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July 7, 2026

Congressional Research Service
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R49024

CRS REPORT
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Committees of Congress

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SUMMARY

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July 7, 2026

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Clean Air Act: EPA's Greenhouse Gas Endangerment Finding and Repeal

The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency's (EPA's) Administrator to address pollutants and sources of air pollution "which, in his judgment, cause or contribute … to air pollution … which may reasonably be anticipated to endanger public health or welfare." This judgment is referred to as an *endangerment finding* (EF) and has two distinct parts: a finding that an air pollutant may reasonably be anticipated to endanger public health or welfare, and a finding that emissions cause or contribute to that air pollution. The CAA requires that EPA regulate a pollutant if an EF is made. Provisions for EFs are in several sections of the CAA, including Section 202(a), covering motor vehicles.

Since the late 1970s, Congress has provided authority and funds for federal agencies to research and better understand climate science, but Congress did not direct agencies to promulgate regulations to reduce greenhouse gas (GHG) emissions. EPA's regulatory actions to limit GHG emissions from new motor vehicles cited the CAA and its amendments. In 2007, the Supreme Court held that EPA has the statutory authority to regulate GHGs as "air pollutants" under the CAA. EPA then issued an EF for motor vehicle emissions in 2009 and subsequently issued GHG regulations for motor vehicles. In 2025, EPA proposed and in 2026 finalized a rulemaking rescinding the 2009 EF and GHG standards for motor vehicles.

In the 2009 EF, EPA found that GHG air pollution "is reasonably anticipated to endanger public health" through "direct temperature effects, air quality effects, the potential for changes in vector-borne diseases, and the potential for changes in the severity and frequency of extreme weather events." EPA further found that GHG air pollution "may reasonably be anticipated to endanger public welfare," including climate impacts on food production, forestry, water resources, sea level rise, energy infrastructure, and ecosystems. Finally, EPA found that motor vehicles "contribute to" GHG air pollution.

Following the 2009 EF, EPA issued GHG emissions standards for passenger cars and light-duty, medium-duty, and heavy-duty trucks. EPA first promulgated GHG emissions standards for passenger vehicles and light-duty trucks in 2010, and for medium- and heavy-duty trucks in 2011. To reduce GHG air pollution, these regulatory actions established, for the first time, GHG emissions standards by setting fleet-wide average carbon dioxide (CO_2) targets for on-road mobile sources. These standards were updated in subsequent years.

In January 2025 EPA announced the reconsideration of the 2009 EF, and in February 2026, EPA finalized the rescission of the 2009 EF and motor vehicle GHG standards. EPA concluded that "Section 202(a) of the CAA does not provide EPA statutory authority to prescribe motor vehicle emission standards for the purpose of addressing global climate change concerns." EPA determined that GHG emissions standards for new motor vehicles and engines "do not impact in any material way the public health and welfare concerns identified in the Administrator's prior findings in 2009." EPA noted that, following these regulatory amendments, engine and vehicle manufacturers are relieved of all prospective obligations regarding the measurement, control, and reporting of GHG emissions for any highway engine or vehicle, including those produced in model years preceding this final rule.

EPA published cost-benefit analyses in regulatory impact analyses (RIAs) for the GHG emissions regulations in 2024 and their rescission in 2026. The 2024 RIAs found that the regulations would decrease GHG emissions, while the 2026 RIA found that rescinding the regulations would increase GHG emissions. RIAs for both the regulations and their rescission found that the regulations would produce net economic benefits, although the RIAs used different analytical approaches and are difficult to compare directly. Unlike the 2024 RIAs, the 2026 RIA for the rescission rulemaking did not include estimates for the health impacts of non-GHG air pollutants. The RIAs for the 2024 rulemakings and three of the four modeled scenarios in the RIA for the 2026 rescission rulemaking estimated that the associated rulemakings would result in net economic benefits.

Some Members of Congress have supported the 2009 EF, while others have opposed it. Joint resolutions were introduced in the House and the Senate to overturn the 2009 EF, although they did not become law. If Congress is dissatisfied with the status quo, Congress could consider a range of legislative options to provide EPA with specific statutory instructions about how or whether to regulate GHGs under the CAA, such as specifying that GHGs either are or are not air pollutants under the CAA. Congress could also consider oversight options to obtain information on the effects of the GHG regulations on public health and public welfare, and on the regulations' costs and benefits to industry and consumers.

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Introduction

The United States has demonstrated varying approaches and intents with regard to reducing greenhouse gas (GHG) emissions and mitigating climate change.[1] Congress has passed legislation containing provisions addressing climate change, such as P.L. 117-169, a budget reconciliation measure commonly referred to as the "Inflation Reduction Act of 2022" (IRA).[2] The IRA contains provisions that directly and indirectly address climate change, including the reduction of U.S. GHG emissions.[3] The 119th Congress has passed legislation—P.L. 119-21, a budget reconciliation measure often referred to as the "One Big Beautiful Bill Act" (OBBBA)—rescinding or repealing some of the IRA provisions addressing climate change.[4] The executive branch has also taken varying approaches. Presidents Obama and Biden issued executive orders specifying climate action to reduce emissions across multiple federal agencies and programs.[5] President Trump has issued executive orders revoking some U.S. climate actions both domestically and internationally.[6]

One particular policy question is whether or not to regulate GHG emissions from motor vehicles. In 2022, the transportation sector was the U.S. economic sector with the largest GHG emissions.[7] Motor vehicles accounted for approximately 70% of transportation-sector GHG emissions in that year.[8] The U.S. Environmental Protection Agency (EPA) took regulatory action to limit GHG emissions from new motor vehicles, citing the authority Congress granted the agency under the Clean Air Act (CAA) and its amendments.[9] EPA regulated GHG emissions from motor vehicles under Section 202(a) of the CAA.[10] These regulations were based on a predicate finding by EPA, known as an *endangerment finding* (EF), that emissions of GHG air pollution by motor vehicles endangered public health and welfare and that motor vehicles caused and contributed to this air pollution.[11] EPA promulgated the EF under Section 202(a) of the CAA on December 7, 2009, and thereafter promulgated GHG regulations for motor vehicles. In 2025, the Trump Administration

[1] Brian Murray and Jonas Monast, "Carrots, Sticks, and the Evolution of U.S. Climate Policy," *Texas A&M Law Review*, vol. 11, no. 2 (2024), p. 431, https://doi.org/10.37419/LR.V11.I2.5.

[2] CRS Report R47262, *Inflation Reduction Act of 2022 (IRA): Provisions Related to Climate Change*, coordinated by Jonathan L. Ramseur.

[3] CRS Report R47262, *Inflation Reduction Act of 2022 (IRA): Provisions Related to Climate Change*.

[4] Provisions of P.L. 117-169 related to climate change that were rescinded or repealed by P.L. 119-21 include, among others, Section 60103—GHG Reduction Fund, Section 60114—Climate Pollution Reduction Grants, and Section 60503—Use of Low-Carbon Materials.

[5] For example, President Obama issued Executive Order 13693, "Planning for Federal Sustainability in the Next Decade," 80 *Federal Register* 15871, March 25, 2015; and President Biden issued Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," 86 *Federal Register* 7619, February 1, 2021.

[6] Executive Order 14154, "Unleashing American Energy," 90 *Federal Register* 8353, January 29, 2025. See also Executive Order 14162, "Putting America First in International Environmental Agreements," 90 *Federal Register* 8455, January 30, 2025.

[7] U.S. Environmental Protection Agency (EPA), "Fast Facts on Transportation Greenhouse Gas Emissions," https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions.

[8] EPA, "Fast Facts on Transportation Greenhouse Gas Emissions." EPA estimated that light-duty vehicles accounted for 57% of 2022 transportation-sector greenhouse gas (GHG) emissions, while medium- and heavy-duty trucks accounted for 23% of these emissions.

[9] 42 U.S.C. §§7401 et seq.

[10] 42 U.S.C. §7521.

