See* 1980 Implementation Plan Requirements, 45 Fed. Reg. at 52,711-12 (“where a source emits in major amounts a pollutant for which the

area in which the source would locate is designated nonattainment, Part D NSR rather than Part C PSD review should apply *to those pollutants.*”) (emphasis added).

The key substantive provision in the PSD program is CAA Section 165(a), which establishes permitting requirements for “major emitting facilities” located in attainment or unclassifiable regions. In relevant part, section 165(a) provides that “[n]o major emitting facility . . . may be constructed in any area to which this part applies unless” the facility obtains a PSD permit. 42 U.S.C. § 7475(a). To obtain a PSD permit, a covered source must, among other things, install the “best available control technology [BACT] for each pollutant subject to regulation under [the CAA]” – regardless of whether that pollutant is a NAAQS pollutant. *Id.* § 7475(a)(4). Since the Tailpipe Rule became effective, EPA has regulated automotive greenhouse gas emissions under Title II of the Act. Thus, greenhouse gases are now a “pollutant subject to regulation under” the Act, and, as required by the statute itself, any “major emitting facility” covered by the PSD program must install BACT for greenhouse gases. *See id.*

The dispute in this case centers largely on the scope of the PSD program – specifically, which stationary sources count as “major emitting facilities” subject to regulation. CAA Section 169(1) defines “major emitting facility,” for the purposes of the PSD program, as a stationary source “which emit[s], or [has] the potential to emit” either 100 tons per year

(tpy) or 250 tpy of “*any air pollutant.*” 42 U.S.C. § 7479(1) (emphasis added). As discussed *supra* in Part I, whether the 100 or 250 tpy threshold applies depends on the type of source. Certain listed categories of sources – for example, iron and steel mill plants – qualify as “major emitting facilities” if they have the potential to emit over 100 tons per year of “any air pollutant.” *Id.* All other stationary sources are “major emitting facilities” if they have the potential to emit over 250 tons per year of “any air pollutant.” *Id.*

As mentioned above, since 1978 EPA has interpreted the phrase “any air pollutant” in the definition of “major emitting facility” as “any air pollutant regulated under the CAA.” *See* 1978 Implementation Plan Requirements, 43 Fed. Reg. at 26,388, 26,403; *supra* Part IV. Thus, because the PSD program covers “major emitting facilities” in “any area to which this part applies,” 42 U.S.C. § 7475, EPA requires PSD permits for stationary sources that 1) are located in an area designated as attainment or unclassifiable for any NAAQS pollutant, and 2) emit 100/250 tpy of any regulated air pollutant, regardless of whether that pollutant is itself a NAAQS pollutant. *See* 1980 Implementation Plan Requirements, 45 Fed. Reg. at 52,710-11. Consequently, once the Tailpipe Rule took effect and made greenhouse gases a regulated pollutant under Title II of the Act, the PSD program automatically applied to facilities emitting over 100/250 tpy of greenhouse gases. But because immediate regulation of greenhouse gas-emitting sources

exceeding the 100/250 tpy benchmark would result in “overwhelming permitting burdens that would . . . fall on permitting authorities and sources,” Tailoring Rule, 75 Fed. Reg. at 31,516, EPA’s Tailoring Rule provided that, for now, sources are subject to PSD permitting requirements only if they have the potential to emit over 100,000 tpy of greenhouse gases (for a construction project) or 75,000 tpy (for a modification project). *Id.* at 31,523; *see also infra*, Part VI.

According to EPA, its longstanding interpretation of the phrase “any air pollutant” – “any air pollutant regulated under the CAA” – is compelled by the statute. *See id.* at 31,517. Disputing this point, Industry Petitioners argue that the phrase is capable of a far more circumscribed meaning and that EPA could have – and should have – avoided extending the PSD permitting program to major greenhouse gas emitters. For the reasons discussed below, we agree with EPA that its longstanding interpretation of the PSD permitting trigger is statutorily compelled. Thus, as EPA argues, it “must give effect to the unambiguously expressed intent of Congress,” *Chevron*, 467 U.S. at 843, which here requires PSD coverage for major emitters of any regulated air pollutant.

We begin our analysis, as we must, with the statute’s plain language. *See Chevron*, 467 U.S. at 842 (“First, always, is the question whether Congress has directly spoken to the precise question at issue.”). CAA Section 169(1) requires PSD permits for stationary sources emitting major amounts of “*any* air pollutant.” 42 U.S.C. § 7479(1) (emphasis added). On

its face, “the word ‘any’ has an expansive meaning, that is, ‘one or some indiscriminately of whatever kind,’” *United States v. Gonzales*, 520 U.S. 1, 5 (1997) (quoting WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 97 (1976)). Greenhouse gases are indisputably an “air pollutant.” See *Massachusetts v. EPA*, 549 U.S. at 528-29. Congress’s use of the broad, indiscriminate modifier “any” thus strongly suggests that the phrase “any air pollutant” encompasses greenhouse gases.

This plain-language reading of the statute is buttressed by the Supreme Court’s decision in *Massachusetts v. EPA*. There the Court determined that CAA’s overarching definition of “air pollutant” in Section 302(g) – which applies to all provisions of the Act, including the PSD program – unambiguously includes greenhouse gases. Noting that “[t]he Clean Air Act’s sweeping definition of ‘air pollutant’ includes ‘any air pollution agent or combination of such agents. . . . which is emitted into or otherwise enters the ambient air,” the Court held that “the definition embraces *all* airborne compounds of whatever stripe, and underscores that intent through repeated use of the word ‘any.’” *Id.* at 529 (quoting 42 U.S.C. § 7602(g)) (second and third emphases added). Crucially for purposes of the issue before us, the Court concluded that “[t]he statute is unambiguous.” *Id.*

Thus, we are faced with a statutory term – “air pollutant” – that the Supreme Court has determined unambiguously encompasses greenhouse gases. This phrase is preceded by the expansive term “any,” a

word the Court held “underscores” Congress’s intent to include “all” air pollutants “of whatever stripe.” *See id.* Absent some compelling reason to think otherwise, “‘any’ . . . means any,” *Ford v. Mabus*, 629 F.3d 198, 206 (D.C. Cir. 2010), and Petitioners have given us no reason to construe that word narrowly here. To the contrary: given both the statute’s plain language and the Supreme Court’s decision in *Massachusetts v. EPA*, we have little trouble concluding that the phrase “any air pollutant” includes *all* regulated air pollutants, including greenhouse gases.

In reaching this conclusion, we recognize that EPA’s definition of “any air pollutant” slightly narrows the literal statutory definition, which nowhere requires that “any air pollutant” be a *regulated* pollutant. *See* 42 U.S.C. § 7479(1). But this does not make the statutory language ambiguous. Indeed, “any regulated air pollutant” is the only logical reading of the statute. The CAA’s universal definition of “air pollutant” – the one at issue in *Massachusetts v. EPA* – provides that the term includes “any physical, chemical, biological [or] radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air.” *Id.* § 7602(g). Of course, nothing in the CAA requires regulation of a substance simply because it qualifies as an “air pollutant” under this broad definition. As discussed *supra* in Parts II and III, for example, the Act requires EPA to prescribe motor vehicle “standards applicable to the emission of any air pollutant” only if that pollutant “cause[s], or contribute[s] to, air pollution which may reasonably

be anticipated to endanger public health or welfare.” *Id.* § 7521(a)(1). But if “any air pollutant” in the definition of “major emitting facility” was read to encompass both regulated and nonregulated air pollutants, sources could qualify as major emitting facilities – and thus be subjected to PSD permitting requirements – if they emitted 100/250 tpy of a “physical, chemical, [or] biological” substance EPA had determined was harmless. It is absurd to think that Congress intended to subject stationary sources to the PSD permitting requirements due to emissions of substances that do not “endanger public health or welfare.” *Id.* § 7521(a)(1). Thus, “any regulated air pollutant” is, in this context, the only plausible reading of “any air pollutant.”

We find further support for this definition throughout the CAA. First, as previously mentioned, the PSD program provides that all major emitting facilities must install BACT for “each pollutant subject to regulation under [the CAA].” *Id.* § 7475(a)(4). “Each pollutant subject to regulation under” the Act is, of course, synonymous with “any air pollutant regulated under the Act.” Thus, EPA’s interpretation of “any air pollutant” in the definition of “major emitting facilities” harmonizes the PSD program’s scope (i.e., which pollutants trigger PSD coverage) with its substantive requirements (i.e., which pollutants must be controlled to obtain a permit). In other words, because a covered source must control greenhouse gas emissions, it makes sense that major

emissions of greenhouse gases would subject that source to the PSD program.

Second, a PSD permittee is required to establish that it

will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies more than one time per year, (B) national ambient air quality standard in any air quality control region, or (C) any other applicable emission standard or standard of performance under [the CAA].

Id. § 7475(a)(3). Subsections (A) and (B) prohibit a permitted source from contributing to a concentration of NAAQS pollutants that exceeds EPA’s standards. By contrast, subsection (C) has an entirely different focus: it prohibits a permitted source from causing or contributing to air pollution in excess of *any* CAA emission standard. Thus, as EPA notes, “what this provision establishes is that while the PSD program was certainly directed towards NAAQS-criteria pollutants, it also was directed at maintaining air quality for other pollutants regulated under other provisions.” EPA Timing & Tailoring Br. 101. EPA’s determination that “any air pollutant” means “any air pollutant regulated under the Act” – encompassing the greenhouse gases regulated under Title II – is entirely consistent with this focus.

Finally, Congress made perfectly clear that the PSD program was meant to protect against precisely the types of harms caused by greenhouse gases. The PSD provision contains a section entitled “Congressional declaration of purpose,” which provides, in relevant part, that “[t]he purposes of this part are . . . to protect public health and welfare from any actual or potential adverse effect which in the Administrator’s judgment may reasonably be anticipated to occur from air pollution.” 42 U.S.C. § 7470(1). The CAA further provides that “[a]ll language referring to effects on welfare includes, but is not limited to, effects on . . . weather . . . and climate.” *Id.* § 7602(h). As previously noted, EPA in the Endangerment Finding “marshaled . . . substantial . . . scientific evidence . . . for the proposition that greenhouse gases trap heat on earth that would otherwise dissipate into space [and] that this ‘greenhouse effect’ warms the climate.” Part II, *supra* at 28-29. It further concluded that this “anthropogenically induced climate change” was likely to threaten the public welfare through, among other things, “extreme weather events.” *Id.* at 15-16. Thus, one express purpose of the program is to protect against the harms caused by greenhouse gases.

In sum, we are faced with a statutory term – “any air pollutant” – that the Supreme Court has determined is “expansive,” and “unambiguous[ly]” includes greenhouse gases. *Massachusetts v. EPA*, 549 U.S. at 529. Moreover, the PSD program requires covered sources to install control technology for “each

pollutant” regulated under the CAA, 42 U.S.C. § 7475(a)(4), and to establish that they “will not cause, or contribute to, air pollution in excess of *any* . . . emission standard . . . under [the CAA].” *Id.* § 7475(a)(3) (emphasis added). These provisions demonstrate that the PSD program was intended to control pollutants regulated under every section of the Act. Finally, Congress’s “Declaration of Purpose” expressly states that the PSD program was meant, in part, to protect against adverse effects on “weather” and “climate” – precisely the types of harm caused by greenhouse gases. *See id.* § 7470(1). Given all this, we have little trouble concluding that “any air pollutant” in the definition of “major emitting facility” unambiguously means “any air pollutant regulated under the CAA.”

B.

Industry Petitioners offer three alternative interpretations of the PSD permitting triggers, none of which cast doubt on the unambiguous nature of the statute.

As a preliminary matter, we note that none of Petitioners’ alternative interpretations applies to Title V. To the contrary, all of the proposed alternative interpretations are based on the structure of – and purported Congressional intent behind – the PSD program. Indeed, Industry Petitioners never argue that their proposed alternative interpretations are relevant to Title V. Petitioners have thus forfeited any

challenges to EPA's greenhouse gas-inclusive interpretation of Title V. *See, e.g., Nat'l Steel & Shipbuilding Co. v. NLRB*, 156 F.3d 1268, 1273 (D.C. Cir. 1998) (petitioners forfeit an argument by failing to raise it in their opening brief).

Industry Petitioners' first alternative is simple enough. Because the PSD program focuses on "the air people breathe in certain geographically defined . . . areas," Coalition for Responsible Reg. Timing & Tailoring Br. 38, Industry Petitioners contend that the term "pollutant" in the PSD statute encompasses only air pollutants that, unlike greenhouse gases, "pollute locally." *Id.* at 35. Industry Petitioners would thus apply a greenhouse gas-exclusive interpretation of "pollutant" throughout the statute's PSD provision. Under this reading, a source would qualify as a "major emitting facility" only if it emits 100/250 tpy of "any air pollutant" except greenhouse gases. *See* 42 U.S.C. § 7479(1). Moreover, sources that *are* subject to PSD permitting requirements would be required to install BACT for "each pollutant subject to regulation under [the CAA]" – except greenhouse gases. *Id.* § 7475(a)(4).

We can easily dispose of Industry Petitioners' argument that the PSD program's "concerns with local emissions," Coalition for Responsible Reg. Timing & Tailoring Br. 36, somehow limit the BACT provision. The statutory text provides, without qualification, that covered sources must install the "best available control technology for *each pollutant subject to regulation* under [the CAA]." 42 U.S.C. § 7475(a)(4)

(emphasis added). Because greenhouse gases are indisputably a pollutant subject to regulation under the Act, it is crystal clear that PSD permittees must install BACT for greenhouse gases. “When the words of a statute are unambiguous . . . judicial inquiry is complete.” *Connecticut Nat’l Bank v. Germain*, 503 U.S. 249, 254 (1992) (internal quotation marks omitted).

Equally without merit is Industry Petitioners’ argument that the PSD program’s regional focus requires a greenhouse gas-exclusive interpretation of “any air pollutant” in the definition of “major emitting facility.” In support of this contention, Industry Petitioners note that CAA Section 161 provides that states’ implementation plans for the PSD program “shall contain emission limitations and such other measures as may be necessary . . . to prevent *significant deterioration of air quality in each region*.” 42 U.S.C. § 7471 (emphasis added). The term “air quality,” Industry Petitioners contend, implies a focus on “the air people breathe,” and the term “in each region” suggests that Congress was concerned about local, not global, effects. *See* Coalition for Responsible Reg. Timing & Tailoring Br. 36. Moreover, Industry Petitioners note that when Congress enacted the PSD program in 1977, it did so “against the backdrop of a known universe of CAA-regulated pollutants.” *Id.* All these pollutants, Industry Petitioners argue, “were regulated because they could cause elevated ground-level concentrations in ambient air people breathe.” *Id.* And as Industry Petitioners point out, EPA itself

has concluded that greenhouse gases are problematic for reasons other than local health and environmental concerns. In EPA's Advance Notice of Proposed Rulemaking for the regulations at issue here, for example, the agency noted that "[a] significant difference between the major [greenhouse gases] and most air pollutants regulated under the CAA is that [greenhouse gases] have much longer atmospheric lifetimes [and] . . . can remain in the atmosphere for decades to centuries." *Regulating Greenhouse Gas Emissions Under the Clean Air Act* ("Greenhouse Gas Advance Notice"), 73 Fed. Reg. 44,354, 44,400-01 (July 30, 2008). Moreover, "unlike traditional air pollutants," greenhouse gases "become well mixed throughout the global atmosphere so that the long-term distribution of [greenhouse gas] concentrations is not dependant on local emission sources." *Id.* Thus, Industry Petitioners conclude, greenhouse gases are problematic for reasons entirely distinct from the local concerns that provided the basis for the PSD program. Given this, the phrase "any air pollutant" cannot be applied to greenhouse gases in the context of the regionally-focused PSD program.

As an initial matter, we note that the Supreme Court rejected a very similar argument in *Massachusetts v. EPA*. There, EPA attempted to distinguish between greenhouse gases and other air pollution agents "because greenhouse gases permeate the world's atmosphere rather than a limited area near the earth's surface." *Massachusetts v. EPA*, 549 U.S. at 529 n.26. The Court held that this was "a plainly

unreasonable reading of a sweeping statutory provision designed to capture ‘*any* physical, chemical . . . substance or matter which is emitted into or otherwise enters the ambient air,’ *id.* (quoting 42 U.S.C. § 7602(g)), thus rejecting the dissent’s view that “EPA’s exclusion of greenhouse gases . . . is entitled to deference.” *Id.* As the Court noted, the purported distinction between greenhouse gases and “traditional” air pollutants “finds no support in the text of the statute, which uses the phrase ‘the ambient air’ without distinguishing between atmospheric layers.” *Id.* *Massachusetts v. EPA* thus forecloses Industry Petitioners’ argument that because greenhouse gases do not “cause elevated ground-level concentrations in ambient air people breathe,” Coalition for Responsible Reg. Timing & Tailoring Br. 36, EPA should have adopted a greenhouse gas-exclusive interpretation of “any air pollutant.”

We also have little trouble disposing of Industry Petitioners’ argument that the PSD program is specifically focused solely on localized air pollution. True, as Industry Petitioners note, one part of the PSD program requires states to “prevent significant deterioration of air quality in each region.” 42 U.S.C. § 7471 (emphasis added). But while localized air quality is obviously one concern of the PSD program, a comprehensive reading of the statute shows it was also meant to address a much broader range of harms. As an initial matter, the PSD provision’s “Congressional declaration of purpose” section expansively provides that the program is intended “to

protect public health and welfare from *any* actual or potential adverse effect . . . *from air pollution.*” *Id.* § 7470(1) (emphasis added). Nothing in this section limits the PSD program to adverse effects on local air quality; to the contrary, the word “any” here gives this clause an “expansive meaning” which we see “no reason to contravene.” *New York*, 443 F.3d at 885 (internal quotation marks omitted). Indeed, the CAA expressly provides that effects on “welfare” means “effects on . . . weather . . . and climate.” 42 U.S.C. § 7602(h). It seems quite clear to us, then, that the PSD program was intended to protect against precisely the types of harms caused by greenhouse gases. This broad understanding of the PSD program’s scope is buttressed by the fact that the program requires covered sources to control “each pollutant subject to regulation under [the CAA],” and further requires sources to comply with “*any* . . . emission standard” under the CAA. *Id.* §§ 7475(a)(3); (a)(4) (emphasis added). These substantive requirements amount to further evidence that Congress wanted the PSD program to cover all regulated pollutants, regardless of the type of harm those pollutants cause.

In light of the PSD program’s broad scope of regulation and the express purposes of the program, we conclude – consistent with the Supreme Court in *Massachusetts v. EPA* – that Industry Petitioners’ greenhouse gas-exclusive interpretation of “pollutant” is “a plainly unreasonable reading” of the statute. *Massachusetts v. EPA*, 549 U.S. at 529 n.26.

2.

For their second alternative interpretation, Industry Petitioners argue that the PSD program's definition of "major emitting facility" establishes a "pollutant-specific situs requirement." Am. Chemistry Council Br. 33. Under this reading of the statute, a stationary source is subject to PSD permitting requirements only if "(1) a source has major emissions of a NAAQS criteria pollutant and (2) the source is located in an area attaining *that pollutant's*" air quality standard. Coalition for Responsible Reg. Timing & Tailoring Br. 23. Thus, for example, a source would be subject to the PSD permitting requirements if it 1) emits over 100/250 tpy of sulfur dioxide (a NAAQS criteria pollutant), and 2) is located in an area that is in "attainment," or is "unclassifiable," for sulfur dioxide. But under this approach, a stationary source could never be subject to the PSD program solely because of its greenhouse gas emissions. After all, Industry Petitioners observe, EPA declined to make greenhouse gases a NAAQS criteria pollutant. Instead, EPA regulated greenhouse gases only under Title II of the Act, dealing with motor vehicle emissions. Because "no major source of [greenhouse gases] can be located in an area attaining the nonexistent [air quality standard] for [greenhouse gases]," *id.* at 24, Industry Petitioners point out that their reading of the statute would bring no new stationary sources under the PSD program's ambit – alleviating any "absurd results" caused by excessive permitting requirements, *id.* at 25.

Industry Petitioners emphasize that, unlike their first proposed alternative, nothing in this approach would “wholly exempt [greenhouse gases] from PSD.” Coalition for Responsible Reg. Timing & Tailoring Reply Br. 20. Although a pollutant-specific situs requirement would limit the *number* of sources subject to the PSD program, nothing in this proposed reading of the statute would alter the substantive requirements for PSD permits, including the requirement that all regulated sources install BACT “for each pollutant subject to regulation under [the CAA].” 42 U.S.C. § 7475(a)(4). So, for example, under this interpretation, a hypothetical stationary source emitting more than 100/250 tpy of sulfur dioxide and located in an area designated as “in attainment” for sulfur dioxide, must still install BACT for “each pollutant subject to regulation” under the Act, including greenhouse gases. Their key point, though, is that sources emitting only major amounts of greenhouse gases – but not major amounts of a NAAQS criteria pollutant – would escape PSD permitting requirements.

