



Finding the ways that work

August 15, 2022

## ***The Inflation Reduction Act Includes Historic Modernization of the Clean Air Act for the American People***

Multiple analyses of the [Inflation Reduction Act](#) forecast that the legislation will slash climate-warming gases 40% below 2005 baseline levels by 2030. These reductions will be achieved by making historic climate and clean energy investments totaling \$369 billion. Those incentives create a tremendous pull on the supply side for climate and clean energy solutions that reduce climate and air pollution.

EDF has taken a closer look at the crucial ways the Inflation Reduction Act also creates a complementary push on the demand side to accelerate clean solutions through historic modernization of the Clean Air Act – our nation’s bedrock law that requires rigorous limits on climate and other air pollutants based on the best available technologies.

Creating incentives that propel climate and clean energy investments works in tandem with the Clean Air Act limits on pollution. The incentives under the Inflation Reduction Act will drive down the cost of clean solutions. Because the availability and cost of pollution abatement technologies are key factors in EPA’s establishment of national emission standards under the Clean Air Act, decreasing the cost of clean solutions will, in turn, increase the pollution reduction protections for the American people.

### **The bottom line: Congress has modernized the Clean Air Act to re-enforce and expand EPA’s authority to protect American families from climate and air pollution**

In accordance with science reflecting the extreme urgency of reducing climate hazards, the United States has committed to reduce climate-destabilizing pollution by at least 50% over 2005 levels by 2030. The Inflation Reduction Act will help us get there through its major investments in clean energy, together with strengthened protections under the modernized Clean Air Act. These advances will work alongside other important actions from across the federal government, action by the states, tribes and local governments, private sector leadership and innovation, and investments in communities and neighborhoods. The new legislation does not just invest in clean energy incentives; it broadens and deepens our national capacity to confront climate change.

The new legislation bolsters EPA’s authority and responsibility to address climate change, including through the addition of many entirely new sections to the Clean Air Act. In the Inflation Reduction Act, Congress has enacted the most far-reaching changes to the Clean Air Act since 1990. These new Clean Air Act sections and the new provisions that rely on the Clean Air Act reinvigorate EPA’s responsibilities under the law addressing the climate crisis and long-standing

inequities with new tools, new solutions, unprecedented investments, additional policies, and with great urgency.

Here are some of the ways the Inflation Reduction Act does just that:

- **Reaffirming greenhouse gases' status as air pollutants**

Among the new law's most significant features is an emphatic reaffirmation of EPA's duty to take action to reduce climate pollution. In numerous instances, the new law references greenhouse gases and confirms their status as air pollutants under the Clean Air Act, reinforcing the long-standing Supreme Court ruling in *Massachusetts v. EPA*, 549 U.S. 497 (2007), and subsequent judicial and administrative precedent.

The amendments repeatedly enumerate each of the principal climate-destabilizing gases that EPA identified following the *Massachusetts* decision, providing more than a dozen times that:

*the term 'greenhouse gas' means the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride*

These Congressional definitions confirm with a new fresh legislative imprimatur what had already become well entrenched in a decade and a half of judicial decisions and agency actions: that greenhouse gases are air pollutants under the Clean Air Act, and that these include the warming gases carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride. The new law lays out a wide array of new and bolstered tools for EPA, states, community groups, companies, and others, to reduce harms to public health and welfare from these harmful pollutants.

- **Environmental and Climate Justice block grants for community-led protections, including more inclusive participation in federal and state policy-making**

In the new law, Congress made Clean Air Act history by giving those most at risk from climate change and other forms of air pollution central roles in developing solutions. For far too long, urgent action on the environmental injustices wrought by climate and air pollution has been impeded by policymakers lacking will, forces claiming EPA lacked authority, and the failure to invest in community centered and community-forged solutions. The new legislation takes a step forward in addressing these impediments to progress, providing EPA with new authority, new resources, and community-led investments to advance environmental and climate justice.

