

The State Energy &
Environmental Impact Center
NYU School of Law

CLIMATE & HEALTH SHOWDOWN IN THE COURTS

State Attorneys General
Prepare to Fight

Special Report
March, 2019



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FROM THE EXECUTIVE DIRECTOR OF THE STATE IMPACT CENTER

States have always borne a special, primary responsibility to look out for the health and environmental interests of their residents. Traditionally, the federal government has assisted states in meeting these obligations by setting basic, nationwide health, safety and environmental standards and inviting states to enact more stringent laws that apply within their states.

Under the Trump administration, this successful cooperative federalism approach, which has delivered strong environmental results for several decades, has broken down – and at a particularly critical time in our history. Just as the high costs of climate change are becoming starkly obvious, the Trump administration has tried to walk away from its statutory obligation to curb the greenhouse gas emissions that are causing climate change. For the past two years, it has pursued a strategy of avoiding implementation and enforcement of climate rules put in place by the prior administration. State attorneys general stepped in, challenged the legality of these delay tactics, obtained court victories, and stopped it.

Backed into a corner, the Trump administration has, in recent months, finally come forward with proposed rules of its own. Rather than reducing greenhouse gas emissions as required by the Clean Air Act, however, its proposals would roll back the reductions embedded in current rules and sanction a return to pre-existing greenhouse gas emissions levels. In some cases, as discussed in this report, climate-damaging greenhouse gas emissions would actually increase further under the administration's proposed rules.

Because the administration's anti-climate actions have taken place over time, and through a number of separate judicial and rulemaking processes, the full implications of its actions have been difficult to discern. This Special Report pulls together key strands in this story and reveals the remarkable picture of an administration that is nearing the final stages of giving a pass to the largest climate polluters in the United States. If the administration is successful, our nation's ability to fight climate change will be set back for years.

State attorneys general are taking on the fight, as they have for dozens of other key environmental protections that the administration is attempting to dismantle. To follow the fight in the weeks and months ahead, visit our website at: www.law.nyu.edu/centers/state-impact.

David J. Hayes



■ EXECUTIVE SUMMARY

This year, the Trump administration has set its sights on watering down or outright repealing a half-dozen health and environmental rules critical to the health and welfare of all Americans as well as the planet. The scope of the administration's effort to tear down these vital, core protections that cut across the most significant sources of pollution in our nation is breathtaking.

To date, state attorneys general have been remarkably successful in fighting many of the Trump administration's efforts to roll back important clean energy, climate change and environmental protections.¹ State attorneys general are now preparing, however, for another, even more critical battle with the administration over climate and health risks from several of the nation's largest emitting sectors: coal, cars, oil and gas, and landfills.

While the Trump administration had consistently attacked environmental and clean energy initiatives,² these specific actions bring the sweeping scope of its efforts into perspective. This report focuses on the following key areas:

- **Coal Industry:** Clean Power Plan (CO₂)
- **Automotive Industry:** Clean Car Standards (CO₂)
- **Automotive Industry:** Glider Truck Pollution (CO₂)
- **Oil & Gas Industry:** Methane emissions (new and existing sources)
- **Oil & Gas Industry:** Methane emissions (public lands)
- **Landfills:** Methane emissions

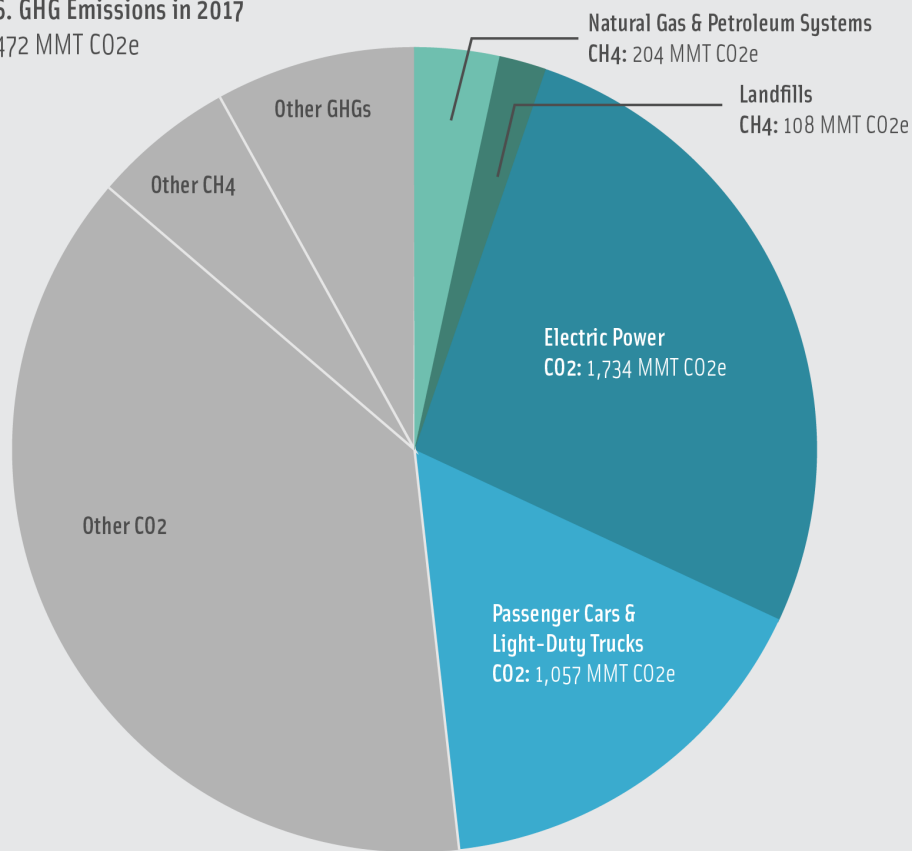
These six rules provide the largest and best near-term opportunities to reduce climate pollution from the highest contributors to greenhouse gas emissions: the power sector (coal-fired electric generation); the transportation sector (cars and light trucks); the oil and gas sector; and the waste sector (landfills).³ Together, these four sectors account for over 3,000 million metric tons (MMT) of carbon dioxide equivalent (CO₂e) emissions in the United States each year -- nearly half of greenhouse gas emissions from all U.S. activities.⁴

The chart below shows the percentage of total U.S. greenhouse gas emissions attributable to carbon dioxide (CO₂), methane (CH₄), and other greenhouse gases (GHGs). It also illustrates (in the dark shading, on the right side of the pie chart) the large proportion of those total greenhouse gases that are tied to the sources and sectors highlighted in this report -- and targeted for rollback by the Trump administration.



[Figure 1]

U.S. GHG Emissions in 2017
6,472 MMT CO₂e



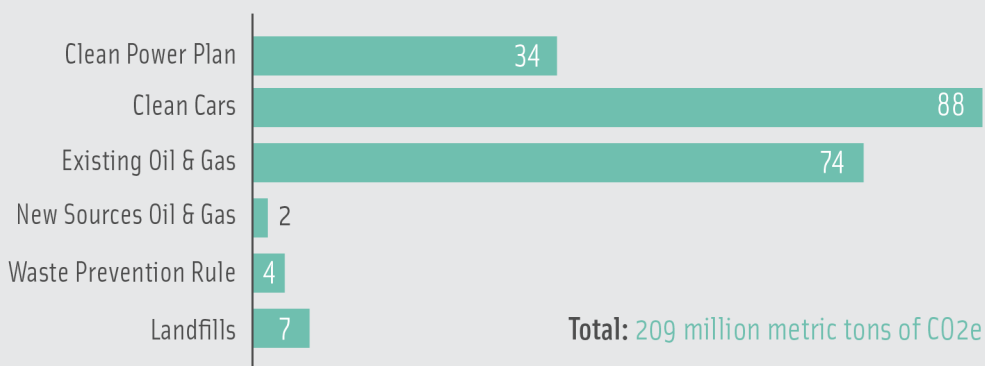
Source: Data From US EPA 2017 GHG Inventory

Combined, these sources and sectors are core drivers of U.S. contributions to global climate change and, because of the legal obligation to reduce their emissions, they provide the most important near-term opportunity to reduce greenhouse gas emissions and fight against climate change.⁵ And yet the administration is doing the opposite, causing great harm to public health and the environment, as recently laid out in the Fourth National Climate Assessment⁶ and highlighted throughout this report. In short, the Trump administration is preparing to take us over the climate cliff.



[Figure 2]

Estimated Annual Forgone GHG Reductions (million metric tons of CO₂e)



Data is based on 2025 estimates when available. In the case of New Sources Oil & Gas, data is based on 2018 estimated reductions. Clean Cars estimates are based on an 80-year average. Sources: EPA 2018 ACE RIA; NHTSA 2018 SAFE Vehicles Rule Draft EIS; EPA 2018 Methane RIA; ICF Methane Study; Draft GHG Inventory; BLM 2018 Methane RIA; EPA 2016 Landfills RIA.

The Trump administration's actions amount to a virtual surrender to climate change, allowing more than 200 MMT of CO₂ Eq. to be emitted annually by 2025, as illustrated in Figure 2. At the same time, these actions bring with them increased levels of conventional pollutants. The report lays out below, on a rule-by-rule basis, the serious health harms associated with the rules' increased levels of such pollutants in these four major industrial sectors, including thousands more premature deaths, hundreds of thousands more asthma attacks, and countless additional missed school and work days. The report uses, in part, analysis completed by the prior administration to provide a sense of the magnitude of the associated economic and health-related costs. For example:

- Replacing the Obama-era Clean Power Plan with Trump's misnamed Affordable Clean Energy plan would generate an increase in particulate matter (PM), sulfur dioxide (SO₂) and nitrogen oxides (NO_x) that, by 2030, could annually cause severe health effects on major portions of the population (particularly children, the elderly and other vulnerable populations), **including 1,630 more incidences of premature deaths, 120,000 additional asthma attacks, and 140,000 missed school days and 48,000 lost work days.**⁷



- By not addressing methane leakage from both new and existing oil and gas operations, the toxic soup released during oil and gas operations -- including methane, volatile organic compounds (VOCs) and hazardous pollutants such as benzene -- will generate dangerous, localized pollution that will annually cause **1,900 premature deaths, 1.1 million asthma attacks, and 3,600 emergency room visits** by 2030.⁸
- Reinstating a loophole to allow the sale of so-called “glider trucks” with non-compliant, older, refurbished engines would, by itself, put an estimated 120,000 non-compliant medium and heavy-duty trucks on the road by 2025, emitting nearly 300,000 tons of NOx and nearly 8,000 tons of PM annually, causing **9,000 to 21,000 premature deaths** and untold numbers of asthma attacks, emergency visits and lost work days every year.⁹

Monetization of the substantial forgone benefits associated with reducing greenhouse gas emissions further illustrates the severe harm that will result from the Trump administration’s attempt to walk away from its legal and moral obligations to reduce greenhouse gas emissions.¹⁰

The adverse impacts associated with the Trump administration’s all-out assault on greenhouse gas emissions reductions also undercut steps that many jurisdictions have taken to mitigate the impacts of climate change by, for example, changing their energy mix to favor increased use of clean, renewable energy. These policies have succeeded in helping a large number of states lower emissions from the very industrial sectors that the Trump administration now wants to let off the hook. State and local initiatives have proven that emissions reductions can move forward in tandem with continued strong economic growth, while providing increased protection for vulnerable low-income and minority communities from unhealthy pollution.