Industry Petitioners’ argument in support of this interpretation proceeds in several steps. First, they argue that the term “any air pollutant,” though “capacious and flexible by itself,” “is a chameleon term” when placed in certain contexts. Am. Chemistry Council Br. 38. Indeed, Industry Petitioners note that EPA has already narrowed the literal meaning of the term “any air pollutant” here. After all, and as discussed *supra*, although the statutory term “air

pollutant” includes “any physical [or] chemical . . . substance or matter,” 42 U.S.C. § 7602(g), EPA has long maintained that the term “any air pollutant” in the definition of “major emitting facility” encompasses only air pollutants regulated under the Act. Moreover, Industry Petitioners point out that when interpreting CAA Part C, Subpart 2, entitled “Visibility Protection,” EPA determined that the term “any pollutant” in the definition of “major stationary source” meant “any visibility-impairing pollutant.” See Coalition for Responsible Reg. Timing & Tailoring Br. 34 (emphasis added). The statute’s definition of “major stationary source” in the visibility-protection subpart is quite similar to the definition of “major emitting facility” in the PSD subpart: for the purposes of the visibility program, a “major stationary source” is defined as a “stationary source[] with the potential to emit 250 tons or more of any pollutant.” 42 U.S.C. § 7491(g)(7); compare 42 U.S.C. § 7479(1) (“major emitting facility” for the purposes of the PSD program is a source which “emit[s], or [has] the potential to emit,” either 100 or 250 tons per year “of any air pollutant”). These narrowed interpretations, Industry Petitioners argue, prove that the seemingly capacious term “any air pollutant” is, notwithstanding that the Supreme Court called this term “expansive” and “sweeping,” *Massachusetts v. EPA*, 549 U.S. at 529 nn.25-26, capable of a far more circumscribed meaning.

According to Industry Petitioners, EPA should have adopted that more circumscribed meaning by

interpreting “any air pollutant” as establishing a pollutant-specific situs requirement. As Industry Petitioners point out, the PSD program requires permits for “major emitting facilit[ies] . . . in any area to which this part applies,” 42 U.S.C. § 7479(1), and defines “major emitting facilities” as stationary sources emitting 100/250 tpy of “any air pollutant.” *Id.* § 7475(a). In this context, Industry Petitioners contend, the phrases “any air pollutant” and “in any area to which this part applies” must be read in concert. And, Industry Petitioners argue, these phrases “*together mean*” that a source is subject to PSD permitting requirements only if it emits major amounts of “any [NAAQS] air pollutant whose NAAQS an area is attaining.” Am. Chemistry Council Br. 33.

In support of this supposedly holistic interpretation of the statute, Industry Petitioners cite CAA § 163(b), a different section of the PSD provision in which the phrase “any air pollutant” and “any area to which this part applies” are used in conjunction with one another. Unlike § 165(a), which sets permitting requirements for sources covered by the PSD program, § 163 provides guidelines for *areas* designated as “in attainment” under the program. Specifically, § 163(b) limits the “maximum allowable increase in concentrations of” airborne NAAQS pollutants that may occur in an attainment area before that area’s “attainment” status is jeopardized. *See* 42 U.S.C. § 7473(b)(1). Subsections (1) through (3) of § 163(b) – not directly relevant here – set limits on

the maximum allowable increases for two specific NAAQS pollutants, sulfur dioxide and particulate matter. Subsection (4) is a catchall provision, which limits the maximum allowable increases for all other NAAQS pollutants. It is in subsection (4) that Industry Petitioners find what they believe is their payoff: the terms “any air pollutant” and “any area to which this part applies” in conjunction with one another. Section 163(b)(4) provides:

The maximum allowable concentration of *any air pollutant in any area to which this part applies* shall not exceed a concentration for such pollutant for each period of exposure equal to –

- (A) the concentration permitted under the national secondary ambient air quality standard, or
- (B) the concentration permitted under the national primary ambient air quality standard,

whichever concentration is lowest for such pollutant for such period of exposure.

42 U.S.C. § 7473(b)(4) (emphasis added). As Industry Petitioners correctly point out, in this context the phrase “any air pollutant” must mean “any NAAQS pollutant,” and “in any area to which this part applies” must mean “any area that is in attainment for that NAAQS pollutant.” After all, the statute states that the “maximum allowable concentration of any air pollutant . . . shall not exceed” either the primary

or secondary national ambient air quality standards. But, as Industry Petitioners observe, national ambient air standards exist only for NAAQS pollutants, so even if “any air pollutant” in CAA § 163(b)(4) was read to include non-NAAQS pollutants, the phrase, in context, would have no practical effect for those pollutants. Moreover, “any area to which this part applies” must mean “any area that is in attainment for that NAAQS pollutant,” because if an area was in nonattainment for a particular pollutant, Part D – rather than the PSD program – would govern emissions limits for that specific pollutant. *See id.* § 7501(2) (“[t]he term ‘nonattainment area’ means, for any air pollutant, an area which is designated ‘nonattainment’ with respect to that pollutant”); § 7502(c) (setting out required “Nonattainment plan provisions”). Finally, Industry Petitioners correctly note that a pollutant-specific reading of the phrase “air pollutant” must also apply to CAA § 165(a)(3)(A), which prohibits PSD permittees from “caus[ing], or contribut[ing] to, air pollution in excess of any . . . maximum allowable concentration for *any air pollutant in any area to which this part applies* more than one time per year.” *Id.* § 7475(a)(3)(A) (emphasis added). This clause, as Industry Petitioners point out, piggybacks off the NAAQS pollutant-specific definition of “maximum allowable concentration” in § 163(b)(4), prophylactically restricting PSD permittees from endangering an area’s attainment status. *See* Am. Chemistry Council Br. 32 (describing the interplay between the two provisions as “Section

163(b)(4) (and Section 165(a)(3)(A), which implements it) . . . ”).

Based on all of this, Industry Petitioners conclude that because the phrase “any air pollutant in any area to which this part applies” in § 163(b)(4) means “any NAAQS pollutant in any area in attainment for that NAAQS pollutant,” an identical reading must apply to the definition of “major emitting facility.” As a result, a stationary source may be subject to the PSD program only if it emits 100/250 tpy of any NAAQS pollutant and is located in an area designated as in attainment for that NAAQS pollutant. We are unpersuaded.

Although we agree that the term “any air pollutant” is, in some contexts, capable of narrower interpretations, we see nothing in the definition of “major emitting facility” that would allow EPA to adopt a NAAQS pollutant-specific reading of that phrase. The contrast with the visibility program is instructive. There, EPA determined that “any pollutant” in the definition of “major stationary source” meant “any visibility-impairing pollutant.” *See* 40 C.F.R. pt. 51, App. Y, § II.A. But as EPA notes, the entire visibility program, codified in CAA Part C, Subpart 2, deals with visibility-impairing pollutants, as reflected in that subpart’s title: “Visibility Protection.” *See* 42 U.S.C. prec. § 7491. From this, “it naturally follows that EPA’s regulations under that section should address ‘visibility-impairing pollutants.’” EPA Timing & Tailoring Br. 99 n.19. No similar guidance can be garnered from Part C, Subpart 1, which contains the

phrase “any air pollutant” at issue here. Dealing with far more than NAAQS pollutants, Part C, Subpart 1 requires, for example, covered sources to install BACT for “each pollutant subject to regulation under [the CAA].” 42 U.S.C. § 7475(a)(4). Indeed, Subpart 1 is simply – and expansively – entitled “Clean Air.” *Id.* prec. § 7470. Moreover, Congress designed the PSD program broadly to protect against “adverse effect[s]” on “public health and welfare,” *Id.* § 7470(1), including effects on global problems like weather and climate. *Id.* § 7602(h).

Furthermore, the phrases “any air pollutant” and “in any area to which this part applies” are used differently in Section 163(b)(4) and in the PSD program’s definition of “major emitting facility.” The presumption that “[a] term appearing in several places in a statutory text is generally read the same way each time it appears,” *Ratzlaf v. United States*, 510 U.S. 135, 143 (1994), “readily yields whenever there is such variation in the connection in which the words are used as reasonably to warrant the conclusion that they were employed in different parts of the act with different intent,” *Atl. Cleaners & Dyers, Inc. v. United States*, 286 U.S. 427, 433 (1933). Here, the focus and structure of § 163(b)(4) is entirely distinct from the PSD permitting trigger. Section 163(b)(4) provides that “[t]he maximum allowable concentration of any air pollutant in any area to which this part applies shall not exceed a [particular] concentration.” 42 U.S.C. § 7473(b)(4). By contrast, § 165(a) provides that “[n]o major emitting facility . . . may be

constructed in any area to which this part applies” unless certain conditions are met, *id.* § 7475(a), and § 169(1) defines “major emitting facility” as any stationary source that emits or has the potential to emit threshold amounts of “any air pollutant,” *id.* § 7479(1). The differences between these two provisions are manifest. In § 163(b)(4), the phrases “any air pollutant” and “in any area to which this part applies” appear next to one another, and it is the concentration of the pollutant in an area that matters. In the PSD permitting trigger, the phrases appear in different subsections and it is the location of the facility that matters. Section 163(b)(4) thus does nothing to undermine the unambiguous meaning of “any air pollutant” in the definition of “major emitting facility.”

Industry Petitioners’ pollutant-specific reading of “any air pollutant” is further undermined by contrasting Part C of the Act (the PSD program) with Part D (which regulates areas in nonattainment). Unlike Part C, Part D is expressly pollutant-specific, providing that “[t]he term ‘nonattainment area’ means, for any air pollutant, an area which is designated ‘nonattainment’ *with respect to that pollutant.*” *Id.* § 7501(2) (emphasis added). Congress thus clearly knew how to promulgate a narrow, pollutant-specific definition of “any air pollutant.” That it did so in Part D but not in Part C strongly suggests that the phrase “any air pollutant” in Part C was meant to be construed broadly. *Keene Corp. v. United States*, 508 U.S. 200, 208 (1993) (“[W]here Congress

includes particular language in one section of a statute but omits it in another . . . , it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.”) (quoting *Russello v. United States*, 464 U.S. 16, 23 (1983)).

A final point: Industry Petitioners observe that every area in the country has always been in attainment for at least one NAAQS criteria pollutant. See Tailoring Rule, 75 Fed. Reg. at 31,561. Thus, pursuant to EPA’s pollutant-indifferent reading of § 165(a), under which a major emitting facility must abide by PSD requirements so long as it is located in an attainment area for *any* NAAQS pollutant, every facility in the United States has always been in an “area to which this part applies.” Consequently, Industry Petitioners argue, “[i]f EPA’s interpretation were right, Congress simply could have left out the phrase ‘in any area to which this part applies’” in the PSD permitting trigger. Am. Chemistry Council Br. 36. But “Congress does not enact ‘stillborn’ laws,” *id.* (quoting *Sosa v. Alvarez-Machain*, 542 U.S. 692, 714 (2004)), and interpretations that render statutory language superfluous are disfavored. Am. Chemistry Council Reply Br. 19. The fact that the PSD program has applied nationwide since its inception, Industry Petitioners conclude, thus militates against EPA’s pollutant-indifferent approach.

This argument fails at its premise, for Industry Petitioners confuse a lack of practical import with a lack of meaning. To say that the phrase “in any area

to which this part applies” is currently without practical import is quite different than showing that the phrase means nothing. Indeed, under different circumstances, the phrase would have a significant effect. If, hypothetically, one area of the country was designated as “nonattainment” for every NAAQS pollutant, the phrase “in any area to which this part applies” would limit PSD coverage, as covered sources in that area would be subject only to Part D requirements. In fact, Environmental Intervenors point out that when Congress drafted the PSD permitting triggers “the prospect that some areas could be in nonattainment for all NAAQS was not far-fetched.” Sierra Club Historic Reg. Br. 23. “In the years leading up to 1977, EPA air quality data identified a number of areas that failed to meet all five of the then-current [air quality standards] for which EPA had gathered data.” *Id.* Accordingly, “in any area to which this part applies” is a meaningful phrase under EPA’s pollutant-indifferent interpretation of the PSD permitting triggers: it provides that sources need not obtain PSD permits if they are located in areas designated “nonattainment” for all six NAAQS pollutants.

In short, although we agree with Industry Petitioners that phrases like “any air pollutant” are, in certain contexts, capable of a more limited meaning, they have failed to identify any reasons that the phrase should be read narrowly here. Nor do we know of one. We thus conclude that EPA’s 34-year-old interpretation of the PSD permitting triggers is statutorily compelled: a source must obtain a permit

if it emits major amounts of any regulated pollutant and is located in an area that is in attainment or unclassifiable for any NAAQS pollutant.

3.

We can quickly dispose of Industry Petitioners' third alternative interpretation, namely, that in order to regulate new pollutants through the PSD program, EPA was required to go through the process prescribed by CAA § 166. Section 166 provides specific steps that EPA must take when designating new "pollutants for which national ambient air quality standards" apply. 42 U.S.C. § 7476(a). Here, Industry Petitioners argue, EPA unlawfully failed to follow the steps laid out in Section 166, including a required study of the pollutant and a one-year delay before the effective date of regulations, before adding greenhouse gases "to the PSD [c]onstellation." Coalition for Responsible Reg. Timing & Tailoring Br. 41.

This argument fails on its face. By its terms, § 166 applies only to new "pollutants *for which national ambient air quality standards*" apply, 42 U.S.C. § 7476(a) (emphasis added), i.e., NAAQS criteria pollutants for which regions may be classified as in "attainment," "non-attainment," or "unclassifiable." And EPA never classified greenhouse gases as a NAAQS criteria pollutant. Instead, it simply determined that under § 165, major emitters of greenhouse gases are subject to the PSD program and all covered sources must install BACT for greenhouse gases.

Contrary to Industry Petitioners' arguments, then, § 166 has no bearing on this addition of greenhouse gases into "the PSD [c]onstellation." Coalition for Responsible Reg. Timing & Tailoring Br. 41. Indeed, we rejected a nearly identical argument in *Alabama Power*, holding that there is "no implied or apparent conflict between sections 165 and 166; nor . . . must the requirements of section 165 be 'subsumed' with those of section 166." *Alabama Power*, 636 F.2d at 406. Stating what should have been obvious from the text of the statute, we concluded: "[S]ection 166 has a different focus from section 165." *Id.*

Thus, because EPA has never classified greenhouse gases as a NAAQS criteria pollutant, the § 166 requirements are entirely inapplicable here. This section of the CAA has absolutely no bearing on our conclusion that EPA's interpretation of the PSD permitting trigger is compelled by the statute itself.

VI.

Having concluded that the CAA requires PSD and Title V permits for major emitters of greenhouse gases, we turn to Petitioners' challenges to the Tailoring and Timing Rules themselves.

As an initial matter, we note that Petitioners fail to make any real arguments against the Timing Rule. To be sure, at one point State Petitioners contend that the Timing Rule constitutes an attempt "to extend the PSD and Title V permitting requirements to greenhouse-gas emissions," State Pet'rs' Timing &

Tailoring Br. 67. This is plainly incorrect. As discussed in the previous section, greenhouse gases are regulated under PSD and Title V pursuant to automatic operation of the CAA. All the Timing Rule did was delay the applicability of these programs, providing that major emitters of greenhouse gases would be subject to PSD and Title V permitting requirements only once the Tailpipe Rule actually took effect on January 2, 2011. *See* Timing Rule, 75 Fed. Reg. at 17,017-19. Despite this, Petitioners confusingly urge us to vacate “[t]he Tailoring *and* Timing Rules,” *e.g.* State Pet’rs’ Timing & Tailoring Br. 24 (emphasis added), although it is unclear what practical effect vacature [sic] of the Timing Rule would have. Nonetheless, given this phrasing of their argument, and given our conclusion that Petitioners lack Article III standing to challenge *both* rules, we shall, where appropriate, discuss the Timing Rule in conjunction with the Tailoring Rule.

In the Tailoring Rule, EPA announced that it was “relieving overwhelming permitting burdens that would, in the absence of this rule, fall on permitting authorities and sources.” Tailoring Rule, 75 Fed. Reg. at 31,516. Although the PSD statute requires permits for sources with the potential to emit 100/250 tpy of “any air pollutant,” 42 U.S.C. § 7479(1), EPA noted that immediate application of that threshold to greenhouse gas-emitting sources would cause permit applications to jump from 280 per year to over 81,000 per year. Tailoring Rule, 75 Fed. Reg. at 31,554. Many of these applications would come from commercial

and residential sources, which would “each incur, on average, almost \$60,000 in PSD permitting expenses.” *Id.* at 31,556. Similarly, if the Title V 100 tpy threshold applied immediately to greenhouse gases, sources needing operating permits would jump from 14,700 per year to 6.1 million per year. *Id.* at 31,562. “The great majority of these sources would be small commercial and residential sources” which “would incur, on average, expenses of \$23,175.” *Id.* And were permitting authorities required to hire the 230,000 full-time employees necessary to address these permit applications, “authorities would face over \$21 billion in additional permitting costs each year due to [greenhouse gases], compared to the current program cost of \$62 million each year.” *Id.* at 31,563.

Thus, instead of immediately requiring permits for all sources exceeding the 100/250 tpy emissions threshold, EPA decided to “phas[e] in the applicability of these programs to [greenhouse gas] sources, starting with the largest [greenhouse gas] emitters.” *Id.* at 31,514. The Tailoring Rule established the first two steps in this phased-in process. During Step One, only sources that were “subject to PSD requirements for their conventional pollutants anyway” (i.e., those sources that exceeded the statutory emissions threshold for non-greenhouse gas pollutants) were required to install BACT for their greenhouse gas emissions. *Id.* at 31,567. Step Two, which took effect on July 1, 2011, also requires PSD permits for sources with the potential to emit over 100,000 tpy CO₂e after a proposed construction project, or 75,000 tpy CO₂e after a

proposed modification project. *Id.* at 31,523. Step Two further requires Title V permits for sources which have the potential to emit over 100,000 tpy CO₂e. *Id.* at 31,516. EPA has since proposed – but has yet to finalize – a “Step Three,” which would maintain the current thresholds while the agency evaluates the possibility of regulating smaller sources. *See* EPA’s 28(j) Letter 1-2, February 27, 2012.

In the Tailoring Rule, EPA justified its phased-in approach on three interrelated grounds, each of which rests on a distinct doctrine of administrative law. First, EPA concluded “the costs to sources and administrative burdens . . . that would result from [immediate] application of the PSD and title V programs . . . at the statutory levels . . . should be considered ‘absurd results,’” which Congress never intended. *Id.* at 31,517; *see Am. Water Works Ass’n v. EPA*, 40 F.3d 1266, 1271 (D.C. Cir. 1994) (“[W]here a literal reading of a statutory term would lead to absurd results, the term simply has no meaning . . . and is the proper subject of construction by EPA and the courts.”). Thus, under the “absurd results” doctrine, EPA concluded that the PSD and Title V programs “should not [immediately] be read to apply to all [greenhouse gas] sources at or above the 100/250 tpy threshold.” Tailoring Rule, 75 Fed. Reg. at 31,554. Second, emphasizing that immediate regulation at the 100/250 tpy threshold would cause tremendous administrative burden, EPA justified its deviation from this threshold on the basis of the “administrative necessity” doctrine. *Id.* at 31,576; *see Env’tl. Def.*

Fund, Inc. v. EPA, 636 F.2d 1267, 1283 (D.C. Cir. 1980) (“[A]n agency may depart from the requirements of a regulatory statute . . . to cope with the administrative impossibility of applying the commands of the substantive statute.”). Finally, asserting that there exists a judicial doctrine that allows agencies to implement regulatory programs in a piecemeal fashion, EPA stated that the Tailoring Rule was justified pursuant to this “one-step-at-a-time” doctrine. Tailoring Rule, 75 Fed. Reg. at 31,578; see *Massachusetts v. EPA*, 549 U.S. at 524 (“Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop.”).

Petitioners – particularly State Petitioners – argue that none of these doctrines permit EPA to “depart unilaterally from the [CAA’s] permitting thresholds and replace them with numbers of its own choosing.” State Pet’rs’ Timing & Tailoring Br. 29. Admitting the “lamentable policy consequences of adhering to the unambiguous numerical thresholds in the Clean Air Act,” State Petitioners rather colorfully argue that EPA’s attempts to alleviate those burdens “establish only that EPA is acting as a benevolent dictator rather than a tyrant.” *Id.* at 26. And because EPA exceeded the boundaries of its lawful authority Petitioners urge us to vacate the Tailoring Rule.

