Building a Clean Energy Economy:

A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action

CleanEnergy.gov

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The White House
Washington

A Note from President Biden's Senior Advisor for Clean Energy Innovation and Implementation

When President Biden signed the Inflation Reduction Act into law in August 2022, he said the new law "is not just about today, it's about tomorrow. It's about delivering progress and prosperity to American families." The Inflation Reduction Act makes a historic commitment to build a new clean energy economy, powered by American innovators, American workers, and American manufacturers, that will create good-paying union jobs and cut the pollution that is fueling the climate crisis and driving environmental injustice.

The Inflation Reduction Act will deliver results through a combination of grants, loans, rebates, incentives, and other investments to support the President's whole-of-government economic plan.

The Inflation Reduction Act includes some two dozen tax provisions that will save families money on their energy bills and accelerate the deployment of clean energy, clean vehicles, clean buildings, and clean manufacturing. These tax provisions reflect the President's strong belief in building the economy from the bottom up and middle out. Many of the clean energy tax provisions offer bonus credits to projects that are located in low-income communities or energy communities, pay prevailing wages and use registered apprentices, or meet certain domestic content requirements—all with the goal of creating good-paying, high-quality jobs and shared economic growth that will last well beyond the Biden-Harris Administration.

The Inflation Reduction Act also provides billions of dollars in grant and loan programs and other investments for clean energy and climate action. As with the tax provisions, Congress and President Biden designed these programs to benefit working families and parts of the United States that are too often overlooked and underserved. The law advances President Biden's Justice40 Initiative, which commits to delivering 40 percent of the overall benefits of climate, clean energy, infrastructure, and other investments to disadvantaged communities, including Tribes, communities with environmental justice concerns, rural areas, and energy communities.

The federal government will closely coordinate with our state, local, and Tribal government partners to maximize the benefits of the Inflation Reduction Act and leverage the complementary investments of President Biden's Bipartisan Infrastructure Law. State, local, and Tribal governments are in the best position to understand the unique needs of their communities, match those needs with available funding streams, and build a strong, sustainable development strategy. It is the job of the federal government to help facilitate their work with clear communication, transparency, and, where available, targeted technical assistance.

This guidebook provides a program-by-program overview of the Inflation Reduction Act, including who is eligible to apply for funding and for what purposes. As these programs develop, you can expect more detail to come in the weeks and months ahead. Federal agencies are working around the clock to design new programs and push out funding as quickly as possible while being good stewards of taxpayer dollars. You can find the most recent information on the Inflation Reduction Act at CleanEnergy.gov, which we will update as new funding announcements and program details become available.

President Biden sees action on climate change as an opportunity to lower costs for all Americans, create good-paying union jobs for workers, address the cumulative impacts of pollution on disadvantaged communities, and ensure America leads the global clean energy economy. We look forward to seizing upon these unprecedented opportunities and building a better America together.

Warm regards,

John D. Podesta
Senior Advisor to the President for Clean Energy Innovation and Implementation
The White House

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Executive Summary

On August 16, 2022, President Biden signed the Inflation Reduction Act into law, marking the most significant action Congress has taken on clean energy and climate change in the nation's history. With the stroke of his pen, the President redefined American leadership in confronting the existential threat of the climate crisis and set forth a new era of American innovation and ingenuity to lower consumer costs and drive the global clean energy economy forward.

The Inflation Reduction Act is aimed squarely at building a better America and delivering on President Biden's vision to make sure the United States—powered by American workers—remains the global leader in clean energy technology, manufacturing, and innovation. The Inflation Reduction Act's $370 billion in investments will lower energy costs for families and small businesses, accelerate private investment in clean energy solutions in every sector of the economy and every corner of the country, strengthen supply chains for everything from critical minerals to efficient electric appliances, and create good-paying jobs and new economic opportunities for workers.

In keeping with the Biden-Harris Administration's commitment to working families, equity, and environmental justice, the Inflation Reduction Act prioritizes creating shared prosperity, making the nation more resilient to growing threats to health and well-being, and driving critical economic investments to historically underserved communities, particularly those living with legacy pollution. For several of the clean energy tax incentives, for example, the law offers bonus credits for projects that are located in economically distressed communities or traditional energy communities and for projects that meet requirements to pay the prevailing wage and hire qualified registered apprentices. The law also will advance the President's Justice40 Initiative, which commits to delivering 40 percent of the overall benefits of climate, clean energy, and related federal investments to communities that are marginalized, overburdened by pollution, and underserved by infrastructure and other basic services. Further, through an all-of-government effort, the Administration will work to ensure that investments under the Inflation Reduction Act facilitate state and local contracting opportunities for underserved small businesses.

The Inflation Reduction Act builds on the foundational climate and clean energy actions taken by the Biden-Harris Administration and investments that President Biden secured in his Bipartisan Infrastructure Law (or Infrastructure Investment and Jobs Act), signed in November of 2021. Historic in its own right, the Bipartisan Infrastructure Law provided billions of dollars to modernize the electricity grid, build a nationwide network of electric vehicle chargers, strengthen the battery supply chain, expand public transit and passenger rail, invest in new clean energy and emissions reduction technologies, improve resilience in physical and natural systems, and clean up legacy pollution in communities across the country—all while creating new, high-quality jobs, including union jobs, with good benefits and supportive services that build pathways for all to the middle class.

The Biden-Harris Administration is showing that American spirit and enterprise can alter the course of history and make people's lives better in pursuit of ambitious goals. In his first days on the job, President Biden set forth a bold climate agenda and has since vigorously advanced policy actions to achieve his commitment to reduce U.S. greenhouse gas emissions by 50-52 percent below 2005 levels by 2030. With the passage of the Inflation Reduction Act—in combination with the Bipartisan Infrastructure Law and other actions—the Department of Energy (DOE) estimates that the United States will achieve a 40 percent reduction in economy-wide greenhouse gas emissions below 2005 levels by 2030, positioning the United States to realize the President's goal with additional executive branch, state, local, and private sector action. DOE estimates that the clean energy provisions of the Inflation Reduction Act and the Bipartisan Infrastructure Law together could reduce emissions by more than 1,000 million metric tons of CO_2e in 2030, equivalent to the combined annual emissions released from every home in the United States.

Overview and Purpose of the Guidebook

This guidebook provides an overview of the clean energy, climate mitigation and resilience, agriculture, and conservation-related tax incentives and investment programs in President Biden's Inflation Reduction Act, including who is eligible to apply for funding and for what activities. The Biden-Harris Administration is working quickly to design, develop, and implement these programs; as such, the information in this guidebook is current as of publication. In the coming weeks and months, we will publish new developments on www.CleanEnergy.gov to keep stakeholders and potential beneficiaries of these programs up to date on the latest deadlines and details. This guidebook does not cover the Inflation Reduction Act's health care provisions or certain corporate tax reforms.

The guidebook groups the Inflation Reduction Act's tax incentives and investment programs into thematic chapters and explains how the law will deliver on the President's commitments to the American people. Each chapter outlines the significance of these programs and includes a one-page summary of each program's eligible uses, potential beneficiaries, and other important information. Given the cross-cutting nature of energy and climate issues, many of these Inflation Reduction Act programs and tax provisions could fall under more than one chapter. For ease of presentation, each program or provision is featured only once in the guidebook.

This document was updated on January 9, 2023 and reflects small corrections to the original version posted in December 2022.

Disclaimer

This guidebook is designed to help users familiarize themselves with the Inflation Reduction Act. Nothing contained in this document constitutes formal guidance from the U.S. government on any law, program, policy, application process, or funding eligibility. Applicants for funding should consult official agency or program specific guidance for additional information.

The Inflation Reduction Act's Commitment to Equity, Environmental Justice, and Working Families in Clean Energy and Climate Programs

The Inflation Reduction Act is a key pillar of President Biden's economic and industrial strategy, which is centered on investing in America's workers and communities to ensure long term, sustainable growth and prosperity. To that end, the Inflation Reduction Act is designed to ensure that these transformative investments create good-paying union jobs to lift up the middle class and bring tangible benefits to communities that are often overlooked and left behind, including communities overburdened by legacy pollution.

Working Families: The Inflation Reduction Act will not only create millions of jobs—it will create good-paying, high-quality jobs that provide a pathway to the middle class for working families, including for workers who have been historically underrepresented in construction and manufacturing. Many of the clean energy tax provisions offer bonus credits to projects that pay the prevailing wage or use registered apprentices. Several provisions offer bonus credits for projects that meet certain domestic content requirements for steel, iron, or other manufactured products, creating an incentive to rely on America's manufacturing base and American workers. In addition, the Inflation Reduction Act's historic investments in clean energy will create tremendous opportunities for small businesses, including minority- and women-owned businesses, to build wealth and create family-sustaining jobs.

Environmental Justice: For far too long, many communities across the United States have borne the brunt of toxic pollution, endured underinvestment in critical infrastructure, and suffered disproportionately from the impacts of climate change. The Inflation Reduction Act supercharges President Biden's Justice40 Initiative, which commits to delivering 40 percent of the overall benefits of climate and clean energy investments to disadvantaged communities, including communities with environmental justice concerns. The law provides targeted investments to cut localized pollution from port operations, heavy duty trucks, and transportation infrastructure—pollution sources that have led to higher incidence of asthma and other health burdens in low-income communities and communities of color. The law directly supports communities working to address local pollution concerns by creating a new $3 billion environmental justice grant program for community-based organizations and their partners.

Tribes: Native communities have long suffered from underinvestment, contributing to poor health and economic outcomes in Indian Country. The Inflation Reduction Act supplements historic investments in the American Rescue Plan and Bipartisan Infrastructure Law in Tribal communities. The Inflation Reduction Act provides $75 million to help guarantee up to $20 billion in loans to support Tribal investment in energy-related projects and $150 million to electrify Tribal homes with clean energy. It also appropriates $225 million for Tribal climate resilience, which can include support for community driven relocation for Tribes threatened by the impacts of climate change. Tribes are eligible for most of the clean energy tax incentives in the law and many of the other funding programs, as described in this guidebook, and will benefit from the President's Justice40 Initiative.

Energy Communities: The Inflation Reduction Act provides targeted support for energy communities, which include areas in which a coal mine or coal-fired power plant has closed or that have been economically reliant on the extraction, processing, transport, or storage of coal, oil, or natural gas but now face higher-than-average unemployment. These are communities that have underpinned America's economic growth and powered this country for decades. To help ensure these communities are dealt into the clean energy economy, the Inflation Reduction Act's production and investment tax credits for clean electricity offer bonus credits for projects located in an energy community. The law also creates a new Energy Infrastructure Reinvestment Financing Program at the Department of Energy, which will guarantee loans to projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operations—such as a coal-fired power plant—or that enable operating energy infrastructure to reduce their greenhouse gas emissions.

Rural America: Rural America will benefit from the Inflation Reduction Act's investments in energy communities, communities with environmental justice concerns, Tribes, and working families, as described above. But the Inflation Reduction Act also makes targeted, tailored investments in Rural America to improve electricity service in rural areas, expand access to affordable clean energy, advance climate-smart agriculture and forestry practices, and support agriculture-based biofuels. The law recognizes that farmers and ranchers are an essential part of the climate solution and supports conservation projects that directly enhance soil carbon or reduce, capture, avoid, or sequester greenhouse gases from agricultural production. The Inflation Reduction Act also offers financial support to farmers and ranchers, including those affected by the COVID-19 pandemic and climate-fueled natural disasters, such as the extreme drought plaguing much of the western United States.