State attorneys general will continue to fight vigorously against the Trump administration’s attempts to replace existing rules that require greenhouse gas emissions reductions with new rules that unlawfully and harmfully negate those reductions. As laid out in this report, attorneys general have been actively engaged in the six rulemakings and the four key sectors highlighted in this report. With the full scope of the assault on greenhouse gas emissions now coming into clear view, state attorneys general will be fighting even harder to protect their states’ and constituents’ interests in reducing harmful pollution and fighting climate change. The cooperative federalism model that serves as the basis of environmental law and regulation in the United States, however, means that the states should not have to take on this task alone, nor should they be hindered by a federal government unwilling to confront the reality of climate change.



COAL INDUSTRY: CLEAN POWER PLAN

Summary

In August 2015, the Environmental Protection Agency (EPA) finalized a rulemaking known as the Clean Power Plan (CPP),¹¹ which would, for the first time, meaningfully restrict carbon dioxide emissions from existing fossil-fueled power plants – one of the top contributors to greenhouse gas emissions in the U.S. today. The result of extensive outreach and stakeholder engagement, the CPP identified CO₂ emission guidelines that would achieve significant reductions in carbon emissions by 2030, while still offering states the flexibility to adopt the particular combination of emissions reduction strategies that make sense for each state. A primary tool identified in the CPP was the ability of states to require generation shifting – or tapping into cleaner, renewable fuel sources and ramping down fossil-fuel generation to meet greenhouse gas emissions reduction targets.

As with many large and complex rulemakings, the CPP faced opposition and was challenged in the courts by several pro-coal states and utilities, and in February 2016, the Supreme Court stayed the rule while those suits were moving forward. Immediately after assuming the role of head of the EPA, however, long-time CPP opponent Scott Pruitt began trying to dismantle the rule, which led the EPA to issue a draft proposal to replace the CPP in August 2018.

The new draft replacement, known as the Affordable Clean Energy rule (ACE),¹² was met with widespread criticism, including from state attorneys general concerned about the likelihood that the new rule would not only fail to result in a demonstrable improvement in the power sector's greenhouse gas emissions, but also is likely to increase the level of climate pollutants coming from our nation's fossil fuel-fired power plants.

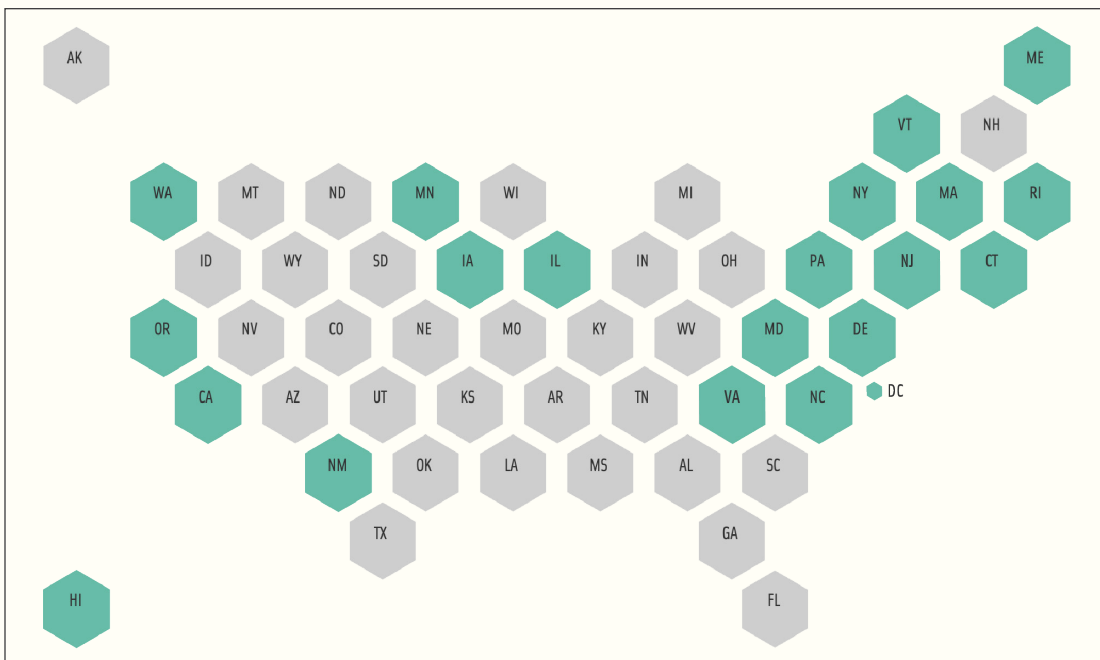
The EPA is currently reviewing thousands of comments received in response to the draft rule, including from a multi-state coalition of attorneys general,¹³ and the agency is expected to issue a final rule this spring.¹⁴



Key Legal Issues

The draft ACE rule is based on a new, restrictive interpretation of the scope of the EPA’s authority under the Clean Air Act that fails to employ “the best system of emissions reductions,” as required under the law.¹⁵ Instead of allowing states to develop plans to cost-effectively reduce carbon emissions from across the power sector using achievable strategies such as generation shifting, ACE requires only marginal efficiency improvements at individual coal plants. As a result, according to the EPA’s own analysis, ACE will result in more carbon pollution than the CPP – CO₂ emissions from the power sector will be 47 to 61 million tons more under the proposed ACE rule in 2030 as compared to the CPP, and CO₂ emissions are likely to increase over no rule at all in at least eight states across the United States.¹⁶

Multi-State Coalition



New York Attorney General Letitia James and **Massachusetts Attorney General Maura Healey** are leading a coalition of 21 state attorneys general in opposition to the Trump administration’s ACE rule. State attorneys general from California, Connecticut, Delaware, Hawaii, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington and Washington, D.C. joined the coalition.



Why State Attorneys General are Taking Action

Because this legally deficient new rule may actually increase the pollution that the EPA is obliged to reduce, progressive attorneys general are challenging the EPA's actions. Unlike the proposed ACE rule, the CPP is an entirely lawful exercise of the agency's Clean Air Act authority and, indeed, is the "best system" of ensuring that the EPA is meeting its legal obligation to reduce CO₂ pollutants. As part of their efforts, attorneys general have intervened to defend the CPP rule in the still-pending litigation, they have objected to the EPA's attempts to unlawfully suspend the CPP prior to promulgating a replacement rule, and they filed comments strongly critical of the ACE rule once it was released.¹⁷

Adverse health impacts. The stakes for attorneys general could not be higher. Should ACE be finalized, the resulting increase in pollutants would result in **hundreds of thousands more deaths and illnesses every year** versus the CPP, in direct contravention of the Clean Air Act's goal of protecting and enhancing the nation's air quality to promote public health and welfare. The EPA's own analysis shows that ACE will result in up to an additional **1,630 premature deaths, 120,000 asthma attacks, 140,000 missed school days, and 48,000 lost work days** in 2030 compared to the CPP.

These types of adverse health and economic impacts can have a disproportionate impact on at-risk communities, which is a grave concern for those states challenging the CPP rollback. For example, more than **15.2 million people live below the poverty line** in the multi-state coalition fighting the rollback, representing approximately **44 percent** of the national population living in poverty.¹⁸ Additionally, many of the coalition states have asthma rates that exceed the national average.¹⁹

Forgone economic benefits. An estimated **\$49 billion in net benefits in 2030** was associated with the final Clean Power Plan, as a result of greenhouse gas and other pollutant reductions,²⁰ which will now be lost as a result of the Trump administration's proposed action.

State commitments to cleaner energy sources. The coalition of states challenging the CPP rollback have been leaders in the transition to cleaner sources of energy, exemplifying the cooperative federalism model that draws on both state and federal efforts to achieve environmental goals. From 2007 to 2017, five coalition states moved from coal as the largest generation share to another fuel (there were 5 non-coalition states that also transitioned from coal during this time period).²¹ These states include Delaware and Virginia, which shifted from coal to natural gas, and Maryland, North Carolina, and Pennsylvania, which shifted from coal to nuclear power. Another coalition state, Maine, shifted from natural gas to hydroelectric power.

All but one of the coalition states have renewable portfolio standards (RPS) that set renewable targets by certain years (Virginia has a voluntary target),²² and several of the coalition states have 100 percent renewable goals: California by 2045, and DC by 2032.



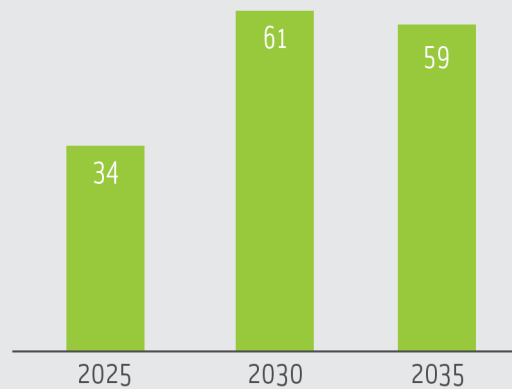
Eight coalition states are members of the Regional Greenhouse Gas Initiative (RGGI), with Connecticut, Delaware, Maine, New York, and Vermont forming RGGI in 2005, and Maryland, Massachusetts, and Rhode Island joining in 2007.²³ RGGI held its first auction of CO₂ emission allowances in 2008, generating economic benefits for participating states.²⁴

Greenhouse Gas Emissions

[Figure 3]
Increases in CO₂ Emissions

Future additional CO₂ emissions (million short tons) attributable to replacement of Clean Power Plan.

Source: EPA 2018 ACE RIA

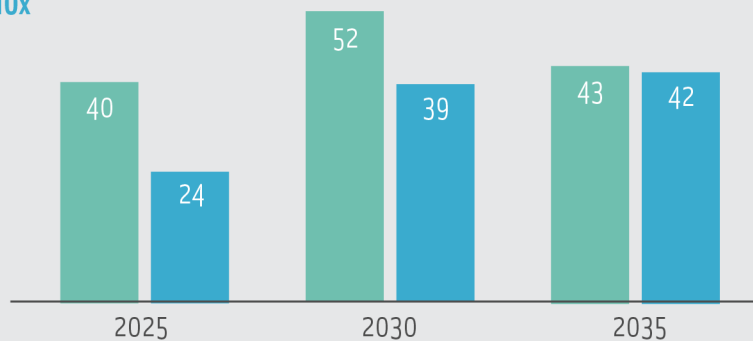


Air Quality

[Figure 4]
Increases in SO₂ and NO_x Emissions

Future additional SO₂ and NO_x emissions (thousand tons) attributable to replacement of Clean Power Plan.

Source: EPA 2018 ACE RIA



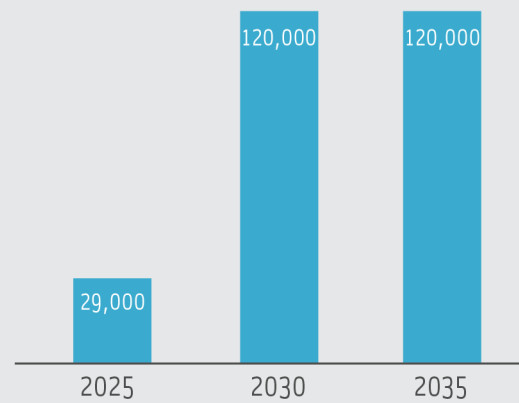


Health

[Figure 5] Additional Asthma Attacks

Future additional asthma attacks attributable to replacement of Clean Power Plan.