In the Inflation Reduction Act, Congress has added a new section to the Clean Air Act – section 138 – to provide EPA with \$3 billion for grants and technical assistance to support community-led responses to climate and air pollution, including climate resilience. The grants must benefit disadvantaged communities and may be awarded for community-led air and other pollution monitoring, prevention, and remediation, and investments in low- and zero-emission and resilient technologies and related infrastructure and workforce development that help reduce greenhouse gas emissions and other air pollutants.

Importantly, grants may be directed to more inclusive and just participation by communities in federal and state policymaking, including “facilitating engagement of disadvantaged communities in State and Federal advisory groups, workshops, rulemakings, and other public processes.” The grants may also be directed to reducing health risks imposing particularly heavy burdens on both urban and rural communities, such as “mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions, and wildfire events.”

Congress has also recognized the vulnerability disadvantaged communities face in the climate crisis and made these resources available for climate resilience and adaptation.

- **Greenhouse Gas Reduction Fund for grants and financing to benefit low-income and disadvantaged communities**

New section 134 of the Clean Air Act will include a multi-billion dollar grant and financing program to ensure that the climate, health and economic benefits of zero-emitting solutions are more widely available and more equitably shared. EPA will have \$7 billion for grants “to enable low-income and disadvantaged communities to deploy or benefit from zero emission technologies, including distributed technologies on residential rooftops.” An additional \$12 billion is available for general assistance and another \$8 billion for assistance in low-income and disadvantaged communities. These resources may provide direct assistance to communities “to reduce or avoid greenhouse gas emissions and other forms of air pollution,” and may be leveraged with private sector investments.

- **Strengthening tools to address community pollution burdens from heavy-duty vehicles, ports and goods movement**

The movement of goods by freight trucks on high traffic surface streets and highways, at warehouses and freight depots, and through ports and freight equipment creates dangerous concentrations of pollution that afflict nearby communities and neighborhoods and contributes large volumes of climate pollution. The Inflation Reduction Act strengthens EPA’s long-standing authorities to make progress on each of these serious pollution challenges.

*Zero-emitting heavy-duty vehicles*

Congress has added new section 132 of the Clean Air Act providing \$1 billion for zero-emitting class 6 or 7 heavy-duty vehicles with 40% of the resources directed to communities in “nonattainment” areas – i.e., areas suffering from persistent failures to meet the Clean Air Act’s health-based national air quality standards. The grants may include the incremental replacement costs of zero-emitting vehicles, charging infrastructure, workforce development and training, planning and deployments. These EPA administered resources will have multiplier effects in addressing the heavy burden of pollution when paired with the extensive tax incentives for heavy-duty vehicles.

*Zero-emitting equipment for ports and comprehensive planning*

New section 133 of the Clean Air Act provides \$3 billion to reduce air pollution at ports through rebates and grants to purchase “zero-emission port equipment,” conduct relevant planning or permitting and for comprehensive climate action plans to reduce greenhouse gases and other air pollutants. One-quarter of these resources are earmarked for nonattainment areas.

*Expanded funding under the Diesel Emissions Reduction Act to protect low-income and disadvantaged communities from goods movement facilities and vehicles*

Congress also provides EPA with \$60 million “to identify and reduce diesel emissions resulting from goods movement facilities, and vehicles servicing goods movement facilities, in low-income and disadvantaged communities to address the health impacts of such emissions on such communities.” These resources are for grants, rebates and loans under the Diesel Emissions Reduction Act (42 U.S.C. § 16132).

- **Monitoring and reducing pollution at schools in low-income and disadvantaged communities**

In the Inflation Reduction Act, Congress invests \$50 million in an EPA Clean Air Act program “to monitor and reduce greenhouse gas emissions and other air pollutants at schools in low-income and disadvantaged communities.” A portion of these resources is committed to supporting technical assistance for schools to develop school environmental quality plans.