Throughout this guidebook, we highlight the tax provisions, grant programs, and other funding programs that will offer transformative benefits to working families; disadvantaged, underserved, and low-income communities; Tribes; rural areas; and other areas in need of economic development and growth.

Advancing and Deploying American-Made Clean Energy Technologies

The Inflation Reduction Act is the most ambitious investment in clean energy in our nation's history. It includes more than 20 new or modified tax incentives and tens of billions of dollars in grant and loan programs to unleash new clean energy technology investment and deployment and supercharge our transition to a clean energy economy. These investments are designed to unlock truly transformative change that not only builds a low-carbon energy system with American-made technology, but also delivers lower energy costs and good-paying jobs, particularly in communities that are underserved, low-income, or overburdened by pollution.

Financing and Expediting Deployment of Clean Energy Technologies

Tackling the climate crisis requires a rapid and deep transition in America's energy system to cleaner sources, starting with the electric power sector. President Biden has set ambitious goals of reaching 100 percent carbon pollution-free electricity by 2035; a 50-52 percent reduction from 2005 levels in economy-wide net greenhouse gas pollution in 2030; and net zero emissions economy-wide by no later than 2050. To meet President Biden's ambitious climate goals, the United States needs to accelerate deployment of commercially-available clean energy technologies and invest in new technologies that have game-changing potential. The Inflation Reduction Act includes billions of dollars in grants and loans to spur financing and deployment of new clean energy projects that cut greenhouse gas emissions and other pollutants, with a focus on projects in disadvantaged communities, energy communities, and other communities in need.

Funding Overview

The Inflation Reduction Act includes several tax provisions and significant grant and loan programs to support deployment of commercially-available and innovative clean energy technologies. Highlights include:

- **Clean Energy Production and Investment Tax Credits**. The Production Tax Credit (PTC) and Investment Tax Credit (ITC) for renewable energy have helped drive deployment of wind farms and solar arrays in the United States, resulting in clean energy providing a majority of all electricity capacity additions in recent years. The Inflation Reduction Act modifies and extends the current PTC and ITC through 2023 and 2024, at which point they sunset in favor of technology-neutral, emissions-based credits, the Clean Electricity PTC and Clean Electricity ITC. For both the extended and future tax credits, the Inflation Reduction Act structures them to incentivize investment in disadvantaged communities and ensure newly-created jobs are good-paying jobs. A project or facility can earn bonus credits if it meets Davis-Bacon prevailing wage and registered apprenticeship requirements, meets certain domestic content requirements, and/or is located in an energy community. As described in the text box on the following page, the ITC offers additional bonuses for wind and solar projects in low-income communities.

- **$27 billion for the Greenhouse Gas Reduction Fund**. The Inflation Reduction Act provides the Environmental Protection Agency with $27 billion to award competitive grants to mobilize financing and leverage private capital for clean energy and climate projects that reduce greenhouse gas emissions, with an emphasis on projects that benefit low-income and disadvantaged communities. This significant new program will meet the requirements of the President's Justice40 Initiative, which commits to delivering 40 percent of the benefits of certain federal investments to disadvantaged communities.

- **$40 billion in loan authority to guarantee loans for innovative clean energy projects.** The Inflation Reduction Act provides the Department of Energy Loan Programs Office with $40 billion in loan authority supported by $3.6 billion in credit subsidy for loan guarantees under section 1703 of the Energy Policy Act for innovative clean energy technologies, including renewable energy systems, carbon capture, nuclear energy, and critical minerals processing, manufacturing, and recycling.

Programs Covered in This Chapter

Agency	IRA Section	Tax Code Section	Program Name	Amount
Department of the Treasury	13101	45	Production Tax Credit for Electricity from Renewables	-
Department of the Treasury	13102	48	Investment Tax Credit for Energy Property	-
Department of the Treasury	13103	48(e), 48E(h)	Increase in Energy Credit for Solar and Wind Facilities Placed in Service in Connection with Low-Income Communities	-
Department of the Treasury	13105	45U	Zero-Emission Nuclear Power Production Credit	-
Department of the Treasury	13701	45Y	Clean Electricity Production Tax Credit	-
Department of the Treasury	13702(h)	48E	Clean Electricity Investment Tax Credit	-
Department of the Treasury	13703*	168(e)(3)(B)	Cost Recovery for Qualified Facilities, Qualified Property, and Energy Storage Technology	-
Environmental Protection Agency	60103	-	Greenhouse Gas Reduction Fund	$27,000,000,000
Department of Energy	50141	-	Funding for Department of Energy Loan Programs Office	$3,600,000,000
Department of Energy	50145	-	Tribal Energy Loan Guarantee Program	$75,000,000

*A description of this section appears in the summaries for sections 13701 and 13702.

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Each of the tax credits in the above table, except for 168(e)(3)(B), is eligible for direct pay and transferability. Section 13801 of the Inflation Reduction Act, which adds Section 6417 of the Internal Revenue Code, extends many of the law's tax incentives to entities that generally do not benefit from income tax credits, such as state, local, and Tribal governments and other tax-exempt entities. Specifically, these entities can elect to receive some of the Inflation Reduction Act's tax credits in the form of direct payments. Section 13801 also adds Section 6418 of the Internal Revenue Code and makes certain tax credits transferable. In these cases, taxpayers that are generally ineligible for direct payment of credits may transfer all or a portion of certain credits to an unrelated party in exchange for cash.

Delivering on the President's Commitment to Working Families, Equity, and Environmental Justice in the Clean Energy Economy

For too long, Tribal nations, rural areas, low-income communities, and communities of color have been left behind as the rest of America prospers. Through the Inflation Reduction Act, we will invest billions of dollars to expedite and expand deployment of new clean energy projects so that these communities will benefit in the form of new economic development, good-paying jobs, and less pollution.

The Inflation Reduction Act structures the clean energy Production Tax Credit (PTC) and Investment Tax Credit (ITC) provisions to incentivize investment in communities most in need of new economic development. The PTC, as extended, and the new Clean Electricity PTC offer a 10 percent credit increase for facilities located in an energy community. The ITC, as extended, and the new Clean Electricity ITC offer up to a 10-percentage point bonus credit for projects located in an energy community. The ITCs also offer another 10-percentage point bonus allocated investment credit for qualified solar and wind facilities located in a low-income community or on Tribal land and a 20-percentage point bonus for projects that are part of a qualified low-income residential building project or a qualified low-income economic benefit project. This bonus amount will require an application by the taxpayer, with a cumulative total of 1.8 GW of direct current capacity per year available for allocation. Additional information about this allocated bonus credit will be issued by the Department of the Treasury.

The Inflation Reduction Act also structures the tax provisions to ensure that new clean energy projects create good-paying jobs. The PTC and ITC offer bonus credit to projects that pay the prevailing wage or use registered apprentices. They also offer bonus credit for projects that meet certain domestic content requirements for steel, iron, and manufactured products, a provision designed to strengthen America's manufacturing base and the good-paying jobs needed to support it. The Zero-Emission Nuclear Power Production Credit also offers bonus credit for facilities meeting prevailing wage requirements.

The Environmental Protection Agency's Greenhouse Gas Reduction Fund, by statute, must dedicate at least $15 billion of the Fund's $27 billion appropriation to help low-income and disadvantaged communities deploy or benefit from projects that reduce greenhouse gas emissions and other air pollution. This requirement aligns with the President's Justice40 Initiative, which commits to delivering 40 percent of the benefits of certain federal investments to disadvantaged communities.

As noted above, the ITC offers bonus credit for solar and wind investments on Tribal land. In addition, the Inflation Reduction Act increases the Department of Energy's loan authority from $2 billion to $20 billion for the Tribal Energy Loan Guarantee Program, allowing the agency to offer more support to Tribal Energy Development Organizations and federally recognized Tribes, including Alaska Native villages or regional or village corporations, for energy-related projects.

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Production Tax Credit for Electricity from Renewables

Federal Agency: Department of the Treasury

IRA Statutory Location: 13101
Tax Code Location: 26 U.S. Code § 45

Tax Provision Description: Provides a tax credit for production of electricity from renewable sources.

Period of Availability: Projects beginning construction before 1/1/25.

Tax Mechanism: Production tax credit

New or Modified Provision: Modified and extended. Extended for projects beginning construction before 1/1/25. Modified to tie the value of the credit to meeting prevailing wage and registered apprenticeship requirements.

Eligible Recipients: Facilities generating electricity from wind, biomass, geothermal, solar, small irrigation, landfill and trash, hydropower, and marine and hydrokinetic renewable energy.

Tribal Eligibility: Yes

Base Credit Amount: 0.3 cents/kW, inflation adjusted[*]

Bonus Credit Amount: Credit is increased by 5 times for projects meeting prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here. Credit is increased by 10% if the project meets certain domestic content requirements for steel, iron, and manufactured products. Credit is increased by 10% if located in an energy community.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops. Applies to qualified facilities that are originally placed in service after December 31, 2022; applies separately with respect to each qualified facility.

Transferability: Yes

Stackability: Credit reduced for tax-exempt bonds with similar rules as section 45(b)(3).

Relevant Announcements: Request for Comments on Certain Energy Generation Incentives (10/5/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

[*] A previous version of this guidebook erroneously stated the base credit as $0.03/kW.

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Investment Tax Credit for Energy Property

Federal Agency: Department of the Treasury

IRA Statutory Location: 13102

Tax Code Location: 26 U.S. Code § 48

Tax Provision Description: Provides a tax credit for investment in renewable energy projects.

Period of Availability: Projects beginning construction before 1/1/25. For geothermal heat property, the base investment tax credit is 6% for the first 10 years, scaling down to 5.2% in 2033 and 4.4% in 2034.

Tax Mechanism: Investment tax credit

New or Modified Provision: Modified and extended to include standalone energy storage with capacity of at least 5 kWh, biogas, microgrid controllers (20MW or less), and interconnection property for small projects (5MW or less). Value of the credit tied to prevailing wage and registered apprenticeship requirements.

Eligible Recipients: Fuel cell, solar, geothermal, small wind, energy storage, biogas, microgrid controllers, and combined heat and power properties. For solar, includes (1) equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat, and (2) equipment that uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight or electrochromic glass that uses electricity to change its light transmittance properties in order to heat or cool a structure.

Tribal Eligibility: Yes

Base Credit Amount: 6% of qualified investment (basis of energy property)

Bonus Credit Amount: Credit is increased by 5 times for projects meeting prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here. Credit is increased by up to 10 percentage points for projects meeting certain domestic content requirements for steel, iron, and manufactured products. Credit is increased by up to 10 percentage points if located in an energy community.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops.

Transferability: Yes

Stackability: Credit reduced for tax-exempt bonds with similar rules as section 45(b)(3).

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Relevant Announcements: Request for Comments on Certain Energy Generation Incentives (10/5/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

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Increase in Energy Credit for Solar and Wind Facilities Placed in Service in Connection with Low-Income Communities

Federal Agency: Department of the Treasury

IRA Statutory Location: 13103, 13702(h)

Tax Code Location: 26 U.S. Code § 48(e), 26 U.S. Code § 48E(h)

Tax Provision Description: Provides an additional investment tax credit for small-scale solar and wind facilities in low-income communities.

