


ELI Summer School: The Clean Air Act

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The Clean Air Act: looking ahead

- Securing a stable climate
 - Clean Car Standards
 - Clean Power Plan
 - Addressing air pollution
 - Safeguarding science-based decision-making
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Securing a stable climate



Massachusetts v. EPA, 549 U.S. 497 (2007)



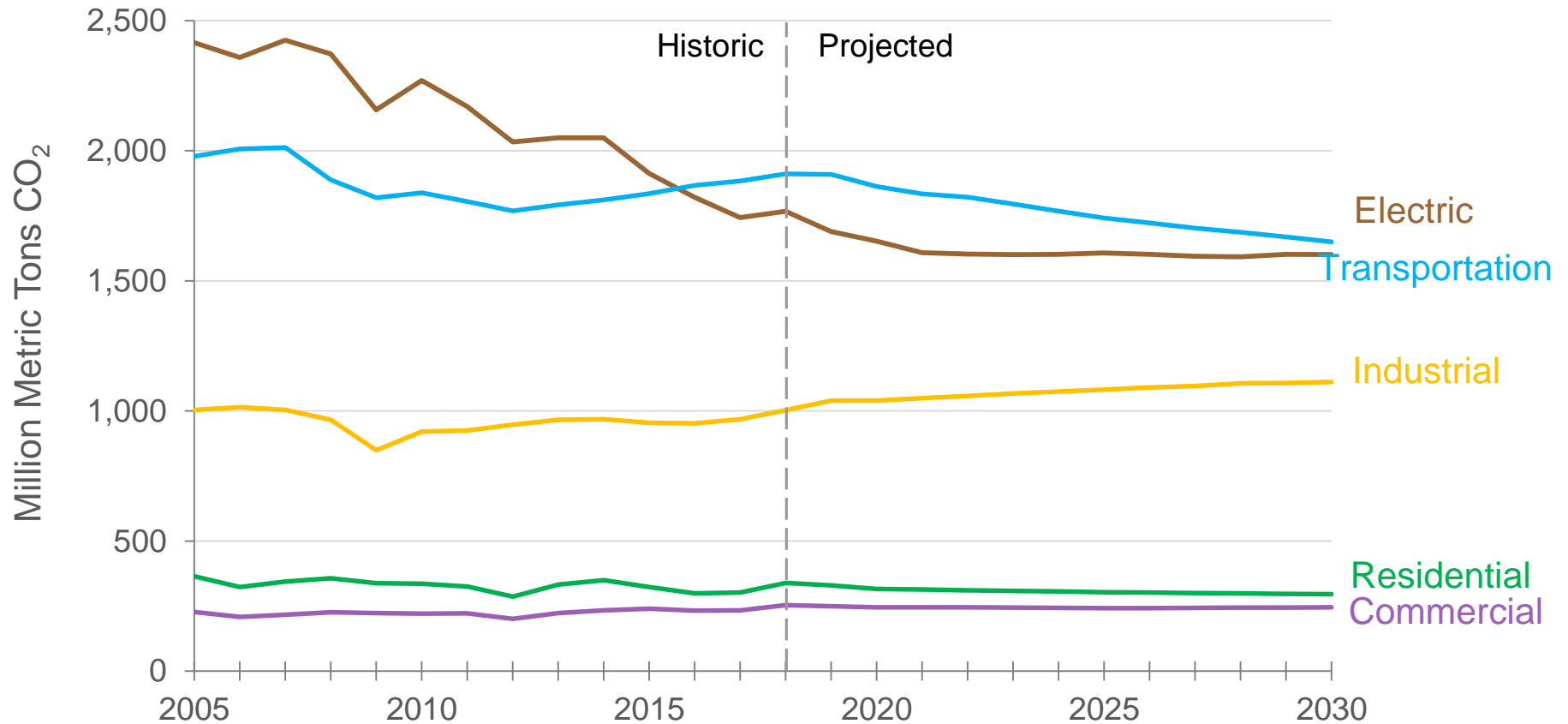
“If EPA makes a finding of endangerment, the Clean Air Act requires the agency to regulate emissions of the deleterious pollutant”

“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.”

