Diminishing Use of EPA Science To Protect Human and Environmental Health

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Union of Concerned Scientists

Science
and
for a
healthy planet
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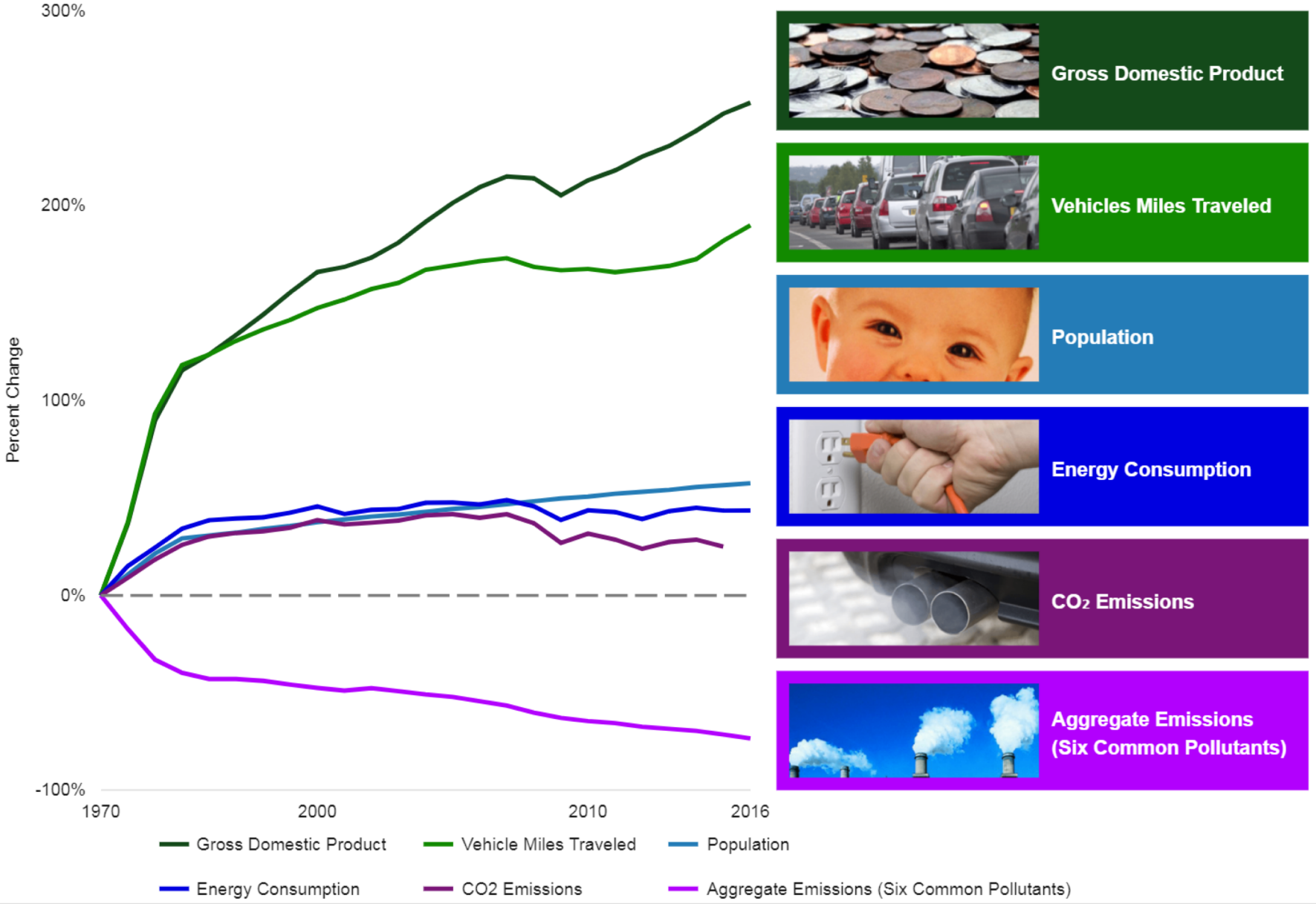
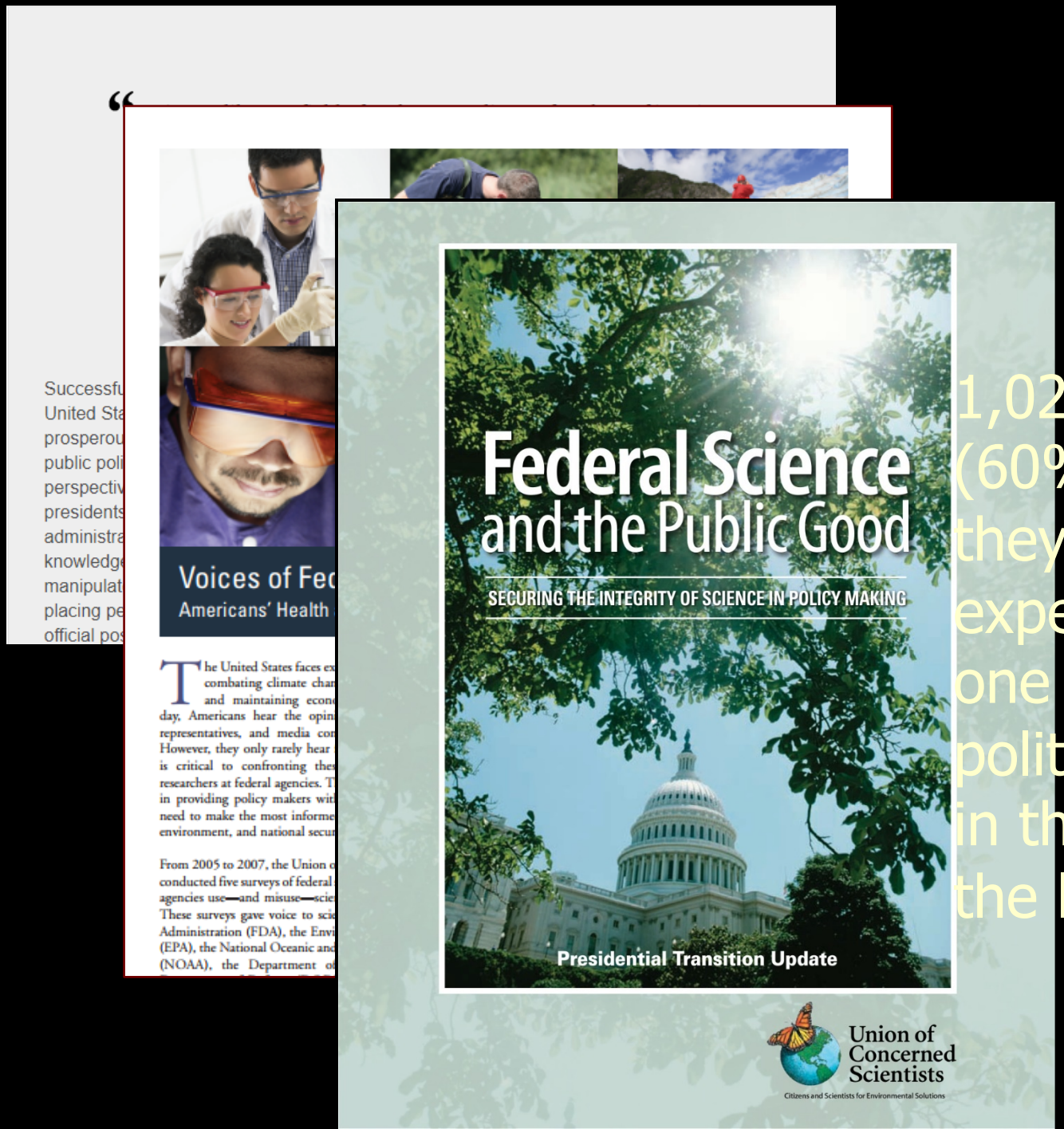
Comparison of Growth Areas and Declining Emissions