Before we may address the merits of these claims, however, we must determine whether we have jurisdiction. “No principle,” the Supreme Court has repeatedly explained, “is more fundamental to the judiciary’s proper role in our system of government

than the constitutional limitation of federal-court jurisdiction to actual cases or controversies.” *Raines v. Byrd*, 521 U.S. 811, 818 (1997) (internal quotation marks omitted). The doctrine of standing “is an essential and unchanging part of the case-or-controversy requirement.” *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992). To establish standing, a petitioner must have suffered an “injury in fact” that is 1) “concrete and particularized . . . [and] actual or imminent, not conjectural or hypothetical,” 2) was caused by the conduct complained of, and 3) is “likely, as opposed to merely speculative [to] be redressed by a favorable decision.” *Id.* at 560-61 (internal quotation marks and citations omitted).

Petitioners fall far short of these “irreducible constitutional . . . elements” of standing, *id.* at 560. Simply put, Petitioners have failed to establish that the Timing and Tailoring Rules caused them “injury in fact,” much less injury that could be redressed by the Rules’ vacatur. Industry Petitioners contend that they are injured because they are subject to regulation of greenhouse gases, Coalition for Responsible Reg. Timing & Tailoring Br. 14. State Petitioners claim injury because they own some regulated sources and because they now carry a heavier administrative burden. State Pet’rs’ Timing & Tailoring Br. 22-23. But as discussed above, *see supra* Part V, the CAA mandates PSD and Title V coverage for major emitters of greenhouse gases. Thus, Industry Petitioners were regulated and State Petitioners required to issue permits not because of anything EPA did in

the Timing and Tailoring Rules, but by automatic operation of the statute. Given this, neither the Timing nor Tailoring Rules caused the injury Petitioners allege: having to comply with PSD and Title V for greenhouse gases.

Indeed, the Timing and Tailoring Rules actually mitigate Petitioners' purported injuries. Without the Timing Rule, Petitioners may well have been subject to PSD and Title V for greenhouse gases before January 2, 2011. Without the Tailoring Rule, an even greater number of industry and state-owned sources would be subject to PSD and Title V, and state authorities would be overwhelmed with millions of additional permit applications. Thus, Petitioners have failed to "show that, absent the government's allegedly unlawful actions, there is a substantial probability that they would not be injured and that, if the court affords the relief requested, the injury will be removed." *Chamber of Commerce v. EPA*, 642 F.3d 192, 201 (D.C. Cir. 2011) (quotations and alterations omitted). Far from it. If anything, vacature [sic] of the Tailoring Rule would significantly exacerbate Petitioners' injuries.

Attempting to remedy this obvious jurisdictional defect, State Petitioners present two alternative theories, neither of which comes close to meeting the "irreducible constitutional . . . elements" of standing. *Lujan*, 504 U.S. at 560. First, State Petitioners counterintuitively suggest that they actually want EPA to immediately "appl[y] the 100/250 tpy permitting thresholds to greenhouse-gas emissions." State

Pet'rs' Timing & Tailoring Reply Br. 15. Admitting that vacature [sic] of the Tailoring Rule would result in astronomical costs and unleash chaos on permitting authorities, State Petitioners predict that Congress will be forced to enact "corrective legislation" to relieve the overwhelming permitting burdens on permitting authorities and sources, thus mitigating their purported injuries. *Id.*

This theory fails. To establish standing, plaintiffs must demonstrate that it is "likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision," *Lujan*, 504 U.S. at 561 (internal quotation marks omitted), but here, State Petitioners simply hypothesize that Congress will enact "corrective legislation." State Pet'rs' Timing & Tailoring Reply Br. 15. We have serious doubts as to whether, for standing purposes, it is ever "likely" that Congress will enact legislation at all. After all, a proposed bill must make it through committees in both the House of Representatives and the Senate and garner a majority of votes in both chambers – overcoming, perhaps, a filibuster in the Senate. If passed, the bill must then be signed into law by the President, or go back to Congress so that it may attempt to override his veto. As a generation of schoolchildren knows, "by that time, it's very unlikely that [a bill will] become a law. It's not easy to become a law." Schoolhouse Rock, *I'm Just a Bill*, at 2:41, available at <http://video.google.com/videoplay?docid=7266360872513258185#> (last visited June 1, 2012).

And even if the astronomical costs associated with a 100/250 tpy permitting threshold make *some* Congressional action likely, State Petitioners are still unable to show that it is “likely, as opposed to merely speculative,” *Lujan*, 504 U.S. at 561, that Congress will redress their injury. State Petitioners apparently assume that if the 100/250 tpy permitting threshold was immediately applied to greenhouse gases, Congress would exempt those pollutants from the PSD and Title V programs entirely. But this is just one of many forms “corrective legislation” could take. For example, were we to vacate the Tailoring Rule, Congress could decide to readopt its key provisions in the PSD and Title V statutes. Or it could set PSD and Title V permitting thresholds at 25,000 tpy for greenhouse gases – higher than the 100/250 tpy threshold, but lower (and thus more costly to Petitioners) than the thresholds promulgated in the Tailoring Rule. Or it could do something else entirely. All of this is guesswork, which is precisely the point: State Petitioners’ faith that Congress will alleviate their injury is inherently speculative.

State Petitioners’ second alternative theory of standing fares no better. In their reply brief, they contend that even if vacating the Timing or Tailoring Rules would indeed exacerbate their costs and administrative burdens (the purported injuries they claimed in their opening brief), “then State Petitioners can establish Article III standing under *Massachusetts* by asserting injuries caused by EPA’s failure to regulate sooner.” State Pet’rs’ Timing & Tailoring Reply Br. 5.

Essentially, State Petitioners' reply brief contends that, contrary to the position taken in the opening brief, they want more regulation, not less, and that they wanted regulation sooner rather than later. And because the Commonwealth of Massachusetts had standing to seek regulation of greenhouse gases in *Massachusetts v. EPA*, State Petitioners argue that they now have standing to seek more regulation of greenhouse gases as well.

This argument is completely without merit. As an initial matter, we are aware of no authority which permits a party to assert an entirely new injury (and thus, an entirely new theory of standing) in its reply brief. Quite to the contrary, we have held that, where standing is not self-evident, “[i]n its *opening* brief, the petitioner should . . . include . . . a concise recitation of the basis upon which it claims standing.” *Sierra Club v. EPA*, 292 F.3d 895, 901 (D.C. Cir. 2002) (emphasis added); *see also* D.C. Cir. R. 28(a)(7) (“[i]n cases involving direct review in this court of administrative actions, the brief of the appellant or petitioner must set forth the basis for the claim of standing.”); *American Library Ass’n v. FCC*, 401 F.3d 489, 493-94 (D.C. Cir. 2005) (discussing limitations on this principle). After all, “it is often the case . . . that some of the relevant facts are known only to the petitioner, to the exclusion of both the respondent and the court.” *Sierra Club*, 292 F.3d at 901. If “the petitioner does not submit evidence of those facts with its opening brief,” the respondent is “left to flail at the unknown in an attempt to prove the negative.” *Id.*

This principle is particularly important here, for State Petitioners' asserted fear of global warming stands in stark contrast to the position they took throughout this litigation. In an earlier brief, for example, they characterized the Endangerment Finding as "a subjective conviction" State Pet'rs' Endangerment Br. 19, "supported by highly uncertain climate forecasts," *id.* at 18, and "offer[ing] no criteria for determining a harmful, as opposed to a safe, climate," *id.* at 17. Given this, EPA could not possibly have anticipated that State Petitioners, abruptly donning what they themselves call "an environmentalist hat," State Pet'rs' Timing & Tailoring Reply Br. 4, would assert that global warming causes them concrete and particularized harm.

In any event, State Petitioners fail to cite any record evidence to suggest that they are adversely affected by global climate change. This is in stark contrast to the evidence put forward in *Massachusetts v. EPA*, where the Commonwealth submitted unchallenged affidavits and declarations showing that 1) rising sea tides due to global warming had "already begun to swallow Massachusetts' coastal land," and 2) "[t]he severity of that injury will only increase over the course of the next century." *Massachusetts v. EPA*, 549 U.S. at 522-23. These specific, factual submissions were key to the standing analysis in *Massachusetts v. EPA*: the Court held that "petitioners' submissions as they pertain to Massachusetts have satisfied the most demanding standards of the adversarial process." *Id.* at 521 (emphasis added). It is

true, as State Petitioners emphasize, that the Supreme Court held that states are “entitled to special solicitude in our standing analysis.” *Id.* at 522. But nothing in the Court’s opinion remotely suggests that states are somehow exempt from the burden of establishing a concrete and particularized injury in fact. State Petitioners, like Industry Petitioners, failed to do so here. We shall thus dismiss all challenges to the Timing and Tailoring Rules for lack of jurisdiction.

VII.

Following promulgation of the Timing and Tailoring Rules, EPA issued a series of rules ordering states to revise their PSD State Implementation Plans (SIPs) to accommodate greenhouse gas regulation. *See Action to Ensure Authority to Issue Permits Under the Prevention of Significant Deterioration Program to Sources of Greenhouse Gas Emissions: Finding of Substantial Inadequacy and SIP Call*, 75 Fed. Reg. 53,892 (Sept. 2, 2010), 75 Fed. Reg. 77,698 (Dec. 13, 2010); *Action to Ensure Authority to Issue Permits Under the Prevention of Significant Deterioration Program to Sources of Greenhouse Gas Emissions: Finding of Failure to Submit State Implementation Plan Revisions Required for Greenhouse Gases*, 75 Fed. Reg. 81,874 (Dec. 29, 2010). Industry Petitioners present several challenges to these SIP-related rules. But our review in this case is limited to four EPA decisions: the Endangerment Finding, the Tailpipe Rule, and the Timing and Tailoring Rules. We thus lack jurisdiction over the SIP-related rules. Moreover,

challenges to these rules are currently pending in at least two separate cases before this court. *See Utility Air Regulatory Group v. EPA*, No. 11-1037 (consolidating various challenges); *Texas v. EPA*, No. 10-1425 (challenge brought by Texas). We decline Industry Petitioners' invitation to rule on the merits of cases which are properly before different panels.

VIII.

For the foregoing reasons, we dismiss all petitions for review of the Timing and Tailoring Rules, and deny the remainder of the petitions.

So ordered.

**United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

Filed: December 20, 2012

No. 09-1322

COALITION FOR RESPONSIBLE REGULATION, INC., ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT
STATE OF MICHIGAN, ET AL., INTERVENORS

Consolidated with 10-1024, 10-1025, 10-1026,
10-1030, 10-1035, 10-1036, 10-1037, 10-1038,
10-1039, 10-1040, 10-1041, 10-1042, 10-1044,
10-1045, 10-1046, 10-1234, 10-1235, 10-1239,
10-1245, 10-1281, 10-1310, 10-1318, 10-1319,
10-1320, 10-1321

No. 10-1073

COALITION FOR RESPONSIBLE REGULATION, INC., ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT
AMERICAN FROZEN FOOD INSTITUTE, ET AL.,
INTERVENORS

App. 105

Consolidated with 10-1083, 10-1099, 10-1109,
10-1110, 10-1114, 10-1118, 10-1119, 10-1120, 10-1122,
10-1123, 10-1124, 10-1125, 10-1126, 10-1127, 10-1128,
10-1129, 10-1131, 10-1132, 10-1145, 10-1147, 10-1148,
10-1199, 10-1200, 10-1201, 10-1202, 10-1203,
10-1206, 10-1207, 10-1208, 10-1210, 10-1211,
10-1212, 10-1213, 10-1216, 10-1218, 10-1219,
10-1220, 10-1221, 10-1222

No. 10-1092

COALITION FOR RESPONSIBLE REGULATION, INC., ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT
LANGBOARD, INC.-MDF, ET AL., INTERVENORS

Consolidated with 10-1094, 10-1134, 10-1143,
10-1144, 10-1152, 10-1156, 10-1158, 10-1159, 10-1160,
10-1161, 10-1162, 10-1163, 10-1164, 10-1166, 10-1182

No. 10-1167

AMERICAN CHEMISTRY COUNCIL, PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY AND
LISA PEREZ JACKSON, ADMINISTRATOR,
U.S. ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENTS

CHAMBER OF COMMERCE OF THE UNITED STATES
OF AMERICA, ET AL., INTERVENORS

- * Circuit Judges Brown and Kavanaugh would grant the petitions for rehearing en banc.
- * A statement by Chief Judge Sentelle and Circuit Judges Rogers and Tatel, concurring in the denials of rehearing en banc, is attached.
- * A statement by Circuit Judge Brown, dissenting from the denials of rehearing en banc, is attached.
- * A statement by Circuit Judge Kavanaugh, dissenting from the denials of rehearing en banc, is attached.

SENTELLE, *Chief Judge*, ROGERS, *Circuit Judge*, and TATEL, *Circuit Judge*, concurring in the denials of rehearing en banc: In dissenting from the denials of rehearing en banc, Judge Brown primarily takes issue with EPA's Endangerment Finding. But as she candidly acknowledges, *see* Dissenting Op. at 2 (Brown, J.), her quarrel is with the Supreme Court. In *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Court expressly *held* that the Clean Air Act's "sweeping definition of 'air pollutant'" unambiguously includes greenhouse gases. *See id.* at 528-29. Moreover, in so holding, the Court expressly rejected many of the arguments her dissent now presses. In particular, it rebuffed EPA's attempt to use "postenactment congressional actions and deliberations" to obscure "the meaning of an otherwise-unambiguous statute," *id.* at 529, and found EPA's reliance on *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000), "similarly misplaced," *Massachusetts v. EPA*, 549 U.S. at 530. Seeking to revive the *Brown & Williamson* argument, Judge Brown suggests that the Court

never considered the “far-reaching effects” of extending greenhouse gas regulation to stationary sources. *See* Dissenting Op. at 18 (Brown, J.). But this is inaccurate – the briefs before the Court explicitly raised the argument that interpreting “air pollutant” to include greenhouse gases could have tremendous consequences for stationary-source regulation. *See, e.g.,* Brief of Respondent CO₂ Litigation Group, *Massachusetts v. EPA*, 549 U.S. 497 (2007) (No. 05-1120), 2006 WL 3043971 at *19-*31.

To the extent Judge Brown attempts to bypass *Massachusetts v. EPA* by focusing on the statutory condition that air pollution “*reasonably be anticipated to endanger* public health or welfare,” 42 U.S.C. § 7521(a)(1) (emphasis added), her quarrel is not just with the Supreme Court, but also with EPA’s assessment of the science. Of course, we agree that the statute requires EPA to find a particular causal nexus between the pollutant and the harm in order to regulate. *See* Dissenting Op. at 9 (Brown, J.). But that is exactly what EPA did: it found that “greenhouse gases in the atmosphere may *reasonably be anticipated* both to endanger public health and to endanger public welfare.” *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act*, 74 Fed. Reg. 66,496, 66,497 (Dec. 15, 2009). And, as the panel opinion explains, EPA’s scientific judgment about the causal relationship between greenhouse gases and climate change is a scientific determination entitled to “an extreme degree of deference.” *Coalition for*

Responsible Regulation v. EPA, 684 F.3d 102, 120 (D.C. Cir. 2012) (quoting *American Farm Bureau Federation v. EPA*, 559 F.3d 512, 519 (D.C. Cir. 2009)). The dissent’s suggestion that EPA was somehow statutorily precluded from finding the requisite nexus between greenhouse gases and harm to public health and welfare, *see* Dissenting Op. at 10-11 (Brown, J.), is belied by the Supreme Court’s decision to remand precisely this question. *See Massachusetts v. EPA*, 549 U.S. at 532-35.

Judge Kavanaugh’s dissent relates to the scope of the Prevention of Significant Deterioration (“PSD”) program, an aspect of the panel opinion Judge Brown also rejects. Specifically, Judge Kavanaugh disagrees with EPA’s longstanding interpretation of the term “any air pollutant,” 42 U.S.C. § 7479(1), arguing that, in the context of the PSD program, “any air pollutant” refers not to all pollutants regulated under the Clean Air Act, but only to the six NAAQS pollutants. Because taking the statute at its word and interpreting “any air pollutant” to include greenhouse gases would lead to what he considers absurd results, Judge Kavanaugh insists that EPA and this Court are obligated to read “any air pollutant” more narrowly. *See* Dissenting Op. at 3-10 (Kavanaugh, J.). This argument, however, hinges on the proposition that both readings are plausible interpretations of an ambiguous statutory provision. *See* Dissenting Op. at 2-3, 10 (Kavanaugh, J.). But as the panel opinion explains at length, the statute is clear. *See Coalition for Responsible Regulation*, 684 F.3d at 132-44.

Congress did not say “certain ‘air pollutants.’” Dissenting Op. at 2 (Kavanaugh, J.). It said “any air pollutant,” and it meant it. See *Coalition for Responsible Regulation*, 684 F.3d at 136. Thus, unlike the unreasonable interpretation rejected in *Kloeckner v. Solis*, No. 11-184, slip op. at 7-13 (U.S. 2012), the panel’s interpretation of the statute is the only plausible one.

Moreover – and again, as the panel opinion explains at length, see *Coalition for Responsible Regulation*, 684 F.3d at 135-36 – considering “any air pollutant” in context buttresses rather than undermines the panel’s interpretation. The statute frames the purpose of the PSD program in broad – not NAAQS-specific – terms, emphasizing that the program’s goal is “to protect public health and welfare from any actual or potential adverse effect which . . . may reasonably be anticipate[d] to occur from air pollution.” 42 U.S.C. § 7470(1). And although certain aspects of the program are specifically directed at NAAQS pollutants, see, e.g., *id.* § 7473(b)(4), the program as a whole plainly has a more expansive scope. For instance, covered sources are required to (1) install the best available control technology for “each pollutant subject to regulation under [the Act],” *id.* § 7475(a)(4) (emphasis added), and (2) demonstrate that they will not cause or contribute to “any . . . applicable emission standard” under the Act, *id.* § 7475(a)(3) (emphasis added).

In the end, we agree that “the question here is: Who Decides?” Dissenting Op. at 18 (Kavanaugh, J.).

We also agree that “Congress (with the President) sets the policy through statutes, agencies implement that policy within statutory limits, and courts in justiciable cases ensure that agencies stay within the statutory limits set by Congress.” Dissenting Op. at 18 (Kavanaugh, J.). Here, Congress spoke clearly, EPA fulfilled its statutory responsibilities, and the panel, playing its limited role, gave effect to the statute’s plain meaning. See *Chevron, U.S.A., Inc. v. NRDC*, 467 U.S. 837, 842-43 (1984) (“If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.”).

To be sure, the stakes here are high. The underlying policy questions and the outcome of this case are undoubtedly matters of exceptional importance. The legal issues presented, however, are straightforward, requiring no more than the application of clear statutes and binding Supreme Court precedent. There is no cause for en banc review.

BROWN, *Circuit Judge*, dissenting from the denial of rehearing en banc: In the summer of 1974, while waiting to start classes at UCLA, I was lucky enough to obtain a summer job house sitting in the pleasant, upscale neighborhood of Pasadena. Known mostly for its Rose Parade and Rose Bowl, Pasadena is one of the more scenic exurbs of Los Angeles. I inhabited a sparsely furnished, modest-but-pricey bungalow set among the lush landscape typical of southern

California. This is a place where Birds of Paradise grow ten feet tall and the magenta blossoms of Bougainvillea fall like lavish draperies from redwood garden trellises. After staying in the house more than a month and spending a restless night listening to the agitated thrashings of the jacaranda trees in a fitful wind, I stumbled bleary-eyed into the kitchen, looked out the window, and stopped – utterly dumbfounded. There – looking like it was but a few feet beyond the back fence – stood a mountain. Not a foothill. Not an unobtrusive mesa. A mountain! Closer inspection revealed not a lone majestic peak, but a whole mountain range I later identified as the San Gabriels. In those days, the air in the Los Angeles basin was so thick with smog that a mountain, or even a nearby mountain range, could simply disappear.

Although the Los Angeles basin was among the most notorious examples of the phenomenon, it was by no means unique and certainly not the worst. It was this crisis of ambient air quality that precipitated the enactment of the Clean Air Act (CAA). But as the CAA's history, language, and structure make clear, Congress never intended the Act to serve as an environmental cure-all. It was targeted legislation designed to remedy a particular wrong: the harmful direct effects of poisoned air on human beings and their local environs. This is what Congress understood as "air pollution which may reasonably be anticipated to endanger public health" in the tailpipe emissions provision, 42 U.S.C. § 7521(a)(1). The Supreme Court in *Massachusetts v. EPA*, 549 U.S.

497 (2007), however, concluded otherwise. In dicta too suggestive to ignore, the Court implicitly assumed that climate change could provide the basis for an endangerment finding in the tailpipe context. *See id.* at 532-33.