Period of Availability: 48(e) begins in 2023 and ends when the 48E(h) Clean Electricity Investment Tax Credit becomes available in 2025 through 2032.

Tax Mechanism: Allocated investment credit, capped at 1.8 GW per year. Unused capacity carries over to following year.

New or Modified Provision: New

Eligible Recipients: Solar and wind facilities with a maximum net output of less than 5 MW, including associated energy storage technology.

Tribal Eligibility: Yes, facilities on Indian land qualify for the 10 percentage point bonus credit.

Base Credit Amount: 6% of qualified investment (basis of energy property)

Bonus Credit Amount: Credit is increased by 10 percentage points for facilities located in low-income communities or on Tribal land. Credit is increased by 20 percentage points for facilities that are part of certain federally subsidized housing programs or that offer at least 50 percent of the financial benefits of the electricity produced to low-income households. This bonus amount will require an application by the taxpayer, with a cumulative total of 1.8 GW of direct current capacity per year available for allocation.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops.

Transferability: Yes

Stackability: No rules

Relevant Announcements: Request for Comments on Certain Energy Generation Incentives (10/5/2022)

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Zero-Emission Nuclear Power Production Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13105

Tax Code Location: 26 U.S. Code § 45U

Tax Provision Description: Tax credit for electricity produced at a qualified nuclear power facility.

Period of Availability: Available for electricity produced and sold after 12/31/23, in tax years beginning after that date. Not available for tax years beginning after 12/31/32.

Tax Mechanism: Production tax credit

New or Modified Provision: New

Eligible Recipients: Existing nuclear power plants at time of enactment that are not eligible for the 45J credit.

Tribal Eligibility: Yes

Base Credit Amount: 0.3 cents/kWh, inflation adjusted after 2024. Credit amount phases down depending on the amount of energy produced and the gross receipts of the nuclear power facility.

Bonus Credit Amount: 5 times the base credit if prevailing wage requirement is met for workers doing alteration or repair at the facility. Initial guidance on the labor provisions is available here.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops.

Transferability: Yes

Stackability: Facilities eligible for the 45J advanced nuclear production tax credit are not eligible for the 45U credit. Payments from federal, state, or local zero-emission nuclear subsidies reduce the credit amount.

Relevant Announcements: Request for Comments on Certain Energy Generation Incentives (10/5/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act

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Clean Electricity Production Tax Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13701

Tax Code Location: 26 U.S. Code § 45Y

Tax Provision Description: Provides a technology-neutral tax credit for production of clean electricity. Replaces the production tax credit for electricity generated from renewable sources (extended in Section 13201 through 2024).

Period of Availability: Facilities placed in service after 12/31/24. Phase-out starts the later of (a) 2032 or (b) when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower.

Tax Mechanism: Production tax credit

New or Modified Provision: New

Eligible Recipients: Facilities generating electricity for which the greenhouse gas emissions rate is not greater than zero.

Tribal Eligibility: Yes

Base Credit Amount: 0.3 cents/kW, inflation adjusted[†]

Bonus Credit Amount: Credit is increased by 5 times for projects meeting prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here. Credit is increased by 10% for projects meeting certain domestic content requirements for steel, iron, and manufactured products. Credit is increased by 10% if located in an energy community.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops. Applies separately with regard to each facility.

Transferability: Yes

Stackability: Credit reduced for tax-exempt bonds with similar rules as section 45(b)(3).

Additional Information: Section 13703 offers an additional tax deduction for facilities or property qualifying for this tax credit. These facilities or property will be treated as a 5-year

[†] A previous version of this guidebook erroneously stated the base credit as $0.03/kW.

property for purposes of cost recovery; meaning, they will be able to deduct from their taxable income the depreciating value of their business assets, such as equipment, faster than the value actually declines. In practical terms, qualifying facilities or property will be able to take bigger deductions—leaving them with lower taxable income—in the earlier years of a clean energy investment.

Relevant Announcements: Request for Comments on Certain Energy Generation Incentives (10/5/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

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Clean Electricity Investment Tax Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13702

Tax Code Location: 26 U.S. Code § 48E

Tax Provision Description: Provides a technology-neutral tax credit for investment in facilities that generate clean electricity. Replaces the investment tax credit for facilities generating electricity from renewable sources (extended in Section 13202 through 2024).

Period of Availability: Facilities placed in service after 12/31/24. Phase-out starts the later of (a) 2032 or (b) when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower.

Tax Mechanism: Investment tax credit

New or Modified Provision: New

Eligible Recipients: Facilities that generate electricity with a greenhouse gas emissions rate that is not greater than zero and qualified energy storage technologies.

Tribal Eligibility: Yes

Base Credit Amount: 6% of qualified investment (basis)

Bonus Credit Amount: Credit is increased by 5 times for facilities meeting prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here. Credit is increased by up to 10 percentage points for facilities meeting certain domestic content requirements for steel, iron, and manufactured products. Credit is increased by up to 10 percentage points if located in an energy community.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops.

Transferability: Yes

Stackability: Credit reduced for tax-exempt bonds with similar rules as section 45(b)(3).

Additional Information: Section 13703 offers an additional tax deduction for facilities or property qualifying for this tax credit. These facilities or property will be treated as a 5-year property for purposes of cost recovery; meaning, they will be able to deduct from their taxable income the depreciating value of their business assets, such as equipment, faster than the value actually declines. In practical terms, qualifying facilities or property will be able to take bigger deductions—leaving them with lower taxable income—in the earlier years of a clean energy investment.

Relevant Announcements: Request for Comments on Certain Energy Generation Incentives (10/5/2022)
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Greenhouse Gas Reduction Fund

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of the Administrator

IRA Statutory Location: 60103

Program Description: To provide competitive grants to mobilize financing and leverage private capital for clean energy and climate projects that reduce greenhouse gas emissions, with an emphasis on projects that benefit low-income and disadvantaged communities. This includes (1) $7 billion to provide financial and technical assistance to low-income and disadvantaged communities to deploy or benefit from zero-emission technologies, including distributed technologies on residential rooftops, and to carry out other greenhouse gas emission reduction activities; and (2) $19.97 billion to provide financial and technical assistance for qualified projects that reduce or avoid greenhouse gas emissions and other forms of air pollution, with $8 billion specifically carved out for low-income and disadvantaged communities.

Funding Amount: $27,000,000,000

Period of Availability: To remain available to EPA until September 30, 2024. Must begin implementing the grant program by February 15, 2023 (180 days after enactment).

Funding Mechanism: Competitive grants

New or Existing Program: New

Eligible Recipients: (1) States, municipalities, Tribal governments, and "eligible recipients" are eligible for the $7 billion for low-income and disadvantaged communities. (2) 'Eligible recipients,' as defined in the statute, are eligible for the $19.97 billion, of which $8 billion is reserved for projects that provide financial and technical assistance in low-income and disadvantaged communities. The term 'eligible recipient' means a nonprofit organization that—(A) is designed to provide capital, including by leveraging private capital, and other forms of financial assistance for the rapid deployment of low- and zero-emission products, technologies, and services; (B) does not take deposits other than deposits from repayments and other revenue received from financial assistance provided using grant funds under this section; (C) is funded by public or charitable contributions; and (D) invests in or finances projects alone or in conjunction with other investors.

Tribal Eligibility: Tribal governments are eligible to be direct recipients for the $7 billion for low-income and disadvantaged communities.

Eligible Uses: Grant recipients will provide financial and technical assistance for zero-emission technology and qualified projects. The term 'zero-emission technology' means any technology that produces zero emissions of any air pollutant that is listed pursuant to section 108(a) of the

Clean Air Act (or any precursor to such an air pollutant); and any greenhouse gas.' The term 'qualified project' includes any project, activity, or technology that— (A) reduces or avoids greenhouse gas emissions and other forms of air pollution in partnership with, and by leveraging investment from, the private sector; or (B) assists communities in the efforts of those communities to reduce or avoid greenhouse gas emissions and other forms of air pollution.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: TBD

Relevant Announcements: EPA Greenhouse Gas Reduction Fund Announcements

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Funding for Department of Energy Loan Programs Office

Federal Agency: Department of Energy
Bureau or Office: Loan Programs Office

IRA Statutory Location: 50141

Program Description: To support the cost of loans for innovative clean energy technologies. IRA provides $40 billion of loan authority supported by $3.6 billion in credit subsidy for projects eligible for loan guarantees under section 1703 of the Energy Policy Act of 2005. This loan authority is open to all currently eligible Title 17 Innovative Clean Energy technology categories, including fossil energy and nuclear energy, and new categories of activities, including critical minerals processing, manufacturing, and recycling.

Funding Amount: $3,600,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Loan Guarantees

New or Existing Program: Existing

Eligible Recipients: States, Counties, Cities / Townships, Special Districts, Tribal Governments (federally recognized), Tribal Governments (other than federally recognized), Independent School Districts, Public Higher-Ed Institutions, Private Higher-Ed Institutions, Public Housing Authorities, Indian Housing Authorities, Nonprofits with 501(c)(3) status, Nonprofits without 501(c)(3) status, Small Businesses, Businesses (other than small businesses)

Tribal Eligibility: Yes

Eligible Uses: Undergoing rulemaking process to define eligible uses. Innovation requirement applies absent State Energy Financing Institution exemption.

Cost Share Requirements: N/A. Loan guarantee cannot exceed 80% of eligible project costs.

Formula Funding: No

SAM.gov Assistance Listing: 81.126

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Tribal Energy Loan Guarantee Program

Federal Agency: Department of Energy
Bureau or Office: Loan Programs Office

IRA Statutory Location: 50145

Program Description: To support Tribal investment in energy-related projects by providing direct loans or partial loan guarantees to federally recognized Tribes, including Alaska Native villages or regional or village corporations, or a Tribal Energy Development Organization that is wholly or substantially owned by a federally recognized Indian Tribe or Alaska Native Corporation. The Inflation Reduction Act increased the total loan authority from $2 billion to $20 billion and provides $75 million to carry out the program.

Funding Amount: $75,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Loan Guarantees

New or Existing Program: Existing

Eligible Recipients: DOE's Tribal energy financing is available to eligible Indian Tribes or entities, including Alaska Native village or regional or village corporations, or other financial institutions or Tribes meeting certain criteria established by DOE, that are able to demonstrate being eligible for the special programs and services provided by the United States to Indians because of their status as Indians, or their wholly-owned entities with appropriate legal authority. In addition, a Tribal Energy Development Organization (TEDO) that is wholly or substantially owned by a federally recognized Tribe is eligible.

Tribal Eligibility: Yes

Eligible Uses: DOE can support a broad range of projects and activities for the development of energy resources, products, and services that utilize commercial technology (innovative technology is permitted but not required). The following non-exclusive list of potential types of eligible projects is provided for illustrative purposes only: electricity generation, transmission and/or distribution facilities, utilizing renewable or conventional energy sources; energy storage facilities, whether or not integrated with any of the above; energy resource extraction, refining, or processing facilities; energy transportation facilities, including pipelines; district heating and cooling facilities; cogeneration facilities; distributed energy project portfolios, including portfolios of smaller distributed generation and storage facilities employed pursuant to a unified business plan.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: 81.126

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Revitalizing American Manufacturing to Build the Clean Energy Economy

Implementation of the Inflation Reduction Act presents an historic opportunity to advance America's economic and foreign policy objectives. As we invest billions of dollars to accelerate deployment of clean energy technologies across the country, the Administration is committed to designing programs that boost domestic manufacturing, create good-paying jobs, and reduce the country's dependence on foreign nations for critical components of the clean energy supply chain. President Biden made a promise to re-energize American manufacturing, and the Inflation Reduction Act makes good on that promise.