[11] EPA, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act," 74 *Federal Register* 66496, December 15, 2009, https://www.federalregister.gov/documents/2009/12/15/E9-29537/endangerment-and-cause-or-contribute-findings-for-greenhouse-gases-under-section-202a-of-the-clean (hereinafter EPA, 2009 GHG Endangerment Finding).

announced policy initiatives on existing regulation of GHGs by EPA.[12] In 2026, EPA finalized a rulemaking rescinding the 2009 EF and GHG standards for motor vehicles.[13]

This report describes EPA's 2009 EF with respect to GHG emissions from motor vehicles and its basis within the CAA. It then describes EPA's motor vehicle GHG regulations that relied upon the 2009 EF, EPA's subsequent actions to rescind the 2009 EF (and the associated regulations), and the estimated change in GHG emissions. The report also discusses the net benefits associated with both the regulations and their subsequent rescission. It concludes with legislative and oversight considerations for Congress.

Congressional Action on Climate Change Research

Since the late 1970s, Congress has provided authority and funds for federal agencies to research and better understand climate science but has not directed agencies to promulgate regulations to reduce GHG emissions. In 1978, Congress passed the National Climate Program Act (NCPA), which created the National Climate Program Office in the Department of Commerce.[14] The NCPA required the office to assess climate change effects, improve understanding of climate change science, and collect global and domestic climate data.[15] Congress also passed the Global Climate Protection Act of 1987 (Title XI of P.L. 100-204), which stated that U.S. climate policy should, among other things, increase understanding of the greenhouse effect, foster international cooperation on climate research, identify climate mitigation technologies, and "work toward multilateral agreements." Congress subsequently passed additional legislation authorizing federal climate change research, interagency collaboration, collection of GHG emissions data, and the establishment of a voluntary program for reporting GHG emissions. This legislation included the Global Change Research Act of 1990 (P.L. 101-606, Title I, United States Global Change Research Program), "aimed at understanding and responding to global change, including the cumulative effects of human activities and natural processes on the environment";[16] the Global Climate Change Prevention Act of 1990 (P.L. 101-624, Title XXIV, Global Climate Change) directing the Department of Agriculture to study the effects of climate change on forestry and agriculture;[17] and the Energy and Policy Act of 1992 (P.L. 102-486, §1605, National Inventory and Voluntary Reporting of Greenhouse Gases) requiring the Secretary of Energy to prepare an annual inventory of GHG emissions and establishing a voluntary reporting program and database.[18] These statutes authorized federal agencies to investigate climate change and its potential impacts but did not direct agencies to promulgate regulations to reduce GHG emissions.

EPA's 2009 Endangerment Finding

Legal and administrative developments preceded EPA's 2009 EF. On October 20, 1999, a group of 19 organizations petitioned EPA to regulate GHG emissions from new motor vehicles under CAA Section 202.[19] The petitioners cited the CAA and a 1998 memorandum from EPA's general

[12] Executive Order 14154, "Unleashing American Energy," 90 *Federal Register* 8353, January 29, 2025.

[13] EPA, "Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards," 90 *Federal Register* 36288, August 1, 2025; and EPA, "Rescission of the Greenhouse Gas Endangerment Finding and Motor Vehicle Greenhouse Gas Emission Standards Under the Clean Air Act," 91 *Federal Register* 7686, February 18, 2026 (hereinafter EPA, 2026 GHG EF and Motor Vehicle Standards Rescission).

[14] National Climate Program Act of 1978, P.L. 95-367, 92 Stat. 601 (1978) (as amended at 15 U.S.C. §§2901-2908); 15 U.S.C. §2904(c).

[15] 15 U.S.C. §2904(d). For more information on the Climate Program Office, see the National Oceanic and Atmospheric Administration, "Climate Program Office," https://cpo.noaa.gov/about-cpo/.

[16] Global Change Research Act of 1990, 15 U.S.C. §§2921-2938.

[17] 7 U.S.C. §6702, Study of Global Climate Change, Agriculture, and Forestry.

[18] 42 U.S.C. §13385, National Inventory and Voluntary Reporting of Greenhouse Gases.

[19] The lead petitioner was the International Center for Technology Assessment (ICTA). The petition may be found at https://www.ciel.org/Publications/greenhouse_petition_EPA.pdf.

counsel that argued the agency had CAA authority to regulate certain emissions from power plants, noting that "CO_2, as an air pollutant, is within EPA's scope of authority to regulate."[20]

On August 28, 2003, EPA denied the petition based on a new EPA general counsel memorandum that concluded that the CAA did not grant EPA authority to regulate carbon dioxide (CO_2) and other GHG emissions based on their climate change impacts.[21] Massachusetts, 11 other states, and a number of petitioners challenged EPA's denial of the petition in a case that ultimately reached the Supreme Court.[22] In 2007, the Supreme Court held in a 5-4 decision in *Massachusetts v. EPA* that EPA has statutory authority to regulate GHGs as "air pollutants" under the CAA.[23] After this decision EPA issued an EF for motor vehicle emissions in 2009.

Endangerment Findings in the Clean Air Act

EPA promulgates EFs as part of the regular process of rulemaking under the CAA, with the EF on lead emissions from aircraft engines being a recent example.[24] The 2009 GHG EF was one of two GHG EFs promulgated by EPA and was specific to emissions from motor vehicles.[25] The other GHG EF is specific to emissions from aircraft and was promulgated by EPA in 2016.[26] Only EPA regulation of GHG emissions from motor vehicles was directly dependent on the 2009 EF. GHG regulation of other sectors such as aircraft, electric generating units (EGUs), and oil and gas facilities (O&G) are not dependent on the 2009 EF; however, rulemaking regarding GHG emissions from all three sectors cite the 2009 EF as providing scientific support for their GHG regulation.[27] EPA's regulatory authority for setting standards on emissions from the EGU and O&G source categories is based on EFs for these source categories as stationary sources that emit pollutants under Section 111 of the CAA, rather than EFs specific to GHGs.[28]

[20] Memorandum from Jonathan Z. Cannon, EPA General Counsel, to Carol M. Browner, Administrator, titled "EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources," issued on April 10, 1998 (President Clinton's Administration). EPA later withdrew the Cannon memorandum (President George W. Bush's Administration). See EPA's notice of petition denial for further information: EPA, "Control of Emissions from New Highway Vehicles and Engines," 68 *Federal Register* 52922, September 8, 2003.

[21] In an August 28, 2003, memorandum from Robert E. Fabricant, EPA General Counsel, to Marianne L. Horinko, Acting EPA Administrator, on "EPA's Authority to Impose Mandatory Controls to Address Global Climate Change Under the Clean Air Act," the General Counsel withdrew the 1998 Cannon memorandum. The General Counsel concluded that the Clean Air Act (CAA) "does not authorize EPA to regulate for global climate change purposes, and accordingly that CO_2 and other GHGs cannot be considered 'air pollutants' subject to the CAA's regulatory provisions for any contribution they may make to global climate change." See EPA's notice of petition denial for further information: EPA, "Control of Emissions From New Highway Vehicles and Engines," 68 *Federal Register* 52922, September 8, 2003.

[22] The D.C. Circuit, in a split decision, rejected the suit. See Massachusetts v. EPA, 415 F.3d 50, 56, 59-60 (2005) (Randolph, J., dissenting) (holding that EPA reasonably denied the petition based on scientific uncertainty and policy considerations).

[23] Massachusetts v. EPA, 549 U.S. at 497 (2007). For further information on the Court's ruling and legal challenges to the endangerment finding (EF), see CRS Legal Sidebar LSB11320, *EPA to Revisit Greenhouse Gas Endangerment Finding*, by Andrew S. Coghlan.

[24] EPA, "EPA Determines that Lead Emissions from Aircraft Engines Cause or Contribute to Air Pollution," press release, October 18, 2023, https://www.epa.gov/newsreleases/epa-determines-lead-emissions-aircraft-engines-cause-or-contribute-air-pollution.