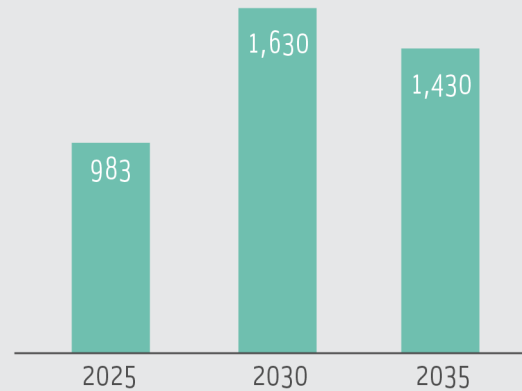
Source: EPA 2018 ACE RIA



[Figure 6] Additional Premature Deaths

Future additional premature deaths attributable to replacement of Clean Power Plan.

Source: EPA 2018 ACE RIA





AUTOMOTIVE INDUSTRY: CLEAN CAR STANDARDS

Summary

In October 2012, the EPA and the Department of Transportation (DOT) concluded a joint rulemaking, in partnership with the State of California and with the cooperation of the automotive industry, that harmonized greenhouse gas emissions and fuel economy standards.²⁵ Under the jointly-developed rule, automakers agreed to progressively raise the fuel economy of their cars and light trucks to an average of 54.5 miles per gallon by 2025, nearly double the average in 2012.

The Trump administration asserted that “changed circumstances” justified reexamination of the successful program,²⁶ and it subsequently issued a proposed rule that would roll back the existing law by freezing mileage requirements at 2020 levels, instead of maintaining annual increases in fuel efficiency through 2026.²⁷ The proposal would also rescind California’s statutory right to set its own standards for regulating greenhouse gas emissions from vehicles.

State attorneys general have filed extensive comments against the proposed rule.²⁸ The EPA and DOT are in the process of reviewing comments and preparing a final rule, which may be issued as soon as March 2019.²⁹

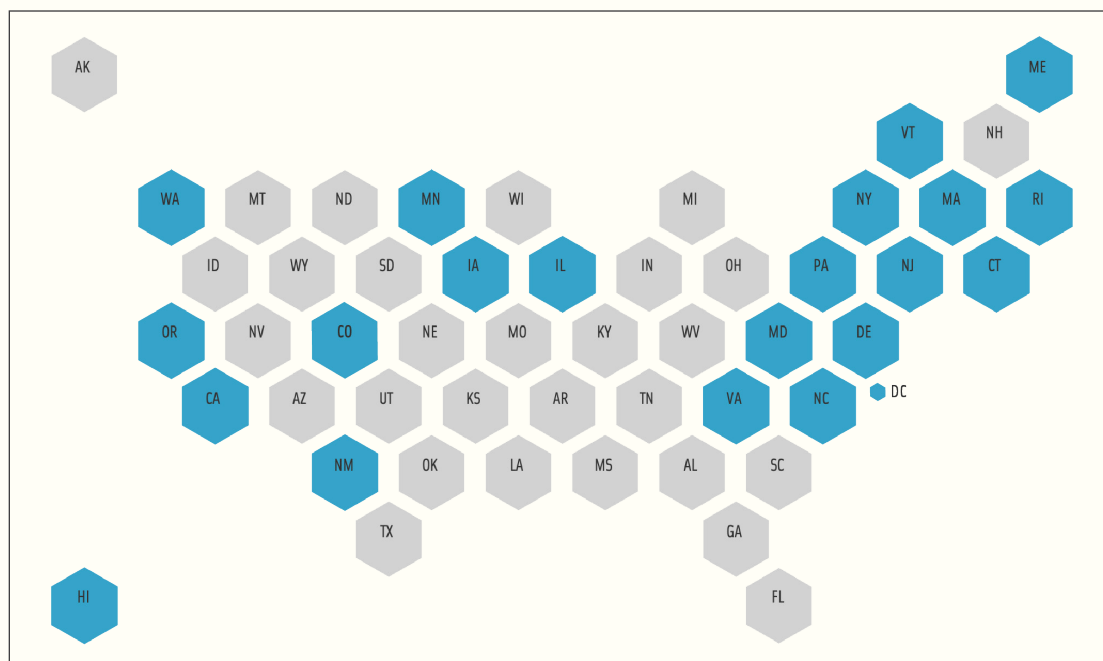


Key Legal Issues

The proposed rollback is directly contrary to the mandates of the Clean Air Act and the Energy Policy Conservation Act to reduce greenhouse gas emissions and conserve energy, respectively. The proposal fails to explain and justify its many factual and legal departures from the current rule's extensive record. Instead, the proposal relies on key assumptions and modeling that are illogical and unsupported in the record including, for example, the fanciful notion that having new, more fuel-efficient cars on the road will cause a large increase in car-related deaths.³⁰ Scientists whose studies the EPA and DOT relied upon to make this nonsensical claim have publicly rebuked the agencies' misuse of their work.³¹

The administration is also proposing to revoke California's waiver rights under the Clean Air Act, without evidentiary support and in contravention of the text, structure and purpose of the statute. This action would undermine the rights of California, and more than a dozen additional states that adopted California's emissions standards under Section 177 of the Clean Air Act, to continue to require stricter tailpipe standards for the protection and benefit of their citizens. Together, California and the Section 177 states account for more than 40 percent of the U.S. car fleet.³²

Multi-State Coalition



California Attorney General Xavier Becerra is leading a coalition of 21 state attorneys general in opposition to the Trump administration's proposal to roll back national Clean Car Standards.



State attorneys general from Connecticut, Delaware, Hawaii, Iowa, Illinois, Maine, Maryland, Massachusetts, Minnesota, North Carolina, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington and Washington, D.C. joined California in multi-state comments opposing the administration's proposed rollback. *Colorado Attorney General Phil Weiser has subsequently stated publicly that he would be joining the coalition.

Why State Attorneys General are Taking Action

If the proposed rule is finalized, harmful tailpipe pollution will spike, accelerating climate change and causing many Americans to suffer significant adverse health effects. The rule also would hit Americans' pocket books by requiring increased expenditures on gas, and it would slow innovation in the auto industry.

Greenhouse gas emissions. The administration's decision to increase emissions from cars and light trucks is irresponsible and dangerous. Transportation is now the largest source of climate change-causing greenhouse gas emissions in the United States.³³ Accordingly, reducing these emissions -- which the law currently requires -- represents one of the most significant actions that the government can take to combat the high costs of climate change. Rather than take advantage of this opportunity, which the automotive industry had already agreed to implement, the Trump rollback of fuel efficiency standards to 2020 levels through 2026 would dump an additional **16 to 37 million metric tons** of harmful carbon pollution into our atmosphere.³⁴ By 2025, by the EPA's own count, emission increases will be equivalent to the annual emissions from **more than 9,000,000 vehicles**.³⁵

Adverse health impacts. Dirtier tailpipe emissions also will have serious health impacts on Americans. The Trump administration's own analysis shows that its rollback would cause 25 million Americans to have more asthma attacks, lost work days, hospital visits, and suffer more premature deaths.³⁶

Asthma is a serious health condition that affects many Americans, including those in coalition states. Approximately **11 million people have asthma** in coalition states (**51.3 percent** of all asthma patients in the United States), and the Centers for Disease Control (CDC) estimates that some **1,821 asthma related mortalities** occur in these states annually (51.7 percent of the United States total).³⁷ Additionally, 14 states have asthma rates above the national average (Connecticut, Delaware, Illinois, Maine, Maryland, Massachusetts, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and Washington, D.C.).³⁸

Forgone economic benefits. The Trump rollback will increase fuel costs for American drivers. Because cars and trucks would get poorer mileage under the proposal, U.S. oil consumption will increase **between 126,300 and 283,000 barrels per day** in 2025, increasing drivers' fuel expenses by **\$193 to \$236 billion** cumulatively between now and 2035.³⁹ Considering fuel savings, climate benefits, and health benefits from reducing PM, the 2012 CAFE standards are estimated to have maximum net benefits of nearly **\$18 billion annually**.⁴⁰



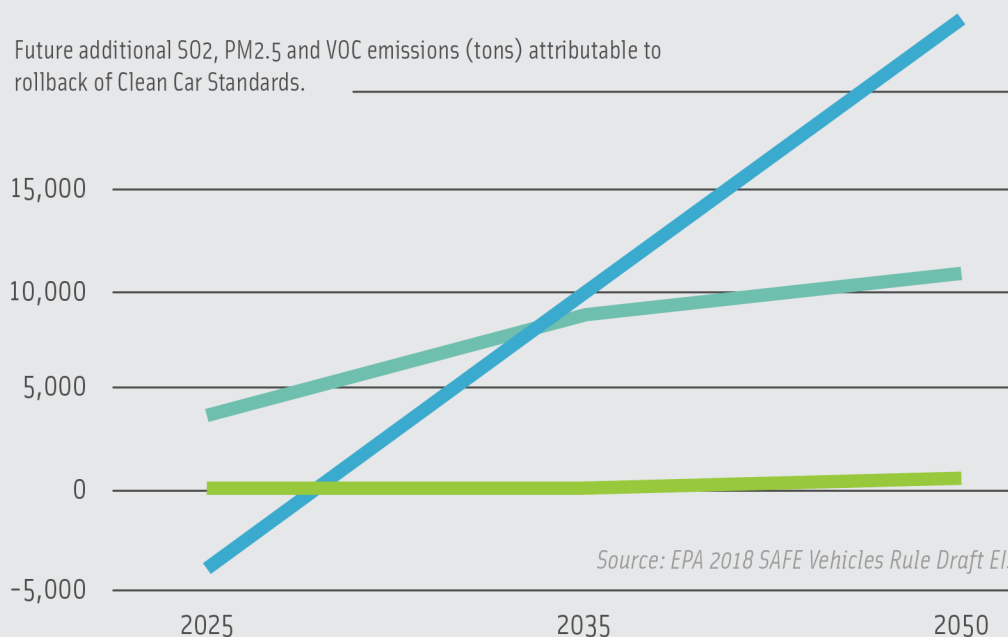
State commitments to cleaner transportation systems. The coalition of states challenging the rollback of clean car standards have been leaders in reducing carbon emissions from their transportation sectors by promoting the electrification of the transportation industry and lowering the carbon intensity of transportation fuels. While U.S. transportation sector carbon emissions rose by 23 million metric tons between 2000 and 2016, coalition states saw a net reduction of 9 million metric tons of transportation sector carbon emissions during the same time.⁴¹

In 2012, California updated its zero emission vehicle (ZEV) standards to require manufacturers sell an increasing percentage of the cleanest cars available.⁴² The following year, seven other states joined with California in signing a memorandum of understanding (MOU) to commit to place 3.3 million ZEVs on the road by 2025; New Jersey signed the MOU in 2018.⁴³ California (2010) and Oregon (2015), have also both adopted Low Carbon Fuel Standards that seek to reduce greenhouse gas emissions from transportation fuels by reducing the carbon intensity of those fuels over time.⁴⁴

Air Quality

[Figure 7]
Increases in SO₂, PM_{2.5} and VOC Emissions

Future additional SO₂, PM_{2.5} and VOC emissions (tons) attributable to rollback of Clean Car Standards.



Source: EPA 2018 SAFE Vehicles Rule Draft EIS



Greenhouse Gas Emissions

- By 2025, emission increases will be equivalent to the annual emissions from **9,178,000 vehicles**.
- From 2021 to 2100, an additional **7 billion metric tons of CO₂** will be released into the atmosphere.