- **State, Tribal and Local Government Climate Pollution Reduction Grants for cutting total greenhouse gas pollution and in low-income and disadvantaged communities**

The Inflation Reduction Act adds new section 137 of the Clean Air Act providing EPA with \$5 billion for states, tribes and local governments throughout the country to develop comprehensive plans to carry out reductions in greenhouse gas emissions. The new protections under the Clean Air Act direct \$250 million for planning and \$4.75 billion for implementing those plans. Plans must include “programs, policies, measures, and projects that will achieve or facilitate the reduction of greenhouse gas air pollution.” EPA must require applications to address “the degree to which greenhouse gas air pollution is projected to be reduced in total and with respect to low-income and disadvantaged communities.” Congress has thus provided substantial funding to support tailored climate solutions at every level of government.

- **Reinforcing that zero-emitting vehicles are integral to federal and state clean vehicle programs**

The federal Clean Air Act and state clean air programs have long recognized that zero-emitting vehicles are integral to addressing climate pollution and other airborne contaminants. Although zero-emitting vehicles have been a key part of federally authorized California clean air programs for decades, the understanding that zero-emitting vehicles are vital to clean air goes back decades earlier still: On July 18, 1967, during the Senate’s adoption of provisions in the Air Quality Act of 1967 (S. 780) waiving federal preemption for California’s motor vehicle pollution control program, Republican Senator George Murphy explained Congress’s vision that the “automobile industry. . . should not rest until it produces a pollution-free engine.”

This objective of pollution-free vehicle engines has been repeatedly reaffirmed in succeeding actions of Congress under the modern Clean Air Act. In the Inflation Reduction Act, Congress reaffirmed it again by adding a new Clean Air Act section 132(d)(5) defining the term “zero-emission vehicle” to mean a vehicle with “zero exhaust emissions” of “any air pollutant” listed under the national health-based air quality standards program and “any greenhouse gas.”

The Inflation Reduction Act also expressly recognizes and reinforces state clean- and zero-emitting vehicle programs building on the congressional action first adopted in 1967 and on the foundation repeatedly strengthened and expanded in subsequent amendments to the Clean Air Act. The new legislation contains specific provisions to support “Greenhouse Gas and Zero-Emission Standards for Mobile Sources,” by designating additional funding “to provide grants to States to adopt and implement greenhouse gas and zero emission standards for mobile sources pursuant to section 177 of the Clean Air Act.” This provision both reinforces the long-standing state programs reducing greenhouse gases and providing for zero-emitting vehicles and invests in continued state action to adopt these programs.

- **Accelerating pollution reductions from large emitting sectors including Oil and Gas Methane, Power Plants, and Industrial Sources of HFCs:**

***Methane Emission Reduction Incentive Program for Oil and Gas establishes first-ever pollution fee under U.S. law for potent warming gas***

For the first time ever under federal law, the Inflation Reduction Act imposes a fee on climate pollution – highlighting the critical importance of rapidly slashing methane emissions from oil and gas production. Responsible for 25% of today’s warming, methane is a potent greenhouse gas more than 80 times as powerful as carbon dioxide in the near-term. Methane leakage across the oil and gas supply chain can be readily eliminated with today’s low-cost solutions, leading to far-reaching climate and health benefits. Methane leaks alongside toxic air pollutants such as cancer-causing benzene and smog-forming volatile organic compounds, harming the nearly [18 million people](#) that live within one mile of an oil or gas well, including disproportionately large numbers of communities of color, people living below the poverty line, older individuals, and young children.

One of the most important provisions of the Inflation Reduction Act is titled the “Methane Emissions Reduction Program,” a new section 136 of the Clean Air Act establishing an escalating pollution fee on excessive methane emissions from oil and gas activities: \$900 per ton in 2024, \$1200 in 2025, and \$1500 in 2026 and thereafter.

Key features of the program include requirements that EPA revise how it measures methane emissions using “empirical data” based on actual measurements that “accurately reflect total methane emissions.” This is essential as [EDF-led peer reviewed science](#) using infrared cameras and aerial flyovers document oil and gas methane emissions 60% higher than EPA’s outdated estimates.