[25] EPA, 2009 GHG Endangerment Finding.

[26] EPA, "Finding That Greenhouse Gas Emissions from Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated to Endanger Public Health and Welfare," 81 *Federal Register* 54422, August 15, 2016 (hereinafter EPA, 2016 Aircraft GHG Endangerment Finding).

[27] EPA, 2016 Aircraft GHG Endangerment Finding, p. 48. See also EPA, "NSPS for GHG Emissions from New, Modified, and Reconstructed Electric Utility Generating Units," 89 *Federal Register* 39798, May 9, 2024. See also EPA, "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources," 81 *Federal Register* 35824, June 3, 2016.

[28] 42 U.S.C. §7411(b).

Process of Rulemaking

The CAA requires the EPA Administrator to address pollutants, fuel or fuel additives, categories of sources, or classes of vehicles "which, in his judgment, cause or contribute … to air pollution … which may reasonably be anticipated to endanger public health or welfare."[29] Under the CAA, the term *air pollutant* is defined to include "any physical, chemical, biological, radioactive ... substance or matter which is emitted into or otherwise enters the ambient air."[30] If the Administrator finds that an air pollutant or combination of air pollutants may reasonably be anticipated to endanger public health or welfare, this determination is referred to as an *endangerment finding*. Multiple CAA sections include EF clauses, which require EPA to address air pollutants or specific sources of air pollution if the Administrator determines they cause or contribute to air pollution that may "endanger public health or welfare."[31]

The finding that air pollution endangers public health or welfare is one of two distinct procedural steps in the CAA and federal regulation of air pollutants. The other finding is a *cause or contribution* finding that emissions of a pollutant, fuel or fuel additive, or emissions from a category of sources or class of vehicles, contribute to the air pollution that endangers public health or welfare.[32] In general usage of the term, *endangerment finding* often refers to the regulatory action that includes both of these distinct findings: (1) the endangerment to public health or welfare by the air pollution finding and (2) the cause or contribution to that air pollution finding. Both findings are necessary for regulatory action.[33] If both findings are made, the CAA requires the Administrator to regulate and set standards for the pollutant, fuel or fuel additive, category of sources, or class of vehicles.[34] In 2009 EPA completed an EF on GHG emissions from motor vehicles under the authority of CAA Section 202(a).[35]

When EPA proposes a CAA rule like an EF, CAA Section 307(d) requires EPA to publish a notice of proposed rulemaking "accompanied by a statement of its basis and purpose."[36] Specifically, an EF, when finalized, triggers new duties for EPA to promulgate emissions standards and regulate the pollutant, fuel or fuel additive, category of sources, or class of vehicles that caused or contributed to the air pollution that triggered the finding. The statement of basis and purpose shall include a summary of "(A) the factual data on which the proposed rule is based; (B) the methodology used in obtaining and in analyzing the data; and (C) the major legal interpretations and policy considerations underlying the proposed rule."[37] In addition, all data, information, and documents "on which the proposed rule relies shall be included in the docket on the date of

[29] The requirement is found in multiple CAA provisions (42 U.S.C. §§7401 et seq.).

[30] 42 U.S.C. §7602(g). See also Associate Justice of the U.S. Supreme Court John Paul Stevens, *U.S. Reports: Massachusetts v. EPA*, 549 U.S. 497, 2006, https://www.loc.gov/item/usrep549497/.

[31] These sections include CAA §108, CAA §111, CAA §115, CAA §122, CAA §202, CAA §211, CAA §213, and CAA §231.

[32] The 2009 endangerment and cause or contribution findings are two distinct findings; however, they are often referred to as the *2009 endangerment finding*. EPA, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act," https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a.

[33] EPA, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act." See also Sarah Vican et al., "Foundations of the Endangerment Finding," *Environmental Law Reporter*, vol. 55 (August 2025), p. 10359.

[34] The requirements are found in multiple CAA provisions (42 U.S.C. §§7401 et seq.).

[35] EPA, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act." This text provides the basis and the purpose of this EF.

[36] 42 U.S.C. §7607(d)(3).

[37] 42 U.S.C. §7607(d)(3).

publication of the proposed rule."[38] Pursuant to this requirement, EPA has typically included a technical support document (TSD) that provides further details regarding the agency's findings. The TSD includes an overview of the information, studies, peer-reviewed reports, recommendations, modeling, and other relevant resources relied upon to make the EF.[39]

2009 Finding That GHGs Endanger Public Health and Welfare

In the first part of the 2009 EF, EPA reviewed scientific evidence and made findings regarding the connection between GHG-driven changes in climate and the danger of these changes to public health and public welfare. The EF determined that "elevated atmospheric concentrations of the well-mixed greenhouse gases may reasonably be anticipated to endanger the public health and welfare of current and future generations."[40] The 2009 EF determined that human-caused emissions of six GHGs—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—were the primary drivers of current and projected climate change.[41] Of the six gases, CO_2, which is largely produced by combustion of fossil fuels, accounts for about 80% of U.S. annual GHG emissions of the combined group when measured as CO_2 equivalents (CO_2e).[42] EPA defined the air pollutant for which the EF was made as these six long-lived directly emitted GHGs.[43] It explained that defining an air pollutant as the aggregate group of substances that share common attributes was similar to the definition of other air pollutants, such as particulate matter and volatile organic compounds, that are also groupings of multiple similar substances.[44]

The 2009 EF determined that emissions of these six GHGs had increased the levels of these gases in the atmosphere, which, in turn, had increased temperature and caused the climate to change.[45] Specifically, EPA stated that it found "the scientific evidence linking human emissions and resulting elevated atmospheric concentrations of the six well-mixed greenhouse gases to observed global and regional temperature increases and other climate changes to be sufficiently robust and

[38] 42 U.S.C. §7607(d)(3).

[39] See, for example, EPA, "Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act," 2009, https://www.regulations.gov/document/EPA-HQ-OAR-2009-0171-11645.

[40] EPA, 2009 GHG Endangerment Finding, p. 367.

[41] EPA, 2009 GHG Endangerment Finding, p. 302.

[42] The term *CO_2 equivalent* (*CO_2e*) is used because GHGs vary by global warming potential (GWP). GWP is an index developed by the Intergovernmental Panel on Climate Change (IPCC) that allows comparisons of the heat-trapping ability of different gases over a period of time, typically 100 years. Consistent with international GHG reporting requirements, EPA's most recent GHG inventory (with data from 2022) uses the GWP values presented in the IPCC's 2013 *Fifth Assessment Report*. For example, based on these GWP values, a ton of methane is 28 times more potent than a ton of CO_2 when averaged over a 100-year time frame. EPA's inventory is available at EPA, "Inventory of U.S. Greenhouse Gas Emissions and Sinks," https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks.

[43] EPA, 2009 GHG Endangerment Finding, p. 499.

[44] EPA, 2009 GHG Endangerment Finding, pp. 499-500. EPA stated in this section that the common attributes used in grouping the six GHGs into a single air pollutant included the following:

> The fact that they are all greenhouse gases that are directly emitted (i.e., they are not formed through secondary processes in the atmosphere from precursor emissions); they are sufficiently long-lived in the atmosphere such that, once emitted, concentrations of each gas become well mixed throughout the entire global atmosphere; and they exert a climate warming effect by trapping outgoing, infrared heat that would otherwise escape to space.