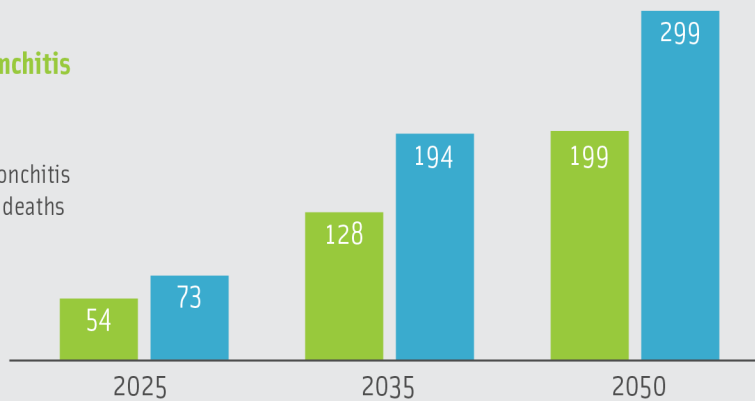
Source: NHTSA 2018 SAFE Vehicles Rule Draft EIS

Health

[Figure 8] Increases in Acute Bronchitis and Premature Deaths

Future additional acute bronchitis incidences and premature deaths attributable to rollback of Clean Car Standards.

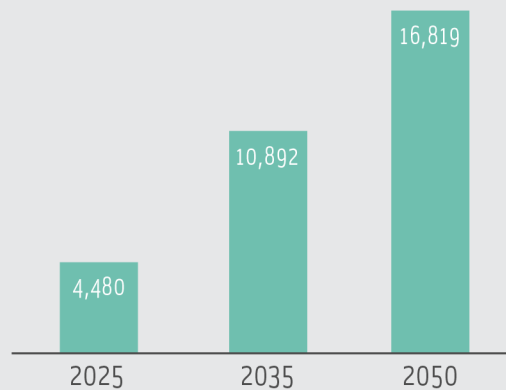
Source: NHTSA 2018 SAFE Vehicles Rule Draft EIS



[Figure 9] Increases in Lost Work Days

Future additional lost work days attributable to rollback of Clean Car Standards.

Source: NHTSA 2018 SAFE Vehicles Rule Draft EIS





AUTOMOTIVE INDUSTRY: GLIDER TRUCK POLLUTION

Summary

Glider trucks combine a new truck chassis with an older refurbished diesel engine and powertrain. Due to their older, non-compliant engines and powertrains, glider trucks typically generate **20 to 40 times higher emissions** of particulate matter and other harmful, conventional pollutants than new trucks with new engines.⁴⁵

When stricter diesel truck emissions requirements became effective in 2010, glider manufacturers ramped up production and passed off gliders as “new trucks,” despite their non-compliant engines. The EPA completed a rulemaking in 2016 that closed this loophole by confirming that glider trucks cannot be sold as new vehicles unless their engines meet current emissions requirements.⁴⁶

After then-Administrator Scott Pruitt met with the CEO of Fitzgerald Glider Kits,⁴⁷ the EPA reversed its principled position on this issue and, in November 2017, the agency published a proposed rule recommending complete repeal of the 2016 reform rule.⁴⁸ A few months later, and shortly before resigning, Administrator Pruitt announced that while the proposed rule remained pending, the EPA would give glider manufacturers a “no action” assurance that the agency would not enforce the 2016 rule against them.⁴⁹

A coalition of state attorneys general sued the EPA for failing to enforce the existing rule and filed extensive objections to the proposed repeal of the rule.⁵⁰ The EPA subsequently abandoned its “no action” decision,⁵¹ but it is apparently continuing to move forward with its proposal to repeal the 2016 rule, and to exempt glider trucks from new truck emissions requirements.

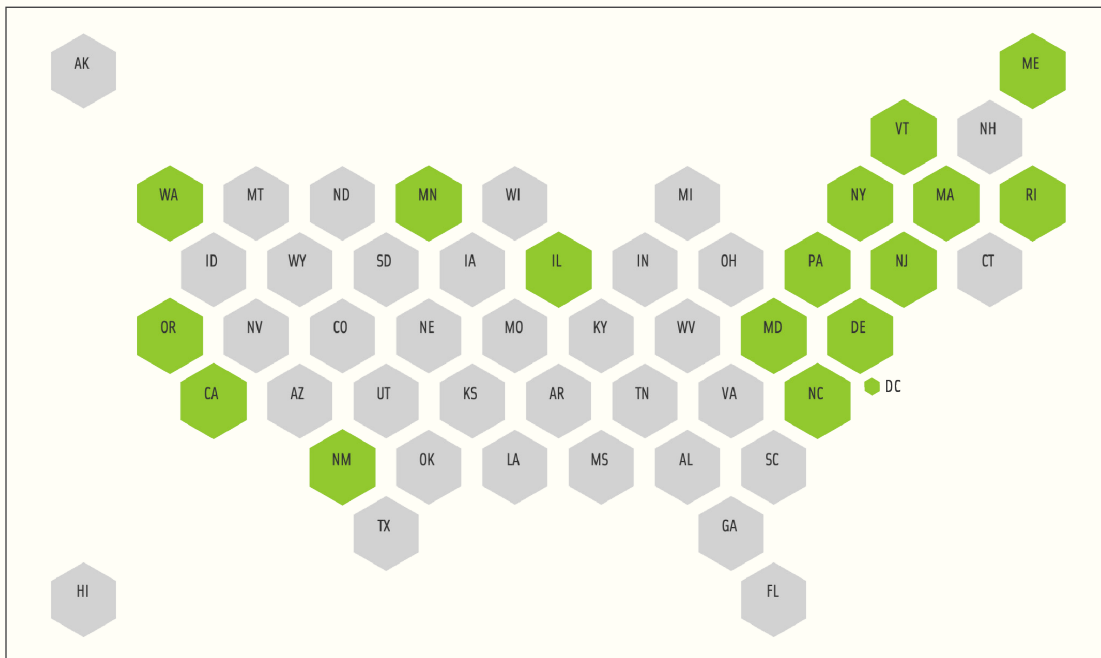


Key Legal Issues

The EPA has proposed that the 2016 rule should be repealed based on the newly-articulated and unsupported view that Congress did not intend for new glider trucks to be regulated as “new motor vehicles” under the Clean Air Act.

The language, text, and legislative history of the Clean Air Act does not support this argument, which previously was proffered, and rejected, by the EPA in the 2016 rulemaking. As the EPA has explained, a straightforward reading of the Clean Air Act requires that pollution control standards for gliders be based on the year that the entire truck was manufactured, including the engine. Any other reading creates a perverse incentive to put dirtier, older engines in newly manufactured trucks and pass them off as new, undermining the Clean Air Act’s authority to restrict harmful mobile source emissions. The EPA also has failed to counteract the ample evidentiary record compiled under the 2016 rulemaking. Instead, it relied heavily on a discredited study that was financed by a major glider truck manufacturer.⁵²

Multi-State Coalition



California Attorney General Xavier Becerra is leading a coalition of 17 state attorneys general in opposition to the Trump administration’s proposal to roll back the EPA’s 2016 Glider Truck Rule. State attorneys general from Delaware, Illinois, Maine, Massachusetts, Maryland, Minnesota, New



Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington and Washington, D.C. joined the coalition.

Why State Attorneys General are Taking Action

State attorneys general are fighting against the rollback of the EPA's 2016 rule because reinstating the glider truck loophole would substantially increase harmful pollution emitted from heavy duty trucks, putting both our planet and human health at risk. More specifically, rolling back glider truck regulation will greatly increase life-threatening diesel PM and gaseous pollution, including both small carbon particles (soot) that can cause severe respiratory impacts, cancer-causing toxic chemical particulates, smog-forming NO_x, and sulfur dioxide, which causes acid rain.⁵³ Together, these pollutants pose immediate and severe public health threats, particularly to vulnerable populations.

Greenhouse gas emissions. The EPA's 2016 so-called "Phase 2" greenhouse gas and fuel efficiency standards for medium and heavy duty trucks anticipated reductions of **166.8 million metric tons of CO₂e** by 2040 and **199.3 million metric tons of CO₂e** by 2050.⁵⁴ Before the 2016 rule went into effect, glider truck manufacturers were building approximately 10,000 glider trucks with non-compliant engines.⁵⁵ Because glider trucks utilize, by definition, older and less efficient engines, they will not achieve the greenhouse gas reductions required under Phase 2 standards. Thus, with glider trucks potentially representing 5 percent of the overall medium and heavy duty truck fleet (if the EPA is successful in repealing the 2016 rule), a proportionate loss in greenhouse gas emissions reductions can be expected.⁵⁶

Particulate Matter and NO_x emissions. As noted above, the EPA estimated in its 2016 rulemaking that glider vehicles can have NO_x and PM emissions 20 to 40 times higher than current engines. The EPA also estimated that if left unregulated, by 2025, glider vehicles would emit **nearly 300,000 tons of NO_x** and nearly **8,000 tons of PM** annually, and that although gliders "would make up only 5 percent of heavy-duty tractors on the road, their emissions would represent about one-third of all NO_x and PM emissions from heavy-duty tractors in 2025."⁵⁷ Putting this massive amount of pollution into perspective, the Trump administration has admitted that "500 non-compliant gliders produce the same total amount of harmful [PM] and [NO_x] emissions as do 20,000 fully compliant vehicles."⁵⁸

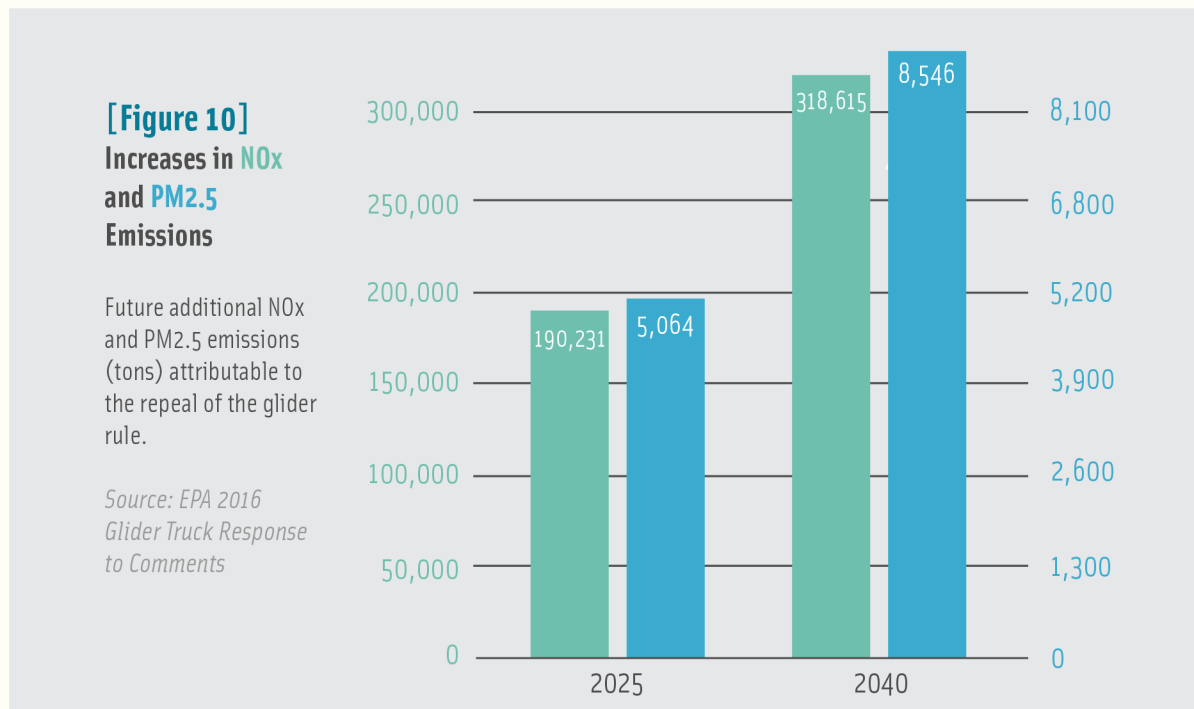
These large quantities of NO_x and PM emissions will cause more frequent and more serious incidences of smog around the country—aggravating asthma and other serious respiratory conditions. The EPA's own analysis concluded that if the EPA is successful in rolling back the current rule and reinstating the glider truck loophole, the PM pollution associated with each model year thereafter would cause up to **1,600 premature deaths** over the lifetime of those vehicles.⁵⁹ The total economic consequences of adverse health outcomes associated with glider sales would amount to, on average, from **\$300,000 to \$1,100,000** for each non-emissions compliant additional glider sold.⁶⁰ Extensive analysis completed by the California Air Resources



Board concluded that “if the glider repeal takes effect, over 120,000 dirty gliders would be on our nation’s highways by 2025, which would have a nationwide impact of causing **9,000 to 21,000 premature deaths** and **\$40 to \$140 billion in economic harm.**”⁶¹

Forgone economic benefits. The EPA estimated that removing all unrestricted glider vehicle emissions from the atmosphere could yield between **\$6 billion and \$14 billion in health benefits** annually.⁶²

Air Quality



Health

- For every 1,000 glider vehicles being produced, there are up to **160 premature deaths** from air pollution.
- If the EPA is successful in reinstating the glider truck loophole, an estimated 10,000 glider kits would be produced each year, leading to **1,600 premature deaths** every year.