1970-2016



Source: US EPA, Our Nation's Air: Status and Trends Through 2016



1,028 scientists (60%) reported they had personally experienced at least one incident of political interference in their work over the last five years.

ucsusa.org/surveys

Preserving Scientific Integrity in Federal Policymaking

Lessons from the Past Two Administrations and What's at Stake under the Trump Administration

	Scientific Integrity Policy	Peer Review Policy	Media Policy	Social Media Policy	Procedure for Allegations	Public Reporting of Allegations	Differing Scientific Opinions Policy	Scientific Integrity Official
US Dept. of Commerce	Some Progress	Nonexistent or Poor	Some Progress	Some Progress	Nonexistent or Poor	Some Progress	Nonexistent or Poor	Nonexistent or Poor
US Dept. of Energy	Strong	Some Progress	Some Progress	Some Progress	Nonexistent or Poor	Some Progress	Nonexistent or Poor	Strong
US Dept. of Interior	Strong	Some Progress	Some Progress	Strong	Strong	Strong	Some Progress	Strong
US Dept. of Labor	Nonexistent or Poor	Some Progress	Nonexistent or Poor	Nonexistent or Poor	Some Progress	Some Progress	Some Progress	Some Progress
US Dept. of Transportation	Nonexistent or Poor	Some Progress	Nonexistent or Poor	Nonexistent or Poor	Nonexistent or Poor	Some Progress	Nonexistent or Poor	Some Progress
US Dept. of Agriculture	Strong	Strong	Some Progress	Some Progress	Strong	Some Progress	Nonexistent or Poor	Strong
Centers for Disease Control and Prevention	Strong	Strong	Strong	Some Progress	Some Progress	Some Progress	Some Progress	Strong
US Consumer Product Safety Commission	Some Progress	Nonexistent or Poor	Some Progress	Some Progress	Nonexistent or Poor	Some Progress	Some Progress	Nonexistent or Poor
US Environmental Protection Agency	Strong	Strong	Strong	Some Progress	Some Progress	Strong	Some Progress	Strong
US Fish and Wildlife Service	Strong	Some Progress	Some Progress	Strong	Strong	Strong	Some Progress	Strong
US Food and Drug Administration	Some Progress	Nonexistent or Poor	Some Progress	Strong	Nonexistent or Poor	Some Progress	Strong	Strong
National Aeronautics and Space Administration	Some Progress	Some Progress	Some Progress	Some Progress	Some Progress	Some Progress	Nonexistent or Poor	Nonexistent or Poor
National Institute of Standards and Technology	Some Progress	Some Progress	Some Progress	Some Progress	Nonexistent or Poor	Some Progress	Nonexistent or Poor	Some Progress
National Institutes of Health	Nonexistent or Poor	Strong	Some Progress	Strong	Some Progress	Some Progress	Nonexistent or Poor	Some Progress
National Oceanic and Atmospheric Administration	Strong	Some Progress	Strong	Some Progress	Strong	Strong	Some Progress	Strong
National Science Foundation	Strong	Some Progress	Strong	Some Progress	Some Progress	Some Progress	Nonexistent or Poor	Nonexistent or Poor
Nuclear Regulatory Commission	Nonexistent or Poor	Strong	Some Progress	Some Progress	Nonexistent or Poor	Some Progress	Nonexistent or Poor	Nonexistent or Poor
US Geological Survey	Strong	Strong	Some Progress	Strong	Strong	Strong	Some Progress	Strong

Strong Some Progress Nonexistent or Poor

ucsusa.org/preservingscientificintegrity

Unprecedented Losses of Scientific Integrity

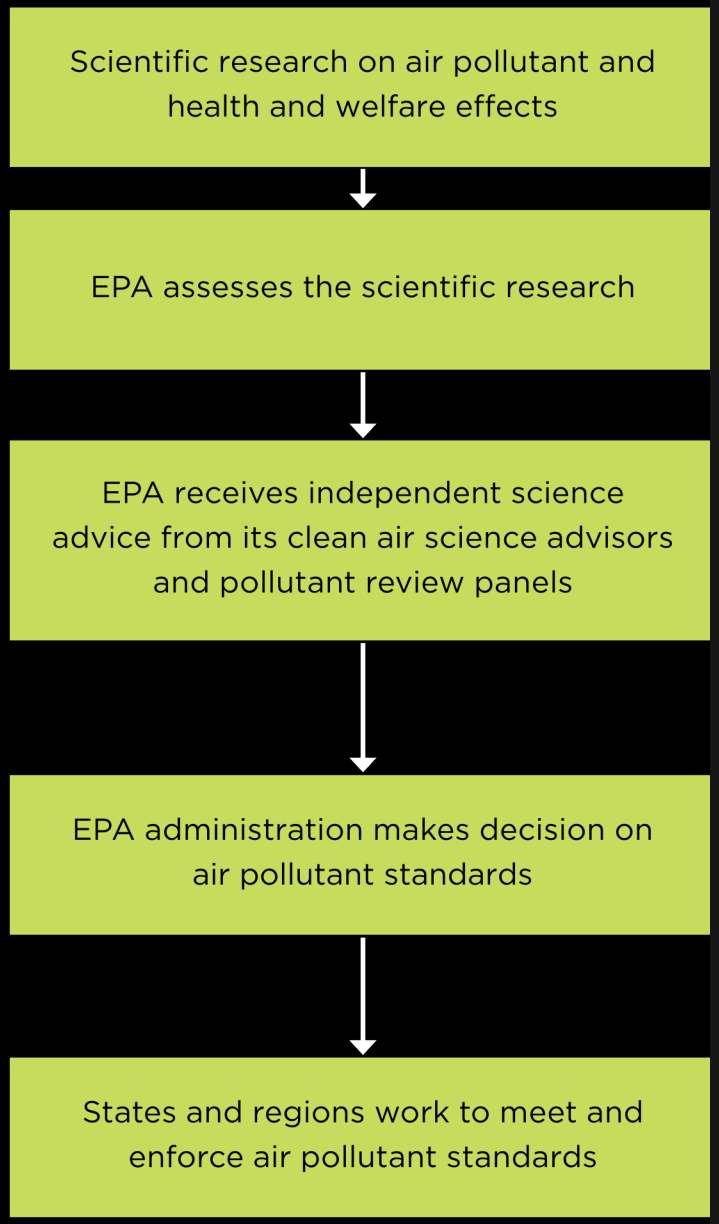
Overall, we find that the Trump administration's violations of scientific integrity are largely a continuation and escalation of patterns built up over the past seven decades as science and the growing federal science apparatus increasingly came into conflict with political, economic, and ideological interests. While many of the Trump administration's actions have origins in the work of prior administrations, others fit with the "unprecedented" narrative, including the uniquely open disregard for the conclusions of its own scientists.