Climate Science

- EPA Endangerment Finding (Dec. 2009)
- Fourth National Climate Assessment (U.S. Global Change Research Program, Nov. 2017):
 - “[T]here is no convincing alternative explanation” for observed warming over last century other than human activities
 - Under business as usual, U.S. is expected with high confidence to warm by additional 2.5°F (1.4°C), on average, over next few decades
- Global Warming of 1.5°C Report (IPCC, Oct. 2018):
 - Underscored importance of limiting warming to 1.5°C
 - In pathways consistent with a 1.5°C increase, global net anthropogenic CO₂ emissions must decline by about 45% from 2010 levels by 2030, reaching net zero around 2050

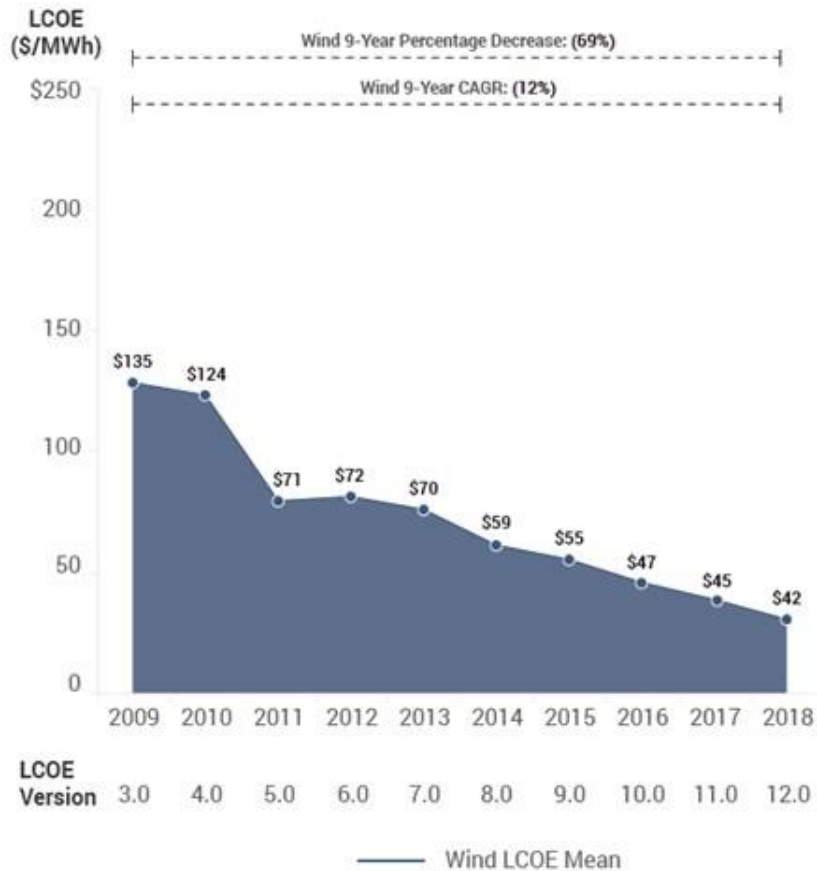
U.S. Energy-Related Carbon Emissions



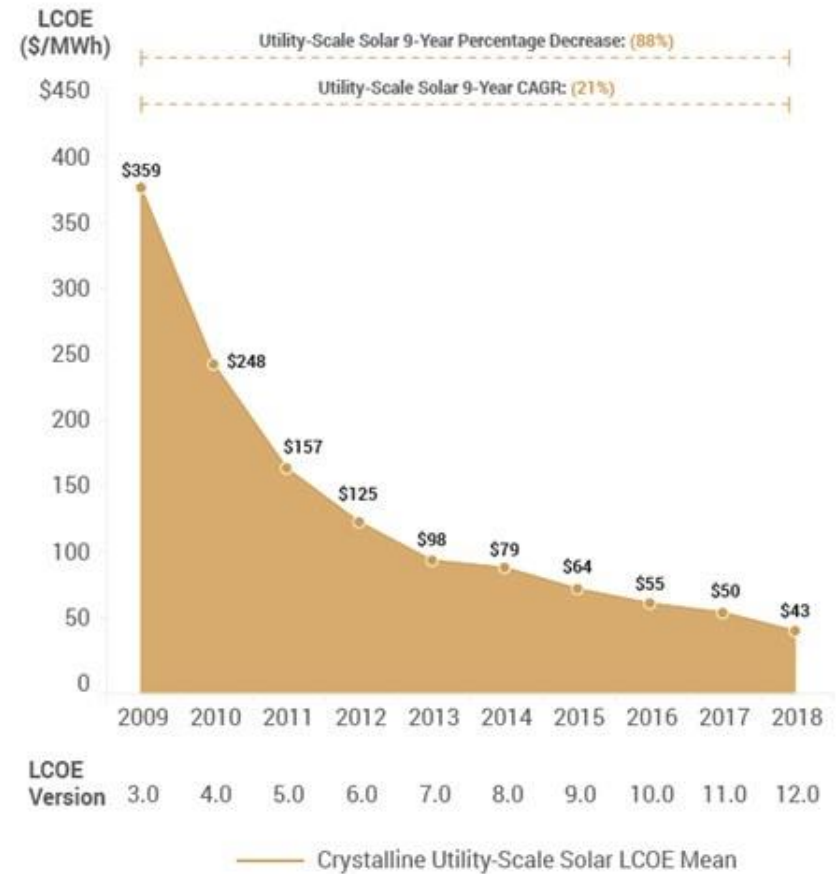
Source: EIA data (projected emissions use 2019 Annual Energy Outlook reference case)