[45] EPA, 2009 GHG Endangerment Finding, pp. 308, 310.

compelling."[46] Further, the Administrator found that these climate changes could potentially affect "every aspect of human health, society and the natural environment."[47]

EPA's 2009 EF was based on scientific and technical assessments of climate change from the U.S. Global Change Research Program (USGCRP), the Intergovernmental Panel on Climate Change (IPCC), and the National Research Council (NRC).[48] The 2009 EF stated that it used these three scientific assessments because they were comprehensive, they were subject to rigorous review, and they addressed the different stages of the "emissions-to-potential-harm chain necessary for the endangerment analysis."[49] In making the final endangerment decision, EPA also used its own emissions data; observational data, such as global temperature datasets from the National Aeronautics and Space Administration (NASA) and from the National Oceanic and Atmospheric Administration (NOAA); and information obtained from public comments on the proposal.[50]

In the 2009 EF, EPA made a finding that "well-mixed greenhouse gas air pollution is reasonably anticipated to endanger *public health*, for both current and future generations."[51] The 2009 EF stated that the Administrator considered how GHG air pollution could endanger public health through "direct temperature effects, air quality effects, the potential for changes in vector-borne diseases, and the potential for changes in the severity and frequency of extreme weather events."[52] Specifically, the 2009 EF concluded the following:

- Hot temperatures and heat waves are associated with increased mortality, and global warming is projected to result in increased mortality.[53]
- Climate change is expected to affect U.S. air quality through increases in regional ozone pollution due to increasing temperatures and weaker circulation.[54]
- Some food- and water-borne diseases are likely to spread under climate change conditions.[55]
- There are dangers of increased deaths, injuries, infectious diseases, and stress-related disorders from increases in extreme weather events.[56]

[46] EPA, 2009 GHG Endangerment Finding, p. 369.

[47] EPA, 2009 GHG Endangerment Finding, p. 369.

[48] EPA, 2009 GHG Endangerment Finding, p. 244. A recent national climate assessment from the U.S. Global Change Research Program (USGCRP) is the *Fifth National Climate Assessment*: USGCRP, *Fifth National Climate Assessment*, A. R. Crimmins et al., eds., Washington, DC, 2023. A recent climate assessment from the IPCC is the Sixth Climate Assessment: IPCC, *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, H. Lee and J. Romero, eds., Geneva, Switzerland, 2023, pp. 35-115. The National Research Council is the operating arm of the National Academies of Sciences, Engineering, and Medicine (NASEM), which published a recent consensus study report on climate change and its effects: NASEM, *Effects of Human-Caused Greenhouse Gas Emissions on U.S. Climate, Health, and Welfare* (The National Academies Press, 2025).

[49] EPA, 2009 GHG Endangerment Finding, p. 247.

[50] EPA, 2009 GHG Endangerment Finding, pp. 240, 313.

[51] EPA, 2009 GHG Endangerment Finding, p. 378 (italics added).

[52] EPA, 2009 GHG Endangerment Finding, p. 380.

[53] EPA, 2009 GHG Endangerment Finding, p. 381.

[54] EPA, 2009 GHG Endangerment Finding, p. 383.

[55] EPA, 2009 GHG Endangerment Finding, p. 390. EPA stated, "There will likely be an increase in the spread of several food and water-borne pathogens among susceptible populations depending on the pathogens' survival, persistence, habitat range and transmission under changing climate and environmental conditions."

[56] EPA, 2009 GHG Endangerment Finding, p. 387. EPA stated the following: "The Administrator notes that the vulnerability to weather disasters depends on the attributes of the people at risk (including where they live, age, (continued...)

In addition to its finding about endangerment of public health, in the 2009 EF EPA also made a finding that "well-mixed greenhouse gas air pollution may reasonably be anticipated to endanger *public welfare*, both for current and future generations."[57] The finding included the impacts on public welfare in six climate-sensitive sectors: food production and agriculture, forestry, water resources, sea level rise and coastal areas, energy infrastructure and settlements, and ecosystems and wildlife. Specifically, the EF concluded the following:

- There may be near-term benefits for agriculture from climate change, but these effects are uncertain, and long-term climate change effects are likely to be adverse to agriculture and food production.[58]
- Observed and longer-term risks of the adverse effects of climate change—which include changes in precipitation patterns; increases in insect, pest, and disease outbreaks; and the possibility of more frequent extreme weather events—more than offset near-term beneficial climate impacts for U.S. forestry, which include the CO_2 fertilization effect and elevated temperatures.[59]
- The scientific literature supports the finding that GHG air pollution endangers water resources now and in the future, putting large areas of national water supply at risk.[60]
- Sea level is rising and will continue to rise at an increasing rate in the future.[61] Further, U.S. coastal cities are at risk from sea level rise and "could have difficulty coping with the sea level rise projected by the end of the century under a higher emissions scenario."[62]

2009 Finding That Motor Vehicle Emissions Cause and Contribute to GHG Air Pollution

As noted above, in the first part of the 2009 EF, the Administrator found that GHG air pollution endangered public health and public welfare. In the second part of the 2009 EF, the cause or contribution finding, the Administrator found that motor vehicle sources covered under Section 202(a) of the CAA caused or contributed to GHG air pollution.[63] The Administrator defined the GHG air pollution entering the atmosphere through emissions from sources covered by Section 202(a) as consisting of the combination of the same set of six long-lived, well-mixed GHGs identified as endangering public health and public welfare in the 2009 EF, as described above.[64]

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income, education, and disability) and on broader social and environmental factors (level of disaster preparedness, health sector responses, and environmental degradation)."

[57] EPA, 2009 GHG Endangerment Finding, p. 440 (italics added).

[58] EPA, 2009 GHG Endangerment Finding, pp. 449, 451.

[59] EPA, 2009 GHG Endangerment Finding, p. 457.

[60] EPA, 2009 GHG Endangerment Finding, p. 465. EPA stated, "The Administrator finds that the total scientific literature provides compelling support for finding that greenhouse gas air pollution endangers the water resources important for public welfare in the United States, both for current and future generations. The adequacy of water supplies across large areas of the country is at serious risk from climate change."

[61] EPA, 2009 GHG Endangerment Finding, p. 467.

[62] EPA, 2009 GHG Endangerment Finding, p. 467.

[63] EPA, 2009 GHG Endangerment Finding, pp. 497, 510.

[64] EPA, 2009 GHG Endangerment Finding, p. 116. EPA stated, "The Administrator is defining the 'air pollution' referred to in CAA section 202(a) to be the mix of six long-lived and directly-emitted greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)."

The GHGs emitted by motor vehicles—CO_2, CH_4, N_2O, and HFCs—are among the six long-lived, well-mixed GHGs.

This cause or contribution finding was based in part on a review of GHG emissions data.[65] The data specific to Section 202(a) sources used for the Administrator's determination were historical data for GHG emissions from motor vehicles in the United States for 1990-2007.[66] EPA stated that the relative contribution of Section 202(a)-covered motor vehicles to emissions, as well as the magnitude of these emissions, were the basis of the cause and contribution determination. Specifically, it determined the following:

> The relative importance of the CAA section 202(a) source categories is central to making the contribution determination. Both the magnitude of these emissions and the comparison of these emissions to other sources provide the basis to determine whether the CAA section 202(a) source categories may reasonably be judged as contributing to the air pollution problem.[67]

Specifically, EPA noted that the Administrator used two criteria to assess whether motor vehicles covered under Section 202(a) caused or contributed to GHG air pollution: the contribution of U.S. motor vehicle emissions (1) as a share of global aggregate GHG emissions and (2) as a share of U.S. aggregate GHG emissions.[68] Regarding the first criterion, EPA found that in 2005 emissions from U.S. motor vehicles covered under Section 202(a) were responsible for about 4% of total global well-mixed GHG emissions. Furthermore, EPA found that in 2005 these emissions were greater than those of whole countries, ranking behind China, the United States (as a whole), Russia, and India.[69] Regarding the second criterion, EPA found that 2005 emissions from U.S. motor vehicles covered under Section 202(a) were responsible for about 23% of total U.S. well-mixed GHG emissions. Furthermore, EPA found that these emissions were the second-largest source of emissions in the United States behind electricity generation.[70] Based on this analysis, EPA stated that levels of GHG emissions supported a finding that these sources caused or contributed to air pollution "that may be reasonably anticipated to endanger public health and welfare."[71]

EPA's Motor Vehicle GHG Regulations

Because EPA's 2009 EF referenced cars and light-duty, medium-duty, and heavy-duty trucks as among the sources that contributed to the GHG emissions that endangered public health and welfare,[72] it served as the mandatory legal trigger that required EPA to regulate GHG emissions from these sources.[73] By formally concluding that these air pollutants endangered public health

[65] EPA, 2009 GHG Endangerment Finding, p. 512.