Berman, E., J. Carter. 2018. Scientific Integrity in Federal Policymaking Under Past and Present Administrations*. J Science Policy and Governance*. Vol 13. Issue 1. September.

Recent EPA Policy Changes

- Affordable Clean Energy Rule (Clean Power Plan replacement)
- Updates to the Ozone and Particulate Ambient Standards (End of 2020)
- Strengthening Transparency rule (Final Rule Dec 2019)
- Changes to Cost Benefit Analysis
  - White House guidance on the Information Quality Act
  - Pruitt directive for EPA to change cost-benefit approach (EPA Air office to release by Dec 2019)
- Loosening of Emissions Standards
  - CAFE Standards
  - Mercury and Air Toxics Rule
  - New Guidance on Maximum Achievable Control Technology (MACT)
  - Ditch continuous NO_x monitoring requirement
  - SO_2 modeling change for permit processes
- Long-term implications of process/capacity changes now

The Clean Air Act Ambient Air Pollutant Policy Development Process



Changes to Cost Benefit Analysis

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Corporate interests, including the fossil fuel, auto and tobacco industries, are searching for ways to undermine the science that says particulate pollution kills

By Gretchen Goldman, Ploy Achakulwisut on June 17, 2019

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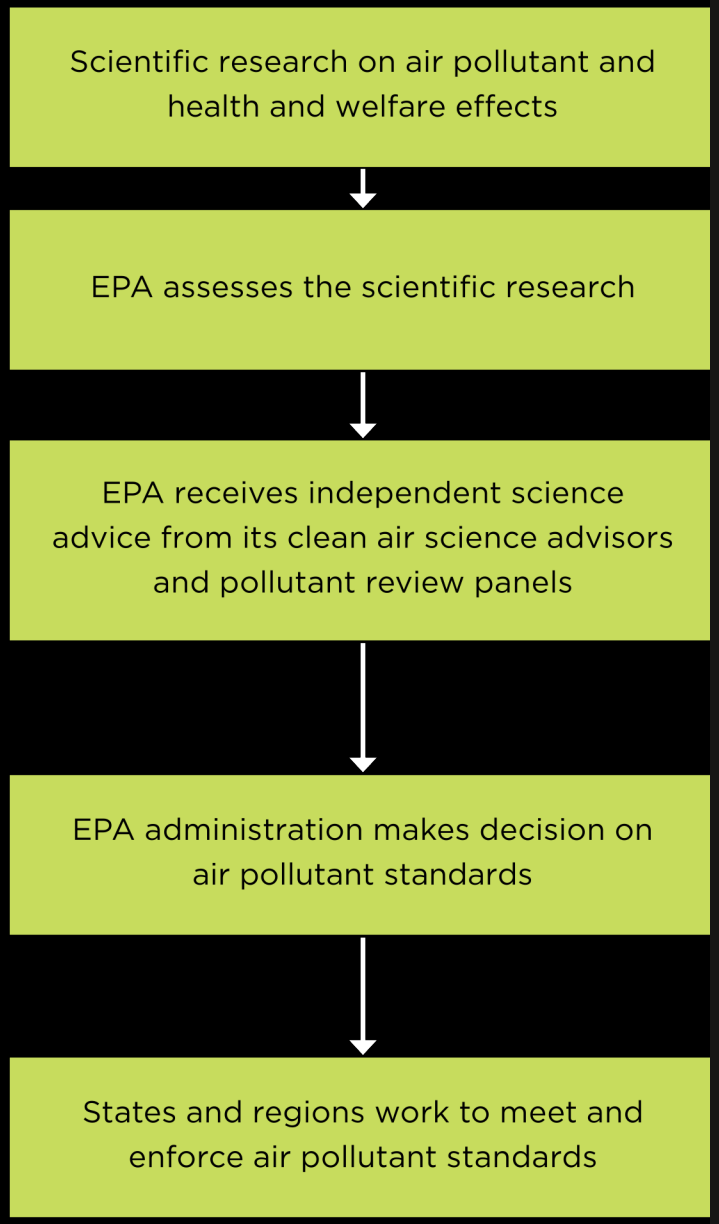