Clean Power Innovation: RE Costs

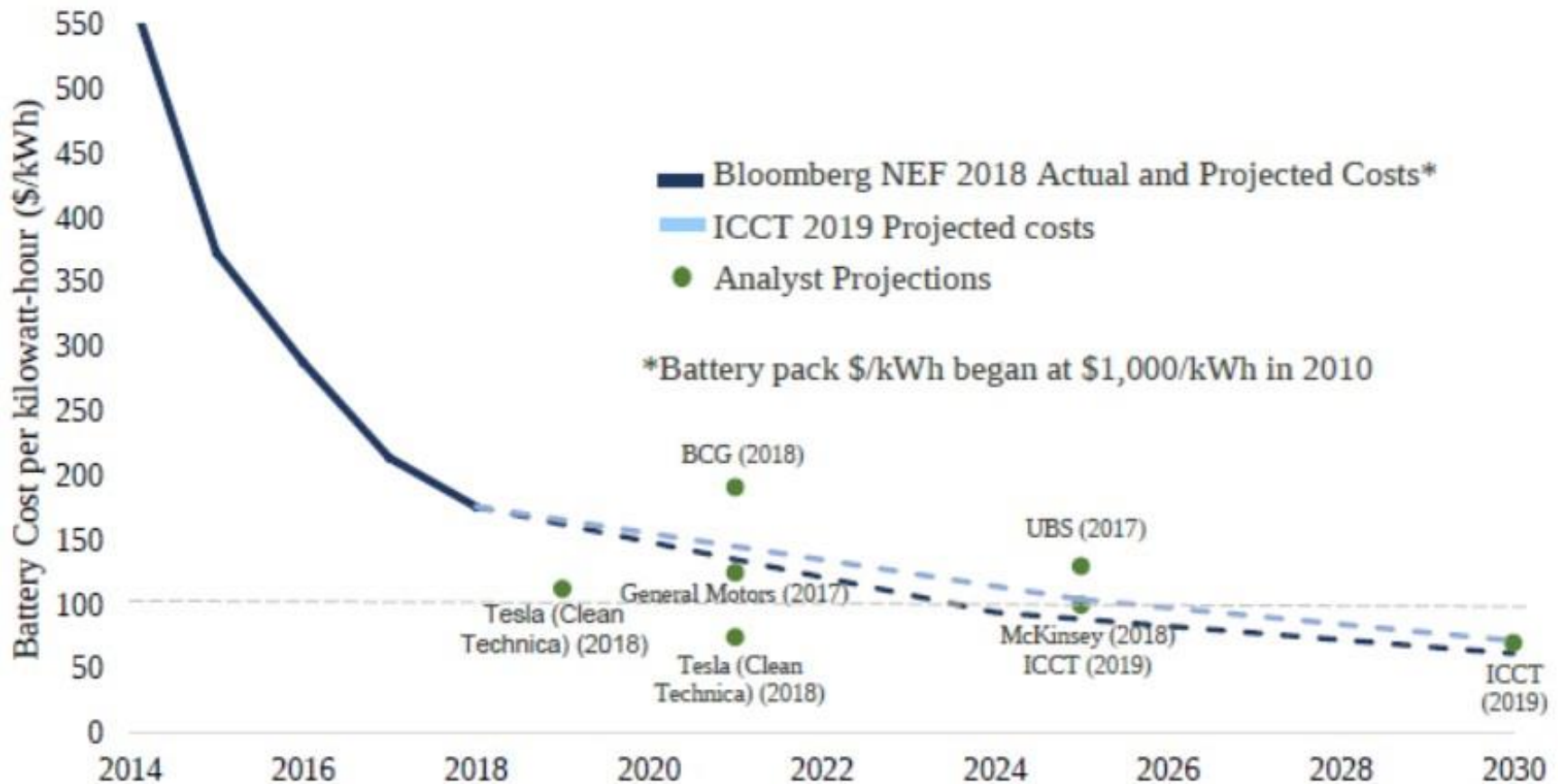
Unsubsidized Wind LCOE




Unsubsidized Solar PV LCOE



Clean Car Innovation: Battery Costs




Trump EPA Climate Priorities

- Weaken or eliminate existing climate safeguards
 - Clean Power Plan
 - Clean Car Standards
 - Oil and Gas Methane Standards
 - Landfill Methane Standards
 - But no formal proposal to reverse 2009 Endangerment Finding
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2015 Clean Power Plan

- Addressed carbon pollution from existing power plants under Clean Air Act Section 111(d)
- 3 key elements:
 - Determined the “best system of emission reduction” for existing power plants—reflecting the three “building blocks” of (1) efficiency improvements at existing coal power plants; (2) shifting generation to natural gas; and (3) shifting generation to renewable energy
 - Set emission reduction targets based on the “BSER”
 - Provided implementation guidance for states
- Estimated to reduce carbon pollution from existing power plants to 32% below 2005 levels by 2030

Rollback of the Clean Power Plan

- Recent “ACE” rule finalizes repeal of the Clean Power Plan
 - Rule also finalizes Section 111(d) emissions guidelines that direct states to consider efficiency improvements for existing coal plants on a case-by-case basis
 - Guidelines contain no binding limits on carbon pollution
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Rollback of the Clean Power Plan

- Disregards what power companies are doing to reduce carbon pollution in favor of ineffective heat-rate improvements
 - EPA analysis anticipates that carbon pollution could increase in as many as 16 states under the final rule
- Sets aside flexible Clean Power Plan approach for a rigid focus on on-site reductions; at odds with decades of industry requests for greater flexibility
- Assumes away the health benefits of reducing particulate matter pollution
- Disregards most of the harms of climate pollution
- A huge missed opportunity for cost-effective pollution reduction

Clean Car Standards

- 2009: EPA responds to California petition and grants a waiver of preemption under Clean Air Act Section 209 to the state for GHG emission standards
- 2010: EPA and DOT finalize joint rulemaking establishing GHG emission and fuel economy standards for MY 2012-2016 passenger vehicles
 - Unified regulatory approach together with California
- 2012: EPA and DOT finalize joint rulemaking setting out GHG emission and fuel economy standards for MY 2017-2025 passenger vehicles
- Standards apply to passenger cars, SUVs and trucks up to a Ford F-150 type size
- Standards are based on vehicle footprint, with larger vehicles assigned less stringent standards