Funding Overview

The Inflation Reduction Act includes several funding and tax programs to boost domestic manufacturing of clean energy technologies and create good-paying manufacturing jobs that have staying power, including for those who are historically underrepresented in this field. Highlights include:

- **Up to $250 billion in new loan authority for Energy Infrastructure Reinvestment Financing.** The Inflation Reduction Act provides the Department of Energy with $5 billion in credit subsidy to support up to $250 billion in new loan authority to guarantee loans to projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operations or that enable operating energy infrastructure to avoid, reduce, use, or sequester greenhouse gases. This new program could support a variety of projects, such as building clean energy facilities on former coal mining sites, reconductoring transmission lines, or updating operating energy facilities with pollution control technologies. This program could offer particular benefits to energy communities.

- **Extension and Expansion of the Advanced Energy Project Credit**. The Inflation Reduction Act provides the Secretary of the Treasury with new authority to allocate $10 billion to projects that (1) re-equip, expand, or establish an industrial or manufacturing facility for the production or recycling of a range of renewable energy and energy efficiency equipment, carbon capture equipment, and advanced vehicles; (2) re-equip an industrial or manufacturing facility with equipment designed to reduce greenhouse gas emissions by at least 20 percent; or (3) re-equip, expand, or establish an industrial facility for the processing, refining, or recycling of critical materials. The law requires the Secretary of the Treasury to set aside 40 percent of the qualified investments for projects in energy communities where a coal mine or coal-fired electric generating unit has closed.

- **A new Advanced Manufacturing Production Credit.** The Inflation Reduction Act creates a new production tax credit for domestic manufacturing of components along the supply chain for solar modules, wind turbines, battery cells and modules, and critical minerals processing.

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The Advanced Energy Project Credit (48C) and Advanced Manufacturing Production Credit (45X) are eligible for direct pay and transferability. Section 13801 of the Inflation Reduction Act, adding Section 6417 of the Internal Revenue Code, extends many of the law's tax incentives, including the 48C and 45X credits, to entities that generally do not benefit from income tax credits, such as state, local, and Tribal governments and other tax-exempt entities. Certain businesses also can elect to receive the 45X tax credits in the form of direct payments. Section 13801 also adds Section 6418 of the Internal Revenue Code and makes certain tax credits transferable. In these cases, taxpayers that are generally ineligible for direct payment of credits may transfer all or a portion of certain credits to an unrelated party in exchange for cash.

Programs Covered in This Chapter				
Agency	**IRA Section**	**Tax Code Section**	**Program Name**	**Amount**
Department of the Treasury, Department of Energy	13501	48C	Advanced Energy Project Credit	$10,000,000,000
Department of the Treasury	13502	45X	Advanced Manufacturing Production Credit	-
Department of Energy	50144	-	Energy Infrastructure Reinvestment Financing	$5,000,000,000
Department of Energy	30001	-	Enhanced Use of Defense Production Act	$250,000,000
Department of Energy	50173	-	Availability of High-Assay Low-Enriched Uranium (HALEU)	$700,000,000

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Advanced Energy Project Credit

Federal Agency: Department of the Treasury, Department of Energy

IRA Statutory Location: 13501

Tax Code Location: 26 U.S. Code § 48C

Tax Provision Description: Provides a tax credit for investments in advanced energy projects, as defined in 26 USC § 48C(c)(1).

Period of Availability: The credit is available when the application and certification process begins and ends when credits are fully allocated.

Tax Mechanism: Allocated investment credit. 48C provides $10 billion of allocations, at least $4 billion of which must be allocated in energy communities.

New or Modified Provision: Modified and extended. 48C had been enacted in 2009 but was fully allocated after the 2nd allocation round in 2013. The Inflation Reduction Act provides $10 billion of allocations, directs a minimum share to energy communities, and expands eligibility to new types of projects.

Eligible Recipients: A project that (1) re-equips, expands, or establishes an industrial or manufacturing facility for the production or recycling of a range of clean energy equipment and vehicles; (2) re-equips an industrial or manufacturing facility with equipment designed to reduce greenhouse gas emissions by at least 20 percent; or (3) re-equips, expands, or establishes an industrial facility for the processing, refining, or recycling of critical materials.

Tribal Eligibility: Yes

Base Credit Amount: 6% of taxpayer's qualifying investment

Bonus Credit Amount: Businesses can claim a 30% credit for projects meeting prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops.

Transferability: Yes

Stackability: Cannot claim 45X credit for property produced at facilities that received the 48C credit.

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Relevant Announcements: Request for Comments on Energy Security Tax Credits for Manufacturing Under Sections 48C and 45X (10/5/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

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Advanced Manufacturing Production Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13502

Tax Code Location: 26 U.S. Code § 45X

Tax Provision Description: Provides a production tax credit for domestic manufacturing of components for solar and wind energy, inverters, battery components, and critical minerals.

Period of Availability: Credit for critical minerals is permanent starting in 2023. For other items, the full credit is available between 2023-2029 and phases down over 2030-2032.

Tax Mechanism: Production tax credit

New or Modified Provision: New

Eligible Recipients: Domestic manufacturers

Tribal Eligibility: Yes

Base Credit Amount: Varies by technology

Bonus Credit Amount: None

Direct Pay Eligibility: Yes, for tax-exempt organizations, states, political subdivisions, the Tennessee Valley Authority, Indian Tribal governments, Alaska Native Corporations, and rural electricity co-ops (applicable entities). Entities other than applicable entities are eligible for up to 5 years of direct pay (which expires at the end of 2032) for tax years after December 31, 2022 in which they produce eligible components if they make an election.

Transferability: Yes

Stackability: Cannot claim 45X credit for property produced at facilities that received the Inflation Reduction Act 48C credit.

Relevant Announcements: Request for Comments on Energy Security Tax Credits for Manufacturing Under Sections 48C and 45X (10/5/2022)

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Energy Infrastructure Reinvestment Financing

Federal Agency: Department of Energy
Bureau or Office: Loan Programs Office

IRA Statutory Location: 50144

Program Description: To guarantee loans to projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operations or that enable operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases. IRA places a total cap on loan guarantees of up to $250 billion and appropriates $5 billion in credit subsidy to support these loans under section 1706 of the Energy Policy Act of 2005.

Funding Amount: $5,000,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Loan Guarantees

New or Existing Program: New

Eligible Recipients: Program design and rulemaking is underway to refine definition of eligible recipients. Anticipated: States, Counties, Cities / Townships, Special Districts, Tribal Governments (federally recognized), Tribal Governments (other than federally recognized), Independent School Districts, Public Higher-Ed Institutions, Private Higher-Ed Institutions, Public Housing Authorities, Indian Housing Authorities, Nonprofits with 501(c)(3) status, Nonprofits without 501(c)(3) status, Small Businesses, Businesses (other than small businesses)

Tribal Eligibility: Yes

Eligible Uses: Projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operations, or enable operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases. Potential projects could include repurposing shuttered fossil energy facilities for clean energy production, retooling infrastructure from power plants that have ceased operations for new clean energy uses, or updating operating energy infrastructure with emissions control technologies, including carbon capture, utilization, and storage (CCUS).

Cost Share Requirements: N/A. Loan limits to be established via rulemaking.

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Enhanced Use of Defense Production Act of 1950

Federal Agency: Department of Energy
Bureau or Office: Office of Manufacturing and Energy Supply Chains

IRA Statutory Location: 30001

Program Description: Section 30001 appropriates $500 million to carry out the Defense Production Act (DPA). President Biden issued presidential determinations providing the Department of Energy (DOE) with the authority to use $250,000,000 of the DPA funding to accelerate domestic production of key energy technologies. In November 2022, DOE announced a notice of intent and request for information on a proposed $250 million DPA investment to accelerate domestic electric heat pump manufacturing.

Funding Amount: $250,000,000

Period of Availability: To remain available through September 30, 2024.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: Entities capable of establishing or expanding manufacturing capacity.

Tribal Eligibility: Yes

Eligible Uses: New domestic production facilities projects for heat pumps (air- or ground-source), heat pump water heaters, or heat pump system components where domestic production would address a clear supply-chain vulnerability. This focus area includes investment in workforce needed to support manufacturing through partnerships with labor unions and other workforce groups, apprenticeship programs, and pre-apprenticeship programs. Renovation of existing production facilities projects to transition from manufacture of other HVAC systems or water heating equipment that use fossil energy to produce electric heat pumps, heat pump water heaters, or heat pump system components. This focus area includes investment in workforce that can transition to support manufacturing of electric heat pumps through partnerships with labor unions and other workforce groups, apprenticeship programs, and pre-apprenticeship programs.

Cost Share Requirements: Limited to applicants seeking assistance for up to 50% of the cost

Formula Funding: No

SAM.gov Assistance Listing: TBD

Relevant Announcements: Biden-Harris Administration Announces $250 Million Investment from Inflation Reduction Act for Domestic Heat Pump Manufacturing (11/2/2022)

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Availability of High-Assay Low-Enriched Uranium (HALEU)

Federal Agency: Department of Energy
Bureau or Office: Office of Nuclear Energy

IRA Statutory Location: 50173

Program Description: To support the High-Assay Low-Enriched Uranium (HALEU) Availability Program activities directed in section 2001 of the Energy Act of 2020, including supporting the establishment of a diverse, market-based supply chain for HALEU. The HALEU Availability Program is essential to the demonstration and commercial deployment of advanced reactors, including two demonstration projects that received approximately $2.5 billion in funding through the Bipartisan Infrastructure Law.

Funding Amount: $700,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Grants, Contracts

New or Existing Program: Existing

Eligible Recipients: States, Counties, Cities / Townships, Special Districts, Tribal Governments (federally recognized), Tribal Governments (other than federally recognized), Independent School Districts, Public Higher-Ed Institutions, Private Higher-Ed Institutions, Public Housing Authorities, Indian Housing Authorities, Nonprofits with 501(c)(3) status, Nonprofits - without 501(c)(3) status, Small Businesses, Businesses (other than small businesses), and/or individuals.

Tribal Eligibility: Yes

Eligible Uses: Acquisition of HALEU, activities that support transportation of HALEU, and activities to support the availability of high-assay low-enriched uranium for civilian domestic research, development, demonstration, and commercial use.

Cost Share Requirements: Between 20%-50% on the financial assistance/grant depending on developmental or demonstration driven by the Energy Act of 2005. $200 million of the $700 million is well suited for cost-shared financial assistance.

Formula Funding: No

SAM.gov Assistance Listing: 81.009

Investing in America's Electricity Grid

An affordable, reliable, and clean electricity grid requires a historic investment in new and upgraded transmission lines. An estimated 70 percent of the grid's transmission lines and power transformers are more than 25 years old, making American communities, critical infrastructure, and the economy endure wasteful inefficiencies and experience disruptions in the face of extreme weather. The Inflation Reduction Act invests nearly $3 billion in the U.S. transmission system to help overcome the financial and permitting challenges that hinder the buildout of new high-capacity lines. These investments will not only address critical vulnerabilities but also connect Americans to cleaner and cheaper power, advancing the Biden-Harris Administration's ambitious goal of 100 percent carbon pollution-free electricity by 2035.