Bound as I am by *Massachusetts*, I reluctantly concur with the Panel's determination that EPA may regulate GHGs in tailpipe emissions. But I do not choose to go quietly. Because the most significant regulations of recent memory rest on the shakiest of foundations, Part I of this statement engages *Massachusetts's* interpretive shortcomings in the hope that either Court or Congress will restore order to the CAA. Part II, by contrast, reflects my belief that *Massachusetts* does not compel the same result for Title V and the Prevention of Significant Deterioration of Air Quality (PSD) program. Although I agree with Judge Kavanaugh's dissent, *Coal. for Responsible Regulation v. EPA*, Nos. 09-1322, et al. (Kavanaugh, J., dissenting from denial of rehearing en banc), I approach the inflection point from a slightly different perspective. Part III concludes with a brief note on standing.

Because I would vote for the full court to consider the propriety of extending *Massachusetts* to Title V and the PSD program, I respectfully dissent from this denial of rehearing en banc.

I.

A.

The origins of the Clean Air Act are closely tied to fatal fogs and deadly air inversions that, for much of early postindustrial history, seemed to be the inevitable consequence of economic progress. See Arnold W. Reitze, Jr., *A Century of Air Pollution Control Law: What's Worked; What's Failed; What Might Work*, 21 ENVTL. L. 1549, 1575 (1991).¹ Initially regulated at the local and state level, air pollution became the focus of the federal government only after World War II. See *id.* at 1585-86. In October 1948, a severe temperature inversion in the industrial city of Donora, Pennsylvania increased air pollution to such an extent that traffic “was virtually stopped because of lack of visibility.” The inversion killed 20 people, *id.*, and prompted the federal government to begin researching air pollution. *Id.* at 1586. By 1961, President Kennedy included a plea for “an effective air pollution program” in his Special Message on the Natural Resources. *Id.* Public pressures for legislation only increased when a “Killer Smog” engulfed London in December 1962, killing at least 340, and a similar inversion in New York City allegedly claimed the lives of 200. *Id.* Eventually, legislation recommended by President Kennedy in February 1963 led

¹ Inversions, sometimes known as “Londoners,” occur “when a layer of hot air warmed by . . . water exists above cooler ground-level air and traps smoke and particulate matter under the warmer air.” *Id.*

to the enactment of the CAA, which President Johnson signed into law on December 17, 1963. *Id.* at 1586-87. Seven years later, President Nixon signed The Clean Air Amendments of 1970. The 1970 Amendments authorized the EPA to prescribe national ambient air quality standards (NAAQS) and created the statutory framework that still exists today.

B.

It was no happy accident that congressional draftsmen titled the legislation the “*Clean Air Act.*” Ambient air quality was the point, purpose, and focus of the CAA. Congress had set its sights on the “dirty, visible ‘smokestack’ emissions,” 136 CONG. REC. H2771-03 (1990) (statement of Rep. Roe), and smog caused by vehicle emissions. The CAA was the means by which Congress would grapple with urban air pollution and its attendant health effects, including impaired breathing, heart disease, lung damage and lung disease, and even death. If pollution was the problem, these ills were the specific harms Congress sought to combat. Even a cursory glance at the legislative history, with its numerous charts, graphics, and statistics detailing cancer and death rates, will bear this point out. *See, e.g.*, Hearings on Air Pollution – 1968 Before the Subcomm. on Air and Water Pollution of the Sen. Comm. on Pub. Works, 90th Cong. 2nd Sess., pt. 2, 608-20 (1968) (statement of Dr. Samuel S. Epstein, Children’s Cancer Research Foundation.) (“Air Pollution – 1968”).

With the enactment of the 1990 Amendments, Congress expanded the Act beyond its singular emphasis on urban air quality to address hazardous – *i.e.*, toxic – air pollutants, acid rain, and stratospheric ozone. In regulating hazardous pollutants, Congress reemphasized the need for a close and tangible nexus between pollutant and harm. The legislative record, for example, continued to conceive of dangers in terms of their direct effects on human health and well-being. *See, e.g.*, S. Rep. No. 101-228, at 3388 (1989), reprinted in 1990 U.S.C.C.A.N. 3385 (“Air pollution can silently damage our lungs and heart or act swiftly in the case of exposure to toxic air pollutants. Rigorous regulation of toxic air pollutants is needed to avoid risk of serious, irreversible damage to human health.”). To the extent the regulation of stratospheric ozone and acid rain suggest a broader nexus between pollutant and harm to human health, the very particular way in which Congress handled these exceptions goes a long way toward proving the rule: Congress only expands the CAA through considered legislative acts.

In addressing these transnational phenomena, the legislature did not spin regulations out of whole cloth. With ozone concerns, for example, Congress developed solutions through international negotiations, the implementation of which led to the creation of a separate title of the CAA. *See NRDC v. EPA*, 464 F.3d 1, 3 (D.C. Cir. 2006). Likewise, years of contentious discussions with Canada helped bring about the acid rain provisions in the 1990 Amendments. *See*

generally Dennis A. Leaf, *Intergovernmental Cooperation: Air Pollution from an U.S. Perspective*, 18 CAN.-U.S. L.J. 245 (1992). Simply put, when Congress became aware of new dangers, it acted judiciously in crafting workable remedies that, when they obtained the necessary political support, were worked into their own discrete provisions under the Act. Neither Congress nor the EPA attempted to force these distinct problems into existing, ill-suited regulatory schemes.

Congressman Waxman, one of the strongest proponents of stringent air pollution controls and a key force behind the 1990 Amendments, has stated that “in recent experience, no legislation has received more scrutiny during its consideration.” The Honorable Henry A. Waxman, *An Overview of the Clean Air Act Amendments of 1990*, 21 ENVTL. L. 1721, 1724 (1991). Hyperbole or not, the admission is telling. The history of the CAA is one of hard-fought incremental gains through which Congress remedied particular environmental wrongs with tailored remedies. Said the Congressman:

Discrete and extensive new programs are included to grapple with high ambient pollution levels (urban and regional smog), hazardous air pollution, acid rain, and depletion of the stratospheric ozone layer. Each of these programs [was] tailored to the problem it [sought] to address, and each [was] quite different in its approach.”

Id. at 1811. Political necessity has forced Congress to calibrate its amendments to the CAA with great specificity and care. Where our Representatives have acted with such caution, any suggestion that Congress has – through a single word – conferred upon EPA the authority to steamroll through Congressional gridlock, upend the Senate’s rejection of the Kyoto Protocol, and regulate GHGs for the whole of American industry must necessarily fail. The legislature, recall, does not “hide elephants in mouseholes.” *Whitman v. Am. Trucking Assocs.*, 531 U.S. 457, 468 (2001).

But we needn’t rely on interpretative canons alone to make this point. In drafting the 1990 Amendments, Congress considered – and *expressly rejected* – proposals authorizing EPA to regulate GHGs under the CAA. *See* S. Rep. No. 101-228, at 377 (1989), *as reprinted in* 1990 U.S.C.C.A.N. 3385, 3760. Even the Executive objected that an attempt to control Carbon Dioxide (CO₂) emissions – emissions not harmful to health – in order to prevent global warming was premature. *See* Administration’s Amendments – Hearings Before the Subcomm. On Health and the Env’t of the Comm. on Energy and Commerce, 101st Cong., 1st Sess. (1989) (includes Bush Administration Report on S. 1630). The Executive’s critique noted that “unilateral action aimed at addressing a global problem” through a standard limiting tailpipe emissions would not be an effective means of safeguarding the global environment and

would “necessarily punish national interests.” *Id.* at 792, 813.

That Congress has never deviated from its decision to not regulate GHGs under the CAA was not for lack of opportunity. Congress has considered and rejected countless other bills in the years since the 1990 Amendments that would have authorized GHG regulation. By one estimate, Congressmen have proposed over 400 bills concerning GHGs between 1990 and 2009. *See* Abigail R. Moncrieff, *Reincarnating the “Major Questions” Exception to Chevron Deference As A Doctrine of Noninterference (or Why Massachusetts v. EPA Got It Wrong)*, 60 ADMIN. L. REV. 593, 636-37 (2008) (tracking proposals). Congress’s inability to break this nearly quarter-century long deadlock is incredibly suggestive: this is not an area of policymaking where the legislature has acted rashly or unthinkingly in delegating authority to agencies.

At bottom, Congress understood the dangers of “any air pollutant” in § 7521(a)(1) in terms of the ill-effects caused those who inhale the pollutants, not the broad, attenuated consequences of climate change. The CAA was drafted not to combat the threat of flooding or the menace of heat waves, *see* Endangerment and Cause of Contribute Findings for Greenhouse Gases, 74 Fed. Reg. 66,496, 66,526 (Dec. 15, 2009) (“EPA Endangerment Finding”), but the choking, stifling, and degenerative effect of airborne pollutants on human beings and their affected localities. Congress has long quantified this harm in terms

of mortality rates, *see, e.g.*, Air Pollution – 1968, 564 (statement of Dr. Roger S. Mitchell, Director, Webb-Waring Institute for Medical Research), not acreage of “costal [sic] land” lost. *Massachusetts*, 549 U.S. at 522. To put matters pointedly: the injury sufficient to establish standing need not suffice to establish endangerment as well.

Congress was of course free to circumvent this close cause-health effect nexus by devising a separate provision for GHG regulation, much as it did for stratospheric ozone, but it did no such thing. And nothing in the legislative history suggests that Congress has deviated from this status quo.

The plain language of the CAA only underscores the Act’s non-applicability to GHGs insofar as it requires the harm be of the sort “reasonably [] anticipated to endanger.” 42 U.S.C. § 7251(a)(1) – a term we know to have a discrete meaning.

C.

In the present case, this Court had “little trouble” disposing of the argument that the “PSD program is specifically focused solely on localized air pollution” because it is “*quite clear . . . the PSD program was intended to protect against precisely the types of harms caused by greenhouse gases.*” *CRR* Slp. Op. 62-63 (emphasis added). *Massachusetts* notwithstanding, this statement is a curious thing in light of the

uncontradicted legislative history just discussed.² So too is the court's reliance on the statutory text, particularly its finding that "the CAA expressly provides that effects on 'welfare' means 'effects on . . . weather . . . and climate.'" Slp. Op. 62-63 (citing 42 U.S.C. § 7602(h)).

As a textual matter, there is nothing "quite clear" about it. The Supreme Court has declared that GHGs like CO₂ are pollutants within the meaning of the Act. Under the CAA, however, EPA can regulate a pollutant only if the administrator finds that the GHG causes or contributes to "air pollution which *may reasonably be anticipated to endanger* public health or welfare." 42 U.S.C. § 7251(a)(1) (emphasis added). But in locating the CAA's conception of "harm" in § 7602(h), the definition of "welfare," and not § 7251(a)(1) generally, this court effectively skirted the operative statutory language – "may reasonably be anticipated" – and rendered it nugatory. This was in error. Section 7602(h) defines only the potential *objects* of harm; the "reasonably be anticipated" language of § 7251(a)(1) supplies the requisite *nexus* between the pollutant and the objects of its harm. The two provisions must be read together if the statute is to be interpreted faithfully. To put matters another way, the "may reasonably be anticipated"

² As noted, the weather and climate issues targeted by the CAA involve direct, deleterious, localized effects caused by polluted air people breathe or suspended pollutants that may be deposited on land and crops by precipitation.

language must do some analytical work in the endangerment determination lest it be deemed surplusage. *See, e.g., Conference of State Bank Supervisors v. Conover*, 715 F.2d 604, 627 (D.C. Cir. 1983) (“[I]n construing a statute, we ‘are obliged to give effect, if possible, to every word Congress used.’” (quoting *Reiter v. Sonotone Corp.*, 442 U.S. 330, 339 (1979))). And in view of the CAA’s legislative history, the nature of that work is clear.

In order to reasonably anticipate that a pollutant will contribute to air pollution that endangers public health or welfare, the Agency would have to conclude that pollution created by CO₂ or another GHG is a reasonably direct cause of the damage to public health and welfare. To find that CO₂ may ultimately endanger public health and welfare because sea levels will rise tells us nothing about whether CO₂ concentrations in the ambient air directly harm public health and welfare. The ingredients of a Killer Smog are few and specific; the process through which an air inversion traps particulate matter close to the ground is well understood. With both there is a direct correlation between reducing the concentration of the pollutant and reducing the negative health effects. Questions of public health impacts from air pollution have consistently been based on the direct – that is, inhalational – effects of exposure to the pollutant. *See, e.g., Joint Opening Brief of Non-State Petitioners and Supporting Intervenors at 58, Coal. for Responsible Regulation v. EPA*, No. 09-1322 (May 20, 2011); *NRDC, Inc. v. EPA*, 902 F.2d 962, 973 (D.C. Cir. 1990)

(concluding that EPA may not consider the health effects of increased unemployment when setting new health-based NAAQS)

In contrast, any harm to human health and welfare flowing from climate change comes at the end of a long speculative chain. The dissent in *Massachusetts* pointed out that EPA had described in great detail the scientific uncertainty that precluded even forming a judgment as to whether greenhouse gases endanger public welfare. *See* 549 U.S. at 553-55 (Scalia, J., dissenting). In that earlier defense of its refusal to form a judgment, EPA explained how predicting climate change involved a “complex web of economic and physical factors,” including:

[o]ur ability to predict future global anthropogenic emissions of GHGs and aerosols; the fate of these emissions once they enter the atmosphere (*e.g.*, what percentage are absorbed by vegetation or are taken up by the oceans); the impact of those emissions that remain in the atmosphere on the radiative properties of the atmosphere; changes in critically important climate feedbacks (*e.g.*, changes in cloud cover and ocean circulation); change in temperature characteristics (*e.g.*, average temperatures, shifts in daytime and evening temperatures); changes in other climatic parameters (*e.g.*, shifts in precipitation, storms); and ultimately the impact of such changes on human health and welfare (*e.g.*, increases or decreases in agricultural productivity, human health impacts).

Id. If there can be this much logical daylight between the pollutant and the anticipated harm, there is nothing EPA is not authorized to do. If this finding is valid, in a world where six degrees of separation is the compass of all humankind, the right endangerment finding would allow EPA to rule the world. But as this Court has noted before, EPA's authority to regulate is constrained, not enlarged, by the relationship of the term "will endanger" to other sections of the CAA. See *Ethyl v. EPA*, 541 F.2d 1, 29 (D.C. Cir. 1976) (en banc).

Of course, nothing here should be taken to imply that a particular GHG does not contribute to climate change. I mean only to suggest that a pollutant might contribute to the nebulous mélange of potential drivers of climate change without having any direct, deleterious impact within the meaning of the CAA. I emphasize too that this is not a problem with science. This is a problem of statutory interpretation. Climate change, with its geologic timeframe and its many uncertainties and imponderables, is and will probably remain a subject of some controversy. EPA finds the science sufficiently convincing for its purposes and it is entitled to a certain amount of deference on questions related to its technical expertise. But it is not necessary to quibble with the science of climate change to conclude that the endangerment finding fails on textual and logical terms. There is simply a point at which a difference in degree becomes a difference in kind and we have passed this point many times over in the course of this tortured litigation. The

Supreme Court, however, has refused to recognize as much for tailpipe emissions.

II.

A.

But we need not follow *Massachusetts* off the proverbial cliff and apply its reasoning to the unique Title V and PSD provisions not considered in that case. The cascading layers of absurdity that flow from that interpretive exercise make clear that the plain language of the CAA compels no such result. As EPA's own rulemaking documents have so unabashedly explained:

To apply the statutory PSD and title V applicability thresholds literally to sources of GHG emissions would bring tens of thousands of small sources and modifications into the PSD program each year, and millions of small sources into the title V program. These extraordinary increases in scope of the permitting programs would mean that the programs would become several hundred-fold larger than what Congress appeared to contemplate.

PSD and Title V Greenhouse Gas Tailoring Rule; Final Rule, 75 Fed. Reg. 31,514, 31,533 (Jun. 3, 2010) (“Final Tailoring Rule”). Completely oblivious to the irony, EPA added:

For our authority to take this action, we rely in part on the “absurd results” doctrine,

because applying the PSD and title V requirements literally (as previously interpreted narrowly by EPA) would not only be inconsistent with congressional intent concerning the applicability of the PSD and title V programs, but in fact would severely undermine congressional purpose for those programs.

Id. at 31,541-42. And again:

[I]n this case because a literal reading of the PSD and title V applicability provisions results in insurmountable administrative burdens. Those insurmountable administrative burdens – along with the undue costs to sources – must be considered “absurd results” that would undermine congressional purpose for the PSD and title V programs.

Id. at 31,547.

In precincts outside Washington, D.C., this litany might cause a regulator to pause and consider whether results so at odds with Congressional presuppositions could ever be justified as falling within the literal meaning of an enactment. EPA, however, proposes that the absurd result can be easily eliminated by ramping up and gradually phasing in the requirements. Faced with the choice of reconsidering the legitimacy of an endangerment finding that sets in motion such a cluster of chaos or rewriting the statute, the agency has blithely done the latter. This is an abuse of the absurdity and administrative necessity doctrines as neither can be invoked to

preempt legislative prerogatives. Permitting a statute “to be read to avoid absurd results allows an agency to establish that seemingly clear statutory language does not express the ‘unambiguously expressed intent of Congress,’” but it does not grant the agency “a license to rewrite the statute.” *Mova Pharmaceuticals v. Shalala*, 140 F.3d 1060, 1068 (D.C. Cir. 1998).

But that is not the worst of it. The real absurdity – apparently as invisible to the EPA as the San Gabriels once were to me – cannot be cured by phase in, no matter how subtly Byzantine. The real absurdity is that this unprecedented expansion of regulatory control, this epic overreach, may very well do more damage to the wellbeing of Americans than GHGs could ever do.³

B.

A second, more elementary consideration counsels against the mechanical application of *Massachusetts’s* tailpipe emissions determination to these distinct CAA provisions: deference to Congress.

As articulated in *Food & Drug Administration v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120

³ See, e.g., Joint Reply Br. of Non-State Petitioners and Supporting Intervenors at *1, No. 09-1322 (Nov. 14, 2011) (“Nor does [EPA] dispute that the new rules will impose massive burdens on a struggling economy, or that its program of vehicle standards will affect global mean temperatures by no more than 0.01 degree Celsius by 2100”).

(2000), the Supreme Court’s “major questions” canon gives form to the judicial intuition so strongly implicated here: Congress should not be presumed to have deferred to agencies on questions of great significance more properly resolved by the legislature. If there was ever a regulation in recent memory more befitting such a presumption than the present, I confess I do not know of it.

On familiar facts, the Supreme Court in *Brown & Williamson* rebuffed the FDA’s expansionist effort to bring tobacco products within its regulatory ambit. The agency’s regulation rested on a strained interpretation of the Food, Drug, and Cosmetic Act, 21 U.S.C. § 301 *et seq.*, in which it defined nicotine as a “drug” and cigarettes and smokeless tobacco as “combination products” used to deliver nicotine to the body. *See Brown & Williamson*, 529 U.S. at 125-27. Applying *Chevron U.S.A. Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984), the Court first considered the statutory structure. “[I]f tobacco products were within the FDA’s jurisdiction,” the majority concluded, the normal operation of the “Act would require the FDA to remove them from the market entirely,” and this would “contradict Congress’ clear intent as expressed in its more recent, tobacco-specific legislation.” *Brown & Williamson*, 359 U.S. at 143. As the present case confirms, such absurdity is all but inevitable where an agency attempts to regulate that which “simply do[es] not fit” within its regulatory scheme. *Id.* The Court next considered Congress’s 35 year history of tobacco-specific legislation,

finding it “clear” that this “legislation has effectively ratified the FDA’s previous position that it lacks jurisdiction to regulate tobacco.” *Id.* at 156.

The Court then closed its lengthy *Chevron* discussion with an appeal to first principles. The “inquiry into whether Congress has directly spoken to the precise question at issue,” the Court explained, “is shaped, at least in some measure, by the nature of the question presented.” *Id.* at 159. *Chevron* deference operates on the assumption “that a statute’s ambiguity constitutes an implicit delegation,” but this tenuous fiction need not hold true in every situation. *Id.* “In extraordinary cases,” the Court went on, “there may be reason to hesitate before concluding that Congress has intended such an implicit delegation.” *Id.* (referencing Stephen Breyer, *Judicial Review of Questions of Law and Policy*, 38 ADMIN. L. REV. 363, 370 (1986) (“A court may also ask whether the legal question is an important one. Congress is more likely to have focused upon, and answered, major questions, while leaving interstitial matters to answer themselves in the course of the statute’s daily administration”)).⁴

⁴ *MCI Telecommunications Corporation v. AT&T Co.*, 512 U.S. 218 (1994), a case the *Brown & Williamson* Court found “instructive,” *Brown & Williamson*, 529 U.S. at 160, had advanced a similar logic. In concluding Congress had spoken to the meaning of the term “modify” as it appears in § 203(b) of the Communications Act of 1934, the Court rejected FCC’s far more expansive interpretation. The Court assumed in dicta that it was “highly unlikely that Congress would leave the determination of

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Declaring *Brown & Williamson* “hardly [the] ordinary case,” the Court reasoned:

Contrary to its representations to Congress since 1914, the FDA has now asserted jurisdiction to regulate an industry constituting a significant portion of the American economy. In fact, the FDA contends that, were it to determine that tobacco products provide no “reasonable assurance of safety,” it would have the authority to ban cigarettes and smokeless tobacco entirely. Owing to its unique place in American history and society, tobacco has its own unique political history. Congress, for better or for worse, has created a distinct regulatory scheme for tobacco products, squarely rejected proposals to give the FDA jurisdiction over tobacco, and repeatedly acted to preclude any agency from exercising significant policymaking authority in the area. Given this history and the breadth of the authority that the FDA has asserted, we are obliged to defer not to the agency’s expansive construction of the statute, but to Congress’ consistent judgment to deny the FDA this power.