Proposed Clean Cars Rollback

- Joint EPA and DOT August 2018 proposal would dramatically weaken MY 2021-2025 federal standards:
 - Weaken EPA GHG emission standards: from about 5% annual improvement to zero annual improvement
 - Establish NHTSA fuel economy standards with zero annual improvement
- Would also attack state clean car authority:
 - Revoke California's preemption waiver for its clean car program (adopted by 14 states total)
 - Assert that the Energy Policy and Conservation Act preempts state clean car programs

Proposed Clean Cars Rollback

- Administration's own analysis estimates proposal would cause 7.4 billion tons of additional carbon pollution
- Evidence that EPA was shut out of decision-making



U.S. Department of Transportation
National Highway Traffic Safety Administration



U.S. Environmental Protection Agency
Office of Transportation and Air Quality

Preliminary Regulatory Impact Analysis

**Corporate Average Fuel Economy
Standards and CO₂ Standards for
Model Year 2021 – 2026
Passenger Cars and Light Trucks**

Massachusetts v. EPA, 549 U.S. 497 (2007)



“If EPA makes a finding of endangerment, the Clean Air Act requires the agency to regulate emissions of the deleterious pollutant from motor vehicles.”

“[T]hat DOT sets mileage standards in no way licenses EPA to shirk its environmental responsibilities. EPA has been charged with protecting the public’s ‘health’ and ‘welfare,’ a statutory obligation wholly independent of DOT’s mandate to promote energy efficiency.”


Headwinds for Administration Priorities

- NYU Law Institute for Policy Integrity: >90% of Trump administration deregulatory efforts have failed in court
 - Administration continues to fall behind schedule on advancing its climate rollbacks
 - Rollbacks belied by science, facts, law
 - Need for ambitious climate action remains; seeing progress at the state and local level
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Addressing air pollution



Clean Air Act: unfinished work

- Latest science continues to underscore health risks from pollution exposure
 - Over 140 million Americans currently live in counties with unhealthy air
 - Enduring failure to address pollution hotspots
 - Hotspot challenge now further underscored by recent developments in monitoring technology
 - Trump administration meanwhile acting to undermine existing safeguards
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Pollution hotspots

- Enhanced hyper-local monitoring capabilities are demonstrating dramatic variation in pollution levels



Mercury and Air Toxics Standards

- Fully implemented standards addressing power plant toxic pollution under CAA Section 112
- EPA estimates they annually prevent up to:
 - 11,000 premature deaths
 - 4,700 heart attacks
 - 130,000 asthma attacks among children
- Dec. 2018 EPA proposal would withdraw the predicate finding under CAA Section 112(n)(1)(A) that addressing toxic pollutants from power plants is “appropriate and necessary”