The funding in the Inflation Reduction Act builds on historic grid investments in the Bipartisan Infrastructure Law, including the Transmission Facilitation Program and the Grid Resilience Innovation Partnership, to help build transformative projects that modernize and increase the reliability of the power grid and provide American communities and businesses with better access to affordable, reliable, clean electricity. In January 2022, the Administration launched the Building a Better Grid Initiative to mobilize these and other resources and to support nationwide development of new and upgraded transmission lines. Additionally, the Department of Energy created the Grid and Transmission Programs Conductor to provide updated information on the application process for funding from the Bipartisan Infrastructure Law, Inflation Reduction Act, and other federal financing programs.

Funding Overview

The Inflation Reduction Act redoubles the Biden-Harris Administration's commitment to modernize America's electricity grid and accelerate buildout of long-distance transmission lines. Highlights include:

- **$2 billion for transmission facility financing.** This funding will allow the Department of Energy to carry out a direct loan program for the construction or modification of electric transmission facilities designated by the Secretary to be in the national interest.

- **$760 million in grants to facilitate the siting of interstate transmission lines**. With this funding from the Inflation Reduction Act, the Department of Energy will be able to provide grants to siting authorities to study the impacts of potential transmission lines, identify alternative siting corridors, and take other actions that reduce the time to site and permit a transmission project. The Department of Energy also can provide grants to a siting authority and other state, local, or Tribal governmental entities for economic development activities in communities that may be affected by the construction and operation of a transmission project.

See the table on the next page for a full list of the programs summarized in this chapter.

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Programs Covered in This Chapter			
Agency	**IRA Section**	**Program Name**	**Amount**
Department of Energy	50151	Transmission Facility Financing	$2,000,000,000
Department of Energy	50152	Grants to Facilitate the Siting of Interstate Electricity Transmission Lines	$760,000,000
Department of Energy	50153	Interregional and Offshore Wind Electricity Transmission Planning, Modeling and Analysis	$100,000,000

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Transmission Facility Financing

Federal Agency: Department of Energy
Bureau or Office: Grid Deployment Office

IRA Statutory Location: 50151

Program Description: To carry out a direct loan program for transmission facility financing for the construction or modification of electric transmission facilities designated by the Secretary to be in the national interest under section 216(a) of the Federal Power Act.

Funding Amount: $2,000,000,000

Period of Availability: To remain available through September 30, 2030. DOE shall not enter into loan agreements that could result in disbursements after September 30, 2031.

Funding Mechanism: Loan

New or Existing Program: New

Eligible Recipients: Transmission Developers

Tribal Eligibility: Yes

Eligible Uses: Construction or modification of transmission facilities designated by the Secretary to be in the national interest under section 216(a) of the Federal Power Act.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Grants to Facilitate the Siting of Interstate Electricity Transmission Lines

Federal Agency: Department of Energy
Bureau or Office: Grid Deployment Office

IRA Statutory Location: 50152

Program Description: To facilitate siting of transmission projects by providing grants to siting authorities to expedite the siting and permitting process and providing grants for economic development activities in communities that may be affected by a transmission project.

Funding Amount: $760,000,000

Period of Availability: To remain available through September 30, 2029, provided that the Secretary shall not enter into any grant agreement pursuant to this section that could result in any outlays after September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: Transmission siting authority, or other state, local, or Tribal governmental entity

Tribal Eligibility: Yes

Eligible Uses: (1) Grants to siting authorities for analysis, examination of alternative siting corridors, participation in regulatory proceedings in other jurisdictions related to a transmission project, or other measures that reduce the time to site and permit a transmission project. A siting authority must agree, in writing, to reach a final siting or permitting decision not later than 2 years after the date on which a grant is provided. (2) Grants for economic development activities for communities that may be affected by the construction and operation of transmission projects. The Secretary may only disburse grant funds for economic development activities to (a) a siting authority upon approval by the siting authority of the transmission project; and (b) to any other state, local, or Tribal governmental entity upon commencement of construction of the transmission project.

Cost Share Requirements: Federal cost share shall not exceed 50% for grants to siting authorities for participation in regulatory proceedings in other jurisdictions and at FERC. No specified cost share requirement for other grants under this provision.

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Interregional and Offshore Wind Electricity Transmission Planning, Modeling and Analysis

Federal Agency: Department of Energy
Bureau or Office: Grid Deployment Office

IRA Statutory Location: 50153

Program Description: To conduct transmission planning, modeling, and analysis regarding interregional electricity transmission and transmission of electricity generated by offshore wind and to convene relevant stakeholders to discuss these issues.

Funding Amount: $100,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: N/A

Tribal Eligibility: N/A

Eligible Uses: Funding to (1) convene relevant stakeholders and (2) conduct transmission planning, modeling, and analysis of interregional and offshore wind transmission.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Investing in Affordable and Reliable Clean Energy in Rural America and on Tribal Lands

Nearly one in six Americans—approximately 55 million people—live in a remote or rural community. Underserved rural and Tribal communities may pay more for energy as a percentage of their household income and may not have the resources—individually or as community—to invest in clean electricity systems. Additionally, many rural people receive their electricity from nonprofit electric cooperatives that often rely on older coal-fired power plants and have taken on significant debt.

The Inflation Reduction Act provides more than $12 billion to partner with rural and Tribal communities to help them access more clean energy, make their energy systems more reliable and resilient, and lower their electricity costs.

Funding Overview

The Inflation Reduction Act invests in rural and Tribal communities to expand access to affordable clean energy that cuts pollution and reduces energy costs for families. Highlights include:

- **$9.7 billion for the U.S. Department of Agriculture (USDA) electric infrastructure loan and loan guarantee program for rural electric cooperatives.** This funding will support rural electric cooperatives that achieve greenhouse gas emissions reductions by making energy efficiency improvements to electric generation and transmission systems or purchasing and deploying clean energy and carbon capture and storage systems.

- **$1 billion for electric infrastructure loans for renewable energy in Rural America,** which will finance the construction of distribution, transmission, and generation facilities for renewable electricity (from solar, wind, hydropower, biomass, or geothermal), including system improvements and replacements to improve service in rural areas, as well as demand side management, energy conservation, and renewable energy systems.

- **More than $2 billion to expand USDA's Rural Energy for America Program (REAP).** REAP provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or energy efficiency improvements. The Inflation Reduction Act sets aside a portion of this funding for underutilized renewable energy technologies.

- **$150 million to the Tribal Electrification Program** at the Department of the Interior. This funding for Tribes and Tribal organizations will support the powering of unelectrified Tribal homes with zero-emissions energy systems and retrofitting of already electrified Tribal homes to zero-emissions systems.

See the table on the next page for a full list of the programs summarized in this chapter.

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Programs Covered in This Chapter			
Agency	**IRA Section**	**Program Name**	**Amount**
Department of Agriculture	22001	Electric Loans for Renewable Energy	$1,000,000,000
Department of Agriculture	22002(a)	Rural Energy for America Program (REAP)	$1,721,632,500
Department of Agriculture	22002(b)	Rural Energy for America Program (REAP) - Underutilized Renewable Energy Technologies	$303,817,500
Department of Agriculture	22004	USDA Assistance for Rural Electric Cooperatives	$9,700,000,000
Department of the Interior	80003	Tribal Electrification Program	$150,000,000

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Electric Loans for Renewable Energy

Federal Agency: Department of Agriculture
Bureau or Office: Rural Utilities Service

IRA Statutory Location: 22001

Program Description: To finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacements required to furnish and improve electric service in rural areas, as well as demand side management, energy conservation programs, and on-grid and off-grid renewable energy systems.

Funding Amount: $1,000,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Loans, Loan Forgiveness

New or Existing Program: Existing

Eligible Recipients: State and local governmental entities; Federally-recognized Tribes; Nonprofits, including cooperatives and limited dividend or mutual associations; For-profit businesses (must be a corporation or limited liability company)

Tribal Eligibility: Yes

Eligible Uses: For cost of loan projects under Section 317 of the Rural Electrification Act of 1936 (7 U.S.C. 940g) for facilities that generate renewable electricity (from solar, wind, hydropower, biomass, or geothermal source) for resale to rural and nonrural residents. Includes projects that store electricity in support of 317 loan projects.

Cost Share Requirements: Up to 50%, but may be waived at the discretion of the Secretary.

Formula Funding: No

SAM.gov Assistance Listing: 10.859

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Rural Energy for America Program (REAP)

Federal Agency: Department of Agriculture
Bureau or Office: Rural Business-Cooperative Service

IRA Statutory Location: 22002(a)

Program Description: To provide guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements. Agricultural producers may also apply for new energy efficient equipment and new system loans for agricultural production and processing.

Funding Amount: $1,721,632,500

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: Existing

Eligible Recipients: Rural small businesses, agricultural producers

Tribal Eligibility: Yes

Eligible Uses: Funds may be used for renewable energy systems, such as biomass (e.g., biodiesel and ethanol, anaerobic digesters, solid fuels); geothermal for electric generation or direct use; hydropower below 30 MW; hydrogen; small and large wind generation; small and large solar generation; ocean (tidal, current, thermal) generation. Funds also may be used for the purchase, installation and construction of energy efficiency improvements, such as high efficiency heating, ventilation and air conditioning systems (HVAC); insulation; lighting; cooling or refrigeration units; doors and windows; electric, solar or gravity pumps for sprinkler pivots; switching from a diesel to electric irrigation motor; replacement of energy-inefficient equipment.

Agricultural producers may use guaranteed loan funds to install energy efficient equipment and systems for agricultural production or processing.

Cost Share Requirements: Up to 50%

Formula Funding: No

SAM.gov Assistance Listing: 10.868

Relevant Announcements: USDA Invests in Critical Infrastructure to Lower Costs, Create Jobs, and Combat Climate Change Across Rural America (12/15/2022)

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Rural Energy for America Program (REAP) – Underutilized Renewable Energy Technologies

Federal Agency: Department of Agriculture
Bureau or Office: Rural Business-Cooperative Service

IRA Statutory Location: 22002(b)

Program Description: To provide guaranteed loan financing and grant funding to agricultural producers and rural small businesses for underutilized renewable energy technologies.

Funding Amount: $303,817,500

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: Existing

Eligible Recipients: Rural small businesses, agricultural producers

Tribal Eligibility: Yes

Eligible Uses: Underutilized renewable energy technologies

Cost Share Requirements: Up to 50%

Formula Funding: No

SAM.gov Assistance Listing: 10.868

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USDA Assistance for Rural Electric Cooperatives

Federal Agency: Department of Agriculture
Bureau or Office: Rural Utilities Service

IRA Statutory Location: 22004

Program Description: To fund the construction of electric distribution, transmission, and generation facilities for rural electric cooperatives, including system improvements and replacements that achieve the greatest reduction in carbon dioxide, methane, and nitrous oxide emissions in rural areas, as well as demand side management, energy conservation programs, and on-grid and off-grid renewable energy systems.

Funding Amount: $9,700,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Loans, modifications of loans, the cost of loans and modifications, and other financial assistance (including grants)

New or Existing Program: New

Eligible Recipients: Electric cooperatives that are or have been Rural Utilities Service borrowers; electric cooperatives serving a predominantly rural area; or a wholly or jointly owned subsidiary of such cooperatives.