This critically important addition to the Clean Air Act encourages states to quickly develop plans and gain EPA approval to implement oil and gas methane standards under section 111 of the Clean Air Act. Under the Inflation Reduction Act, compliance with these Clean Air Act regulatory requirements will allow operators to avoid paying the pollution fee. EPA’s forthcoming methane rules for oil and gas operations establish an irreducible floor — if future regulations are not as strong as those currently under development by EPA, the compliance exemption ceases to apply and operators will once again have to pay the fee. Congress, however, recognizing EPA’s proposed methane rules are only a floor, appropriated \$1.55 billion to drive deeper reductions, including \$700 million to ensure EPA addresses the methane from marginal wells that produce scant oil and gas but are disproportionately large [emitters of methane](#). EPA is poised to issue a supplemental proposal strengthening methane pollution protections for marginal wells and other emitting activities.

The Inflation Reduction Act’s methane provisions address other key issues including end-of-life pollution from oil and gas wells. Congress requires EPA to determine “closure requirements,” and wells permanently shut-in and plugged-in accordance with those closure requirements may be exempted from the pollution fee. This reform is pivotal to ensure the owners and operators of these wells, rather than taxpayers, bear proper clean-up and closure costs.

In crafting these path-breaking protections, Congress also recognized the particular burdens of oil and gas pollution and industrial activities on local communities. The Inflation Reduction Act provides funding for “mitigating health effects of methane and other greenhouse gas emissions,

and legacy air pollution from petroleum and natural gas systems in low-income and disadvantaged communities.” EPA has discretion on how best to use the \$1.55 billion appropriated for this program to drive down pollution and protect communities, including by improving methane monitoring and emissions estimating, supporting innovative efforts to cut pollution, and protecting frontline communities by remediating pollution and improving resilience. Through a separate appropriation, Congress also provided EPA with an additional \$20 million in grants under the Clean Air Act for “monitoring emissions of methane.”

The Inflation Reduction Act’s methane provisions are historic and offer massive benefits to public health. A new [Congressional Research Service report](#), *Inflation Reduction Act Methane Emissions Charge* (August 4, 2022), examines aspects of this historic addition to the Clean Air Act in more detail.

### ***Low Emissions Electricity Program to ensure reductions in greenhouse gases are achieved***

The Inflation Reduction Act also importantly bolsters EPA’s ability to achieve reductions in emissions of greenhouse gases from power plants. New section 135 of the Clean Air Act provides EPA with \$87 million “to ensure that reductions in greenhouse gas emissions are achieved through use of existing authorities of [the Clean Air Act].” Section 135 provides that EPA’s actions to ensure additional reductions under the Clean Air Act should be based on an immediate assessment of the forecast reductions through fiscal year 2031. This provision thus requires that, in issuing standards pursuant to the Clean Air Act, EPA ensure that those standards will achieve reductions in emissions that are additional to the reductions already expected to occur from other causes, including the Inflation Reduction Act’s investments. In addition, the Low Emissions Electricity Program provides significant funding for education, technical assistance and partnerships with consumers, low-income and disadvantaged communities, industry, states, tribes and local governments to achieve reductions in greenhouse gas emissions from domestic electricity generation and use.

### ***Strengthening implementation of the American Innovation and Manufacturing Act***

The Inflation Reduction Act invests in EPA’s program under the American Innovation and Manufacturing Act of 2020 to phasedown hydrofluorocarbons and transition to next generation technologies including \$20 million to carry out the program, \$3.5 million in new implementation and compliance tools, and \$15 million in competitive grants to foster innovative technologies.

- **Transparency and accountability for corporate climate commitments**

Private-sector commitments to reduce greenhouse gases have often been met with public distrust due to a lack of transparency and accountability. In the Inflation Reduction Act, Congress provides EPA with \$5 million to support strengthened “standardization and transparency of corporate climate action commitments and plans to reduce greenhouse gases,” paired with ensuring real-world “progress toward meeting such commitments and implementing such plans.”