Brown & Williamson, 529 U.S. at 159-60.

whether an industry will be entirely, or even substantially, rate-regulated to agency discretion – and even more unlikely that it would achieve that through such a subtle device as permission to ‘modify’ rate-filing requirements.” *MCI*, 512 U.S. at 231. Certainly the same might be said here as well.

In view of the language, structure, and history of the CAA, I am simply unable to distinguish this logic from the present case in any meaningful way. To the contrary, with only the slightest of modifications one could rework the above text to apply to GHG emissions.⁵

Although the *Massachusetts* Court distinguished *Brown & Williamson*, it did so only in the context of tailpipe emissions. Its reasoning does not extend to Title V and the PSD program.

In the Court's view, *Brown & Williamson* had "found critical at least two considerations that have no counterpart in [*Massachusetts*]." 549 U.S. at 531.

⁵ Perhaps:

Contrary to its representations in *Massachusetts v. EPA*, the EPA has now asserted jurisdiction to regulate industries constituting a significant portion of the American economy. In fact, the EPA contends that, because greenhouse gases can be regulated as tailpipe emissions, it is obligated to regulate all stationary sources at admittedly "absurd" levels. Owing to its ubiquitous place in the planet's life cycle, greenhouse gases have their own unique political history. Congress, for better or for worse, has declined to create a distinct regulatory scheme for greenhouse gases, squarely rejected proposals to give the EPA jurisdiction over greenhouse gases, and repeatedly acted to preclude any agency from exercising significant policymaking authority in the area. Given this history and the breadth of the authority that the EPA has asserted, we are obliged to defer not to the agency's expansive construction of the statute, but to Congress' consistent judgment to deny the EPA this power.

First, whereas the regulation of tobacco under the FDCA would have necessarily led to a ban on tobacco products – an outcome that clashed with the “common sense” intuition that Congress never meant to remove those products from circulation – the expansion of EPA’s “jurisdiction would lead to no such extreme measures [because] EPA would only *regulate* emissions” and “there is nothing counterintuitive to the notion that EPA can curtail the emission of substances that are putting the global climate out of kilter.” *Id.* But the Court spoke too soon. In the present litigation, EPA argued – and a Panel of this Court readily agreed – that in regulating tailpipe emissions under 42 U.S.C. § 7521, it is obligated to regulate stationary sources under Title V and the PSD program as well. As a threshold matter, the *Massachusetts* Court never considered these far-reaching effects. It limited its brief discussion on the merits to the tailpipe emissions question squarely before it. In this way, the Court never considered the differing ways in which the CAA regulates tailpipes and stationary sources.

With tailpipe emissions, the inclusion of greenhouse gasses within the term “air pollutant” does not directly expand or contract the universe of vehicles and engines subject to the new standards. Consequently, the regulation’s impact will fall primarily on those manufacturers already complying with existing emission requirements. And even then, the Court explained, EPA “would have to delay any action ‘to permit the development and application of the

requisite technology, giving appropriate consideration to the cost of compliance.’” *Massachusetts*, 549 U.S. at 531 (quoting § 7521(a)(2)). Not so with the regulation of stationary sources. Insofar as 42 U.S.C. § 7479(1) defines “major emitting facility” to include those facilities with the “potential to emit” either 100 or 250 “tons per year or more of *any* air pollutant,” the statutory term is necessarily tied to CAA’s jurisdictional scope. Inescapably, then, the regulation of greenhouse gasses as “air pollutants” will radically expand the universe of covered entities far beyond Congress’s intentions. EPA’s decidedly extra-textual Tailoring Rule only confirms the ludicrousness of this result. Nor can it be said that the statutory safeguards operate in the same way as § 7521(a)(2). Permitting authorities may well be able to determine on a case-by-case basis what constitutes the “best available control technology” for a particular emitting facility, 42 U.S.C. § 7479(3), but this is of little consolation for the small business owner who previously fell outside the CAA. At bottom, this outcome clashes with the “common sense” understanding that Congress would not have intended such a broad, unchecked expansion of the CAA to potentially millions of businesses from all walks of industry. The Supreme Court in *Massachusetts* simply did not have occasion to consider this absurd and “counterintuitive” outcome, but we do – and we must.

Second, the Court determined that the “unbroken series of congressional enactments” referenced in *Brown & Williamson* “made sense only if adopted

‘against the backdrop of the FDA’s consistent and repeated statements that it lacked authority under the FDCA to regulate tobacco.’” *Massachusetts*, 549 U.S. at 531.⁶ By contrast, EPA had “not identified any congressional action that conflicts in any way with the regulation of greenhouse gases from new motor vehicles.” *Id.* And even if it had, “Congress could not have acted against a regulatory ‘backdrop’ of disclaimers of regulatory authority” because “EPA had never disavowed the authority to regulate greenhouse gases, and in 1998 it in fact affirmed that it *had* such authority.” *Id.* When read in context, however, it is clear that the Court’s reasoning was building toward a wholly unspectacular point: because EPA’s legislative history failed to establish congressional intent with the same weight and precision as *Brown & Williamson*, it did not justify “read[ing] ambiguity into a clear statute.” *Id.* That logic is inapplicable here. In the absence of lexical clarity – which the Court had found in in [sic] CAA’s “sweeping definition of ‘air pollutant,’” *id.* at 528 – we *need* legislative history and other indicia of congressional intent to inform our understanding of how GHGs are to be regulated under other CAA provisions.⁷

⁶ The suggestion here seems to be that Congress’s decision to regulate tobacco products would not, by itself, evince its intent to proscribe agencies from doing the same. Doing so in light of FDA’s statements, however, had the effect of implicitly codifying the agency’s long-held view.

⁷ Consider the role of NAAQS in this regulatory system. EPA in *Massachusetts* had observed that NAAQS were
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The *Massachusetts* Court's effort to distinguish *Brown & Williamson* is thus unavailing where we deal not with the definitional scope of "any pollutant" and tailpipe emissions, but the particular dangers Congress sought to combat in enacting Title V and the PSD program. When read in conjunction with the CAA's history, structure, and language, the intuitive logic of the "major questions" doctrine makes clear that the Panel erred in extending *Massachusetts*. Congress simply did not intend for EPA to convert the "Clean Air Act" to the "Warm Air Act" writ large. But that is exactly what the federal courts have done.

As the Chief Justice observed in his *Massachusetts* dissent, impatience is not a juridical principle that can be sustained under our constitutional

established to "address air pollution problems that occur primarily at ground level" as well as "concentrations of substances in the ambient air and the related public health and welfare problems." *Massachusetts*, 549 U.S. at 558-59 (Scalia, J., dissenting). EPA thus reasoned that the regulation of the buildup of CO₂ in the upper reaches of the atmosphere – the process alleged to cause global climate change – was not akin to regulating the concentration of a substance that is polluting the air and was "beyond the scope of CAA's authorization to regulate." *Id.* In other words, EPA maintained that had Congress intended the CAA to regulate greenhouse gases [sic] and global climate change, it would have provided some better tool than NAAQS. That defense – offered in response to a demand to regulate tailpipe emissions – applies with even greater potency to Title V and the PSD program. In fact, although EPA now claims it is authorized to regulate greenhouse gases and global climate change, the agency acknowledges that the regulatory framework is as ill-suited to the task as ever.

framework. See *Massachusetts*, 549 U.S. at 535-36 (Roberts, C.J., dissenting). It certainly fares no better as a default measure of institutional choice under *Chevron*. As *Massachusetts* recognized, an agency can only exercise the authority Congress has delegated to it. See 549 U.S. at 534-35 (noting that EPA must “ground its reasons for action or inaction in the statute” and “exercise its discretion within defined statutory limits.”). Absurdity can never figure as an adequate substitute for authority in this threshold assessment. Nor can absurdity cure the agency’s failure to establish that the statute unambiguously compels its interpretation or that its interpretation, though discretionary, is actually consistent with statutory text, structure, and purposes. The agency seeks to avoid these pesky constraints here by invoking *Massachusetts*, but Article III judges cannot be a legitimate source of legislative authority. By deferring to the distorted claim of delegation advanced here, this Court has transformed *Chevron* from a useful, albeit accidental, touchstone into an idol to which we surrender our constitutional faith.

III.

In rejecting State Petitioners’ challenge to the Tailoring Rule for want of standing, the Panel invoked that famed preceptor of American civics, Schoolhouse Rock, to great effect. Slp. Op. at 79. (“As a generation of schoolchildren knows, ‘by that time, it’s very unlikely that [a bill will] become a law. It’s not easy to become a law.’”). I certainly do not quarrel

with such dispositive authority. Lawmaking is neither easy nor certain. In an ordinary case, the mere possibility of “corrective legislation” will not establish that redress is “likely, as opposed to merely speculative.” *Lujan*, 504 U.S. at 561. But it bears repeating that this is not an ordinary case. Where the choice is between non-action or a confessedly “absurd” regulation poised to impress countless billions of dollars in costs on American industry, we have transcended the realm of the speculative. For once, the comparison with *Massachusetts* is apt. The Supreme Court found standing on the basis of an estimated rise in sea level of 20 to 70 centimeters by the year 2100, *see Massachusetts*, 549 U.S. at 542 (Roberts, C.J, dissenting) – a prediction based almost entirely on conjecture. Is it any more speculative to say that specific projections of billions of dollars in actual regulatory costs would not suffice to compel Congress to act?

The Panel’s alternative contention fares better: because Congress could remedy the issue in countless ways, not all of which inure to State Petitioners’ benefit, the inquiry is “inherently speculative.” *See Op.* at 79. This argument benefits from the genuine uncertainty in Congress over what, if any, role EPA should play in GHG regulation. But therein lies a frighteningly obtuse logic. If EPA actions are *ultra vires* precisely because disagreement on the Hill prevented Congress from altering the status quo and authorizing such regulation, how then can the very same deadlock be used to *defeat* Petitioners’ standing to challenge the Rule through which EPA effectuates

its absurdist scheme? The Court cannot have it both ways.

At bottom, bad decisions make bad law. In denying rehearing en banc, this Court has read *Massachusetts* to its illogical ends and it is American industry that will have to pay. That this Court did so is unsurprising, but certainly not fated. *Massachusetts* does not compel this outcome for the PSD and Title V provisions. Had this Court interrogated its own assumptions and yielded not to *Massachusetts's* telos but sound constitutional principles, it would have found that the matter properly belongs before Congress, not courts or agencies. As Schoolhouse Rock long ago explained:

Ring one, Executive,
Two is Legislative, that's Congress.
Ring three, Judiciary.
See it's kind of like my circus, circus.⁸

And what a circus it is.

For these reasons, I respectfully dissent from the denial of rehearing en banc.

⁸ "Three Ring Government," Schoolhouse Rocks [sic], available at <http://www.schoolhouserock.tv/ThreeRing.html>.

KAVANAUGH, Circuit Judge, dissenting from the denial of rehearing en banc:

This case is plainly one of exceptional importance. A decision in either direction will have massive real-world consequences. The U.S. Chamber of Commerce describes the EPA regulations at issue here as “the most burdensome, costly, far-reaching program ever adopted by a United States regulatory agency.” Petition for Rehearing En Banc at 1. On the other hand, EPA issued these regulations to help address global warming, a policy issue of major long-term significance to the United States. Put simply, the economic and environmental policy stakes are very high.

Of course, our role is not to make the policy choices or to strike the balance between economic and environmental interests. That job is for Congress and the President when considering and enacting legislation, and then as appropriate for the Executive Branch – here, EPA, under the ultimate supervision of the President – when exercising its authority within statutory constraints. Our job as a court is more limited: to ensure that EPA has acted within the authority granted to it by Congress. In this case, I conclude that EPA has exceeded its statutory authority. I respectfully disagree with the panel opinion’s contrary conclusion, and given the overall importance of the case, I respectfully dissent from the denial of rehearing en banc.

I

A

This case concerns EPA's implementation of the Prevention of Significant Deterioration provisions of the Clean Air Act. The Prevention of Significant Deterioration program – which is codified in Sections 7470 to 7479 of Title 42 – is designed to maintain state and local compliance with the National Ambient Air Quality Standards, known as the NAAQS. The NAAQS are currently established for six air pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution, and sulfur dioxide. As relevant here, the Prevention of Significant Deterioration statute requires stationary facilities that emit certain “air pollutants” to obtain permits before beginning new construction. *See* 42 U.S.C. §§ 7475(a)(1), 7479(1). To obtain a permit, the facility must undergo a lengthy, costly process to analyze the new construction's impact on air quality and to try to demonstrate its compliance with the relevant emissions limits.

A central question in this case is how to construe the term “air pollutant” for purposes of this statutory permitting requirement. In particular, the question is whether the term “air pollutant” here covers not just the NAAQS pollutants, which can cause breathing problems or other health issues, but also greenhouse gases such as carbon dioxide, which contribute to global warming. Under the broader interpretation of “air pollutant” that encompasses greenhouse gases, a far greater number of facilities would fall within the

Prevention of Significant Deterioration program and have to obtain pre-construction permits. That in turn would impose significantly higher costs on businesses and individuals that are building new commercial or residential property.

In considering a different Clean Air Act program targeted at motor vehicle emissions, the Supreme Court said that the term “air pollutant” meant “all airborne compounds of whatever stripe,” which included greenhouse gases such as carbon dioxide. *Massachusetts v. EPA*, 549 U.S. 497, 529 (2007). But all parties here, including EPA, agree that the *Massachusetts v. EPA* interpretation of the term “air pollutant” cannot control in this case, for purposes of this very different Clean Air Act program for stationary facilities. Rather, as the parties agree, we must look to the text and context of the Prevention of Significant Deterioration statute to determine what “air pollutant” covers here.

Looking at the relevant statutory text and context, there would initially appear to be two plausible interpretations of the term “air pollutant” for purposes of the Prevention of Significant Deterioration statute: (i) more broadly, an airborne compound that is deemed harmful and is regulated by EPA in any Clean Air Act program, which would include greenhouse gases such as carbon dioxide; or (ii) more narrowly, the six air pollutants that are regulated by EPA in setting and enforcing the NAAQS, which would cover carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution, and sulfur dioxide, but

would not include greenhouse gases such as carbon dioxide.

EPA chose the broader interpretation of “air pollutant,” thereby greatly expanding the reach of the Prevention of Significant Deterioration statute. But that broader interpretation has a glaring problem, as EPA itself recognized. In the context of the Prevention of Significant Deterioration statute, EPA’s broader interpretation would not mesh with other provisions of the statute and would lead to absurd results. That’s because the Prevention of Significant Deterioration statute requires pre-construction permits for facilities with the potential to emit more than 250 tons per year (or, for some facilities, 100 tons per year) of any covered pollutant. *See* 42 U.S.C. §§ 7475(a)(1), 7479(1). That would be a very low trigger for emissions of greenhouse gases because greenhouse gases are emitted in far greater quantities than the NAAQS pollutants. As a result, the low trigger would mean a dramatically higher number of facilities would fall within the program and have to obtain pre-construction permits.

In an unusual twist, EPA openly acknowledged the unreasonableness – indeed, the absurdity – caused by its interpretation of the statute. If the Prevention of Significant Deterioration program were interpreted to require pre-construction permits based on emissions of greenhouse gases, EPA candidly stated that the result would be “so contrary to what Congress had in mind – and that in fact so undermines what Congress attempted to accomplish with

the PSD requirements – that it should be avoided under the ‘absurd results’ doctrine.” 74 Fed. Reg. 55,292, 55,310 (Oct. 27, 2009).

But faced with those absurd consequences from the broader interpretation of the statute, EPA surprisingly did not choose the seemingly obvious option of adopting the narrower and more sensible interpretation of the term “air pollutant” for the Prevention of Significant Deterioration statute – the interpretation limited to NAAQS air pollutants. Instead, EPA plowed ahead with the broader interpretation. And then, to try to deal with the absurd repercussions of that interpretation for the Prevention of Significant Deterioration statute, EPA re-wrote the very specific 250-ton trigger in the permitting requirement of the statute, unilaterally raising that trigger for greenhouse gas emissions from 250 tons to 100,000 tons – a 400-fold increase. *See* 75 Fed. Reg. 31,514 (June 3, 2010). EPA believed that re-writing the statute’s permitting-triggers provision in this way would reduce the number of facilities that would require pre-construction permits and thereby “tailor” the absurdity – that is, alleviate some of the absurdity caused by interpreting “air pollutant” to cover greenhouse gases.¹

¹ At the same time, EPA reserved the right to ratchet the trigger all the way back down to 250 tons, thereby bringing more and more facilities under the program at EPA’s unilateral discretion. EPA’s assertion of such extraordinary discretionary power both exacerbates the separation of powers concerns in

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This is a very strange way to interpret a statute. When an agency is faced with two initially plausible readings of a statutory term, but it turns out that one reading would cause absurd results, I am aware of no precedent that suggests the agency can still choose the absurd reading and then start rewriting other perfectly clear portions of the statute to try to make it all work out. And just recently, the Supreme Court reminded the Executive Branch and the lower courts that this is not the proper way to interpret a statute: Instead of “reading new words into the statute” to avoid absurd results, as the Government had urged in that case, the Court said that the statute should be interpreted so that “no absurdity arises in the first place.” *Kloeckner v. Solis*, No. 11-184, slip op. at 13 (U.S. 2012).

Even limited to this case alone, the practical implications of accepting EPA’s approach are obviously major. And if this case stands as a precedent that influences other agency decisionmaking, the future consequences likewise could be significant: Agencies presumably could adopt absurd or otherwise unreasonable interpretations of statutory provisions and then edit other statutory provisions to mitigate the unreasonableness. Allowing agencies to exercise that kind of statutory re-writing authority could

this case and underscores the implausibility of EPA’s statutory interpretation. Put simply, the statute cannot be read to grant discretion to EPA to raise or lower the permitting triggers as EPA sees fit.

significantly enhance the Executive Branch's power at the expense of Congress's and thereby alter the relative balance of powers in the administrative process. I would not go down that road.

B

In my view, the statutory issue here is reasonably straightforward. The Prevention of Significant Deterioration statute's definition of "major emitting facility" subjects a facility to the permitting requirement based on the facility's emissions of "air pollutants." See 42 U.S.C. §§ 7475(a)(1), 7479(1). In the context of the Prevention of Significant Deterioration program as a whole, it seems evident that the term "air pollutant" refers to the NAAQS air pollutants.

To begin with, as explained above, interpreting "air pollutant" in this context to refer to the NAAQS air pollutants would avoid the absurd consequences that EPA's broader interpretation creates – namely, the exponential increase in the number of facilities that would be required to obtain pre-construction permits. That single point alone provides dispositive support for the narrower, NAAQS-specific interpretation. See, e.g., *Taniguchi v. Kan Pacific Saipan, Ltd.*, 132 S. Ct. 1997, 2004-05 (2012) (statutory context supports narrower rather than broader reading of statutory term).

Moreover, other provisions in the Prevention of Significant Deterioration statute likewise plainly use the term "air pollutant" to refer to the NAAQS

air pollutants. The Prevention of Significant Deterioration program is codified in Sections 7470 to 7479 of Title 42. Of relevance here, Section 7473 sets guidelines for areas designated as in attainment of the NAAQS and requires that the “concentration of any air pollutant” in those areas not exceed certain concentrations permitted by the NAAQS. 42 U.S.C. § 7473(b)(4). The term “air pollutant” in Section 7473(b)(4) necessarily refers to the NAAQS air pollutants. In addition, several other provisions in the Prevention of Significant Deterioration statute similarly refer to Section 7473(b)(4)’s maximum concentrations for NAAQS pollutants. Each of those references thus also necessarily employs a NAAQS-specific use of the term “air pollutant.” *See, e.g.*, 42 U.S.C. § 7473(c)(1) (listing exclusions from “the maximum allowable increases in ambient concentrations of an air pollutant”); § 7474(a)(B) (redesignations cannot cause “concentrations of any air pollutant” to exceed the maximum); *see also* § 7475(a)(3)(A) (facility may not cause air pollution in excess of “maximum allowable concentration for any pollutant”).