Tribal Eligibility: Yes

Eligible Uses: Loans, modifications of loans (including debt relief), and other financial assistance (including grants) to achieve the greatest reduction in carbon dioxide, methane, and nitrous oxide emissions associated with rural electric systems through the purchase of renewable energy, renewable energy systems, zero-emission systems, and carbon capture and storage systems, to deploy such systems, or to make energy efficiency improvements to electric generation and transmission systems of the eligible entity.

Cost Share Requirements: Varies, depending on product

Formula Funding: No

SAM.gov Assistance Listing: 10.859

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Tribal Electrification Program

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Indian Affairs

IRA Statutory Location: 80003

Program Description: To provide financial and technical assistance to Tribes to increase the number of Tribal homes with zero-emission electricity.

Funding Amount: $150,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Direct Federal Spending, Grants, Contracts, or Financial Assistance Agreements

New or Existing Program: New

Eligible Recipients: Direct Federal Spending and Tribes

Tribal Eligibility: Yes

Eligible Uses: For (1) the provision of electricity to unelectrified Tribal homes through zero-emissions energy systems; (2) transitioning electrified Tribal homes to zero-emissions energy systems; and (3) associated home repairs and retrofitting necessary to install the zero-emissions energy systems.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Incentivizing and Supporting Deployment of Clean Vehicles

The transportation sector is the largest source of greenhouse gas emissions in the United States, accounting for 27 percent of all emissions in 2020. Transportation also is a major source of smog-forming nitrogen oxides and particulate matter, which can trigger asthma attacks and other health problems for the most vulnerable among us. President Biden set a goal that at least 50 percent of all new passenger cars and light trucks sold in 2030 be zero-emission vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles (EVs). In October 2022, President Biden announced the American Battery Materials Initiative, a new effort to mobilize the entire government in securing a reliable and sustainable supply of critical minerals used for power and electric vehicles. The Inflation Reduction Act tackles these priorities comprehensively, by combining incentives for consumers and businesses to purchase clean vehicles with programs to expand manufacturing and sourcing of vehicle components and critical minerals in the United States.

The investments in the Inflation Reduction Act build on the $7.5 billion provided by the Bipartisan Infrastructure Law to deploy a national network of 500,000 electric vehicle chargers; more than $7 billion to ensure domestic manufacturers have the critical minerals and other components necessary to make EV batteries; and $10 billion for clean transit and school buses at the Department of Transportation and Environmental Protection Agency. The CHIPS and Science Act invests in expanding America's manufacturing capacity for the semiconductors used in electric vehicles and chargers. Together, this package of legislation will create good jobs along the full supply chain for the automotive sector, from components and equipment manufacturing and processing to final assembly, and incentivize the development of reliable EV battery supply chains. It also will reduce greenhouse gas emissions and other air pollutants from cars and trucks, which have a disproportionate impact on the air quality in low-income communities and communities of color.

Funding Overview

The Inflation Reduction Act provides billions of dollars in consumer incentives to put more clean vehicles on the road and commits to making more of those vehicles and their components in the United States. Highlights include:

- **Clean Vehicle Credit** for consumers purchasing new qualifying clean vehicles, including battery electric, plug-in hybrid, or fuel cell electric vehicles. To qualify for the maximum $7,500 credit, the vehicle must meet certain standards for North American assembly; the battery's components must meet certain standards for manufacturing or assembly; and the battery's critical minerals must meet certain requirements for sourcing or processing in the United States or from trusted trade partners.

- **Previously-Owned Clean Vehicles Credit** to support used vehicle buyers who choose to go electric. Most families in the United States buy used, and this first-of-kind credit of up to $4,000 will make it more affordable to go electric and save money at the pump.

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- **Commercial Clean Vehicles Credit** to defray up to 30 percent of the cost of replacing diesel- or gas-powered commercial vehicles—ranging from cars and pick-up trucks to long-haul trucks—with electric vehicles. A commercial vehicle owner choosing to replace an existing vehicle with a cleaner but not fully electric alternative is eligible for a credit of up to 15 percent.

- **Three programs to grow the domestic supply chain for clean vehicles.** The Inflation Reduction Act includes billions of dollars to support vehicle manufacturers looking to expand their domestic production of clean vehicles. The Inflation Reduction Act provides $3 billion to the Department of Energy's **Advanced Technology Vehicle Manufacturing Loan Program** for loans to manufacture clean vehicles and their components in the United States, including newly authorized uses from the Bipartisan Infrastructure Law, such as medium- and heavy-duty vehicles, locomotives, maritime vessels, aviation, and hyperloop. The Inflation Reduction Act also provides $2 billion to the Department of Energy for **Domestic Manufacturing Conversion Grants**, which will fund manufacturers' retooling of production lines for clean vehicles. As described earlier in this guidebook, the law also creates a new **Advanced Manufacturing Production Credit** for the domestic production and sale of qualified components for clean energy projects, including batteries and critical minerals.

- **$1 billion for the Clean Heavy-Duty Vehicle Program** at the Environmental Protection Agency. This program will invest $1 billion to help Tribal, state, and local governments and other entities offset the cost of replacing heavy-duty Class 6 and 7 commercial vehicles with zero-emission vehicles, deploy supporting infrastructure, and train and develop the necessary workforce. At least $400 million must go to areas not meeting national air quality standards. (This program is described in more detail later in the guidebook on page 88).

Programs Covered in This Chapter				
Agency	**IRA Section**	**Tax Code Section**	**Program Name**	**Amount**
Department of the Treasury	13401	30D	Clean Vehicle Credit	-
Department of the Treasury	13402	25E	Credit for Previously-Owned Clean Vehicles	-
Department of the Treasury	13403	45W	Credit for Qualified Commercial Clean Vehicles	-
Department of the Treasury	13404	30C	Alternative Fuel Vehicle Refueling Property Credit	-
Department of Energy	50142	-	Advanced Technology Vehicle Manufacturing Loan Program	$3,000,000,000
Department of Energy	50143	-	Domestic Manufacturing Conversion Grants	$2,000,000,000

The Alternative Fuel Vehicle Refueling Property Credit (30C) and Credit for Qualified Commercial Clean Vehicles (45W) are eligible for direct pay. Section 13801 of the Inflation Reduction Act, adding Section 6417 of the Internal Revenue Code, extends many of the law's tax incentives, including the 30C and 45W credits, to entities that generally do not benefit from income tax credits, such as state, local, and Tribal governments and other tax-exempt entities. Specifically, these entities can elect to receive these tax credits in the form of direct payments. **The 30C tax credit also is transferable.** Section 13801 adds Section 6418 of the Internal Revenue Code and makes certain tax credits transferable. Taxpayers that are generally ineligible for direct payment of credits may transfer all or a portion of certain credits to an unrelated party in exchange for cash. As provided in other sections of the Inflation Reduction Act, starting in 2024, buyers of new and pre-owned clean vehicles may transfer **the Clean Vehicle Credit (30D) and Credit for Previously-Owned Clean Vehicles (25E)** to dealers in exchange for a reduction in price at the point of sale.

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Clean Vehicle Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13401

Tax Code Location: 26 U.S. Code § 30D

Tax Provision Description: Provides a tax credit for purchasers of clean vehicles.

Period of Availability: Generally, vehicles placed in service in 2023-2032. Some of the 30D rules have differing timeframes.

Tax Mechanism: Tax credit for consumers

New or Modified Provision: Modified and extended. Credit extended with new rules pertaining to final assembly in the United States, critical minerals/battery components, and foreign entities of concern. Per manufacturer limit is lifted.

Eligible Recipients: The tax credit is not available for consumers who have adjusted gross incomes for the current or preceding year above $300,000 (couples), $225,000 (heads of household), $150,000 (singles). Not inflation adjusted.

Tribal Eligibility: Yes, point of sale transfer to registered dealers (definition of "dealer" includes persons licensed by Indian Tribal governments to engage in the sale of vehicles)

Base Credit Amount: $0

Bonus Credit Amount: $3,750 credit for vehicles meeting critical minerals requirement. The vehicle must contain a threshold percentage of critical minerals extracted or processed in the United States or in a country with which the United States has a free trade agreement, or recycled in North America. Additional $3,750 credit for vehicles meeting the requirement that a threshold percentage of battery components be manufactured or assembled in North America. Vehicles must meet other requirements, including final assembly in North America and MSRP limits (generally $55,000; for vans, SUVs, and pickups $80,000). Starting in 2024, qualifying vehicles cannot have battery components manufactured or assembled by a foreign entity of concern. Starting in 2025, qualifying vehicles' batteries cannot contain critical minerals extracted, processed, or recycled by a foreign entity of concern.

Direct Pay Eligibility: No

Transferability: Yes. Starting in 2024, transferable only to the dealer at point of sale under section 30D(g) but not under section 6418.

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Stackability: Cannot claim both 30D credit and 45W credit.

Relevant Announcements: Plug-in Electric Drive Vehicle Credit at a Glance (8/16/2022)
Frequently Asked Questions on the Inflation Reduction Act's Initial Changes to the Electric Vehicle Tax Credit (8/16/2022)
Request for Comments on Credits for Clean Vehicles (10/5/2022)
Treasury and IRS set out procedures for manufacturers, sellers of clean vehicles (12/12/2022)
Frequently Asked Questions About the New, Previously-Owned and Qualified Commercial Clean Vehicles Credit (12/29/2022)
Notice of Intent to Propose Regulations on the Tax Credit for New Clean Vehicles (12/29/2022)

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Credit for Previously-Owned Clean Vehicles

Federal Agency: Department of the Treasury

IRA Statutory Location: 13402

Tax Code Location: 26 U.S. Code § 25E

Tax Provision Description: To provide a tax credit for purchasers of pre-owned clean vehicles

Period of Availability: Generally, vehicles placed in service in 2023-2032.

Tax Mechanism: Tax credit for consumers

New or Modified Provision: New

Eligible Recipients: Tax credit is not available for consumers who have adjusted gross incomes for the current or preceding year above $150,000 (couples), $112,500 (heads of household), $75,000 (singles). Individuals can claim only once per three years. Vehicles must be sold by a dealer; the sale price must be $25,000 or less; and it can only be claimed once per vehicle.

Tribal Eligibility: Yes, point of sale transfer to registered dealers (definition of "dealer" includes persons licensed by Indian Tribal governments to engage in the sale of vehicles)

Base Credit Amount: The lesser of $4,000 or 30% of sale price

Bonus Credit Amount: None

Direct Pay Eligibility: No

Transferability: Yes. Starting in 2024, transferable only to the dealer at point of sale under section 25E(f) but not under section 6418.

Stackability: No rules

Relevant Announcements:
Request for Comments on Credits for Clean Vehicles (10/5/2022)
Treasury and IRS set out procedures for manufacturers, sellers of clean vehicles (12/12/2022)
Frequently Asked Questions About the New, Previously-Owned and Qualified Commercial Clean Vehicles Credit (12/29/2022)

Credit for Qualified Commercial Clean Vehicles

Federal Agency: Department of the Treasury

IRA Statutory Location: 13403

Tax Code Location: 26 U.S. Code § 45W

Tax Provision Description: Provides a tax credit for purchasers of qualified commercial clean vehicles

Period of Availability: Vehicles placed in service after 1/1/23 and acquired before 1/1/33.