[66] EPA, 2009 GHG Endangerment Finding, p. 515.

[67] EPA, 2009 GHG Endangerment Finding, p. 517.

[68] EPA, 2009 GHG Endangerment Finding, p. 524.

[69] EPA, 2009 GHG Endangerment Finding, p. 529.

[70] EPA, 2009 GHG Endangerment Finding, p. 533.

[71] EPA, 2009 GHG Endangerment Finding, p. 512.

[72] According to EPA, "[T]he transportation sources covered under CAA Section 202(a)—the section of the CAA under which these Findings occur—include passenger cars, light- and heavy-duty trucks, buses, and motorcycles. These transportation sources emit four key greenhouse gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons." EPA, 2009 GHG Endangerment Finding, p. 139.

[73] 42 U.S.C. §7521(a)(1): "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."

and welfare, the agency established the statutory foundation to finalize all subsequent GHG standards for new motor vehicles and motor vehicle engines covered by CAA Section 202(a). Following the 2009 EF, EPA issued GHG regulations for passenger vehicles and light-duty, medium-duty, and heavy-duty trucks.[74]

EPA promulgated the first GHG emissions standards for passenger vehicles and light-duty trucks in 2010 and for medium- and heavy-duty trucks in 2011.[75] The regulatory actions in 2010 and 2011 established, for the first time, GHG emissions standards for on-road mobile sources. These regulations, and subsequent GHG emissions standards (as noted in **Table 1**), set prospective, fleet-wide average CO_2 targets for manufacturers. The 2010 and 2011 regulations covered model years 2012-2016 and 2013-2018, respectively. EPA later issued regulations in 2012, 2016, 2020, 2021, and 2024 to cover standards for subsequent model years. For passenger cars and light-duty trucks, the regulation was achieved by setting CO_2 target values in grams-per-mile based on the vehicle's physical footprint.[76] For medium- and heavy-duty trucks, fleet-wide average CO_2 targets were based on work factor and vehicle weight and by averaging the manufacturer's production to ensure it would meet the standards for each model year.[77] The standards in the regulatory actions from 2012 through 2024 all followed this standard-setting framework, with increasing stringency in subsequent iterations. To meet these GHG standards, vehicle manufacturers altered their engineering, product planning, and compliance strategies. These adjustments focused on a combination of internal combustion advancements, fleet-wide electrification, and the use of regulatory flexibilities.[78]

Table 1 identifies the on-road motor vehicle GHG regulations, provides a brief historical chronology, and notes the Trump Administration's action to rescind the 2009 EF, which is discussed later in this report.

Table 1. EPA On-Road Motor Vehicle Greenhouse Gas (GHG) Regulations

Category of Vehicle	Administrative Findings and GHG Regulation
All	2009 Endangerment and Cause or Contribution Finding[a]
Passenger Car and Light-Duty	2010 Model Year (MY) 2012-2016 Rule[b]
Medium- and Heavy-Duty	2011 Phase I GHG Emissions and Fuel Efficiency Standards[c]
Passenger Car and Light-Duty	2012 MY 2017 and Later Rule[d]

[74] EPA mobile source regulations under Title II of the CAA, 42 U.S.C. §§7521 et seq., were largely prospective, focusing on setting emissions standards for new motor vehicles, engines, and fuels. These regulations established requirements for manufacturers prior to the production and sale of vehicles. For example, see 42 U.S.C. §7521(a)(3)(C), Lead Time and Stability.

[75] EPA, "Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule," 75 *Federal Register* 25324, May 7, 2010. EPA, "Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles," 76 *Federal Register* 57106, September 15, 2011.

[76] 86 *Federal Register* 74440, December 30, 2021.

[77] *Work factor* is defined at 40 C.F.R. §86.1803-01. See also 40 C.F.R. §86.1818-12 for GHG emissions standards for passenger vehicles and light-duty trucks; 40 C.F.R §86.1818-12(c) explains the methodology for obtaining fleet average calculations for passenger vehicles and light-duty trucks. See 40 C.F.R. §86.1819-14 for GHG emissions standards for medium- and heavy-duty trucks; 40 C.F.R. §86.1819-14(a) explains the methodology for obtaining fleet average calculations for medium- and heavy-duty trucks.

[78] These flexibilities included items such as improved air conditioning systems and off-cycle credits (such as engine start-stop systems, solar reflective paint, and high-efficiency alternators). For more information, see EPA, "EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks," August 2012, https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.pdf.

Category of Vehicle	Administrative Findings and GHG Regulation
Medium- and Heavy-Duty	2016 Phase 2 GHG Emissions and Fuel Efficiency Standards[e]
Passenger Car and Light-Duty	2020 SAFE Final Rule for MY 2021-2026[f]
Passenger Car and Light-Duty	2021 Revised MY 2023 and Later Rule[g]
Passenger Car, Light- and Medium-Duty	2024 Multi-Pollutant Rule MY 2027 and Later[h]
Heavy-Duty	2024 Phase 3 GHG Emissions Standards[i]
All	2026 Rescission of the 2009 GHG EF and Motor Vehicle GHG Emissions Standards[j]

Source: Prepared by CRS, based on various U.S. Environmental Protection Agency (EPA) motor vehicle regulations.

a. EPA, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act," 74 *Federal Register* 66496, December 15, 2009.

b. EPA, "Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule," 75 *Federal Register* 25324, May 7, 2010.

c. EPA, "Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles," 76 *Federal Register* 57106, September 15, 2011.

d. EPA, "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards," 77 *Federal Register* 62624, October 15, 2012.

e. EPA, "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2," 81 *Federal Register* 73478, October 25, 2016.

f. EPA, "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks," 85 *Federal Register* 24174, April 30, 2020.

g. EPA, "Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards," 86 *Federal Register* 74434, December 30, 2021.

h. EPA, "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles," 89 *Federal Register* 27842, April 18, 2024. The 2024 regulation included medium-duty vehicles along with passenger and light-duty vehicles.

i. EPA, "Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3," 89 *Federal Register* 29440, April 22, 2024. Note the Phase 1 and Phase 2 regulations covered medium- and heavy-duty vehicles, whereas the Phase 3 regulation covered heavy-duty vehicles with minor changes to medium-duty vehicles.

j. EPA, "Rescission of the Greenhouse Gas Endangerment Finding and Motor Vehicle Greenhouse Gas Emission Standards Under the Clean Air Act," 91 *Federal Register* 7686, February 18, 2026.

EPA's Rescission of the 2009 Endangerment Finding

On January 20, 2025, President Trump issued Executive Order (E.O.) 14154, entitled "Unleashing American Energy." Paragraph (f) of E.O. 14154 states the following:

> Within 30 days of the date of this order, the Administrator of the EPA, in collaboration with the heads of any other relevant agencies, shall submit joint recommendations to the Director of OMB on the legality and continuing applicability of the Administrator's findings, "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act," Final Rule, 74 FR 66496 (December 15, 2009).[79]

On August 1, 2025, EPA proposed and on February 16, 2026, EPA finalized the rescission of the 2009 EF and motor vehicle GHG standards under the CAA, as set out in E.O. 14154.[80] EPA noted

[79] Executive Order 14154, "Unleashing American Energy," 90 *Federal Register* 8353, January 20, 2025.

[80] EPA, "Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards," 90 *Federal Register* 36288, August 1, 2025; EPA, 2026 GHG EF and Motor Vehicle Standards Rescission.

that, following these regulatory amendments, engine and vehicle manufacturers are relieved of all prospective obligations regarding the measurement, control, and reporting of GHG emissions for any highway engine or vehicle, including those produced in model years preceding this final rule.