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How the Trump Administration Has Undermined the Process

Scientific research on air pollutant and health and welfare effects

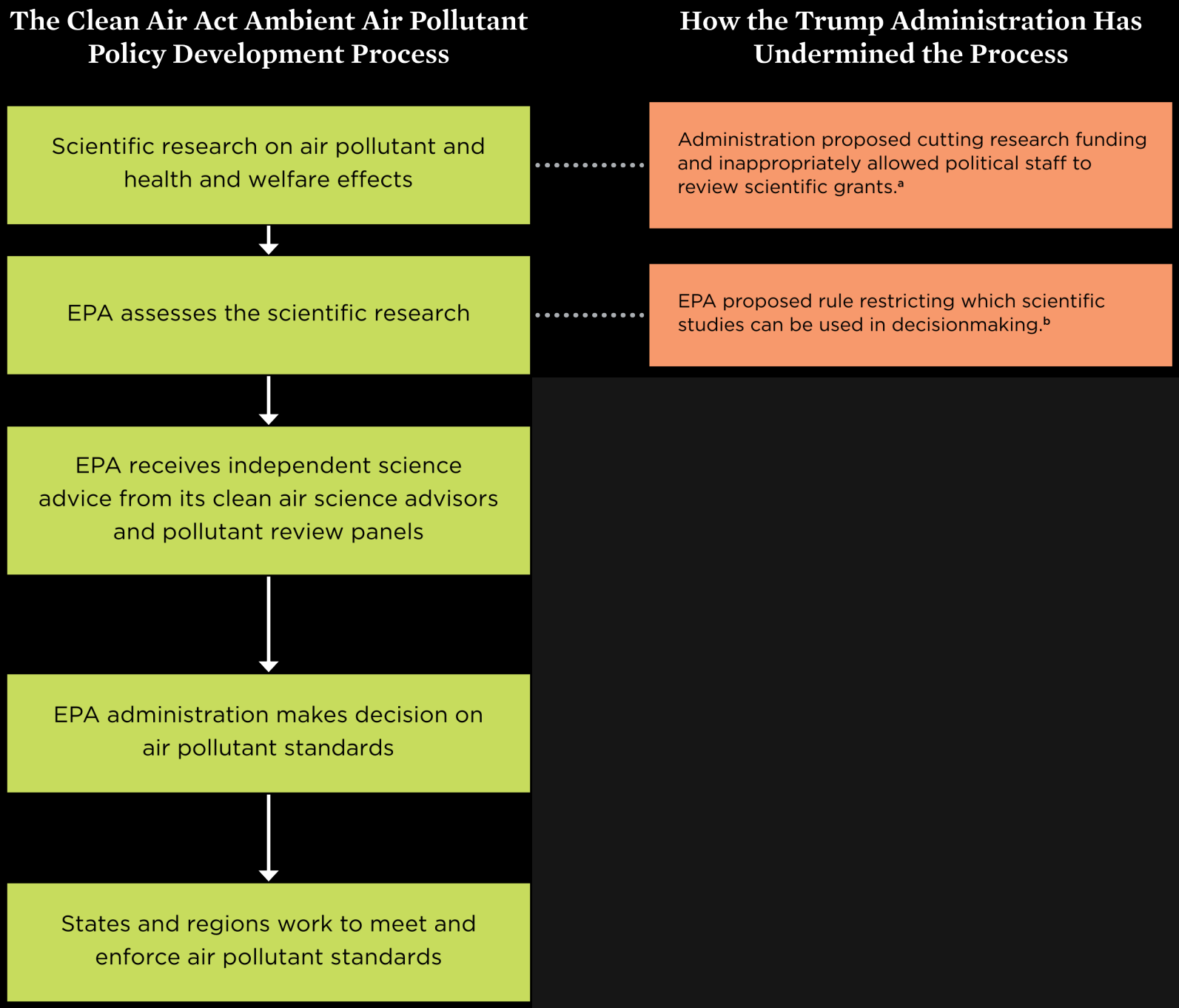
Administration proposed cutting research funding and inappropriately allowed political staff to review scientific grants.[a]