Tax Mechanism: Tax credit for commercial use or lease

New or Modified Provision: New

Eligible Recipients: Businesses that acquire motor vehicles or mobile machinery for use or lease; tax-exempt entities that acquire them for use.

Tribal Eligibility: Yes

Base Credit Amount: The amount of the credit is the lesser of (a) 15% of the vehicle's basis (i.e. its cost to the purchaser) or 30% for vehicles without internal combustion engines, or (b) the amount the purchase price exceeds the price of a comparable internal combustion vehicle. The credit is capped at $7,500 for vehicles < 14,000 lbs and $40,000 for all other clean vehicles.

Bonus Credit Amount: None

Direct Pay Eligibility: Yes, for states, political subdivisions, tax-exempt organizations (other than co-ops described in section 521), and Indian Tribal governments.

Transferability: No

Stackability: Cannot claim both the 30D credit and 45W credit.

Relevant Announcements: Request for Comments on Section 45W Credit for Qualified Commercial Clean Vehicles (11/3/2022)
Treasury and IRS Set Out Procedures for Manufacturers, Sellers of Clean Vehicles (12/12/2022)
Frequently Asked Questions About the New, Previously-Owned and Qualified Commercial Clean Vehicles Credit (12/29/2022)
Notice on the "Incremental Cost" of Vehicles Eligible for the Commercial Clean Vehicle Tax Credit (12/29/2022)

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Alternative Fuel Vehicle Refueling Property Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13404

Tax Code Location: 26 U.S. Code § 30C

Tax Provision Description: Provides a tax credit for alternative fuel vehicle refueling and charging property in low-income and rural areas. Alternative fuels include electricity, ethanol, natural gas, hydrogen, biodiesel, and others.

Period of Availability: January 1, 2023-December 31, 2032

Tax Mechanism: Tax credit for consumers and businesses.

New or Modified Provision: Extended and modified to include prevailing wage and registered apprenticeship requirements for businesses claiming the credit. Adds bidirectional charging equipment, charging equipment for 2- and 3-wheel electric vehicles. Limited to low-income and non-urban areas.

Eligible Recipients: The qualified alternative fuel vehicle refueling property must be for clean-burning fuels, as defined in the statute, and must be located in low-income or rural areas.

Tribal Eligibility: Yes

Base Credit Amount: 6% of the cost for businesses, limited to a $100,000 credit per item of property for businesses. 30% for individuals, limited to $1,000.

Bonus Credit Amount: Businesses can claim a 30% credit for projects meeting prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is here.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops.

Transferability: Yes, for property used in a trade or business.

Stackability: No rules

Relevant Announcements: Request for Comments on Section 30C Alternative Fuel Vehicle Refueling Property Credit (11/3/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

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Advanced Technology Vehicle Manufacturing Loan Program

Federal Agency: Department of Energy
Bureau or Office: Loan Programs Office

IRA Statutory Location: 50142

Program Description: To provide loans to support the manufacture of eligible advanced technology vehicles and components under the Advanced Technology Vehicles Manufacturing Loan Program (ATVM), including newly authorized uses from the Bipartisan Infrastructure Law. Expanded uses include medium- and heavy-duty vehicles, locomotives, maritime vessels including offshore wind vessels, aviation, and hyperloop. IRA removed the $25 billion cap on ATVM loans and appropriates $3 billion in credit subsidy to support these loans.

Funding Amount: $3,000,000,000

Period of Availability: To remain available through September 30, 2028.

Funding Mechanism: Loans

New or Existing Program: Existing with Substantive Modifications

Eligible Recipients: A manufacturer of eligible vehicles or of components or materials that support eligible vehicles' fuel economy performance.

Tribal Eligibility: Yes

Eligible Uses: Manufacturing a range of advanced technology vehicles and their components, including light-duty vehicles, medium- and heavy-duty vehicles, locomotives, maritime vessels including offshore wind vessels, aviation, and hyperloop. The Inflation Reduction Act specifies that funds may be used for the costs of providing direct loans for reequipping, expanding, or establishing a manufacturing facility in the United States to produce advanced technology vehicles only if those vehicles emit, under any possible operational mode or condition, low or zero exhaust emissions of greenhouse gases.

Cost Share Requirements: N/A. Loan amount cannot exceed 80% of eligible project costs.

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Domestic Manufacturing Conversion Grants

Federal Agency: Department of Energy
Bureau or Office: Office of Manufacturing and Energy Supply Chains

IRA Statutory Location: 50143

Program Description: To provide cost-shared grants for domestic production of efficient hybrid, plug-in electric hybrid, plug-in electric drive, and hydrogen fuel cell electric vehicles.

Funding Amount: $2,000,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: Recipients should be manufacturing for eligible vehicle types. Includes small businesses, businesses (other than small businesses), and/or individuals.

Tribal Eligibility: No

Eligible Uses: Domestic production of efficient hybrid, plug-in electric hybrid, plug-in electric drive, and hydrogen fuel cell electric vehicles or components for these vehicles.

Cost Share Requirements: 50%

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Incentivizing and Supporting Development and Use of Cleaner Transportation Fuels

Our dynamic economy depends on moving people and goods around through a variety of transportation modes. As noted previously, the transportation sector is the largest source of greenhouse gas emissions in the United States, and a bulk of those emissions come from light-duty vehicles and heavy-duty freight trucks. But experts predict that emissions from the aviation and maritime sectors will steadily increase over the coming decades without policy intervention. In addition to improving efficiency and electrifying transportation modes, one way to reduce emissions from this sector—and make American households less vulnerable to the price volatility of the oil market—is to make liquid fuels cleaner and diversify their sources. The Inflation Reduction Act includes several tax incentives and programs to increase domestic production of clean biofuels and sustainable aviation fuels.

Funding Overview

The Inflation Reduction Act incentivizes and invests in a range of non-petroleum-based fuels for cars, trucks, and the aviation sector. Highlights include:

- **$500 million for the Higher Blend Infrastructure Incentive Program** at the U.S. Department of Agriculture (USDA), the goal of which is to increase the sale and use of higher blends of ethanol and biodiesel. The program will provide grants to improve infrastructure for blending, storing, distributing, and supplying biofuels, including higher ethanol and biodiesel blends. This investment builds on the Biden Administration's efforts, led by USDA, to expand biofuels infrastructure to open up new market opportunities for sustainable fuel sources and lower energy costs for American families.

- **Extension of existing tax incentives for alternative fuels and creation of a new Clean Fuel Production Credit**. The Inflation Reduction Act extends existing tax incentives for a range of alternative fuels, including biodiesel, renewable diesel, and second-generation biodiesel, through the end of 2024. Beginning in 2025, a new emissions-based Clean Fuel Production Credit will take effect to incentivize production of fuels with low life-cycle greenhouse gas emissions. Producers can earn bonus credits by meeting prevailing wage and registered apprenticeship requirements. The law also extends and modifies the Alternative Fuel Vehicle Refueling Property Credit, which supports fueling stations in low-income and rural areas for alternative liquid fuels as well as electric charging stations.

- **Historic incentives and support for sustainable aviation fuels.** The Inflation Reduction Act includes a **Sustainable Aviation Fuel Credit** to incentivize the production of sustainable aviation fuels that result in at least 50 percent less greenhouse gas emissions than petroleum-based jet fuel. It also includes $297 million for the **Alternative Fuel and Low-Emission Aviation Technology Program** at the Federal Aviation Administration (FAA). FAA will award grants to projects that produce, transport, blend, or store sustainable aviation fuel or projects that develop, demonstrate, or apply low-emission aviation technologies, which are technologies that significantly improve aircraft fuel efficiency or reduce greenhouse gas emissions. These programs are a part of the Biden Administration's comprehensive strategy to deploy technologies to produce sustainable aviation fuels on a commercial scale, including the Sustainable Aviation Fuel Grand Challenge, a joint effort of the Department of Energy, Department of Transportation, and Department of Agriculture.

Programs Covered in This Chapter

Agency	IRA Section	Tax Code Section	Program Name	Amount
Department of the Treasury	13201	40A, 6426(c), 6427(e)	Extension of Tax Credits for Biodiesel and Renewable Diesel	-
Department of the Treasury	13201	6426(d), 6426(e), 6427(e)	Extension of Tax Credit for Alternative Fuels	
Department of the Treasury	13202	40	Extension of Second-Generation Biofuel Incentives	-
Department of the Treasury	13704	45Z	Clean Fuel Production Credit	-
Department of Agriculture	22003	-	Biofuel Infrastructure and Agriculture Product Market Expansion (Higher Blend Infrastructure Incentive Program)	$500,000,000
Environmental Protection Agency	60108	-	Funding for Section 211 of the Clean Air Act	$15,000,000
Department of the Treasury	13203	40B	Sustainable Aviation Fuel Credit	-
Department of Transportation	40007(a)(1)	-	Fueling Aviation's Sustainable Transition through Sustainable Aviation Fuels	$244,530,000
Department of Transportation	40007(a)(2)	-	Fueling Aviation's Sustainable Transition – Technology	$46,530,000

The Clean Fuel Production Credit (45Z) is eligible for direct pay. Section 13801 of the Inflation Reduction Act, adding Section 6417 of the Internal Revenue Code, extends many of the law's tax incentives, including the 45Z credit, to entities that generally do not benefit from income tax credits, such as state, local, and Tribal governments and other tax-exempt entities. Specifically, these entities can elect to receive these tax credits in the form of direct payments. **The 45Z tax credit also is transferable.** Section 13801 adds Section 6418 of the Internal Revenue Code and makes certain tax credits transferable. Taxpayers that are generally ineligible for direct payment of credits may transfer all or a portion of certain credits to an unrelated party in exchange for cash.

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Extension of Tax Credits for Biodiesel and Renewable Diesel

Federal Agency: Department of the Treasury

IRA Statutory Location: 13201

Tax Code Location: 26 U.S. Code § 40A, 26 U.S. Code § 6426(c), 26 U.S. Code § 6427(e)

Tax Provision Description: To provide tax credits for biodiesel and renewable diesel.

Period of Availability: Through 12/31/24

Tax Mechanism: Income tax credit and excise tax credit

New or Modified Provision: Extended from 12/31/2022 through 12/31/2024.

Eligible Recipients: Producers of biodiesel, biodiesel mixtures, and renewable diesel.

Tribal Eligibility: No

Base Credit Amount: $1.00 per gallon for biodiesel, biodiesel mixtures, and renewable diesel. Additional $0.10 credit for small agri-diesel producers. In addition, there is a $1.00-per-gallon excise tax credit for biodiesel and renewable diesel mixtures.

Bonus Credit Amount: N/A

Direct Pay Eligibility: No

Transferability: No

Stackability: No rules

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Extension of Tax Credits for Alternative Fuels

Federal Agency: Department of the Treasury

IRA Statutory Location: 13201

Tax Code Location: 26 U.S. Code § 6426(d), 26 U.S. Code § 6426(e), 26 U.S. Code § 6427(e)

Tax Provision Description: To provide tax credits for alternative fuels.

Period of Availability: Through 12/31/24

Tax Mechanism: Excise tax credit

New or Modified Provision: Extended from 12/31/2021 through 12/31/2024.

Eligible Recipients: Registered producers

Tribal Eligibility: No

Base Credit Amount: $0.50 per gallon for alternative fuels and alternative fuel mixtures.