In its final rule, EPA made several arguments to support its action. Specifically, EPA concluded that "Section 202(a) of the CAA does not provide EPA statutory authority to prescribe motor vehicle emission standards for the purpose of addressing global climate change concerns."[81] EPA argued that in the absence of such authority, the 2009 EF is not valid and EPA cannot retain the GHG regulations that resulted from it.[82] In addition, EPA concluded that Congress never intended to give EPA authority to impose GHG regulations for cars and trucks.[83]

Furthermore, EPA determined that GHG emissions standards for new motor vehicles and engines "do not impact in any material way the public health and welfare concerns identified in the Administrator's prior findings in 2009."[84] EPA contended that its regulations of GHGs from motor vehicles and engines have "not and cannot have any material impact on global climate change concerns, rendering them futile and providing another basis for" the rescission of the 2009 EF.[85] EPA did not include a technical support document (TSD) for its repeal of the 2009 endangerment finding rulemaking in the rulemaking docket.

EPA's Regulatory Impact Analyses for GHG Regulations

As part of its rulemakings, EPA produced regulatory impact analyses (RIAs) that estimated the change in GHG emissions, the compliance costs, and the societal benefits for motor vehicle GHG regulations and their rescission for the period 2027-2055.[86] Cost-benefit analyses are presented in RIAs, which are generally part of a rulemaking docket.[87] The estimates for the GHG regulations were reported in the 2024 RIA for light-duty and medium-duty motor vehicles and in the 2024 RIA for heavy-duty motor vehicles. The estimates for the rescission of the GHG regulations were reported in the 2026 RIA for GHG EF and motor vehicle standards rescission. The RIAs up to and including the 2024 rulemaking typically included monetized estimates for the climate and health impacts of regulating GHG emissions; however, the RIA for the 2026 rulemaking rescinding the EF did not include these estimates.

[81] EPA, "Fact Sheet: Legal; Final Rule: Rescission of the Greenhouse Gas Endangerment Finding and Motor Vehicle Greenhouse Gas Emission Standards Under the Clean Air Act," EPA 420-F-26-003, February 2026, https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101HV00.pdf (hereinafter EPA, 2026 EF Rescission Fact Sheet).

[82] EPA, 2026 EF Rescission Fact Sheet.

[83] EPA, 2026 EF Rescission Fact Sheet.

[84] EPA, 2026 GHG EF and Motor Vehicle Standards Rescission, p. 3.

[85] EPA, 2026 EF Rescission Fact Sheet.

[86] EPA has prepared cost and benefit estimates for all economically significant rules since the Carter Administration. See the Carter Administration order, Executive Order 12044, "Improving Government Regulations," March 23, 1978, http://www.thecre.com/pdf/12044.PDF. The methodologies for the determination of costs and benefits of CAA regulations by EPA is complex, with varying estimates depending on parameters used in the estimation and modeling processes. A detailed discussion of regulatory cost estimates under the CAA is beyond the scope of this report. For further information, see EPA, "Economic and Cost Analysis for Air Pollution Regulations," updated May 26, 2026, https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations.

[87] Sometimes also referred to as economic impact analyses (EIA). EPA, "Regulatory Impact Analyses for Air Pollution Regulations," https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/regulatory-impact-analyses-air-pollution.

The latest EPA projections of the effects of GHG regulations on the motor vehicle sector from their respective RIAs and rulemakings are presented in **Table 2** below. The table includes the estimated change in cumulative GHG emissions and the net monetized benefits associated with the motor vehicle GHG regulations and their rescission for the years 2027-2055. As shown in **Table 2**, according to EPA, the 2024 rulemakings would have decreased GHG emissions (relative to a baseline in which these rules were not in place), whereas the 2026 rulemaking would increase GHG emissions (relative to the baseline in which the 2024 rules were in place). The estimated cumulative increase in GHG emissions of 8,300 million metric tons (MMT) of CO_2e projected to occur with the rescission approximately reverses the estimated cumulative decrease in GHG emissions of 8,225 MMT CO_2e that was projected to occur if the 2024 motor vehicle rules had remained in place. Also as shown in **Table 2**, each of the RIAs found that the agency's action, including promulgating the rules in 2024 and rescinding them in 2026, would have net positive monetized benefits. However, the RIAs used different approaches to calculating benefits, which makes the estimates difficult to compare, as discussed below.

Table 2. Estimated Regulatory Impact of Motor Vehicle Greenhouse Gas (GHG) Regulations

EPA Rulemaking	Regulatory Impact Time Period	Estimated Change in Cumulative GHG Emissions Compared to Baseline[a]	Net Monetized Benefits[b]
2024 Light-Duty and Medium-Duty Motor Vehicles Model Year 2027 and Later[c]	2027-2055	-7,200 MMT CO_2e	$2,000[d]
2024 Heavy-Duty Motor Vehicles Model Year 2027 and Later[e]	2027-2055	-1,025 MMT CO_2e	$280[f]
2026 GHG Endangerment Finding and All Motor Vehicle Standards Rescission[g]	2027-2055	8,300 MMT CO_2e	From -$180 to $920[h]

Source: EPA, RIA documents for each respective sector.

Notes: MMT = million metric tons. The combined influence of all six GHGs included in the finding (CO_2, CH_4, N_2O, SF_6, HFCs, and PFCs) may be determined by normalizing the global warming potentials of the GHGs to the global warming potential of carbon dioxide (CO_2). This results in a metric of carbon dioxide equivalent (CO_2e) to compare across various GHGs.

a. A negative number indicates a reduction in emissions, and a positive number indicates an increase in emissions. Total GHG emissions for the U.S. transportation sector for 2022 were approximately 1,808 MMT CO_2e (EPA, "Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2022," EPA 430-R-24-004, 2024). EPA assumed the baseline to be a no-action scenario (for example, the baseline for the 2024 rulemakings was a scenario where EPA did not finalize its Model Year 2027 and Later regulations, and the 2026 rulemaking baseline was a scenario where the 2024 rulemakings were not rescinded).

b. In billions of dollars over the regulatory impact time period. Based on scenarios with a 3% discount rate per the Office of Management and Budget's (OMB's) Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs," https://www.whitehouse.gov/wp-content/uploads/2023/11/CircularA-94.pdf. The RIAs also include estimated costs and benefits under scenarios with 2% and 7% discount rates, which are not shown here.

c. EPA, "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles," 89 *Federal Register* 27842, April 18, 2024; see Table 8-25, p. 8-49, and Table 9-19, p. 9-22.

d. Billions of 2022 dollars. These benefits are due to a calculation summing the climate change mitigation benefits and health benefits associated with reductions in other air pollutants minus the cost of implementing the rule.

e. EPA, "Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles: Phase 3 Regulatory Impact Analysis," Table 4-39, p. 627, and Table 8-8, p. 816, 2024.

f. Billions of 2022 dollars. These benefits are due to a calculation summing the climate change mitigation benefits and health benefits associated with reductions in other air pollutants minus the cost of implementing the rule.

g. EPA, "Rescission of the Greenhouse Gas Endangerment Finding and Motor Vehicle Greenhouse Gas Emission Standards Under the Clean Air Act," 91 *Federal Register* 7757, February 18, 2026; see Tables 14 and 18, p. 815.

h. Billions of 2024 dollars. The range encompasses the highest estimate and the lowest estimate among the four scenarios EPA modeled, which ranged from a net cost of $180 billion to a net benefit of $920 billion. All scenarios assumed all GHG regulations were rescinded. Scenario one used fuel prices from U.S. Energy Information Administration's (EIA's) Annual Energy Outlook (AEO) 2025. Scenario two assumed oil costs dropped to $47 per barrel. Scenarios three and four are similar to one and two, but did not consider fuel costs after two-and-a-half years. None of the scenarios removed the non-GHG air pollutant standards that were finalized in the 2024 rulemakings noted in the table.