EPA assesses the scientific research

EPA receives independent science advice from its clean air science advisors and pollutant review panels

EPA administration makes decision on air pollutant standards

States and regions work to meet and enforce air pollutant standards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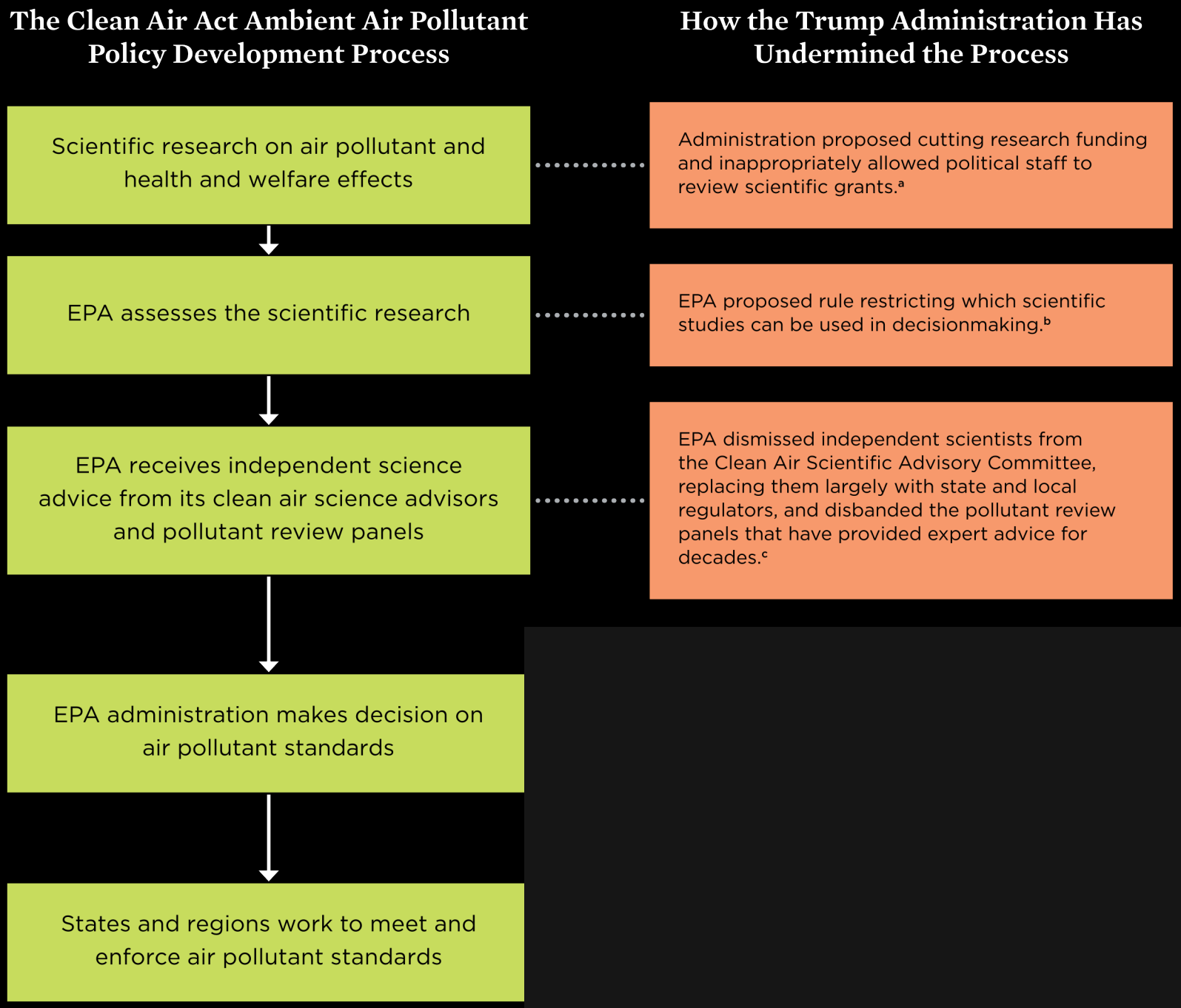
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Particulate Matter Standard Update

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Don't abandon evidence and process on air pollution policy

Gretchen T. Goldman[1], Francesca Dominici[2]
+ See all authors and affiliations

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NEWS

Fired EPA scientists to release air pollution report they say agency unqualified to issue

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CLIMATE IN CRISIS

Fired EPA scientists to release air pollution report they say agency unqualified to issue