Source: EPA 2016 Glider Truck Response to Comments



OIL & GAS INDUSTRY: METHANE EMISSIONS

Introduction

Methane is 28 to 36 times more powerful than CO₂ in its ability to trap heat over a 100-year timeframe, and up to 86 times more powerful over a 20-year timeframe.⁶³ Natural gas consumption increased 24 percent between 2005 and 2017 in the United States, while coal consumption has declined nearly 40 percent over the same period of time.⁶⁴ While often seen as a positive shift away from dirtier coal, the methane emissions associated with the natural gas supply chain carry serious climate implications.⁶⁵

The EPA's recently-released Draft Inventory of U.S. Greenhouse Gas Emissions shows that methane emissions increased in 2017, with natural gas systems and coal mining among the sectors that saw increases.⁶⁶ Although methane emissions from landfills decreased slightly in 2017,⁶⁷ landfills are the third largest source of human-related methane emissions.⁶⁸ The comprehensive actions planned by the prior administration to curb methane emissions from the oil and natural gas sector, including several of the rules discussed here, were projected to save up to 180 billion cubic feet of wasted natural gas in 2025, or enough to heat over 2 million homes for a year.⁶⁹ And a recent study shows that if methane emissions continue on a similar trajectory, the extra climate-warming impact that methane has may significantly negate or even reverse climate progress from reduced CO₂ emissions.⁷⁰

The discussion of benefits in implementing the rules in this section do not include quantifiable health benefits. While EPA expects that the forgone VOC, ozone, PM, and hazardous air pollutant emission reductions may degrade air quality and adversely affect health, data limitations prevent EPA and others from quantifying these forgone benefits. There is no doubt, however, that continued releases of methane and other oil and gas-related pollutants are causing significant adverse health effects, as discussed in the pages that follow.⁷¹



OIL & GAS INDUSTRY: NEW SOURCE PERFORMANCE STANDARDS FOR METHANE EMISSIONS

Summary

The oil and gas industry is the largest source of methane emissions in the United States, accounting for 44 percent of all methane emissions.⁷² Despite this, in the fall of 2018, the EPA proposed a rule to weaken its 2016 standard to reduce methane and VOC emissions from new, reconstructed and modified processes and equipment used in oil and gas extraction and production.⁷³ The EPA's replacement rule, if finalized, will reduce operator obligations to engage in leak detection and repair as compared to its 2016 standard, resulting in increased methane emissions from the oil and gas industry.⁷⁴ State attorneys general filed comments challenging the EPA's rollback of the 2016 standard,⁷⁵ the final version of which could be issued as early as April 2019.⁷⁶



Key Legal Issues

The EPA's proposed replacement rule is unsupported by facts or data in the administrative record, as required by the Clean Air Act and the Administrative Procedure Act. The lack of evidentiary support for the rollback stands in stark contrast to the robust record compiled for the 2016 standard.

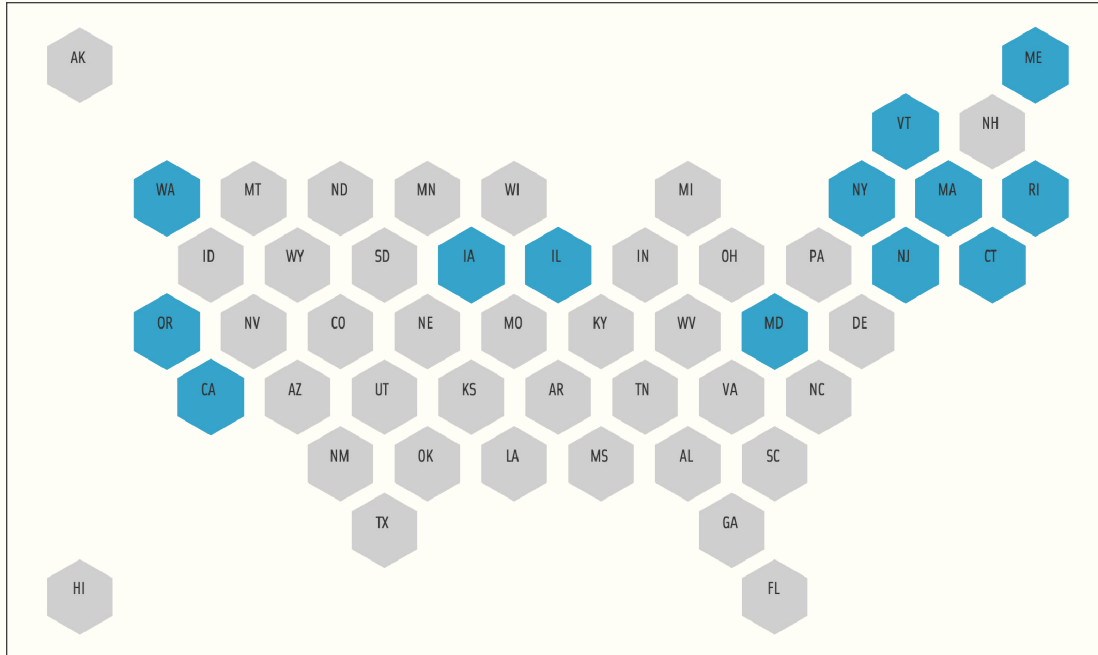
More specifically,⁷⁷ the EPA has not shown that its proposed replacement rule constitutes the "best system of emission reduction" as required under section 111(b) of the Clean Air Act. Similarly, the EPA failed to show that the 2016 New Source Performance Standard is not adequately demonstrated or that its compliance costs are unreasonable, entirely failing to reference industry data on compliance with the 2016 standard to-date. In fact, existing state and voluntary corporate programs demonstrate the existence of cost-effective measures to reduce methane emissions and save fuel.

Failing to provide data or information to justify rolling back the 2016 standard falls short of the statutory standard for administrative proceedings for replacing a rule. The EPA seemed to be using the proposed replacement rule comment period to gather data to support its preferred result, rather than first assembling supportive data and then making it available for public comment.

While cost-effectiveness, standing alone, would not justify loosening the standard, the EPA ignored the compliance data it has that provides actual cost information.⁷⁸ And the EPA cites some of the same studies it used in promulgating the 2016 standards to attempt to justify this dramatic change to the standard - an arbitrary and unlawful turnaround.⁷⁹

Multi-State Coalition

California Attorney General Xavier Becerra is leading a coalition of 13 state attorneys general in opposition to the Trump administration's proposal to roll back New Source Performance Standards for methane emissions from the oil and gas industry. State attorneys general from Connecticut, Illinois, Iowa, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, Vermont and Washington joined the coalition.



Why State Attorneys General are Taking Action

The EPA’s proposed replacement rule will weaken leak monitoring requirements and move away from stricter emissions limits for the largest industrial source of methane in the United States. The EPA has acknowledged that “processes in the Oil and Natural Gas source category emit significant amounts of methane.”⁸⁰ The EPA’s recently-released Draft Inventory of U.S. Greenhouse Gas Emissions shows that methane emissions from oil and gas increased in 2017 and were the highest they have been since 2014.⁸¹

Greenhouse gas emissions and air quality. The EPA’s proposed replacement rule will reduce the required frequency of monitoring for fugitive emissions and the repair of leaks once they are detected. The rule would also exempt wellhead-only sites from which all major production and processing equipment has been removed from monitoring and repair requirements. These changes are predicted to cause an additional **380,000 tons of methane emissions, 100,000 tons of VOCs, and 3,800 tons of hazardous air pollutants** between 2019 and 2025, as compared to the 2016 standard.

Adverse health impacts. The EPA expects that the forgone VOC emission reductions may adversely affect health and welfare through increased exposure to ozone, PM, and hazardous air pollutants. EPA scientists and other researchers estimated particulate matter and ozone pollution from the oil and natural gas industry as a whole (for both existing and new sources)



would account for **1,970 premature deaths, 39,000 individuals with upper and lower respiratory symptoms, 3,600 emergency room visits, and 1.1 million asthma attacks** in 2025.⁸²

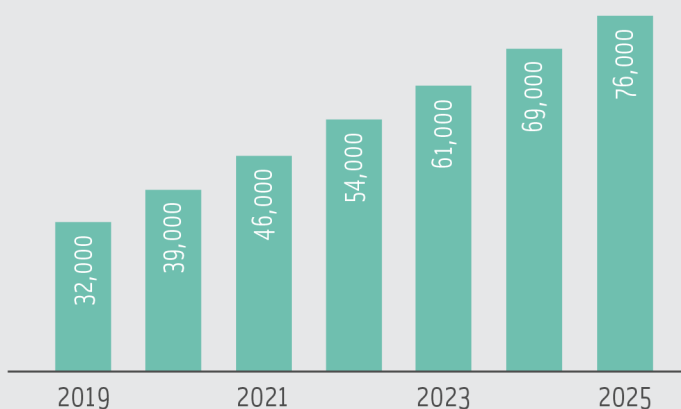
Forgone economic benefits. The EPA estimated that the 2016 standard would result in a net benefit of **\$35 million in 2020** and **\$170 million in 2025**.⁸³ Monetized benefits include the revenues from recovered natural gas that would otherwise be lost through fugitive emissions. Benefits from reductions in VOC and hazardous air pollutant emissions are not quantified. Benefits from reductions in methane as a precursor to global background concentrations of tropospheric ozone are also not quantified.

Greenhouse Gas Emissions

[Figure 11]
Increases in Methane Emissions

Future additional methane emissions (short tons) attributable to rollback of methane NSPS for sources in the oil and gas industry.

Source: EPA 2018 Methane RIA



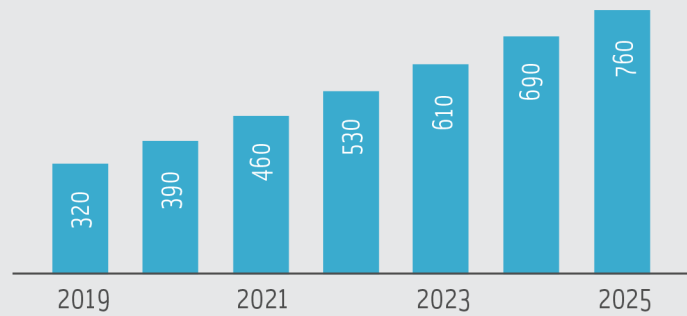


Air Quality

[Figure 12] Increases in Hazardous Air Pollutant Emissions

Future additional hazardous air pollutant emissions (short tons) attributable to rollback of methane NSPS for sources in the oil and gas industry.