Safeguarding science-based decision-making



Administration Science Initiatives

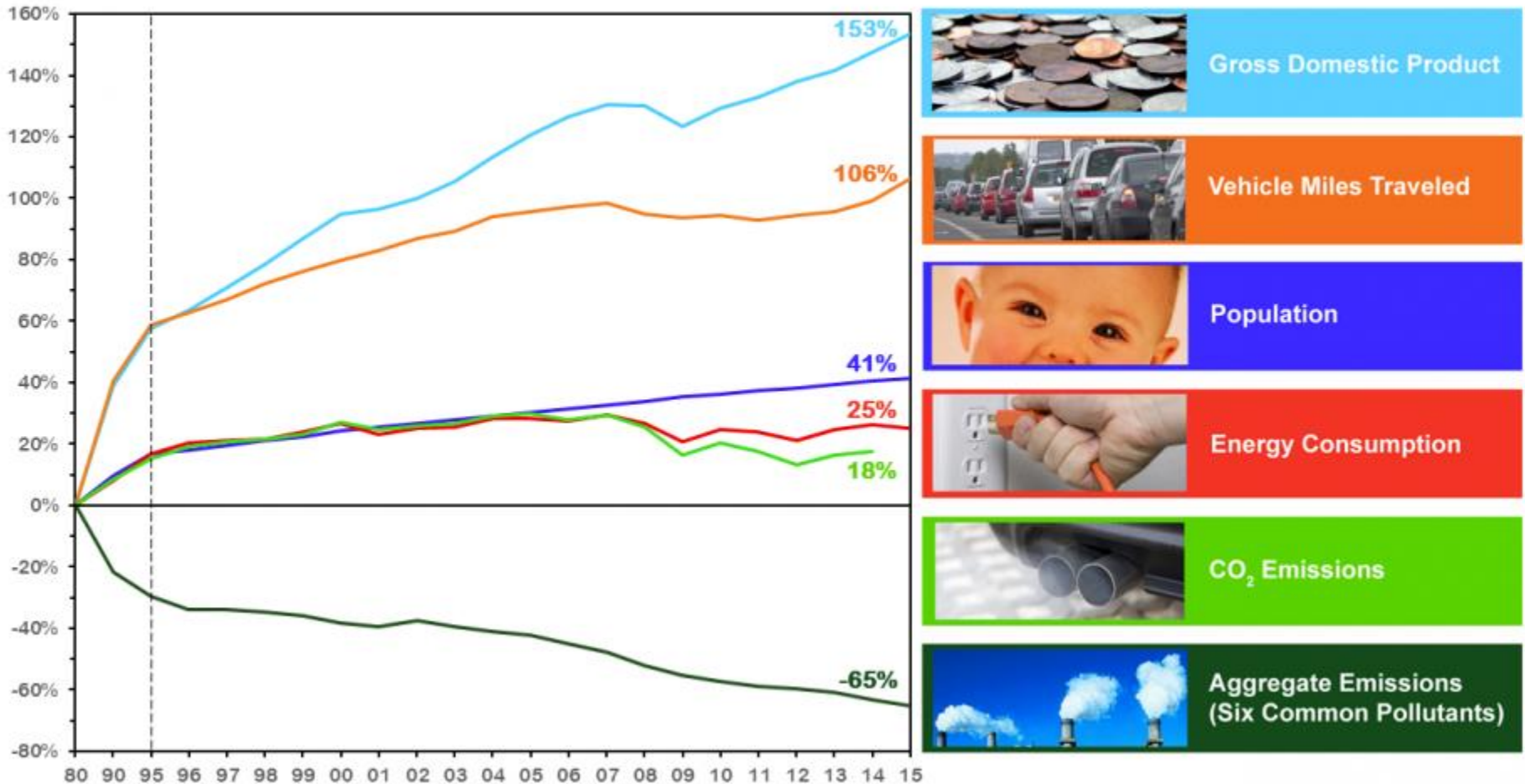
- Sound science and economic analysis are at the heart of all Clean Air Act decision-making
- Administration has advanced numerous initiatives to change EPA practice in this area, with cross-cutting implications for Clean Air Act activities
 - Censored Science Proposal
 - Cost-Benefit rulemakings, starting with EPA's Office of Air and Radiation
 - Directive on science advisory committee membership
 - Changes to NAAQS review
 - Treatment of benefits from reducing particulate matter

Censored Science Proposal

- Would undermine EPA's ability to set standards on the basis of the best available science
- Would prohibit EPA from considering public health studies for which underlying data cannot be made "publicly available in a manner sufficient for independent validation"
- Scope would cover vital, rigorously vetted health studies that are based on confidential patient information that cannot be legally or ethically disclosed
- EPA proposal did not include any cost-benefit analysis
- Concerns raised by Presidents of the National Academies of Sciences, Engineering, and Medicine; the President of Harvard University and nearly one hundred leading Harvard scientists and medical experts; EPA's own Science Advisory Board; and other leading experts

The Clean Air Act: looking ahead

Comparison of Growth Areas and Emissions, 1980-2015



Thank you!

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