So it’s clear that a variety of provisions in the Prevention of Significant Deterioration statute use “air pollutant” to refer to a NAAQS air pollutant. And we presume that, unless otherwise indicated, the term “air pollutant” is used the same way throughout the Prevention of Significant Deterioration statute – and here, we have no reason to conclude otherwise. *See IBP, Inc. v. Alvarez*, 546 U.S. 21, 34 (2005)

(“identical words used in different parts of the same statute are generally presumed to have the same meaning”).

By contrast, when Congress wanted, in the Prevention of Significant Deterioration statute, to refer to a broader set of pollutants than the NAAQS pollutants, it did so expressly. Thus, a facility that requires a pre-construction permit because of its emissions of NAAQS pollutants must employ the best available control technology for emissions not just of “air pollutants” but of “each pollutant subject to regulation under this chapter,” which – now that EPA has regulated greenhouse gases in other parts of the Clean Air Act – *does* include greenhouse gases. 42 U.S.C. § 7475(a)(4). By its terms, Section 7475(a)(4) thus applies to greenhouse gases, not just the NAAQS. Importantly, however, Congress did not employ the language “each pollutant subject to regulation under this chapter” in the statutory provision setting forth which facilities must obtain a pre-construction permit, the provision at issue in this case. And the policy distinction drawn in Section 7475(a)(4) is rather intuitive: Congress designed the statute’s permitting requirement based on facilities’ NAAQS emissions, but, once those facilities are subject to the permitting requirement, they must also

meet a range of other minimum environmental standards.²

The overall objectives of the Prevention of Significant Deterioration statute also suggest that “air pollutant” refers to the NAAQS air pollutants for purposes of the permitting requirement. Importantly, the Prevention of Significant Deterioration statute applies only in areas that have met the NAAQS – that is, areas that do not have excessive emissions of the NAAQS air pollutants. If the purpose of this statute were in part to address global warming by requiring pre-construction permits for facilities that emit greenhouse gases, as EPA’s reading suggests, why would the statute target the construction of facilities only in areas that are in *compliance* with the NAAQS – and not elsewhere in the United States? That would make little sense, which in turn further suggests that EPA has misread the statute.

Moreover, as its name indicates, the Prevention of Significant Deterioration statute is designed primarily to prevent “deterioration” of an attainment area’s air quality. The relevant air quality standards that define whether an area is in attainment are the NAAQS. In a statute expressly linked to the NAAQS

² Section 7479(1) – the definition of “major emitting facility” – speaks of “any” air pollutant. But the word “any” just begs the question of what the term “air pollutant” covers in the Prevention of Significant Deterioration program. It’s either any air pollutant regulated under the Clean Air Act or any of the NAAQS air pollutants.

and designed to ensure that air quality does not “deteriorate” with respect to the NAAQS, it is somewhat illogical to read the statute as requiring pre-construction permits simply because a facility may emit substances that will *not* affect attainment of the NAAQS. Under EPA’s approach, a facility could be covered by the permitting requirement even if it emits no NAAQS air pollutants at all. That, too, makes little sense and suggests that EPA has misread the statute.

A separate canon of interpretation further demonstrates that EPA’s broad reading of the term “air pollutant” is at odds with Congress’s design. By requiring a vastly increased number of facilities to obtain pre-construction permits, EPA’s interpretation will impose enormous costs on tens of thousands of American businesses, with corresponding effects on American jobs and workers; on many American homeowners who move into new homes or plan other home construction projects; and on the U.S. economy more generally. Yet there is literally no indication in the text or legislative record that Members of Congress ever contemplated – much less intended – such a dramatic expansion of the permitting requirement of the Prevention of Significant Deterioration statute. Courts do not lightly conclude that Congress intended such major consequences absent some indication that Congress meant to do so. *See FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 159-61 (2000). Here, as elsewhere, we should not presume that Congress hid an elephant in a mousehole.

For all of those reasons – the statutory text, the absurdity principle, the statutory context as demonstrated by related statutory provisions, the overarching objectives of the statute, the major unintended consequences of a broader interpretation – the Prevention of Significant Deterioration statute as a whole overwhelmingly indicates that the permitting requirement is based on emissions of the NAAQS air pollutants.

And just to reiterate, the simple and absolutely dispositive point in this case is the following: The broader interpretation of “air pollutant” adopted by EPA produces what even EPA itself admits are absurd consequences. When an agency is faced with two plausible readings of a statutory term, but one reading would cause absurd results, the agency cannot choose the absurd reading. Here, therefore, EPA was required to adopt the narrower and more sensible interpretation of “air pollutant,” the interpretation limited to the NAAQS pollutants. As the Supreme Court has said, “interpretations of a statute which would produce absurd results are to be avoided if alternative interpretations consistent with the legislative purpose are available.” *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 575 (1982). Such an “alternative interpretation[] consistent with the legislative purpose” is readily available here.

II

If that were the end of the analysis, I would not hesitate to conclude that EPA had adopted an impermissibly broad reading of the term “air pollutant” for purposes of the permitting provision of the Prevention of Significant Deterioration statute. But before reaching that conclusion definitively, we need to consider whether EPA’s approach was mandated by the Supreme Court’s decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007). In that case, the Supreme Court considered the general statutory term “air pollutant” as applied to a different aspect of the Clean Air Act – the motor vehicle emissions program. The Court there interpreted “air pollutant” very broadly to mean “all airborne compounds of whatever stripe,” including greenhouse gases. *Id.* at 529.

Does *Massachusetts v. EPA* dictate EPA’s broader interpretation of “air pollutant” in the different context of the Prevention of Significant Deterioration statute? The panel opinion seemed to think so; its conclusion appears to have been heavily if not dispositively influenced by *Massachusetts v. EPA*. See, e.g., *Coalition for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 134, 136 (D.C. Cir. 2012). In my view, however, the holding in *Massachusetts v. EPA* does not control the result in this case. Indeed, as explained more fully below, even EPA has concluded that *Massachusetts v. EPA* does not control here. The decision in *Massachusetts v. EPA* concerned the motor vehicle emissions program, a point the Supreme Court expressly noted many times in its opinion. The

case did not purport to say that every other use of the term “air pollutant” throughout the sprawling and multifaceted Clean Air Act necessarily includes greenhouse gases. Each individual Clean Air Act program must be considered in context.³

Importantly, in *Massachusetts v. EPA*, the Supreme Court explicitly relied on the fact that the Clean Air Act’s “capacious definition of ‘air pollutant,’” did not appear “counterintuitive” or produce “extreme” consequences in the context of motor vehicle emissions. 549 U.S. at 531-32. But, as explained above, EPA’s capacious definition of “air pollutant” *is* counterintuitive and *does* produce extreme consequences in the context of the Prevention

³ As an analogy, take the familiar example of “no vehicles in the park.” Assume that a court has decided that the term “vehicles” generally includes bicycles, and that no bicycles are allowed in the park. Next assume that another park regulation states that “all park service vehicles must have reinforced gas tanks.” In that latter regulation, context tells us that the term “vehicles” obviously does not include bicycles. Bicycles are still vehicles in the abstract, but the gas-tank regulation logically applies only to a specific subset of vehicles (namely, motor vehicles).

So it is with “air pollutant” as used in different parts of the Clean Air Act. *Massachusetts v. EPA* held that the term “air pollutant” generally includes greenhouse gases. But that does not mean that the term “air pollutant” can never be used in a narrower sense. Greenhouse gases may qualify as “air pollutants” in the abstract, but context tells us that the Prevention of Significant Deterioration program uses the term “air pollutant” to refer only to a subset of all air pollutants (namely, the NAAQS pollutants).

of Significant Deterioration statute, as EPA itself acknowledges. Moreover, in this case, an alternative and sensible interpretation of the term “air pollutant” is readily discernible from the text, context, and structure of the Prevention of Significant Deterioration statute as a whole – namely, the NAAQS-specific interpretation.

To be sure, as noted earlier, the same words used in different parts of an Act are often construed to have the same meaning. *See IBP, Inc. v. Alvarez*, 546 U.S. 21, 34 (2005). If that were an inflexible command, the *Massachusetts v. EPA* interpretation of “air pollutant” would certainly control here and throughout the entire Clean Air Act. But as the Supreme Court recently reminded us – *in the context of interpreting the Clean Air Act* – “the natural presumption that identical words used in different parts of the same act are intended to have the same meaning is not rigid and readily yields whenever there is such variation in the connection in which the words are used as reasonably to warrant the conclusion that they were employed in different parts of the act with different intent.” *Environmental Defense v. Duke Energy Corp.*, 549 U.S. 561, 574 (2007) (internal quotation marks and ellipsis omitted). As instructed by the Supreme Court, we must interpret statutory terms based on their context and in light of the statute as a whole, even if that approach on some occasions means that the same term applies differently in different parts of a statute. *See, e.g., General Dynamics Land Systems, Inc. v. Cline*, 540 U.S. 581,

596-97 (2004) (term “age” has different meanings within Age Discrimination in Employment Act); *United States v. Cleveland Indians Baseball Co.*, 532 U.S. 200, 212-13 (2001) (term “wages paid” has different meanings within Social Security Act Amendments of 1939); *Robinson v. Shell Oil Co.*, 519 U.S. 337, 343-44 (1997) (term “employee” has different meanings within Title VII).

The Supreme Court’s application of that interpretive principle in *Environmental Defense v. Duke Energy* – a decision issued on the same day as *Massachusetts v. EPA* – is illuminating. There, the Supreme Court confronted the Clean Air Act’s definition of a stationary source “modification.” See 549 U.S. at 567-68. That term was relevant to both the New Source Performance Standards program and the Prevention of Significant Deterioration program. The Court ruled that EPA could interpret the term “modification” differently for each of those two Clean Air Act programs, even though “the terms share a common statutory definition.” *Id.* at 574. In so holding, the Court analyzed the two programs’ different regulatory goals, noting that a “given term in the same statute may take on distinct characters from association with distinct statutory objects calling for different implementation strategies.” *Id.*

The Supreme Court’s interpretive approach in *Environmental Defense v. Duke Energy* – which recognizes that the meaning of a statutory term in the Clean Air Act may vary based on the particular program at issue – shows that the *Massachusetts v.*

EPA interpretation of “air pollutant” in the context of the motor vehicle emissions program does not necessarily require the same interpretation of “air pollutant” in the context of the Prevention of Significant Deterioration program. In *Massachusetts v. EPA*, the Supreme Court emphasized that the regulation of greenhouse gases in the motor vehicle emissions program would not be “counterintuitive” and would not lead to any “extreme measures.” 549 U.S. at 531. Greenhouse gas standards would simply be added to the other regulations already applicable to manufacturers of new motor vehicles, and any such standards would take into account both cost and technological feasibility. See 42 U.S.C. § 7521(a). By contrast, the regulation of greenhouse gases in the Prevention of Significant Deterioration program would be both counterintuitive and extreme. Tens of thousands of businesses and homeowners would be swept into the Clean Air Act’s purview for the first time and hit with permitting costs averaging \$60,000, not to mention the additional costs of trying to construct and maintain the facility in compliance with the relevant emissions limits and technological standards. See 75 Fed. Reg. 31,514, 31,556 (June 3, 2010). In addition, the costs associated with a vastly expanded permitting requirement would deter numerous projects from even starting in the first place. The major differences between the motor vehicle emissions program and the Prevention of Significant Deterioration program thus neatly fit the *Environmental Defense v. Duke Energy* paradigm of “distinct statutory objects calling for different implementation strategies.”

In reaching that conclusion, it bears mention that the Clean Air Act is a very complicated statute encompassing several distinct environmental programs. It is no surprise, then, that the motor vehicle emissions program and the Prevention of Significant Deterioration program are not the only parts of the Act to employ a term like “air pollutant” in a context-dependent way. For example, the visibility program applies to facilities based on their emissions of “any pollutant.” 42 U.S.C. § 7491(g)(7). In the context of that program, EPA has interpreted the term “any pollutant” to mean “any visibility-impairing pollutant,” which obviously does not include greenhouse gases. 40 C.F.R. pt. 51, App. Y, § II.A. Similarly, the nonattainment program applies to areas that have been designated as nonattainment “for any air pollutant.” 42 U.S.C. § 7501(2). In the context of that program, the term “air pollutant” is logically limited to the NAAQS air pollutants, which are the only pollutants for which an area can be designated as nonattainment. *Id.* § 7407(d)(1)(A). All of that simply underscores that a court should exercise caution before reflexively importing the interpretations applicable to one Clean Air Act program into a distinct Clean Air Act program.

Any lingering doubt that *Massachusetts v. EPA* does not control here is dispelled when we recall that EPA itself has rejected *Massachusetts v. EPA*’s interpretation of “air pollutant” for the Prevention of Significant Deterioration statute. The Court in *Massachusetts v. EPA* said that “air pollutant” meant “all

airborne compounds of whatever stripe.” 549 U.S. at 529. EPA has acknowledged, however, that such a broad definition cannot possibly extend to the use of the term “air pollutant” in the Prevention of Significant Deterioration statute. EPA understood that it would be absurd to require pre-construction permits because of emissions of any airborne compound, including emissions of airborne compounds that have not been deemed harmful and regulated under the Clean Air Act. To avoid rendering the Prevention of Significant Deterioration statute an absurdity, EPA construed “air pollutant” to mean *certain* air pollutants – in particular, “any regulated air pollutant.”

The critical point for present purposes – and it really is a critical point in thinking about the significance of *Massachusetts v. EPA* to the present case – is that EPA itself recognized that the *Massachusetts v. EPA* definition of “air pollutant” cannot and does not control how to interpret “air pollutant” in the Prevention of Significant Deterioration context. As it tries to justify its broad interpretation of the Prevention of Significant Deterioration statute, EPA cannot simultaneously latch on to *Massachusetts v. EPA* and reject *Massachusetts v. EPA*.

If *Massachusetts v. EPA* does not control here – and even EPA admits that it does not – then we are back where we started. EPA was faced with two initially plausible interpretations of “air pollutant” for purposes of the permitting requirement of the Prevention of Significant Deterioration statute. One interpretation created patent absurdities and made

little sense given the other statutory provisions. The other interpretation fit comfortably and sensibly within the statutory text and context. EPA nonetheless chose the first option. In my view, EPA's reading of the statute was impermissible. An agency cannot adopt an admittedly absurd interpretation and discard an eminently sensible one.

Given all of this, the case seems reasonably straightforward. So how did the panel opinion reach the opposite conclusion? I respectfully have three main points of disagreement. First, as I read it, the panel opinion was decisively influenced by *Massachusetts v. EPA*'s interpretation of "air pollutant" in the context of the motor vehicle emissions program. But in light of the material differences between the motor vehicle emissions program and the Prevention of Significant Deterioration program, the *Massachusetts v. EPA* interpretation cannot control here, as even EPA acknowledges. Second, the panel opinion attempted to buttress its choice of a broad interpretation of the term "air pollutant" by pointing to Section 7475(a)(4), the provision in the Prevention of Significant Deterioration program requiring covered facilities to use the best available control technology. But as explained above, Section 7475(a)(4) actually cuts the other way because it specifically refers to "each pollutant subject to regulation under this chapter," which now does include greenhouse gases – whereas, by contrast, other statutory provisions in the Prevention of Significant Deterioration program clearly employ a NAAQS-specific interpretation of the

unadorned term “air pollutant.” Third, the panel gave insufficient weight to the most critical point in this case, the absurd consequences of EPA’s broad interpretation. This was a mistake because the ultimate clincher in this case is one simple point: EPA chose an admittedly absurd reading over a perfectly natural reading of the relevant statutory text. An agency cannot do that.

III

In finding EPA’s statutory interpretation legally impermissible, I do not in any way want to diminish EPA’s vital policy objectives. EPA’s regulations for the Prevention of Significant Deterioration statute may well be a good idea as a matter of policy. The task of dealing with global warming is urgent and important. But as in so many cases, the question here is: Who Decides? The short answer is that Congress (with the President) sets the policy through statutes, agencies implement that policy within statutory limits, and courts in justiciable cases ensure that agencies stay within the statutory limits set by Congress. A court’s assessment of an agency’s compliance with statutory limits does not depend on whether the agency’s policy is good or whether the agency’s intentions are laudatory. Even when that is true, we must enforce the statutory limits. *See Hamdan v. United States*, 696 F.3d 1238 (D.C. Cir. 2012) (ruling that Executive Branch exceeded statutory authority in wartime prosecution of al Qaeda member).

In cases like this one, the bedrock underpinnings of our system of separation of powers are at stake. To be sure, courts must be wary of undue interference with an agency's action implementing its statutory responsibilities. *See American Radio Relay League, Inc. v. FCC*, 524 F.3d 227 (D.C. Cir. 2008) (separate opinion of Kavanaugh, J.); *see also Desert Citizens Against Pollution v. EPA*, 699 F.3d 524 (D.C. Cir. 2012); *National Environmental Development Association's Clean Air Project v. EPA*, 686 F.3d 803 (D.C. Cir. 2012); *American Petroleum Institute v. EPA*, 684 F.3d 1342 (D.C. Cir. 2012); *ATK Launch Systems, Inc. v. EPA*, 669 F.3d 330 (D.C. Cir. 2012); *Natural Resources Defense Council v. EPA*, 661 F.3d 662 (D.C. Cir. 2011); *Medical Waste Institute & Energy Recovery Council v. EPA*, 645 F.3d 420 (D.C. Cir. 2011). To take one salient and important example, the statutory scheme gives EPA significant discretion in setting the NAAQS for the NAAQS air pollutants – a discretion the courts must respect.

But at the same time, undue deference or abdication to an agency carries its own systemic costs. If a court mistakenly allows an agency's transgression of statutory limits, then we green-light a significant shift of power from the Legislative Branch to the Executive Branch. The Framers of the Constitution did not grant the Executive Branch the authority to set economic and social policy as it sees fit. Rather, the Framers gave Congress, along with the President, that legislative role (subject to constitutional limits), and they assigned the Executive Branch the

executive power to issue rules and enforce the law *within the limits set by Congress*.⁴

It is true that the legislative process can be cumbersome and frustrating, and the Executive Branch often is well-intentioned in wanting to address pressing policy concerns quickly, before the sometimes glacial congressional machinery can be stirred to action.⁵ The legislative process can be slow because the Constitution makes it far harder to enact legislation than to block it: Under the Constitution, three different entities must agree in order to enact legislation – the House, the Senate, and the President (or two-thirds of both the House and the Senate to override a President’s veto). But the Framers knew the legislative process would be laborious. They designed it that way. The time and difficulty of enacting new legislation has never justified an agency’s contravention of statutory limits. The

⁴ In protecting national security, the Executive has some Article II authority to act in certain circumstances in the Nation’s defense even without specific congressional authorization. This is known as *Youngstown* category two. *See Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 637 (1952) (Jackson, J., concurring). There is no general *Youngstown* category two authority in the domestic social and economic realms, where the Executive must have statutory authority in order to act.

⁵ In 2009, the House of Representatives passed a global warming bill that was supported by the President. But the Senate did not pass it. In the early 2000s, Senators McCain and Lieberman sought to pass global warming legislation, but no law was ultimately enacted. Numerous other bills have been introduced over the years, and various legislative efforts are ongoing.

Framers specifically contemplated, moreover, that there would be situations where the Executive Branch confronts a pressing need that it does not have current authority to address. In those circumstances, the Constitution's Recommendations Clause provides that the President may "recommend" to Congress "such Measures as he shall judge necessary and expedient." U.S. CONST. art. II, § 3.

Importantly, the separation of powers and checks and balances of our system are designed not just to ensure that the Branches operate within the proper spheres of their authority, but also to protect individual liberty. As the Supreme Court has explained many times, "while a government of opposite and rival interests may sometimes inhibit the smooth functioning of administration, the Framers recognized that, in the long term, structural protections against abuse of power were critical to preserving liberty. . . . The failures of . . . regulation may be a pressing national problem, but a judiciary that licensed extraconstitutional government with each issue of comparable gravity would, in the long run, be far worse." *Free Enterprise Fund v. Public Company Accounting Oversight Board*, 130 S. Ct. 3138, 3157 (2010) (internal quotation marks, alterations, and citations omitted).

As a court, it is not our job to make the policy choices and set the statutory boundaries, but it is emphatically our job to carefully but firmly enforce the statutory boundaries. That bedrock separation of powers principle accounts for my concern about this

case. Here, as I see it, EPA went well beyond what Congress authorized for the Prevention of Significant Deterioration statute. I respectfully disagree with the panel's resolution of this issue, and given the overall importance of the case, I respectfully dissent from the denial of rehearing en banc.