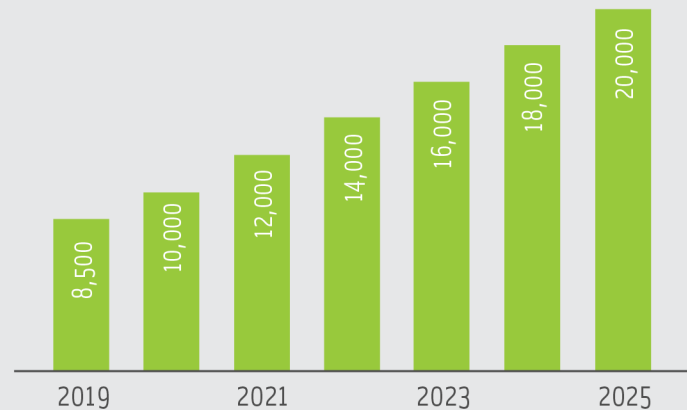
Source: EPA 2018 Methane RIA



[Figure 13] Increases in VOC Emissions

Future additional VOC emissions (short tons) attributable to rollback of methane NSPS for sources in the oil and gas industry.

Source: EPA 2018 Methane RIA





OIL & GAS INDUSTRY: EXISTING SOURCE RESTRICTIONS ON METHANE EMISSIONS

Summary

In addition to its responsibility to regulate new oil and gas operations that emit methane, the EPA has a legal obligation to reduce methane emissions from existing oil and gas operations. It has failed to do so and, in April 2018, a coalition of states sued the EPA for failing to reduce methane emissions from these oil and gas sources, as required by the Clean Air Act.⁸⁴ The EPA's on-going failure to implement its legal obligation is causing significant harm in the fight against climate change and harming human health, including the health of those who live and work in oil and gas regions.



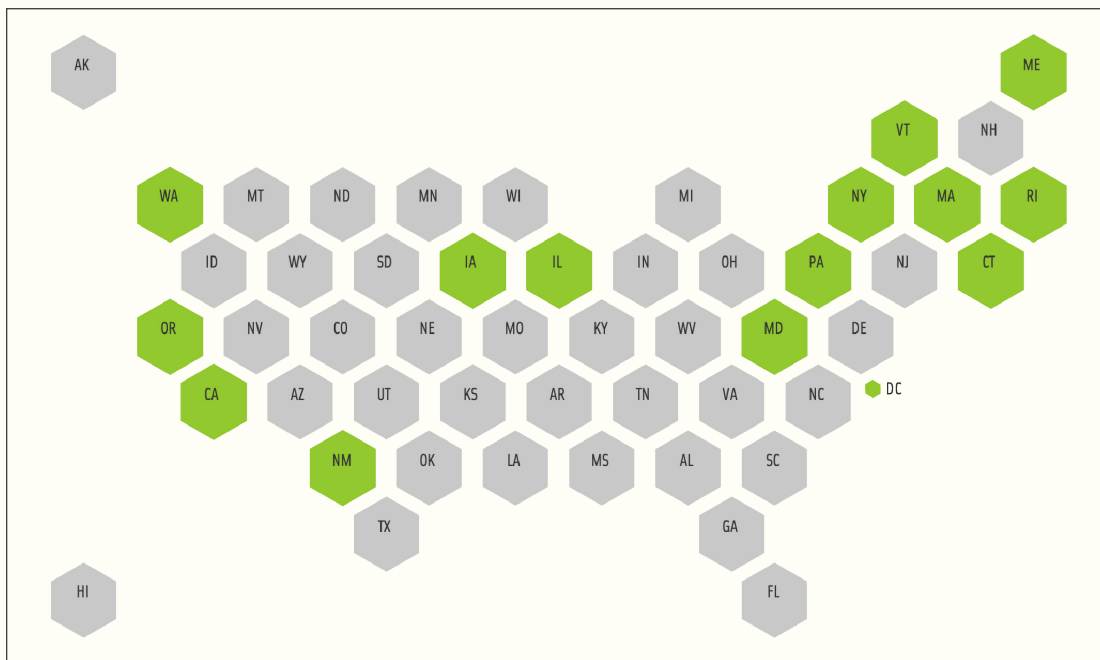
Key Legal Issues

The EPA’s legal obligation to regulate methane emissions from existing oil and gas industry sources originates in section 111(d) of the Clean Air Act.⁸⁵ That provision requires that when the EPA establishes performance standards for new sources in a particular category under section 111(b) of the Clean Air Act – as it has for methane emissions from the oil and gas industry – it is also required to publish guidelines for controlling emissions from existing sources in the same category. The EPA’s regulations require it to issue such guidelines concurrently upon or after the proposal of section 111(b) standards.⁸⁶

Although the EPA had issued an information collection request in 2016 to gather more specific information about addressing emissions from existing source operators and facilities,⁸⁷ the EPA withdrew it in March 2017.⁸⁸ A coalition of attorneys general informed the EPA that the withdrawal was “with no meaningful explanation, let alone a reasoned one.”⁸⁹

The EPA cannot bootstrap its failure to collect additional information from the industry into an excuse for failing to regulate existing sources of methane emissions from the oil and gas industry. It is skirting its mandatory duty to restrict this major source of harmful emissions. The EPA has worked for decades with oil and natural gas companies through the Natural Gas Star Program, for example,⁹⁰ and the agency has developed a significant amount of scientific and technical data on emissions and control strategies.⁹¹

Multi-State Coalition





New York Attorney General Letitia James is leading the challenge to the administration's failure to regulate methane emissions from oil and gas industry sources. State attorneys general from California, Connecticut, Illinois, Iowa, Maine, Maryland, Massachusetts, New Mexico, Oregon, Pennsylvania, Rhode Island, Vermont, Washington and Washington, D.C. joined the coalition.

Why State Attorneys General are Taking Action

Greenhouse gas emissions. The particular dangers of methane from this sector are detailed earlier in this section and in the description of the methane New Source Performance Standards. Existing sources in the oil and gas industry contribute the vast majority of methane emissions. Pre-2012 sources are projected to be responsible for **up to 90 percent of the methane emissions** from the oil and gas sector.⁹² State attorneys general sued the EPA to force the agency to protect state property, the health and well-being of state citizens, and the natural resources held in trust by the states.⁹³

Forgone economic benefits. A study by ICF International examined the cost effectiveness of curbing methane emissions from the largest industrial source of methane emissions in the country.⁹⁴ It estimated that industry could cut emissions forty percent below projected 2018 levels at an average annual cost of less than \$0.01 per thousand cubic feet of natural gas produced.⁹⁵ These additional emissions controls would allow for the economic recovery of natural gas, resulting in savings **over \$100 million per year** to consumers and the economy.⁹⁶ These reductions in methane emissions would have the co-benefit of reducing associated VOCs and hazardous air pollutants by **44 percent**.⁹⁷

State programs. While a few states are beginning to regulate methane leaks from oil and gas operations,⁹⁸ state coverage is sporadic and incomplete. The Clean Air Act requires federal action to provide some measure of uniform control and a regulatory floor in states that have not regulated in this area.⁹⁹



OIL & GAS INDUSTRY: RESTRICTIONS ON WASTEFUL METHANE EMISSIONS ON PUBLIC LANDS

Summary

In addition to posing serious public health and climate change threats, uncontrolled methane emissions from the oil and gas sector represent a waste of natural gas that could otherwise be used for energy generation in a cleaner, more efficient manner. Recognizing this issue, in November 2016, the Bureau of Land Management (BLM) finalized the methane Waste Prevention Rule to reduce the waste of natural gas from venting, flaring and equipment leaks during existing and new oil and gas production activities at the over 96,000 oil and gas wells on federal and Indian lands.¹⁰⁰ The rule was expected to provide an additional **\$14 million in annual royalty payments** to federal, state and tribal governments due to increased natural gas production, and have the additional benefit of reducing methane emissions by at least **175,000 tons a year**.¹⁰¹

The Trump administration, however, repealed the Waste Prevention Rule in September 2018, after failing to succeed in delaying enforcement of the 2016 final rule.¹⁰² The repeal removed requirements that oil and gas operators submit waste minimization plans, capture an increasing percentage of flared gas, and institute a leak detection and repair program.¹⁰³

The day the repeal rule was finalized, **the attorneys general of California and New Mexico** challenged the repeal of the Waste Prevention Rule in federal district court in California.¹⁰⁴ The litigation remains in its early stages.¹⁰⁵



Key Legal Issues

The repeal of the Waste Prevention Rule contravenes several federal land management statutes. The Mineral Leasing Act, the Indian Mineral Leasing Act, the Federal Oil and Gas Royalty Management Act, and the Federal Land Policy and Management Act mandate that BLM develop federal and Indian oil and gas resources in a productive, royalty-producing and environmentally responsible manner.¹⁰⁶ Repealing the Waste Prevention Rule violates these statutory obligations. A repeal ensures that valuable gas resources will be wasted, royalties owed to the government will be lost, and both climate and traditional pollutants will increase.¹⁰⁷

Repealing the rule also is unsupported by the record. Contrary to BLM assertions, the record shows that the Waste Prevention Rule did not impose significant compliance costs on industry.¹⁰⁸ The BLM also relied on an improper measurement for the social cost of methane in concluding, incorrectly, that the rule's costs would exceed its benefits.¹⁰⁹

Why State Attorneys General are Taking Action

The attorneys general of California and New Mexico have opposed the rollback of the Waste Prevention Rule because of the economic and environmental damage that will result. Repeal of the Waste Prevention Rule means more wasted natural gas, lost royalty payments for states, and increased climate change- and ozone-causing pollutants.

Greenhouse gas emissions. The Trump administration's decision to repeal the Waste Prevention Rule will have profound climate consequences. In 2016, BLM estimated that the Waste Prevention Rule would help reduce annual methane emissions by **175,000-180,000 tons**.¹¹⁰ The release of additional tons of the potent greenhouse gas from repealing the Waste Prevention Rule will accelerate climate change in areas of the United States, including (but certainly not limited to) the plaintiff states of California and New Mexico, that are already experiencing the adverse effects of climate change, including increased risk of wildfires, droughts and higher temperatures.¹¹¹

Adverse health impacts. States will also suffer other dangerous environmental and health effects from the repeal of the Waste Prevention Rule. The Waste Prevention Rule was anticipated to cut emissions of VOCs, a precursor to ozone, by **250,000-267,000 tons annually** and reduce toxic air pollutants, such as benzene, **by 1,860-2,030 tons each year**.¹¹² Increases in smog and toxic air pollutants significantly increase the rates of asthma, heart disease and lung disease and the risk of cancer in communities surrounding oil and gas fields.¹¹³

For example, Kern County is the site of more than 95 percent of all federal drilling in California, and parts of the county are in nonattainment with the 2008 federal 8-hour ozone standard and federal fine particulate matter standards, as well as certain state standards.¹¹⁴ Due to this excess pollution, including methane, particulate matter, and VOCs, this community has an increased risk of asthma, heart disease, lung disease, and certain cancers.¹¹⁵ Kern County leads the state of California in number of days with air quality concerns due to particulate pollution.¹¹⁶



Similarly, New Mexico's San Juan Basin is already home to the largest methane cloud in the nation, as a result of extensive oil and gas development in the region.¹¹⁷ VOC emissions from oil and gas development have led to high ozone levels and an "F" rating for San Juan County from the American Lung Association in 2016.¹¹⁸

Forgone economic benefits. Repealing the Waste Prevention Rule will prove costly to the states. Implementation of the Waste Prevention Rule would help ensure the annual capture and use of up to 41 billion cubic feet of avoided-wasted natural gas.¹¹⁹ As a result of the rollback, states with federal oil and natural gas resources, such as California and New Mexico, will be deprived of royalty revenue that would have been paid on the captured and used natural gas. New Mexico lost at least \$39 million in royalty payments between 2010 and 2015 due to wasted natural gas and will lose more, as will California.¹²¹ Both states use federal royalty payments to support education.