EPA estimates costs and benefits in monetary terms using a process known as *monetization.*[88] In monetization, EPA assigns a dollar value to the costs and the benefits that the regulated industry and the public would experience as a result of its rulemaking. Costs in the 2024 RIAs included vehicle technology costs, repair and maintenance costs, and insurance costs, among other associated costs.[89] Benefits in the 2024 RIAs included fuel saving benefits, energy security benefits, climate change mitigation benefits, and fine particulate matter ($PM_{2.5}$) reduction health benefits, among other associated benefits.[90] In the 2026 RIA for the rescission, net monetized costs included fuel costs, repair and maintenance costs, insurance costs, congestion costs, and energy security and refueling costs.[91] Net monetized benefits in the RIA included vehicle technology benefits, as well as electric vehicle supply equipment and replacements benefits.[92] Each of these RIAs estimated net benefits as the total monetized benefits minus the total monetized costs of the rulemaking.[93]

Although both the 2024 RIAs for the GHG regulations and the 2026 RIA for their rescission monetized costs and benefits, their estimates of net benefits are difficult to compare. This is because they took different approaches toward whether or not to monetize the climate and the public health effects from changes in emissions. In the 2024 RIAs, EPA monetized the climate change mitigation benefits and public health benefits of emissions reductions resulting from its

[88] EPA, "Chapter 7: Analyzing Benefits," in *Guidelines for Preparing Economic Analyses—Third Edition*, EPA-240-R-24-001, 2024.

[89] EPA, "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles: Regulatory Impact Analysis," EPA-420-R-24-004, 2024, Table 9-19, p. 9-22 (hereinafter EPA, RIA for LD and MD MY 2027 and Later); EPA, "Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles: Phase 3 Regulatory Impact Analysis," EPA-420-R-24-006, 2024, Table 8-8, p. 816 (hereinafter EPA, RIA for HD MY 2027 and Later).

[90] EPA, RIA for LD and MD MY 2027 and Later, Table 9-19, p. 9-22 and Table 8-8, p. 816. According to EPA, the climate impacts associated with GHGs included "changes in net agricultural productivity, human health effects, property damage from increased flood risk and natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem," and the benefits are realized in "avoiding that increase" in GHGs. EPA also noted that "exposure to pollutants such as $PM_{2.5}$ … are linked to adverse environmental and human health impacts, such as premature deaths and non-fatal illnesses. Reducing human exposure to these pollutants results in significant and measurable health benefits." EPA, "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light- Duty and Medium-Duty Vehicles," 89 *Federal Register* 27842, April 18, 2024.

[91] EPA, RIA for the Rescission of the EF, Table A-1, p. 28.

[92] EPA, RIA for the Rescission of the EF, Table A-1, p. 28. Vehicle technology benefits refer to the advanced machinery and software requirements of an electric vehicle in comparison to a fossil-fuel-powered vehicle. The supply equipment refers to the hardware and safety technology needed to connect an electric vehicle to a power source.

[93] EPA, RIA for LD and MD MY 2027 and later, Table 9-19, p. 9-22; Table 9-20, p. 9-23; Table 9-21, p. 9-24. Also see EPA, RIA for HD MY 2027 and Later, Table 8-8, p. 816.

GHG regulations.[94] EPA used estimates of the Social Cost of GHGs (SC-GHG) to estimate the climate change mitigation benefits of reductions in GHG emissions.[95] In addition to GHGs, motor vehicles emit $PM_{2.5}$ and ozone-forming volatile organic compounds (VOCs).[96] $PM_{2.5}$ and ground-level ozone can increase rates of respiratory illness and fatalities, and emissions of these substances are reduced when motor vehicle emissions are reduced. As a consequence, reductions in $PM_{2.5}$ and ozone exposures account for a large portion of the monetized benefits for GHG regulations. To monetize the public health benefits of reducing these pollutants, EPA used a benefit-per-ton dollar value.[97]

In the RIA for the rescission, by contrast, EPA did not monetize the public health effects of emissions increases associated with the rulemakings. In making this determination, EPA "acknowledged significant uncertainties related to monetized $PM_{2.5}$ and ozone impacts" and noted that it was "considering various techniques for characterizing the uncertainty in such estimates."[98] It further stated that due to the "significant impacts of environmental regulations on the U.S. economy, it is essential that the Agency have confidence in the estimated benefits of an action prior to utilizing these estimates in a regulatory context."[99] In addition, the 2026 RIA did not monetize the public health effects resulting from climate change associated with increased emissions. It noted in the draft RIA that "the accuracy of previous assumptions about links between worldwide emissions and future climate bears little relationship to the fact that these are proper ingredients of benefit-cost analysis."[100]

The RIAs for the 2024 GHG regulations and the 2026 RIA for their rescission also differed in other ways. For example, in the scenarios modeled for the rescission, EPA reflected the changes to the IRA tax credits, removed California's Advanced Clean Truck rule, reduced battery electric vehicle acceptance levels, and updated the costs of particulate filters. The 2024 RIAs, by contrast, were completed before the IRA tax credits were terminated by OBBBA, and therefore made different assumptions. In the 2026 RIA EPA also included reduced fuel costs in some of the modeled scenarios and concluded a net benefit in monetary terms for three of the four scenarios modeled for the rulemaking, as noted in **Table 2**.[101]

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[94] EPA's RIAs typically discuss the monetized benefits associated with emissions reductions. For more information and a list of various RIAs, see EPA, "Regulatory Impact Analyses for Air Pollution Regulations," https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/regulatory-impact-analyses-air-pollution. See also EPA, "Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards; Draft Regulatory Impact Analysis," Appendix A, p. 33, https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101HKBB.pdf (hereinafter EPA, DRIA for the Reconsideration of the EF).

[95] EPA, RIA for HD MY 2027 and Later, "6.2 Climate Benefits," p. 6-6; EPA, RIA for HD MY 2027 and Later, "5.2 Climate Benefits," p. 660.

[96] EPA, "Smog, Soot, and Other Air Pollution from Transportation," https://www.epa.gov/transportation-air-pollution-and-climate-change/smog-soot-and-other-air-pollution-transportation. See also EPA, "Ground-Level Ozone Basics," https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics#:~:text=air%20emission%20sources.-,How%20does%20ground%2Dlevel%20ozone%20form?,can%20experience%20high%20ozone%20levels.

[97] EPA, "Sector-Based $PM_{2.5}$ and Ozone Benefit Per Ton Estimates," https://www.epa.gov/benmap/sector-based-pm25-and-ozone-benefit-ton-estimates.

[98] EPA, "New Source Performance Standards Review for Stationary Combustion Turbines and Stationary Gas Turbines," 91 *Federal Register* 1964, January 15, 2026, p. 34: "The EPA is no longer monetizing benefits from $PM_{2.5}$ and ozone but will continue to quantify the emissions."

[99] EPA, "New Source Performance Standards Review for Stationary Combustion Turbines and Stationary Gas Turbines," 91 *Federal Register* 1964, January 15, 2026. EPA, "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units: Final Repeal," 91 *Federal Register* 9112, February 24, 2026. Also see EPA, 2026 GHG EF and Motor Vehicle Standards Rescission, p. 816.

[100] EPA, DRIA for the Reconsideration of the EF, Appendix A, p. 33.

[101] EPA, RIA for the Rescission of the EF, Appendix A, pp. 26-32.

Considerations for Congress

Given the importance of the EPA rules to public health, the U.S. economy, and the environment, Congress has shown a continuing interest in the EPA EF. If Congress is not satisfied with the status quo, it has several potential options to make changes. Congress may also choose not to act on the current situation regarding the EPA EF.

Congress may choose from a range of legislative options with respect to the GHG EF. Broadly speaking, these options may entail providing EPA with specific statutory instruction on whether or how to regulate GHGs under the CAA.