RELEVANT SECTIONS – CLEAN AIR ACT

(42 U.S.C. § 7401, *et seq.*)

Section 107 (42 U.S.C. § 7407)

(a) Responsibility of each State for air quality; submission of implementation plan Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State.

...

(d) Designations. –

(1) Designations generally. –

(A) Submission by governors of initial designations following promulgation of new or revised standards. – By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 109, the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State, designating as –

- (i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,
- (ii) attainment, any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant, or
- (iii) unclassifiable, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. The Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.

Section 161 (42 U.S.C. § 7471)

In accordance with the policy of section 7401 (b)(1) of this title, each applicable implementation plan shall contain emission limitations and such other measures as may be necessary, as determined under regulations promulgated under this part, to prevent significant deterioration of air quality in each region (or portion thereof) designated pursuant to section 7407 of this title as attainment or unclassifiable.

Section 165 (42 U.S.C. § 7475)

(a) Major emitting facilities on which construction is commenced

No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless –

(1) a permit has been issued for such proposed facility in accordance with this part setting forth emission limitations for such facility which conform to the requirements of this part;

...

Section 169 (42 U.S.C. § 7479):

For purposes of this part:

(1) The term “major emitting facility” means any of the following stationary sources of air pollutants which emit, or have the potential to emit, *one hundred tons per year* or more of any air pollutant from the following types of stationary sources: [listing 26 particular stationary source categories]. Such term also includes any other source with the potential to emit *two hundred and fifty tons per year* or more of any air pollutant. This term shall not include new or modified facilities which are nonprofit health or education institutions which have been exempted by the State [emphasis added].

...

Section 501 (42 U.S.C. § 7661):

As used in this subchapter –

...

(2) Major source

The term “major source” means any stationary source (or any group of stationary sources located within a contiguous area and under common control) that is either of the following:

(A) A major source as defined in section 7412 [pertaining to hazardous air pollutants] of this title.

(B) A major stationary source as defined in section 7602 of this title [defining the term “major stationary source” to mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant] or part D of subchapter I of this chapter [pertaining to sources in nonattainment areas].

...

Section 502 (42 U.S.C. § 7661(a))

(a) Violations

... The Administrator may, in the Administrator’s discretion and consistent with the applicable provisions of this chapter, promulgate regulations to exempt one or more source categories (in whole or in part) from the requirements of this subsection if the Administrator finds that

compliance with such requirements is impracticable, infeasible, or unnecessarily burdensome on such categories, except that the Administrator may not exempt any major source from such requirements.

...

Excerpt from EPA Technical Support Document for the Endangerment Finding, defining the meaning of “very likely” as 90-99% certainty. JA03355:

Box 1.2: Communication of Uncertainty in the IPCC *Fourth Assessment Report* and CCSP/USGCRP

Because some aspects of climate change are better understood, established, and/or resolved than others and involve projections, it is helpful to precisely convey the degree of certainty of statements and findings. Uncertainty can arise from a variety of sources: (1) a misspecification of the cause(s), such as the omissions of a causal factor resulting in spurious correlations; (2) mischaracterization of effect(s), such as a model that predicts cooling rather than warming; (3) absence of or imprecise measurement or calibration; (4) fundamental stochastic (chance) processes; (5) ambiguity over the temporal ordering of cause and effect; (6) time delays in cause and effect; and (7) complexity where cause and effect between certain factors are camouflaged by a context with multiple causes and effects, feedback loops, and considerable noise (CCSP, 2008b). For this reason, climate change assessments have developed procedures and terminology for communicating uncertainty. Consistent and transparent treatment of uncertainty helps minimize ambiguity and opportunities for misinterpretation of language.

IPCC *Fourth Assessment Report* Uncertainty Treatment

A set of terms to describe uncertainties in current knowledge is common to all parts of the IPCC *Fourth Assessment Report* based on the *Guidance Notes for Lead Authors of the IPCC Fourth Assessment Report on Addressing Uncertainties* (http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-uncertaintyguidance_note.pdf), produced by the IPCC in July 2005 (IPCC, 2005). Any use of these terms in association with IPCC statements in this Technical Support Document carries the same meaning as originally intended in the IPCC *Fourth Assessment Report*.

Description of confidence

Based on a comprehensive reading of the literature and their expert judgment, authors have assigned a confidence level as to the correctness of a model, an analysis, or a statement as follows:

Very high confidence	At least 9 out of 10 chance of being correct
High confidence	About 8 out of 10 chance
Medium confidence	About 5 out of 10 chance
Low confidence	About 2 out of 10 chance
Very low confidence	Less than a 1 out of 10 chance

Description of likelihood

Likelihood refers to a probabilistic assessment of some well defined outcome having occurred or occurring in the future, and may be based on quantitative

analysis or an elicitation of expert views. When authors evaluate the likelihood of certain outcomes, the associated meanings are:

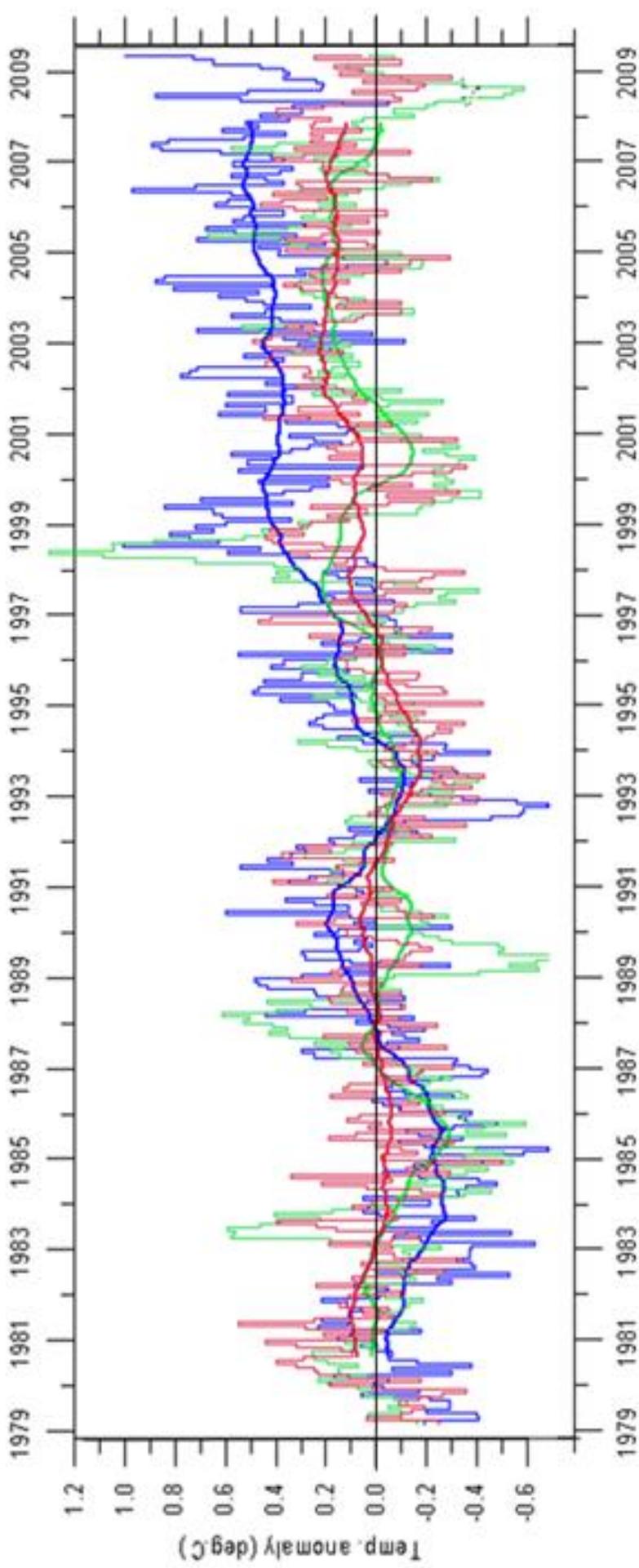
Virtually certain	>99% probability of occurrence
Very likely	90 to 99% probability
Likely	66 to 90% probability
About as likely as not	33 to 66% probability
Unlikely	10 to 33% probability
Very unlikely	1 to 10% probability
Exceptionally unlikely	<1% probability

CCSP/USGCRP Uncertainty Treatment

In many of its SAPs and its report “Global Climate Change Impacts in the United States” (Karl et al., 2009), the CCSP/USGCRP uses the same or similar terminology to the IPCC to describe confidence and likelihood. However, there is some variability from report to report, so readers should refer to the individual SAPs for a full accounting of the respective uncertainty language. In this document, when referencing CCSP/USGCRP reports, EPA attempted to reflect the underlying CCSP/USGCRP reports’ terminology for communicating uncertainty.

Excerpt from Public Comment submitted by Alan Cheetham, on the Endangerment Finding, regarding whether “global” warming is global or regional, data from University of Alabama at Huntsville (“UAH”) satellite dataset. JA02164:

The following figure shows satellite temperature anomaly data for the three world regions of Northern Hemisphere, Tropics and Southern Hemisphere, confirming that warming has only been occurring in the Northern Hemisphere. This does **not** match the CO2 theory.



Excerpt from US Climate Change Science Program (“CCSP”), Synthesis and Assessment Product 1.1, Temperature Trends in the Lower Atmosphere, Steps for Reconciling and Understanding Differences, p. 64. JA05120:

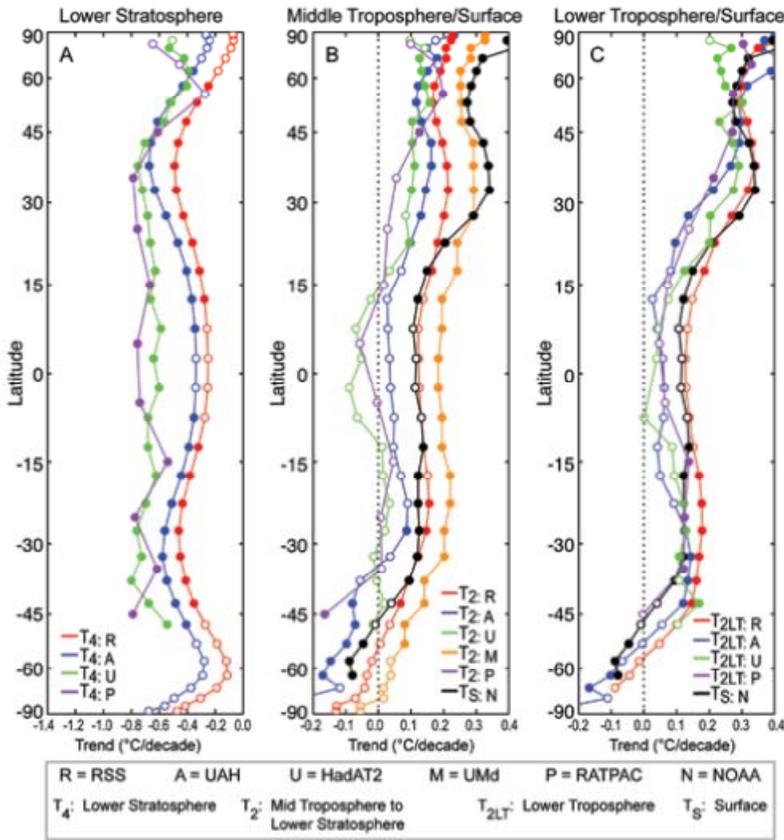


Figure 3.5: Temperature trends for 1979-2004 (°C/decade) by latitude.

Left: stratospheric temperature (T_4) based on RSS (red) and UAH (blue) satellite datasets, and RATPAC (violet) and HadAT2 (green) radiosonde datasets.

Middle: mid-tropospheric temperature (T_2) based on UMD (orange), RSS (red) and UAH (blue) satellite datasets, and RATPAC (violet) and HadAT2 (green) radiosonde datasets; and surface temperature (T_s) from NOAA data (black).

Right: surface temperature (T_s) from NOAA data (black) and lower tropospheric temperature (T_{2LT}) from RSS (red) and UAH satellite data (blue), and from RATPAC (violet) and HadAT2 (green) radiosonde data.

Filled circles denote trends estimated to be statistically significantly different from zero (at the 5% level). A Student's t-test, using the lag-1 autocorrelation to account for the non-independence of residual values about the trend line, was used to assess significance (see Appendix A for discussion of confidence intervals and significance testing).

Excerpt from Public Comment submitted by Joseph D'Aleo on the Endangerment Finding, regarding past warming in the Arctic. JA02615, 02617:

THE ARCTIC

Warming in the arctic has shown to be cyclical in nature. This was acknowledged in the AR4 which mentioned the prior warming and ice reduction in the 1930s and 1940s. Warming results in part from the reduction of arctic ice extent because of flows of the warm water associated with the warm phases of the PDO and AMO into the arctic from the Pacific through the Bering Straits and the far North Atlantic and the Norwegian Current.

Hartmann et al., 2005 showed how the rapid Great Pacific Climate Shift that was the change of the PDO from cold to warm in 1977 produced stepladder discontinuities in Alaskan temperatures.

Polyakov et al (2002) created a temperature record using stations north of 62 degrees N. The late 1930s-early 1940s were clearly the warmest of the last century. In addition, the numbers of available observations in the late 1930s-early 1940s (slightly more than 50) is comparable to recent decades. The annual temperatures are plotted in figure 3.

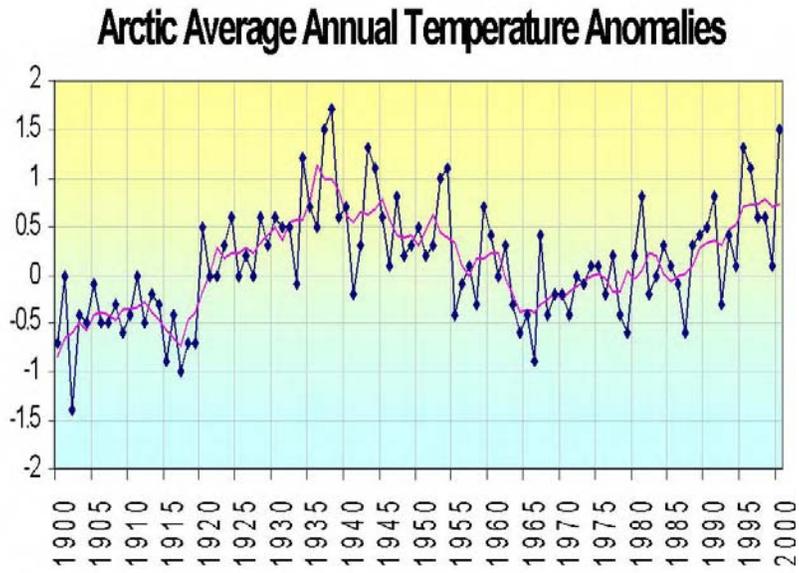
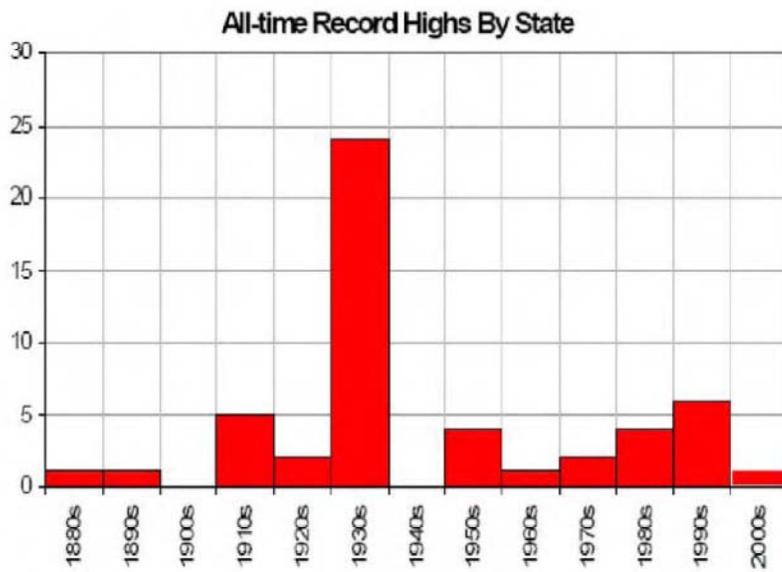


Figure 3: Arctic Basin wide temperatures (Polyakov 2003)

Excerpt from Public Comment submitted by Joseph D'Aleo on the Endangerment Finding, regarding the absence of any trend in extreme events. JA01280, 01283:

When examined on a state by state basis, the 1930s jumps out as the warmest decade with 24 state records. 37 records occurred before the 1970s.



Excerpt from U.S. Climate Change Science Program, Synthesis and Assessment Product 3.3, Weather and Climate Extremes in a Changing Climate, p. 39, Figure 2.3. JA05139:

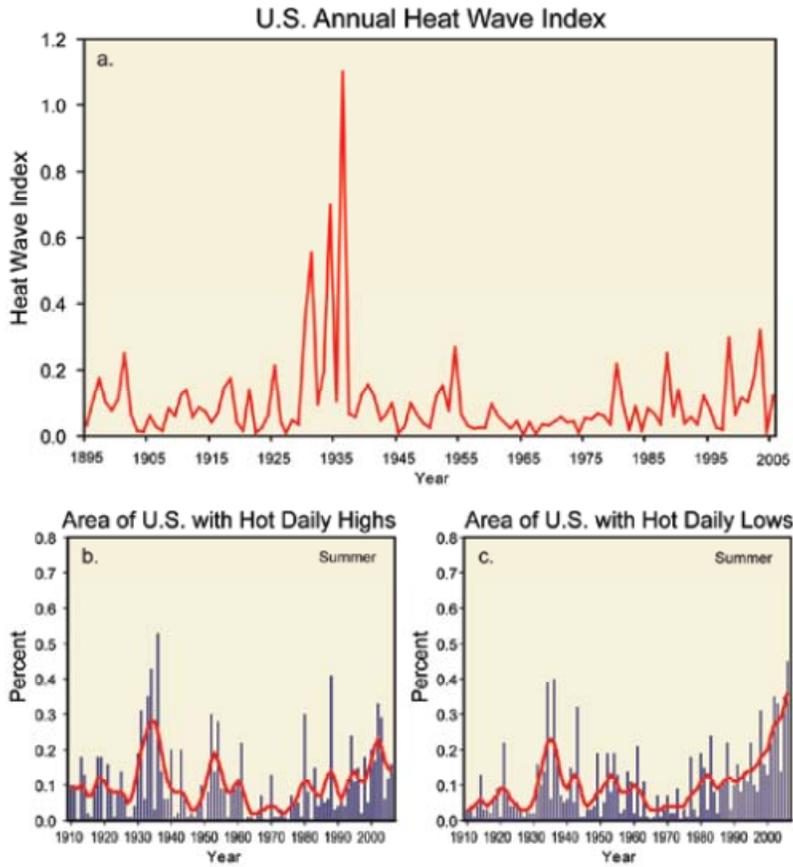


Figure 2.3: Time series of (a) annual values of a U.S. national average “heat wave” index. Heat waves are defined as warm spells of 4 days in duration with mean temperature exceeding the threshold for a 1 in 10 year event. (updated from Kunkel *et al.*, 1999);

(b) Area of the United States (in percent) with much above normal daily high temperatures in summer; (c) Area of the United States (in percent) with much above normal daily low temperatures in summer. Blue vertical bars give values for individual seasons while red lines are smoothed (9-year running) averages. The data used in (b) and (c) were adjusted to remove urban warming bias.

Excerpt from Public Comment submitted by Joseph D'Aleo on the Endangerment Finding. JA02587:

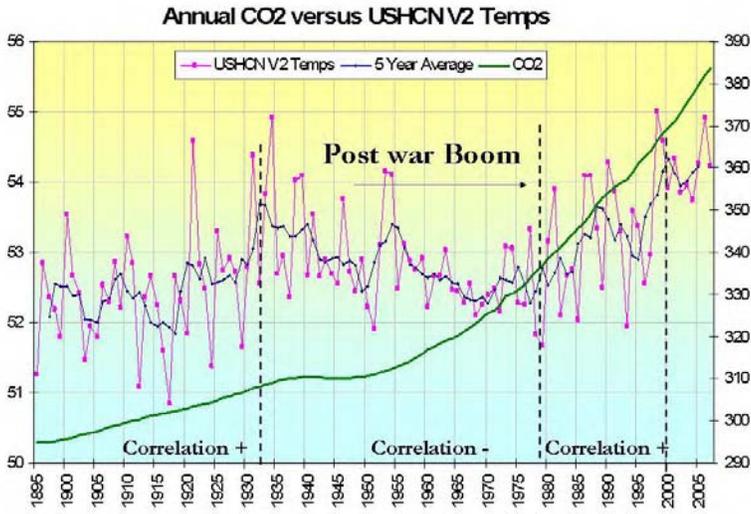


Figure 7: USHCN version 2 annual mean temperatures versus annual average CO2 since 1895.

