OPINION

# The Supreme Court case that could limit the EPA's power to fight climate change

One of the industry arguments is that Congress did not intend Clean Air Act to apply to carbon dioxide, because 'no one knew' at the time about its potential effects on climate. That is false.

**By Naomi Oreskes, Colleen Lanier-Christensen, Hannah Conway, and Ashton Macfarlane**
Updated February 28, 2022, 50 minutes ago


Climate activists rally outside as the Supreme Court hears from coal companies and their partisan allies who are trying to gut the Clean Air Act and block climate action on Monday in Washington, DC. LEIGH VOGEL/GETTY IMAGES FOR NRDC

The US Supreme Court heard oral arguments Monday in West Virginia v. Environmental Protection Agency, a case challenging the EPA's authority to regulate carbon dioxide as a pollutant. The future of our country's capacity to protect the world from catastrophic climate change could hinge on what the justices decide.

One argument made in the past is that Congress could not have intended the 1970 Clean Air Act to apply to carbon dioxide because at the time few if any people understood the damage it could do. In the 2007 landmark case Massachusetts v. EPA, the court ruled 5-4 that the Clean Air Act did assign the federal government the authority to regulate CO2. The Act's definition of air pollution was capacious, and its definition of "public welfare" specifically included effects on "weather, visibility, and climate." But the justices expressed skepticism that legislators in 1970 would have recognized CO2's climate-altering effects. At the time of the Clean Air Act's passage,

the court wrote, "the study of climate change was in its infancy." The court may have been influenced by industry intervenors in Massachusetts, who argued, in a lower court brief, "No reason exists to believe Congress had anything in mind other than the commonplace definition" of climate — in the sense of local or regional climate — when it drafted the welfare provision of the Clean Air Act.

That statement is untrue.

As early as the 1950s, scientists referred to $CO_2$ as an "industrial pollutant," and compared it to other well-studied industrial pollutants, including sulfur dioxide, carbon monoxide, and the oxides of nitrogen. The threat of damaging climate change from the increasing atmospheric concentration of $CO_2$ produced by fossil fuel combustion was discussed in several scientific contexts, including weather prediction and control, theoretical meteorology and atmospheric physics, the International Geophysical Year (1958-59), and, most important in this context, air pollution. Between 1958 and 1968, there were three National Conferences on Air Pollution where $CO_2$ was explicitly discussed as a pollutant connected to motor vehicle emissions.

Members of the federal government, including legislators involved in the passage of the Clean Air Act, were aware of this work. This included leading scientists, high-level administrators of federal agencies, members of Congress, White House staff under Presidents Lyndon Johnson and Richard Nixon, the Council on Environmental Quality, and the President's Science Advisory Committee. It specifically included architects of the Clean Air Act, including Senator Edmund Muskie of Maine, Senator Howard Baker Jr. of Tennessee, and Senator Jennings Randolph of West Virginia. In 1967, funding for research on $CO_2$ was included in the 1967 Air Quality Act.

We have identified over 100 congressional hearings in the 1960s when carbon dioxide, the greenhouse effect, and climate were discussed in various contexts, including in specific testimony pursuant to the 1970 Clean Air Act. The potential for $CO_2$ to cause

"climatic modifications" was a major subject in the first report of the Council on Environmental Quality, released in draft form in 1969 and entered into congressional testimony as part of the hearings for the Clean Air Act. This report used language virtually identical to what, just a few months later, appeared in the act.

Concern about CO2 pollution was so well known that it made its way into children's books, articles in popular magazines including Fortune and Sports Illustrated, and film and television. In 1969 it was discussed on television by the Beat poet Allen Ginsberg, prompting an outraged citizen of Washington state to write to the powerful Senator Henry "Scoop" Jackson, complaining that "one of America's premier kooks" was claiming that air pollution from automobiles could "melt the polar ice caps, causing a flooding of the greater part of the globe." Jackson wrote to the president's science advisor Lee DuBridge to ask if Ginsberg's claim was true; DuBridge said yes. The CO2 "greenhouse effect" was a known fact; we were "indeed filling the atmosphere with a great many gases and in very large quantities from our automobiles, from industry, and from the burning of fossil fuels."

Soon after that, DuBridge appeared on "Meet the Press," where he explained that the solution was regulation: "Air and water pollution could be reduced" through "regulations, practices, and requirements which will reduce the amount of pollution that is being put into the air by automobiles [and] industrial combustion." He also defended scientists who were already being accused of alarmism: "I don't like to be a calamity howler, but sometimes it takes a few calamity howlers to wake people up to the fact that there are serious problems and to arouse people to the point where they are willing to do something about it. I think we are at that point now."

Admittedly, CO2 in 1969 was viewed as different from the pollutants responsible for urban air quality deterioration, such as smoke and sulfur dioxide. Politicians in the 1960s, therefore, drew an analogy between CO2 and other types of "invisible" pollution, such as radiation, or pollution that had long-term but not necessarily

immediate adverse effects, such as persistent pesticides. In his opening statement at 1966 hearings on pollution abatement technologies, Daddario explained how, with population growth and industrialization, "the potential of mankind to create worldwide problems such as radioactive fallout, spread of persistent pesticides, and a carbon dioxide imbalance in the atmosphere, also increases."

This broad awareness explains how the words "weather and climate" could appear in the 1970 Clean Air Act and why they were included in its definition of public welfare. In 1970, scientists could and did communicate their concerns about the climate-altering effects of $CO_2$ to the US government, including to members of Congress specifically engaged in drafting and passing the law. Scientists at that time could not specify in any detail what the exact effects of increased atmospheric $CO_2$ would be or when they would occur. Nor were most prepared to stipulate what steps should be taken to regulate, and control or reverse, the harmful effects of a rise in atmospheric $CO_2$. While much more would be learned in the decades to come, by 1970 $CO_2$ was understood as a pollutant that over time could affect the behavior of the global climate



This history matters, because the current court appears to be inclined to limit federal regulatory authority to cases where Congress has been explicit in its intent. Whatever the merits or demerits of that inclination, the court's decision should not be based on an assumption that Congress did not — much less could not — have intended the 1970 Clean Air Act to address climate change. The word "climate" is in the act, because scientists had raised an alarm, and the authors of the Clean Air Act had heard it.

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