Massachusetts v. EPA

Motor vehicle regulation by EPA under Clean Air Act

- "Traditional" pollutants regulated: nitrogen oxides, volatile organic compounds, carbon monoxide, and particulate matter
- 1999—petition to regulate greenhouse gases
- 2000—George W. Bush elected
- 2001—National Research Council study
- 2003—petition denied

Section 202(a)(1)—Clean Air Act

- The 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 vehicle 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.

Issue 1. Does EPA have statutory authority to regulate greenhouse gas emissions from new motor vehicles under the Clean Air Act?

- Court –
  - CAA definition of "any air pollutant"
- Dissent—GHGs not "agent" of air pollution

Issue 2. Was EPA's decision not to regulate for other reasons arbitrary and capricious?

- Court
  - EPA's reasons not related to statutory rule—Section 202(a)(1)
- Dissent
  - EPA Administrator did use his judgment, and decided not to regulate

Even the scientists are surprised

"As practicing scientists who study the earth's climate system, we and many in our profession have long understood that continued human-caused emission of greenhouse gases….would eventually warm the earth's surface. Most were skeptical that we would see strong signs of human-induced climate change in our lifetimes."

--Brief of Amicus Curiae Climate Scientists at 2, Massachusetts v. EPA, No. 06-1120 (U.S. Aug. 31, 2006)

For more, see http://johndernbach.com/MassVEPA.html

"But by the beginning of this decade, we observed that global temperatures are rising, plant and animal ranges are shifting, glaciers are in retreat globally, and arctic sea ice is retreating. Sea levels are rising and the oceans are becoming more acidic."

Id.

"To the extent that these changes result from human alteration of the atmosphere, we know that they are just the first small increment of climate change yet to come if human societies do not curb emissions of greenhouse gases."

--Brief of Amicus Curiae Climate Scientists.

Cherry Picking

What NRC report said: "The changes observed over the last several decades are likely mostly due to human activities, but we cannot rule out that some significant part of these changes is also a reflection of natural variability."

What EPA cited from NRC report (without citing above statement): a "causal linkage between the buildup of greenhouse gases in the atmosphere and the observed climate changes during the 20th century cannot be unequivocally established."

From climate science amicus brief:

EPA admitted to three important observations about the global climate:

(1) that "concentrations of GHGs are increasing in the atmosphere as a result of human activities,"

(2) that a "diverse array of evidence points to a warming of global surface air temperatures," and

(3) that "the magnitude of the observed warming is large in comparison to natural variability (citations omitted).

However, EPA omitted the essential scientific conclusion that constitutes the core of *Climate Change Science: that these separate observations are causally* linked. This is a fundamental omission. It is as if a summary of Newton's *Principia—which advanced the* theory of gravitation as the common explanation for how apples fall to earth and planets move in the heavens—repeated Newton's description of the motions of apples and planets, but never got around to mentioning gravity. Isaac Newton, *Principia Mathematica Philosophiae Naturalis* (W.A. Kaminski trans., World Scientific 1987) (1729).

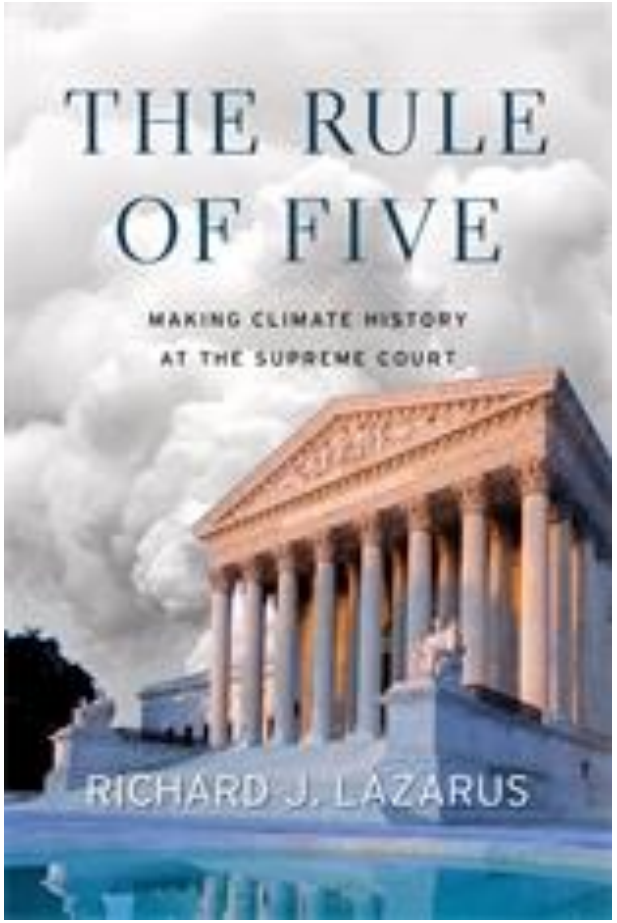
First two sentences of court's opinion:

- A well-documented rise in global temperatures has coincided with a significant increase in the concentration of carbon dioxide in the atmosphere. Respected scientists believe the two trends are related.

Recent Book About Massachusetts v. EPA

- Richard Lazarus
- Rule of Five: Making Climate History at the Supreme Court

- https://www.youtube.com/watch?v=ZkQ4cWuftdI



Does science seem clearer to you now?

- If so, clearer in what way(s)?

Mass. v. EPA has broad impacts throughout the Act

- Within Clean Air Act:
  - GHG emissions from motor vehicles
  - Waiver request by California
  - GHG emissions from stationary sources
  - Possible regulation of GHGs as criteria air pollutants
- Of general importance, it means that federal legislation is not necessary to regulate greenhouse gas emissions.

Fuel economy/greenhouse gas limits for vehicles

- Light duty motor vehicles (cars, sport utility vehicles, minivans, and pickup trucks)
  - 2010—35.5 mpg (250 grams of carbon dioxide per mile) by 2016 .
- Heavy duty trucks and buses:
  - 2011—first-ever limits to improve fuel efficiency and reduce greenhouse gas emissions

In 2020, Trump EPA adopted new rules for 2023-26

- Requires increased stringency of 1.5% annually for those model years.
- By contrast:
  - Obama rule required 5% annual increase.
  - Without any regulation, auto industry "recently achieved an average annual increase in fuel economy of 2.4 percent."
  - Source: https://www.nytimes.com/2020/03/30/climate/trump-fuel-economy.html

In 2021, Biden EPA strengthened standard

- Emission standard increases in stringency from prior model year:
  - Model Year 2023 (10% more stringent),
  - Model Year 2024 (5% more stringent),
  - Model Year 2025 (6.6% more stringent),
  - Model Year 2026 (10% more stringent).

  - EPA projects final standard will:
    - Reduce GHG emissions by 3.1 billion tons by 2050,
    - Reduce emissions of other air pollutants, and
    - Save consumers between $210 and $420 billion in fuel costs through 2050.

2023—further strengthening of rules for light duty and heavy duty vehicles

- Focused on Model Year 2027 and after
- Electric cars don't emit air pollutants.
- How do you design an emission standard for an entire auto fleet to drive adoption of electric cars?