Excerpt from US Climate Change Science Program, Synthesis and Assessment Product 1.1, Temperature Trends in the Lower Atmosphere, Steps for Reconciling and Understanding Differences, p. 25; Figure 1.3(F); graph showing tropical upper tropospheric hot spot predicted by theory and simulated by models. JA05113:

PCM Simulations of Zonal-Mean Atmospheric Temperature Change

Total linear change computed over January 1958 to December 1999

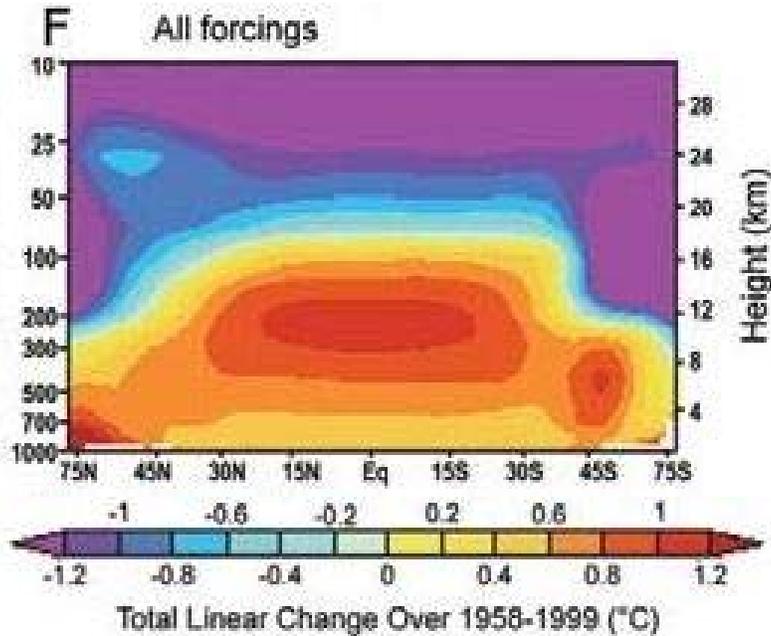


Figure 1.3: PCM simulations of the vertical profile of temperature change due to various forcings, and the effect due to all forcings taken together [F] (after Santer *et al.*, 2000).

Excerpt from US Climate Change Science Program, Synthesis and Assessment Product 1.1, Temperature Trends in the Lower Atmosphere, Steps for Reconciling and Understanding Differences, p. 62, Figure 3.4b; graph showing absence of tropical upper tropospheric hot spot in multiple independent data sets. JA05118:

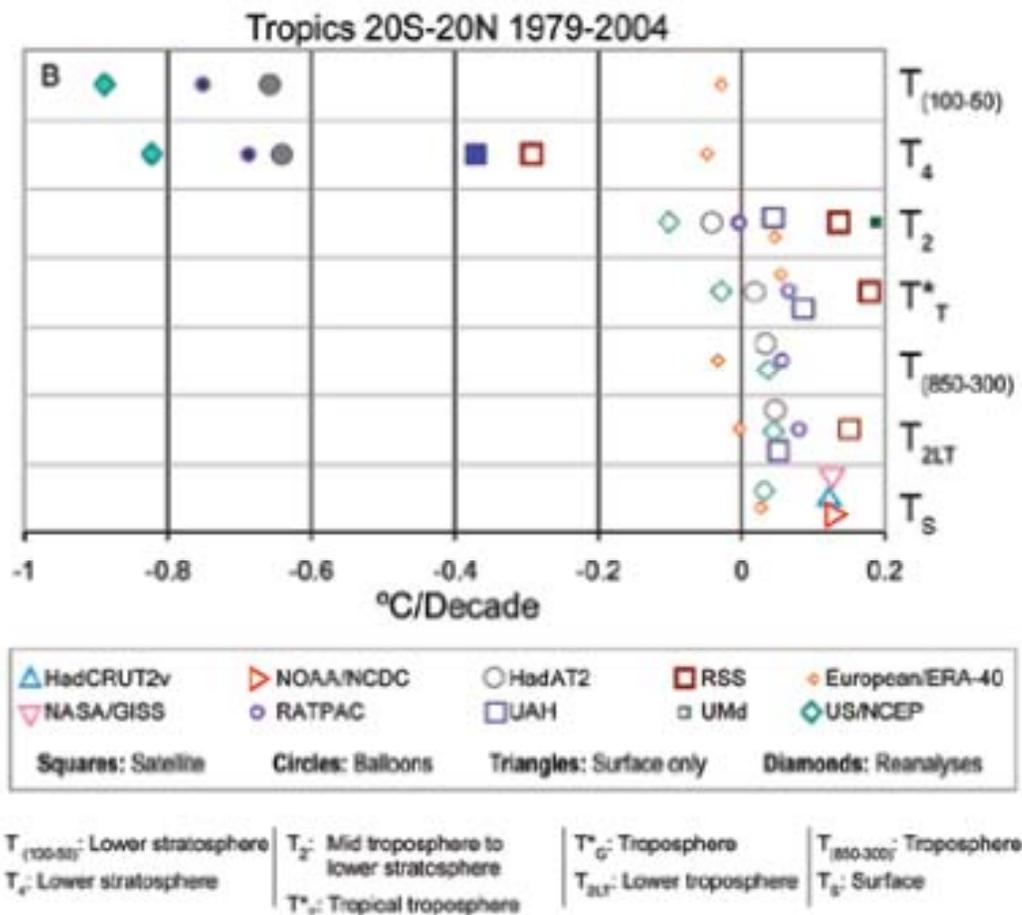


Figure 3.4b: Tropical (20°N-20°S) temperature trends (°C/decade) for 1979-2004 from Table 3.4 plotted as symbols. See figure legend for definition of symbols. Filled symbols denote trends estimated to be statistically significantly different from zero (at the 5% level). A Student's t-test, using the lag-1 autocorrelation to account for the non-independence of residual values about the trend line, was used to assess significance (see Appendix A for discussion of confidence intervals and significance testing).

Excerpt from Public Comment submitted by Joseph D'Aleo on the Endangerment Finding. JA02584:

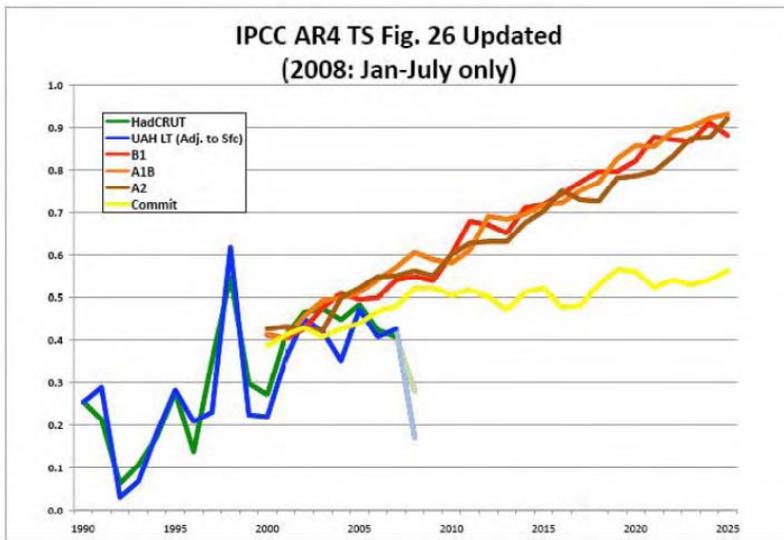


Figure 4: IPCC model scenarios versus actual satellite derived temperatures adjusted to the surface and Hadley CRUT in the lower troposphere (Source John Christy UAH)

Excerpt from Public Comment, authored by Professor Richard S. Lindzen, Alfred P. Sloan Professor of Atmospheric Sciences, M.I.T., discussing model validity. EPA Docket No. EPA-HQ-OAR-2009-0171-11564, pp. 2-3:

The matter of what are the questions really at issue is by no means obvious. That atmospheric CO₂ levels have risen from about 280 ppmv to 380 ppmv since the industrial revolution began is generally accepted. Similarly, it appears that there has been a net increase in global mean temperature anomaly over the same period of about 0.5-0.8C. However, this increase has been irregular implying a significant contribution from natural variability. Indeed, warming, cooling, and change, in general, are natural features of the climate. The mere existence of change tells us nothing beyond this. The serious questions involve quantitative issues. Is the warming sufficiently large to exclude natural origin? Is the sensitivity of climate such that we might reasonably expect such large warming in the future as a result of human activities? Is the net impact of such warming likely to be beneficial or detrimental? Are the proposed policies of relevance to climate per se? The public discussion of the global warming (or the peculiarly relabeled climate change) issue has generally conflated the non-serious and serious issues to the detriment of significant meaning. Gore's powerpoint presentation exemplifies this intentional and misleading confusion.

Note that just as the existence of change per se is no cause for alarm or even surprise, neither is the fact that some part of such change must certainly be due to man's activities. This would hardly need mentioning but for the fact that the iconic claim of the IPCC AR4 was that most of the change of temperature over the period since 1954 was due to man. Even, if true, this statement would hardly support alarm. However, once one looks at the argument presented by the IPCC, one readily sees how embarrassing the claim really is. What was done, was to take a large number of models that could not reasonably simulate known patterns of natural behavior (such as ENSO, the Pacific Decadal Oscillation, the Atlantic Multidecadal Oscillation), claim that such models nonetheless accurately depicted natural internal climate variability, and use the fact that these models could not replicate the warming episode from the mid seventies through the mid nineties, to argue that forcing was necessary and that the forcing must have been due to man. The argument makes arguments in support of intelligent design sound rigorous by comparison. It constitutes a rejection of scientific logic, while widely put forward as being 'demanded' by science. Equally ironic, the fact that the global mean temperature anomaly ceased increasing by the mid nineties is acknowledged by modeling groups as contradicting the main claim of the so-called attribution argument (Smith et al, 2007, Keenlyside et al, 2008). The behavior of the temperature anomalies is readily seen in the records of any of the official IPCC sources (viz figures 1 and 1a). Note that the failure of the models

to predict the cessation of warming in the mid 90's (except for a bump associated with a major El Nino event in 1998), does not disprove the possibility of significant anthropogenic warming. What it does disprove is the claim that the data provides evidence that recent warming is mostly due to man. It must be emphasized that the popular projections of catastrophe hardly follow simply from warming (at any level). They all depend on many additional and unpredictable factors.

Excerpts from Nongovernmental International Panel on Climate Change (“NIPCC”), Final Report, *Climate Change Reconsidered*, pp. 2-3; 9-11. (Copyrighted material not available in public EPA Docket for Endangerment Finding; available at <http://www.nipccreport.org/reports/2009/pdf/CCR2009FullReport.pdf>, last visited April 4, 2013):

Key Findings by Chapter

Chapter 1. Global Climate Models and Their Limitations

- The IPCC places great confidence in the ability of general circulation models (GCMs) to simulate future climate and attribute observed climate change to anthropogenic emissions of greenhouse gases.
- The forecasts in the Fourth Assessment Report were not the outcome of validated scientific procedures. In effect, they are the opinions of scientists transformed by mathematics and obscured by complex writing. The IPCC’s claim that it is making “projections” rather than “forecasts” is not a plausible defense.
- Today’s state-of-the-art climate models fail to accurately simulate the physics of earth’s radiative energy balance, resulting in uncertainties “as large as, or larger than, the doubled CO₂ forcing.”
- A long list of major model imperfections prevents models from properly modeling cloud formation and cloud-radiation interactions, resulting in large differences between model predictions and observations.

- Computer models have failed to simulate even the correct sign of observed precipitation anomalies, such as the summer monsoon rainfall over the Indian region. Yet it is understood that precipitation plays a major role in climate change.

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Global Climate Models and Their Limitations

1. Global Climate Models and Their Limitations

- 1.1. Models and Forecasting
- 1.2. Radiation
- 1.3. Clouds
- 1.4. Precipitation

Introduction

Because the earth-ocean-atmosphere system is so vast and complex, it is impossible to conduct a small-scale experiment that reveals how the world's climate will change as the air's greenhouse gas (GHG) concentrations continue to rise. As a result, scientists try to forecast the effect of rising GHG by looking backwards at climate history to see how the climate responded to previous "forcings" of a similar kind, or by creating computer models that define a "virtual" earth-ocean-atmosphere system and run scenarios or "story lines" based on assumptions about future events.

The Intergovernmental Panel on Climate Change (IPCC) places great confidence in the ability of general circulation models (GCMs) to simulate future climate and attribute observed climate change to anthropogenic emissions of greenhouse gases. It says “climate models are based on well-established physical principles and have been demonstrated to reproduce observed features of recent climate . . . and past climate changes . . . There is considerable confidence that Atmosphere-Ocean General Circulation Models (AOGCMs) provide credible quantitative estimates of future climate change, particularly at continental and larger scales” (IPCC, 2007-I, p. 591).

To be of any validity, GCMs must incorporate all of the many physical, chemical, and biological processes that influence climate in the real world, and they must do so correctly. A review of the scientific literature reveals numerous deficiencies and shortcomings in today’s state-of-the-art models, some of which deficiencies could even alter the sign of projected climate change. In this chapter, we first ask if computer models are capable *in principle* of producing reliable forecasts and then examine three areas of model inadequacies: radiation, clouds, and precipitation.

References

IPCC. 2007-I. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental*

Panel on Climate Change. Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller. (Eds.) Cambridge University Press, Cambridge, UK.

1.1. Models and Forecasting

J. Scott Armstrong, professor, The Wharton School, University of Pennsylvania and a leading figure in the discipline of professional forecasting, has pointed out that forecasting is a practice and discipline in its own right, with its own institute (International Institute of Forecasters, founded in 1981), peer-reviewed journal (*International Journal of Forecasting*), and an extensive body of research that has been compiled into a set of scientific procedures, currently numbering 140, that must be used to make reliable forecasts (*Principles of Forecasting: A Handbook for Researchers and Practitioners*, by J. Scott Armstrong, Kluwer Academic Publishers, 2001).

According to Armstrong, when physicists, biologists, and other scientists who do not know the rules of forecasting attempt to make climate predictions based on their training and expertise, their forecasts are no more reliable than those made by nonexperts, even when they are communicated through complex computer models (Armstrong, 2001). In other words, forecasts by scientists, even large numbers of very distinguished scientists, are not necessarily *scientific* forecasts. In support of his position, Armstrong and a colleague cite research by Philip E. Tetlock (2005),

a psychologist and professor of organizational behavior at the University of California, Berkeley, who “recruited 288 people whose professions included ‘commenting or offering advice on political and economic trends.’ He asked them to forecast the probability that various situations would or would not occur, picking areas (geographic and substantive) within and outside their areas of expertise. By 2003, he had accumulated more than 82,000 forecasts. The experts barely if at all outperformed non-experts and neither group did well against simple rules” (Green and Armstrong, 2007). The failure of expert opinion to lead to reliable forecasts has been confirmed in scores of empirical studies (Armstrong, 2006; Craig *et al.*, 2002; Cerf and Navasky, 1998; Ascher, 1978) and illustrated in historical examples of incorrect forecasts made by leading experts (Cerf and Navasky, 1998).

In 2007, Armstrong and Kesten C. Green of Monash University conducted a “forecasting audit” of the IPCC Fourth Assessment Report (Green and Armstrong, 2007). The authors’ search of the contribution of Working Group I to the IPCC “found no references . . . to the primary sources of information on forecasting methods” and “the forecasting procedures that were described [in sufficient detail to be evaluated] violated 72 principles. Many of the violations were, by themselves, critical.”

One principle of scientific forecasting Green and Armstrong say the IPCC violated is “Principle 1.3 Make sure forecasts are independent of politics.” The

two authors write, “this principle refers to keeping the forecasting process separate from the planning process. The term ‘politics’ is used in the broad sense of the exercise of power.” Citing David Henderson (Henderson, 2007), a former head of economics and statistics at the Organization for Economic Cooperation and Development (OECD), they say “the IPCC process is directed by non-scientists who have policy objectives and who believe that anthropogenic global warming is real and danger.” They conclude:

The forecasts in the Report were not the outcome of scientific procedures. In effect, they were the opinions of scientists transformed by mathematics and obscured by complex writing. Research on forecasting has shown that experts’ predictions are not useful in situations involving uncertainty and complexity. We have been unable to identify any scientific forecasts of global warming. Claims that the Earth will get warmer have no more credence than saying that it will get colder.

Scientists working in fields characterized by complexity and uncertainty are apt to confuse the output of *models* – which are nothing more than a statement of how the modeler believes a part of the world works – with real-world trends and forecasts (Bryson, 1993). Computer climate modelers certainly fall into this trap, and they have been severely criticized for failing to notice that their models fail to replicate real-world phenomena by many scientists, including Balling (2005), Christy (2005), Essex and McKittrick (2007), Frauenfeld (2005), Michaels

(2000, 2005, 2009), Pilkey and Pilkey-Jarvis (2007), Posmentier and Soon (2005), and Spencer (2008).

Canadian science writer Lawrence Solomon (2008) interviewed many of the world's leading scientists active in scientific fields relevant to climate change and asked them for their views on the reliability of the computer models used by the IPCC to detect and forecast global warming. Their answers showed a high level of skepticism:

- Prof. Freeman Dyson, professor of physics at the Institute for Advanced Study at Princeton University, one of the world's most eminent physicists, said the models used to justify global warming alarmism are "full of fudge factors" and "do not begin to describe the real world."
- Dr. Zbigniew Jaworowski, chairman of the Scientific Council of the Central Laboratory for Radiological Protection in Warsaw and former chair of the United Nations Scientific Committee on the Effects of Atomic Radiation, a world-renowned expert on the use of ancient ice cores for climate research, said the U.N. "based its global-warming hypothesis on arbitrary assumptions and these assumptions, it is now clear, are false."
- Dr. Richard Lindzen, a professor of meteorology at M.I.T. and member of the National Research Council Board on Atmospheric Sciences and Climate, said the IPCC is "trumpeting catastrophes that couldn't happen even if the models were right."

- Prof. Hendrik Tennekes, director of research at the Royal Netherlands Meteorological Institute, said “there exists no sound theoretical framework for climate predictability studies” used for global warming forecasts.
- Dr. Richard Tol, principal researcher at the Institute for Environmental Studies at Vrije Universiteit and adjunct professor at the Center for Integrated Study of the Human Dimensions of Global Change at Carnegie Mellon University, said the IPCC’s Fourth Assessment Report is “preposterous . . . alarmist and incompetent.”
- Dr. Antonino Zichichi, emeritus professor of physics at the University of Bologna, former president of the European Physical Society, and one of the world’s foremost physicists, said global warming models are “incoherent and invalid.”

Princeton’s Freeman Dyson has written elsewhere, “I have studied the climate models and I know what they can do. The models solve the equations of fluid dynamics, and they do a very good job of describing the fluid motions of the atmosphere and the oceans. They do a very poor job of describing the clouds, the dust, the chemistry, and the biology of fields and farms and forests. They do not begin to describe the real world that we live in” (Dyson, 2007).

Many of the scientists cited above observe that computer models can be “tweaked” to reconstruct climate histories after the fact, as the IPCC points out in the passage quoted at the beginning of this chapter. But this provides no assurance that the new

model will do a better job forecasting *future* climates, and indeed points to how unreliable the models are. Individual climate models often have widely differing assumptions about basic climate mechanisms but are then “tweaked” to produce similar forecasts. This is nothing like how real scientific forecasting is done.

Kevin Trenberth, a lead author along with Philip D. Jones of chapter 3 of the Working Group I contribution to the IPCC’s Fourth Assessment Report, replied to some of these scathing criticisms on the blog of the science journal *Nature*. He argued that “the IPCC does not make forecasts” but “instead proffers ‘what if’ projections of future climate that correspond to certain emissions scenarios,” and then hopes these “projections” will “guide policy and decision makers” (Trenberth, 2007). He says “there are no such predictions [in the IPCC reports] although the projections given by the Intergovernmental Panel on Climate Change (IPCC) are often treated as such. The distinction is important.”

This defense is hardly satisfactory. As Green and Armstrong point out, “the word ‘forecast’ and its derivatives occurred 37 times, and ‘predict’ and its derivatives occurred 90 times in the body of Chapter 8” of the Working Group I report, and a survey of climate scientists conducted by those same authors found “most of our respondents (29 of whom were IPCC authors or reviewers) nominated the IPCC report as the most credible source of forecasts (not ‘scenarios’ or ‘projections’) of global average temperature.” They conclude that “the IPCC does provide

forecasts.” We agree, and add that those forecasts are unscientific and therefore likely to be wrong.

Additional information on this topic, including reviews of climate model inadequacies not discussed here, can be found at http://www.co2science.org/subject/m/subject_m.php under the heading Models of Climate.