One option is for Congress to pass legislation regarding the 2009 EF or its 2026 rescission. Members of Congress who support the 2009 EF could seek to overturn its 2026 rescission under the Congressional Review Act. Some Members of Congress have supported the 2009 EF and have opposed its reevaluation or repeal, stating, "Disabling that 'endangerment finding' would cripple the Agency's ability to regulate carbon pollution under the Clean Air Act."[102] In recent months, some Members of Congress have expressed concern regarding, and opposition to, the Trump Administration's decision to rescind the 2009 EF. For example, Members from both the House and Senate have sent letters to EPA Administrator Lee Zeldin expressing "grave concern" and opposition to rescinding the 2009 EF.[103]

Alternatively, Members of Congress who oppose the 2009 EF could seek to pass legislation to codify its 2026 rescission. When EPA finalized the 2009 EF, some Members of Congress criticized the process, pace, and data sources used in development of the 2009 EF and raised "very serious concerns" about the process for developing the EF.[104] Other Members have expressed support for EPA's repeal of the EF.[105] In the 111th Congress, Members introduced resolutions disapproving of the 2009 EF and urging the EPA Administrator to reevaluate the

[102] Sen. Sheldon Whitehouse, "Climate Change," remarks in the Senate, *Congressional Record*, vol. 168, no. 61, April 6, 2022, p. S2025.

[103] Sustainable Energy and Environment Coalition (SEEC), "SEEC Condemns Trump Administration's Unlawful Attack on EPA Endangerment Finding," press release, February 27, 2025, https://seec.house.gov/media/press-releases/seec-condemns-trump-administrations-unlawful-attack-epa-endangerment-finding. See also U.S. Senate Committee on Environment and Public Works (EPW), "Whitehouse Opening Statement at Hearing to Consider Fotouhi, Szabo for EPA," https://www.epw.senate.gov/public/index.cfm/2025/3/whitehouse-opening-statement-at-hearing-to-consider-fotouhi-szabo-for-epa. For a copy of the letter, see EPW, "Letter to EPA RE: Endangerment," https://www.epw.senate.gov/public/_cache/files/7/6/76dff0b6-7f0e-4f8a-95a9-5d364b0a91d6/DA82892DE0D05AC11896AFD0BB6E8CEF29D2CC4221FF20DFEB34F1879B59EBB6.2.28.2025-letter-to-epa-re-endangerment-finding.pdf.

[104] Rep. Michael Burgess, "Providing for Consideration of H.R. 806, Ozone Standards Implementation Act of 2017," remarks in the House, *Congressional Record*, vol. 163, no. 121, July 18, 2017, p. H5932. See also Sen. James Inhofe, "Cap-and-Trade," remarks in the Senate, *Congressional Record*, vol. 156, no. 88, June 14, 2010, p. S4874.

[105] Committee on Science Space and Technology (SST), "Chairman Babin Applauds White House Decision to Repeal 2009 Endangerment Finding," press release, February 12, 2026, https://science.house.gov/press-releases?ID=C2495D60-D3EC-4C52-ABD2-427B14F8E061. See also Rep. Troy A. Carter Sr., "Congressman Carter Statement on EPA Abolishing the Endangerment Finding, Leaving Americans Vulnerable to Pollution and the Climate Crisis," press release, February 12, 2026.

finding.[106] None of the resolutions passed in either the House or the Senate.[107] In the 111th Congress, Members also introduced legislation to repeal the 2009 EF finding so it would have no legal effect, but none of this legislation became law.[108]

A second option is for Congress to pass legislation regarding the status of GHGs under the CAA that would remove the requirement for a GHG EF. Specifically, Members who support the regulation of GHGs under the CAA could seek to pass legislation declaring that GHGs are air pollutants under the CAA or that GHGs endanger public health and welfare. Legislation was introduced in the 118th Congress defining GHGs as "air pollutants" under Section 302(a) of the CAA (H.R. 9319). This bill did not become law.

Alternatively, Members who oppose the regulation of GHGs under the CAA could seek to pass legislation stating that GHGs are not air pollutants subject to the CAA or that they do not endanger public health or welfare. For example, legislation to exclude the GHGs carbon dioxide, water vapor, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride from the statutory definition of "air pollutant" under Section 302(a) of the CAA was introduced in the 115th Congress (H.R. 637). Relatedly, legislation to exclude GHGs from the statutory definition of "air pollutant" under Section 302(a) of the CAA, except for purposes other than addressing climate change concerns, was introduced in the 112th Congress (S. 482 and H.R. 910, among others). Neither of these bills became law.

Congress also has options with respect to its oversight authority over the process of rulemaking and the repeal of the 2009 EF. In the oversight process, Congress may seek to determine the effects of these regulations, or of the rescission of these regulations, on GHG emissions, on health and welfare, and on the costs and benefits to industry and consumers. For example, EPA has stated that it is "considering various techniques for characterizing the uncertainty" in estimates of health effects.[109] Congress may request EPA to undertake an RIA of the rescission that includes monetizing the effects of the rulemaking on public health, public welfare, and the climate.[110] In addition, for the 2026 rescission rulemaking, EPA modeled scenarios with stable or declining oil prices and modeled oil prices for a period of two-and-a-half years into the future. Congress may

[106] On December 15, 2009, Rep. Rodney Alexander introduced H.Res. 974, "Urging the Administrator of the Environmental Protection Agency to reevaluate the endangerment and cause or contribute findings regarding greenhouse gases signed on December 7, 2009." On January 21, 2010, Sen. Lisa Murkowski introduced S.J.Res. 26, "A joint resolution disapproving a rule submitted by the Environmental Protection Agency relating to the endangerment finding and the cause or contribute findings for greenhouse gases under Section 202(a) of the Clean Air Act." Other Members of Congress also introduced resolutions to reevaluate the EF. CRS was not able to find congressional resolutions in support of the 2009 EF.

[107] See "All Actions" tab, H.Res. 974, 111th Congress (2009-2010), https://www.congress.gov/bill/111th-congress/house-resolution/974/all-actions?overview=closed#tabs. See also "All Actions" tab, H.J.Res. 66, 111th Congress (2009-2010), https://www.congress.gov/bill/111th-congress/house-joint-resolution/66/all-actions?overview=closed#tabs. See also "All Actions" tab, S.J.Res. 26, 111th Congress (2009-2010), https://www.congress.gov/bill/111th-congress/senate-joint-resolution/26/all-actions. See also "All Actions" tab, H.J.Res. 76, 111th Congress (2009-2010), https://www.congress.gov/bill/111th-congress/house-joint-resolution/76/all-actions?overview=closed#tabs. See also "All Actions" tab, H.J.Res. 77, 111th Congress (2009-2010), https://www.congress.gov/bill/111th-congress/house-joint-resolution/77/all-actions?overview=closed#tabs.

[108] For example, H.R. 3409 and S. 1720.

[109] EPA, "New Source Performance Standards Review for Stationary Combustion Turbines and Stationary Gas Turbines," 91 *Federal Register* 1964, January 15, 2026. See also EPA, "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units: Final Repeal," 91 *Federal Register* 9112, February 24, 2026; and EPA, 2026 GHG EF and Motor Vehicle Standards Rescission, p. 816.

[110] EPA, "New Source Performance Standards Review for Stationary Combustion Turbines and Stationary Gas Turbines," 91 *Federal Register* 1964, January 15, 2026, p. 34: "The EPA is no longer monetizing benefits from $PM_{2.5}$ and ozone but will continue to quantify the emissions."

request EPA model scenarios with changes in oil prices that include potential price increases and that include oil costs for longer time periods. This discussion of congressional oversight is illustrative and should not be considered a comprehensive description of the range of potential congressional oversight actions.

Congress could also address the rescission of the EF through appropriations. Congress could restrict funding for rescission of the 2009 EF and the repeal of GHG motor vehicle regulations, or alternatively, could appropriate additional funds to expedite these processes. In the past, legislation was introduced in the 116th Congress to prohibit funding for the implementation of the 2009 EF (H.Rept. 116-119). This legislation did not become law. The potential options for legislation and oversight described in this section are examples and are not necessarily a comprehensive listing.

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