Nationwide, repealing the Waste Prevention Rule will result in **\$203 million in forgone environmental and economic benefits in 2026.**¹²² This figure includes both cost savings from the sale of natural gas and the benefits associated with reducing methane and other air pollutant emissions.¹²³ The EPA expected that the repeal rule would cost **\$824 million in forgone cost savings from natural gas recovery from 2019-2028.**¹²⁴

Unquantified benefits include improvements in quality of life for nearby residents, reduction of VOCs, and reduced production of NOx and particulate matter (and associated respiratory and heart problems).

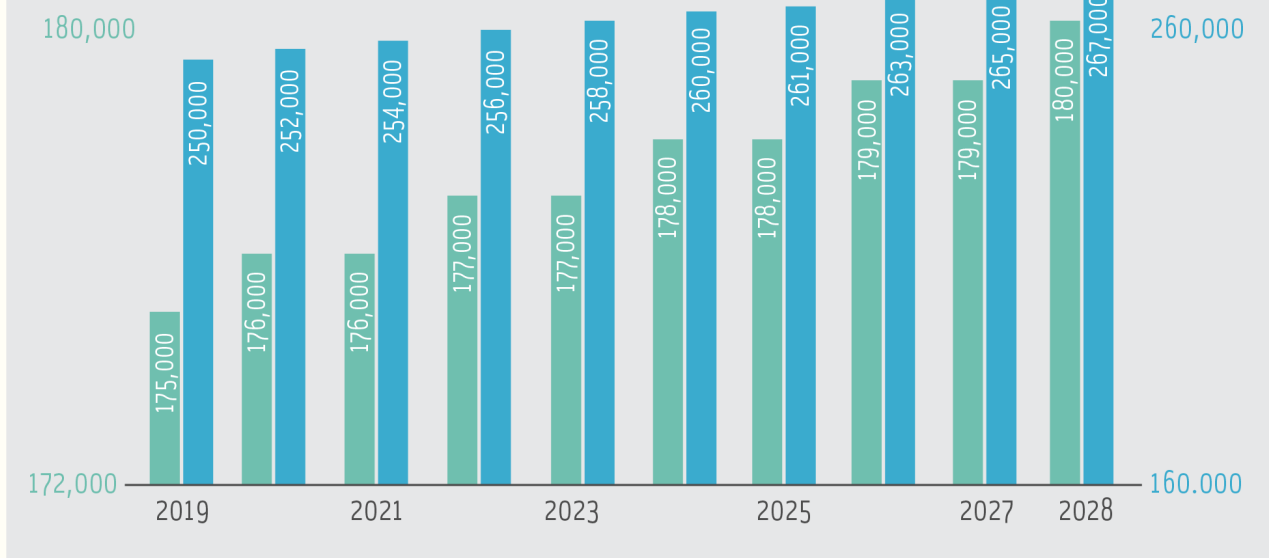


Greenhouse Gas Emissions & Air Quality

[Figure 14]
Increases in Methane and VOC Emissions

Source: BLM 2018 Methane RIA

Future additional methane and VOC emissions (tons) attributable to the repeal of the waste methane rule.





LANDFILL INDUSTRY: METHANE EMISSIONS (EXISTING SOURCES RULE)

Summary

Landfills are the third largest source of human-related methane emissions.¹²⁵ In August 2016, the EPA issued a final rule to reduce methane emissions from existing municipal solid waste landfills.¹²⁶ By 2025, compliance with the rule was expected to reduce methane emissions **by at least 285,000 metric tons per year** and to reduce non-methane organic compound (NMOC) emissions **by 1,810 metric tons per year**.¹²⁷ NMOCs include VOCs that are a precursor to ozone formation and smog, which negatively impact respiratory and cardiovascular health.¹²⁸ NMOCs also include hazardous air pollutants that can increase the risk of cancer and respiratory and neurological illnesses.¹²⁹

The Trump administration published a proposed delay rule, in October 2018, that would extend – from May 2017 until August 2019 – the deadline for states to submit their plans for complying with the 2016 rule to the EPA for approval.¹³⁰ The proposal also pushed back until March 2023 when the EPA would impose federal compliance plans on states that lack an EPA-approved compliance plan.

State attorneys general have filed extensive comments in opposition to the 2018 proposal.¹³¹ The EPA is reviewing the comments received on the proposal, and a final delay rule could be issued as early as April 2019.¹³²

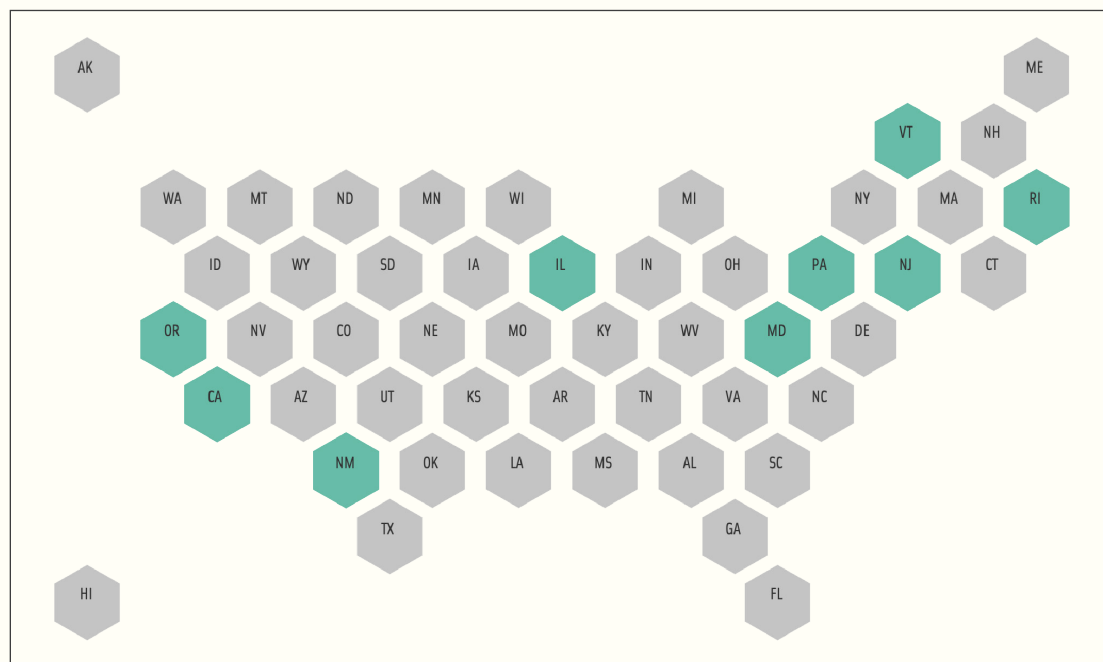


Key Legal Issues

The proposed delay rule violates the Clean Air Act and its regulations. Section 111(d) of the Clean Air Act and its implementing regulations require the EPA to reduce air pollutants from existing sources, such as methane emissions from municipal solid waste landfills, that endanger human health and welfare.¹³³ The EPA's failure to implement methane reductions from landfills violates its Clean Air Act obligation to reduce climate change-causing greenhouse gas emissions.¹³⁴

The EPA has failed to identify any valid basis for delaying implementation of the 2016 rule. The EPA has falsely implied that the Clean Air Act requires that implementation of the 2016 rule be delayed so that the section 111(d) timeline would be more closely aligned with the statutory timeline for state implementation plans under section 110.¹³⁵ Additionally, the EPA's assertion that states need more time to submit state compliance plans ignores the fact that four states have already submitted state compliance plans,¹³⁶ and that the EPA discouraged other states from submitting plans when it indicated shortly before the May 2017 deadline that it intended to stay implementation of the rule.¹³⁷

Multi-State Coalition



California Attorney General Xavier Becerra is leading a coalition of 9 state attorneys general in opposition to the Trump administration's proposed delay. State attorneys general from Illinois, Maryland, New Jersey, New Mexico, Oregon, Pennsylvania, Rhode Island and Vermont joined the coalition.



Why State Attorneys General are Taking Action

State attorneys general are opposing the EPA's efforts to delay implementation of the 2016 rule to reduce methane emissions from existing municipal solid waste landfills because failing to enforce the 2016 rule will significantly increase emissions of methane and non-methane organic compounds (NMOCs) that will harm our planet and our health. Specifically, the 2016 rule would have reduced both climate change-causing methane emissions and traditional pollutants that cause severe health problems.

Greenhouse gas emissions. The delay rule will have deadly consequences for the climate. In issuing the 2016 rule, the EPA estimated that the rule would reduce annual methane emissions **by 285,000 metric tons in 2025**.¹³⁸ Delaying implementation of the rule is the equivalent of an additional 7.1 million metric tons in carbon dioxide emissions per year or the equivalent of adding 1.5 million cars to the road annually.¹³⁹ The EPA also expected that the 2016 rule would result in reductions in greenhouse gas emissions in excess of **285,000 metric tons**, as captured methane gas would replace dirtier fossil fuels in electricity generation.¹⁴⁰

Adverse health impacts. The Trump administration's delay of the landfill methane emissions rule will increase traditional pollutants that have dangerous health impacts. The EPA's own analysis concluded that the 2016 rule would achieve an emissions reduction in NMOCs of **1,810 metric tons per year by 2025**.¹⁴¹

Forgone economic benefits. The EPA estimated that the net annual benefits of implementing the 2016 rule will reach **\$400 million in 2012 dollars by 2025** and that there is an estimated **\$1.5 billion in forgone net benefits** by proposing to delay implementing the rule for four years.¹⁴² This figure does not include the monetized health benefits associated with reductions in ozone pollutants and hazardous air pollutants from implementing the rule because the EPA did not provide quantitative estimates of the health benefits.¹⁴³

Greenhouse Gas Emissions¹⁴⁴

- In 2014, landfills were the third-largest anthropogenic source of methane emissions in the United States, with municipal solid waste landfills accounting for approximately **18.2 percent** of the total methane emissions from all sources.
- In 2014, total methane emissions from municipal solid waste landfills represented approximately **2.7 percent of all CO₂e** emissions in the U.S.
- In 2025, the reduction of GHGs from the 2016 rule would be equivalent to taking **1.5 million cars off the road**.

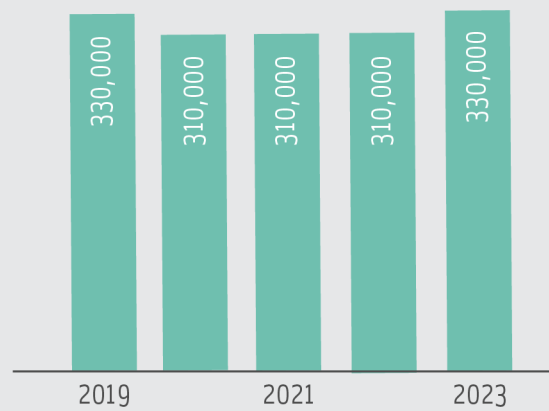
Source: EPA 2016 Landfills RIA



[Figure 15]
Increases in Methane Emissions

Future additional methane emissions (metric tons) attributable to delay of implementation of landfill rule.