- **New EPA program to address the carbon embodied in construction materials used in transportation and federal building projects**

In the Inflation Reduction Act, Congress provides \$250 million for a new program of grants, technical assistance, and action to promote “steadily reducing” the greenhouse gases embodied

in the “materials or product associated with all relevant stages of production, use, and disposal” for “construction materials and products.”

This new funding is paired with a \$100 million investment for EPA to carry out a labeling program, in consultation with the Federal Highway Administration for the carbon embodied in the construction materials used in transportation projects and by the General Services Administration for federal buildings.

- **Investing in advanced biofuels and improved testing including evaluating impacts on low-income and disadvantaged communities**

To strengthen climate and health protections under the renewable fuels program in section 211(o) of the Clean Air Act, the Inflation Reduction Act provides \$10 million to EPA for new grants to industry “to support investments in advanced biofuels” and \$5 million for improved testing, data collection, analysis to modernize regulations, and evaluation of fuel lifecycle implications on the public and on low-income and disadvantaged communities.

- **Modernizing the scaffolding of the Clean Air Act: transparency, accountability, compliance and enforcement through investments in 21<sup>st</sup> century monitoring and enforcement information systems**

Air quality monitoring is the backbone of our nation’s premier clean air law. Monitoring is foundational in identifying problems and threats to the public, empowering the public, informing and driving policy action, measuring progress, and ensuring compliance and enforcement. In July, the U.S. Government Accountability Office called for [modernization of the monitoring](#) programs and systems under the Clean Air Act to address “persistent challenges in meeting additional information needs” including:

“(1) establishing priorities for air toxics monitoring; (2) developing and improving air quality monitoring methods; (3) integrating emerging technologies, such as low-cost sensors; and (4) managing and integrating additional monitoring data.”

The Inflation Reduction Act greatly bolsters federal air quality monitoring. It provides for a multi-programmatic overhaul of EPA’s monitoring under the Clean Air Act, paired with key new investments in compliance and enforcement information systems.

#### *Fenceline air monitoring and screening air monitoring*

The new legislation provides \$117.5 million to EPA in Clean Air Act grants to “deploy, integrate, support, and maintain fenceline air monitoring, screening air monitoring, national air toxics trend stations, and other air toxics and community monitoring.”

#### *Multipollutant monitoring stations*

EPA is provided \$50 million in Clean Air Act grants to “expand the national ambient air quality monitoring network with new multipollutant monitoring stations.”

#### *Air quality sensors in low-income and disadvantaged communities*

The new legislation provides EPA with \$3 million in Clean Air Act grants “to deploy, integrate, and operate air quality sensors in low-income and disadvantaged communities.”

#### *Strengthening EPA testing and activities to address emissions from wood heaters*

Congress directed \$15 million to EPA in Clean Air Act grants for “testing and other agency activities to address emissions from wood heaters.”

*Funding for enforcement technology and public information*

Congress also provides \$25 million to modernize our nation’s compliance and enforcement information systems such as the Integrated Compliance Information System and to update inspection software, directing resources to EPA as well as state, tribal and local air pollution control agency partners.

**Important action lies ahead**

This modernization of the Clean Air Act and the important investments in climate and clean energy solutions and in communities long overburdened by pollution are just the beginning — EPA, state, tribal and local governments, and all, must now begin the vital work of making Congress’ goals a reality and ensuring these new protections deliver. Important engagement and advocacy opportunities lie ahead to ensure funding is distributed effectively and equitably, and to ensure that EPA implements its updated authorities in accordance with Congress’ intent, maximizing pollution reductions and helping put us on the path to meeting our climate commitments. And while this new law is a crucial step on a path toward environmental justice and climate stability, much more will be urgently needed to address the inequitable pollution and climate burdens currently afflicting communities.