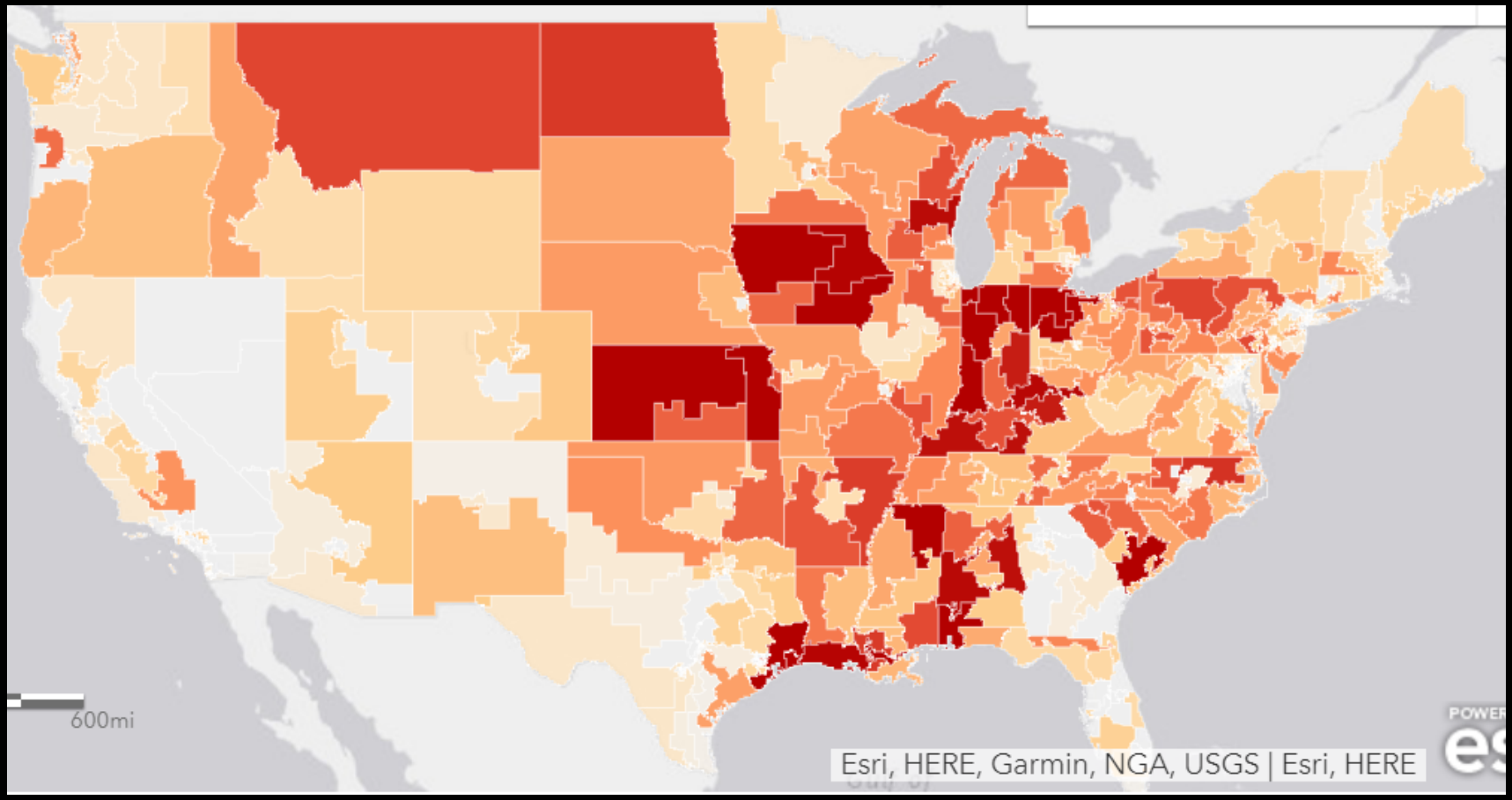
"In the history of the agency this has never happened. The new panel is unqualified and the new panel has said they were unqualified," said a former EPA official.

Affordable Clean Energy (ACE) Rule

Mercury and Air Toxics Standard

Rollback of Vehicle Standards

Changes to Emissions Standard Guidances: MACT Standard Example



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States and regions work to meet and enforce air pollutant standards

116TH CONGRESS
1ST SESSION

H. R. 1709

To amend the America COMPETES Act to establish certain scientific integrity policies for Federal agencies that fund, conduct, or oversee scientific research, and for other purposes.

IN T

Mr. TONKO (for himself, Ms. JOHNSON of Texas, Ms. STEVENS, and Mr. L

To amend the America COMPETES Act to establish certain scienti
purposes.