Source: EPA 2016 Landfills RIA

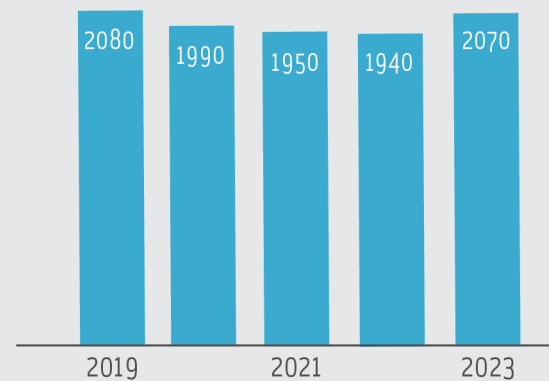


Health

[Figure 16]
Increases in Non-Methane Organic Compounds

Future additional non-methane organic compound emissions (metric tons) attributable to delay of implementation of landfill rule.

Source: EPA 2016 Landfills RIA





PUTTING THE RISKS OF REGULATORY ROLLBACKS INTO PERSPECTIVE

As detailed extensively in this report, the Trump administration has taken historically unprecedented actions to roll back years of environmental progress. From reversing reasonable Clean Car Standards, to weakening requirements for fossil-fueled power plants, to refusing to regulate harmful methane emissions from landfills and oil and gas operations, the cumulative impacts of the administration's environmental attacks pose grave harms to our environment and to people living in every state across America.

Prior to the Trump administration taking office, the cooperative federalism approach of our nation's bedrock environmental laws had allowed states and federal agencies to make real progress in working together to achieve environmental goals - ensuring that every American has access to clean and healthy air to breathe and addressing the crisis of climate change.

And while Trump Administration officials have claimed a commitment to working cooperatively with states,¹⁴⁵ in reality, their actions are undermining state efforts to ensure cleaner air and transition to cleaner sources of energy. Clean energy leaders in states spanning all across the country are faced with the prospect of increased greenhouse gas emissions, leading to adverse health impacts for residents and exacerbating the increasingly dire impacts of a changing climate. As just one example, the administration is fundamentally ignoring its professed interest in states' rights by attempting to strip away California's legal right to set vehicle greenhouse gas emissions standards -- and by extension the rights of the dozen additional states that have lawfully adopted California's standards.

The stakes could not be higher. The coalition of states currently aligned against the rollback of the Clean Car Standards, for instance, represent **more than 50 percent of the U.S. population** and **more than 50 percent of all registered vehicles**. Using the legal tools of the Clean Air Act, these states have been able to lower their emissions over the past two decades, with total vehicle emissions in 2016 achieving a net 3 percent reduction in comparison to 2000.¹⁴⁶ Now all of that progress is in question.



Similarly, the multi-state coalition of 19 attorneys general challenging the administration's attempts to dismantle the Clean Power Plan have spent more than 15 years designing flexible policies that limit greenhouse gas emissions from power plants and incentivize the creation of new clean energy sources for electricity generation. Through their actions, they have succeeded in moving their states forward to cleaner sources of energy and reducing their dependence on fossil fuel-fired power.¹⁴⁷ The Trump administration's proposed replacement rule for the Clean Power Plan now threatens that success, with the EPA's own analysis showing that the replacement could lead to increases in emissions in a number of states as older, dirtier, uneconomical coal-fired power plants are propped up and enabled to run far past their useful life cycles.

Many of the states challenging the Trump administration's deregulatory agenda have spent years designing thoughtful policies aimed at preparing for and managing the risks associated with climate change. The coalition includes all ten of the states (California, Massachusetts, New York, Pennsylvania, Connecticut, Delaware, North Carolina, Maryland, Washington and Virginia) that have been recognized as having the best and most wide-ranging climate change mitigation and adaptation strategies by independent analysts.¹⁴⁸

The state attorneys general challenging each of the actions discussed in this Special Report are doing so because they are committed to protecting their states from the catastrophic consequences of climate change, and protecting their most vulnerable populations from dangerous levels of pollution. States have been first-hand witnesses to the devastating impacts associated with a rapidly changing climate -- extreme heat, drought, wildfires, inland and coastal flooding -- all of which place state populations in danger, strain limited state fiscal resources, and impede economic productivity.¹⁴⁹

In challenging this administration's actions, these states are also seeking to protect their most vulnerable populations. The state attorneys general know that a lack of strong environmental standards will have a disproportionate impact on vulnerable populations. Despite significant progress made in reducing emissions, the states discussed in this Special Report still represent a majority of communities suffering from chronic ozone and particulate matter air pollution.¹⁵⁰ Of the American Lung Association's top 25 most polluted cities by ozone, 16 are located in states opposing the roll back of Clean Car Standards, as are **13 of the 25 most polluted cities by year-round PM_{2.5}**, and **15 of the 25 most polluted cities by short term PM_{2.5}**.¹⁵¹ All 11 of the areas designated as "extreme, severe, serious, or moderate" nonattainment with the 2015 National Ambient Air Quality Standards for ozone (8-hour average) are located in states that are opposing the rollback of the EPA's limits on new glider trucks.¹⁵²

The twin priorities of preserving their states' rights to set effective environmental policies and protecting vulnerable environmental justice communities have led the state attorneys general to mount their historic legal opposition to the Trump administration's environmental agenda, and they will continue to fight against the administration's unlawful and misguided actions.



REFERENCES

1. Hayes, David. “Trump’s Biggest Attempts to Roll Back Environmental Regulations Remain at the Starting Gate,” *Slate*, Oct. 22, 2018.
2. See Fox, Justin. “About That Big Regulatory Rollback...,” *Bloomberg*, Feb. 28, 2019.
3. Power generation and transportation represent the largest emitters of carbon dioxide in our nation. The other two sectors -- the oil and gas and landfill industries -- represent the largest industrial emitters of methane, a super-charged greenhouse gas.
4. Environmental Protection Agency, Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2017, chapter 3 (2019) [hereinafter Draft GHG Inventory]. Note: In 2017, total gross U.S. greenhouse gas emissions were 6,472 MMT CO₂ Eq.
5. The Supreme Court’s decision in *Massachusetts v. EPA* (which confirmed that greenhouse gases are “air pollutants” under the Clean Air Act), combined with EPA’s subsequent “endangerment finding” (upheld by the courts) that greenhouse gases threaten the health and welfare of Americans, triggers the EPA’s obligation to reduce such emissions from mobile and stationary sources under the Act. *Massachusetts v. EPA*, 549 U.S. 497 (2007).
6. United States Global Change Research Program (USGCRP), Fourth National Climate Assessment Volume I: Executive Summary (2017).
7. Environmental Protection Agency, Regulatory Impact Analysis for the Proposed Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program (2018).
8. Fann, Neal, et al. “Assessing Human Health PM_{2.5} and Ozone Impacts from U.S. Oil and Natural Gas Sector Emissions in 2025,” *Environmental Science & Technology*, July 13, 2018.
9. Environmental Protection Agency, Response to Comments for Joint Rulemaking: Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2 at Sec. 14, App. A (2016) [hereinafter 2016 EPA Glider Truck Response to Comments].
10. EPA’s proposals to revise and rollback protections rely, in part, on a flawed methodology for estimating the costs of greenhouse gases. As a result, its proposals are accompanied by arbitrary assignments of benefits that severely undercount the benefits of reducing greenhouse gases. For example, in its estimate for its replacement of the Clean Power Plan, the EPA valued carbon reductions at as little as \$1 per ton through year 2030, negating at least 98% of the benefits of carbon reductions compared to estimates of the Interagency Working Group on the Social Cost of Greenhouse Gases (whose central estimate is \$60 per ton). The social cost of carbon is a measurement of the value of damages avoided by reducing carbon emission by a ton in a given year. In ignoring the benefits associated with reducing climate pollutants, the EPA falls far short of its obligation to weigh climate effects.
11. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,661, 64,661-64 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).
12. Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementation Regulations, 83 Fed. Reg. 44,746 (proposed Aug. 31, 2018) (to be codified at 40 C.F.R. pts. 51, 52, 60).
13. Attorney General of New York et al., Comments on the Environmental Protection Agency’s Proposed Emission Guidelines for Greenhouse Gas Emissions from Existing Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program (Oct. 31, 2018), https://ag.ny.gov/sites/default/files/cpp_replacement_comments.pdf [hereinafter State Comments on CPP Replacement].
14. As the EPA reviews the many comments received, attorneys general have continued to try to help the EPA reach the right conclusion and withdraw its unlawful proposal. In December 2018, for example, the attorneys general highlighted the federal government’s own Fourth Annual National Climate Assessment, which shows that urgent action is needed now to reduce greenhouse gas emissions and avoid the worst effects of climate change, as further support for EPA to abandon the ACE proposal and defend the more sensible and effective CPP. See Letter from New York Attorney General Barbara Underwood, et al. to EPA Acting Administrator Andrew Wheeler (Dec. 11, 2018).
15. *American Electric Power Co. v. Connecticut*, 564 U.S. 410 (2011) (the EPA has found that anthropogenic greenhouse gas emissions are contributing to climate change and its associated dangers, including heat-related deaths; coastal inundation and erosion; more frequent and intense hurricanes, floods, and other extreme weather events that cause death and destruction; drought; and the destruction and disruption of ecosystems and food supply); *Massachusetts v. EPA*, 549 U.S. 524 (2007) (Clean Air Act requires the EPA to regulate greenhouse gas



emissions as a pollutant once the agency determines that those emissions contribute to climate change and pose a danger to public health and welfare).

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 105. Order Re: Parties’ Joint Case Management Statement, California v. Zinke, No. 18-05712 (N.D. Cal. Jan. 16, 2019). Note: There is also a pending industry and state legal challenge to the Waste Prevention Rule; the Tenth Circuit will be considering whether it is moot and the appropriate remedy. See Appellant’s Joint Response to Motion to Dismiss, Wyoming v. Department of Interior, Nos. 18-08027, 18-08029 (10th Cir. Oct. 25, 2018).
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134. Id. at 13-15.
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136. Id. at 17. Arizona, California, New Mexico and West Virginia have submitted state plans for reducing landfill methane emissions.
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138. Id. at 2.
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142. Id. at 25; Environmental Protection Agency, Regulatory Impact Analysis for the Final Revisions to the Emission Guidelines for Existing Sources and The New Source Performance Standards in the Municipal Solid Waste Landfills Sector at Table ES-1 (2016) (Summary of the Monetized Benefits, Costs, and Net Benefits for the Final Emission Guidelines for Existing MSW Landfills in 2025 (millions of 2012\$) at 3% discount rate) [hereinafter EPA 2016 Landfills RIA].



143. 2016 Final Landfills Rule at 59,309.
144. Due to rounding, figures here may differ slightly from associated text.
145. While speaking before a Senate Committee in January 2018, former-EPA Administrator Scott Pruitt told members of Congress that the Trump administration would be committed to adhering to input from the states. “This public participation, cooperative federalism, [and] the rule of law being the focus of how we do things at the EPA is center to restoring confidence in the EPA,” he said. Henry, Devin. “Pruitt says his EPA will work with the states,” *The Hill*, Jan. 18, 2017.
146. U.S. Energy Information Agency, <https://www.eia.gov/environment/emissions/state/> (last visited Feb. 27, 2019).
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