Be it enacted by the Senate and House of Representatives of th

SECTION 1. SHORT TITLE.

This Act may be cited as the "Scientific Integrity Act".

SEC. 2. SENSE OF CONGRESS.

It is the sense of Congress that—

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Hearing Garners Bipartisan Support for Scientific Integrity

Democrats hope Republicans will decide to cosponsor legislation to codify scientific integrity procedures at federal agencies.

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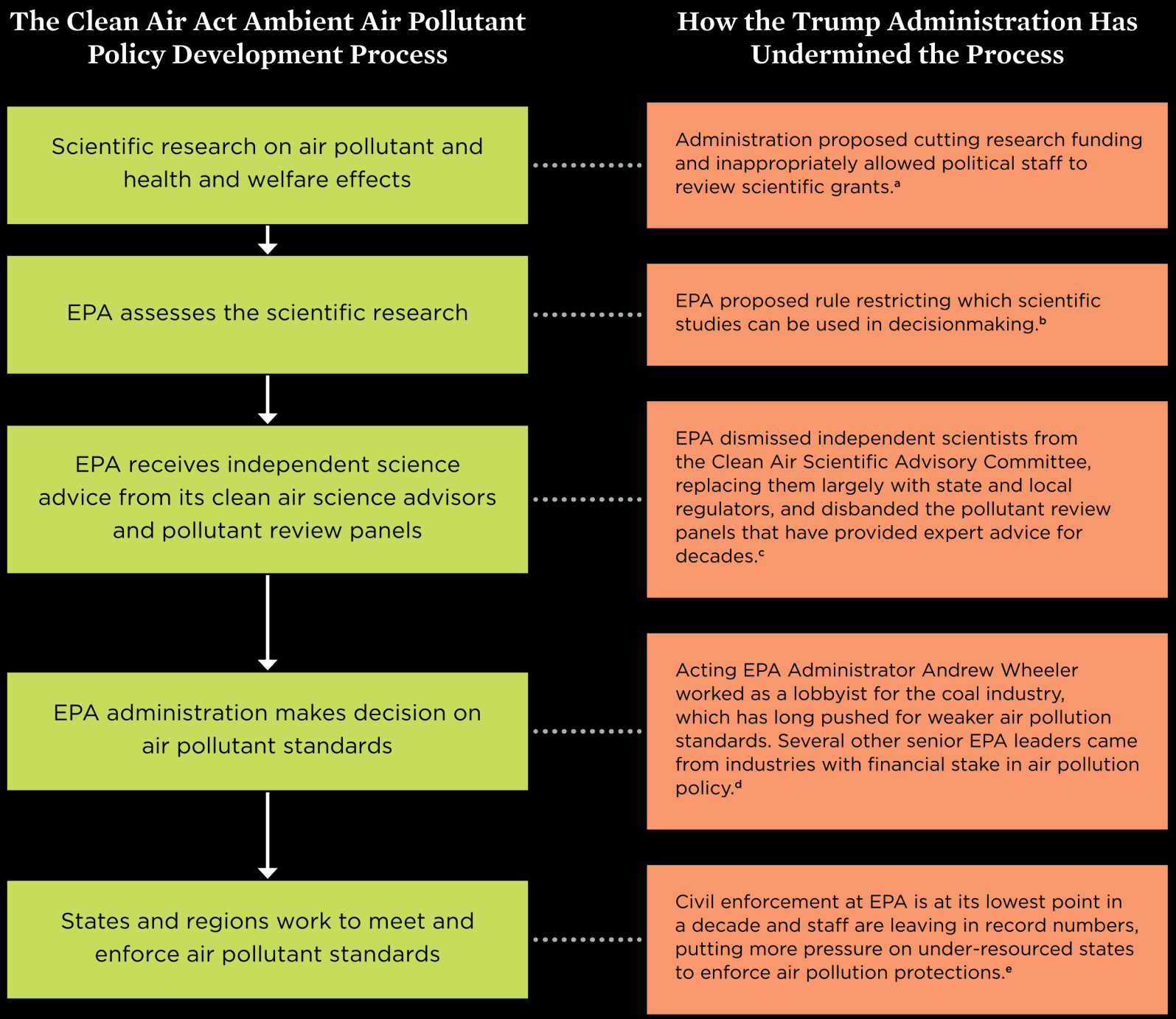
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Civil enforcement at EPA is at its lowest point in a decade and staff are leaving in record numbers, putting more pressure on under-resourced states to enforce air pollution protections.[e]

Disproportionate Impacts

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