Bonus Credit Amount: N/A

Direct Pay Eligibility: No

Transferability: No

Stackability: Fuels eligible for the biodiesel mixture excise tax credit or the income tax credits under sections 40A or 40B (sustainable aviation fuels) are not eligible for the alternative fuels or alternative fuels mixture excise tax credits.

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Extension of Second-Generation Biofuel Incentives

Federal Agency: Department of the Treasury

IRA Statutory Location: 13202

Tax Code Location: 26 U.S. Code § 40

Tax Provision Description: To provide an income tax credit for second-generation biofuel production.

Period of Availability: Through 12/31/24

Tax Mechanism: Income tax credit (general business credit, nonrefundable)

New or Modified Provision: Extended from 12/31/2021 through 12/31/2024.

Eligible Recipients: Registered producers of second-generation biofuels

Tribal Eligibility: No

Base Credit Amount: $1.01 per gallon

Bonus Credit Amount: N/A

Direct Pay Eligibility: No

Transferability: No

Stackability: Fuel eligible for the section 40 credit is not eligible for the credits under section 40A/6426.

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Clean Fuel Production Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13704

Tax Code Location: 26 U.S. Code § 45Z

Tax Provision Description: Provides a tax credit for domestic production of clean transportation fuels, including sustainable aviation fuels.

Period of Availability: Fuel produced after 12/31/24 and used or sold before 12/31/27.

Tax Mechanism: Production tax credit

New or Modified Provision: New

Eligible Recipients: Registered producers in the United States. Fuels with less than 50 kilograms of carbon dioxide equivalent per million British thermal units (CO2e per mmBTU) qualify as clean fuels eligible for credits.

Tribal Eligibility: Yes

Base Credit Amount: The base amount is $0.20/gallon for non-aviation fuel and $0.35/gallon for aviation fuel, multiplied by the carbon dioxide "emissions factor" of the fuel. Inflation adjusted after 2024.

Bonus Credit Amount: Credit is 5 times the base amount ($1/gallon for non-aviation fuel, $1.75 gallon for aviation fuel, multiplied by the emissions factor) for facilities meeting prevailing wage and registered apprenticeship requirements. Inflation adjusted after 2024. Initial guidance on the labor provisions is available here.

Direct Pay Eligibility: Yes, for tax-exempt organizations; states; political subdivisions; the Tennessee Valley Authority; Indian Tribal governments; Alaska Native Corporations; and rural electricity co-ops.

Transferability: Yes

Stackability: No rules

Relevant Announcements: Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production (11/3/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

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Biofuel Infrastructure and Agriculture Product Market Expansion (Higher Blend Infrastructure Incentive Program)

Federal Agency: Department of Agriculture
Bureau or Office: Rural Business-Cooperative Service

IRA Statutory Location: 22003

Program Description: To provide grants through the Higher Blend Infrastructure Incentive Program, which has the goal of significantly increasing the sales and use of higher blends of ethanol and biodiesel by expanding the infrastructure for renewable fuels derived from U.S. agricultural products and by sharing the costs related to building out biofuel-related infrastructure.

Funding Amount: $500,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: Existing

Eligible Recipients: Transportation fueling facilities including fueling stations, convenience stores, hypermarket fueling stations, fleet facilities (including rail and marine), and similar entities with capital investments; fuel distribution facilities, such as terminal operations, depots, and midstream partners, and similarly equivalent operations.

Tribal Eligibility: Yes

Eligible Uses: (1) Fueling stations, convenience stores, hypermarket fueling stations, fleet facilities, and similar entities with capital investments) for eligible implementation activities related to higher blends of fuel ethanol greater than 10 percent ethanol, such as E15 or higher, and biodiesel greater than 5 percent biodiesel, such as B20 or higher; and (2) Terminal operations, depots, and midstream partners, for eligible implementation activities related to higher blends of fuel ethanol greater than 10 percent ethanol, such as E15 or higher, and biodiesel greater than 5 percent biodiesel, such as B20 or higher.

Cost Share Requirements: 25%

Formula Funding: No

SAM.gov Assistance Listing: 10.754

Funding for Section 211(o) of the Clean Air Act

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60108

Program Description: To support investments in advanced biofuels and to implement the Renewable Fuel Standard, including developing tests and protocols, collecting data, and conducting analysis related to the environmental and public health effects of fuels.

Funding Amount: $15,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Competitive grants and direct federal spending

New or Existing Program: New

Eligible Recipients: Advanced biofuel industry; direct federal spending

Tribal Eligibility: No

Eligible Uses: To develop tests and protocols regarding effects of fuel and fuel additives; to update analyses of lifecycle greenhouse gases of a fuel; to review impacts of transportation fuels on the general public and on low-income and disadvantaged communities; to award grants to industry and other related activities to support investments in advanced biofuels.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Sustainable Aviation Fuel Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13203

Tax Code Location: 26 U.S. Code § 40B

Tax Provision Description: Provides a tax credit for the sale or use of sustainable aviation fuel (SAF) that achieves a lifecycle greenhouse gas emissions reduction of at least 50% as compared with petroleum-based jet fuel

Period of Availability: January 1, 2023-December 31, 2024

Tax Mechanism: Tax credit

New or Modified Provision: New

Eligible Recipients: Producers and blenders of SAF-kerosene fuel mixtures for aviation. Qualified SAF mixture must be made in the United States, and fueling of the aircraft must occur in the United States.

Tribal Eligibility: No

Base Credit Amount: $1.25/gallon of SAF.

Bonus Credit Amount: Up to $0.50/gallon depending on lifecycle greenhouse gas emissions of SAF relative to petroleum-based jet fuel.

Direct Pay Eligibility: No

Transferability: No

Stackability: Credit can be claimed against income tax or fuel excise tax. Credit included in gross income (similar to alcohol and biodiesel fuels credits).

Relevant Announcements: Treasury, IRS issue guidance on new Sustainable Aviation Fuel Credit (12/19/2022)

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Fueling Aviation's Sustainable Transition through Sustainable Aviation Fuels (FAST-SAF)

Federal Agency: Department of Transportation
Bureau or Office: Federal Aviation Administration

IRA Statutory Location: 40007(a)(1)

Program Description: To provide grant funding for eligible entities to carry out projects relating to the production, transportation, blending, or storage of sustainable aviation fuel (SAF), with the goal of accelerating the production and use of sustainable aviation fuel and reducing greenhouse gas emissions from the aviation sector.

Funding Amount: $244,530,000

Period of Availability: Available until September 30, 2026.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: (1) a state or local government, including the District of Columbia, other than an airport sponsor; (2) an air carrier; (3) an airport sponsor; (4) an accredited institution of higher education; (5) a research institution; (6) a person or entity engaged in the production, transportation, blending, or storage of SAF in the United States or feedstocks in the United States that could be used to produce SAF; (7) a person or entity engaged in the development, demonstration, or application of low-emission aviation technologies; or (8) nonprofit entities or nonprofit consortia with experience in SAF, low-emission aviation technologies, or other clean transportation research programs.

Tribal Eligibility: Yes. Tribal government entities within the definition of eligible state or local units. Tribal government acting as a nonprofit agency operating under state or local auspices.

Eligible Uses: (1) Grants to enable exploration and identification of supply chains, infrastructure, and distribution needs by key proponents; and (2) Grants for infrastructure projects to facilitate and scale fuel production, transportation, blending, storage, and use of SAF.

Cost Share Requirements: The federal share of the cost of a project shall be 75% of the total proposed cost of the project, except that such federal share shall increase to 90% of the total proposed cost of the project if the eligible entity is a small hub airport or nonhub airport, as such terms are defined in section 47102 of title 49, United States Code.

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Fueling Aviation's Sustainable Transition – Technology (FAST-Tech)

Federal Agency: Department of Transportation
Bureau or Office: Federal Aviation Administration

IRA Statutory Location: 40007(a)(2)

Program Description: To provide grant funding for eligible entities to carry out projects that develop, demonstrate, or apply low-emission aviation technologies, which are technologies that significantly improve aircraft fuel efficiency or reduce greenhouse gas emissions during the operation of civil aircraft.

Funding Amount: $46,530,000

Period of Availability: Available until September 30, 2026.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: (1) a state or local government, including the District of Columbia, other than an airport sponsor; (2) an air carrier; (3) an airport sponsor; (4) an accredited institution of higher education; (5) a research institution; (6) a person or entity engaged in the production, transportation, blending, or storage of SAF in the United States or feedstocks in the United States that could be used to produce SAF; (7) a person or entity engaged in the development, demonstration, or application of low-emission aviation technologies; or (8) nonprofit entities or nonprofit consortia with experience in sustainable aviation fuels, low-emission aviation technologies, or other clean transportation research programs.

Tribal Eligibility: Yes. Tribal government entities within the definition of eligible state or local units. Tribal government acting as a nonprofit agency operating under state or local auspices.

Eligible Uses: (1) Designing, prototyping, and testing of discrete low emission aviation technologies; and (2) Enhancing aircraft and engine technology testing and demonstration capabilities to accelerate development and demonstration of a broad range of low-emission aircraft technologies.

Cost Share Requirements: The federal share of the cost of a project shall be 75% of the total proposed cost of the project, except that such federal share shall increase to 90% of the total proposed cost of the project if the eligible entity is a small hub airport or nonhub airport, as such terms are defined in section 47102 of title 49, United States Code.

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Expanding America's Leadership in Industrial Decarbonization and Carbon Management

The industrial sector is diverse, hard to decarbonize, and contributes nearly one-third of the nation's greenhouse gas emissions. The most emissions-intensive industrial sectors—including steel, aluminum, and concrete—are also a part of the clean energy and infrastructure supply chain and are essential to U.S. national and economic security. Deploying technologies like carbon capture and storage (CCS) at scale will be critical for decarbonizing many industrial processes.

The United States has the opportunity to lead in clean manufacturing and scale the use of low-carbon materials to produce electric vehicles, wind turbines, and solar panels, rebuild America's roads and bridges, and upgrade the nation's buildings to be more efficient and resilient to climate impacts. The Inflation Reduction Act provides billions of dollars in grants to help decarbonize industrial facilities and includes tax credits to expand and improve CCS and direct air capture technologies. This investment complements funding in the Bipartisan Infrastructure Law, which provides $12 billion for carbon management, research, demonstration, and deployment over the next five years.

The law also includes additional funding for the Environmental Protection Agency to work with industry to mitigate emissions of two climate super-pollutants: hydrofluorocarbons and methane.

Funding Overview

The Inflation Reduction Act makes a big down payment on building a cleaner industrial sector, reinvigorating American manufacturing, and cutting climate super-pollutants from key industrial sources. Highlights include:

- **$5.8 billion for the new Advanced Industrial Facilities Deployment Program.** The law launched a new program at the Department of Energy, the Advanced Industrial Facilities Deployment Program, to provide financial support to industrial facilities in emissions-intensive sectors, such as the iron, steel, aluminum, cement, glass, paper, and chemicals sectors, to complete demonstration and deployment projects that reduce greenhouse gas emissions through installation or implementation of advanced industrial technologies. This program complements the $500 million provided to the Department of Energy in the Bipartisan Infrastructure Law for Industrial Emissions Demonstration Projects that test and validate technologies that reduce industrial emissions.

- **Expansion of the Advanced Energy Project Credit to include industrial emissions reduction.** The Inflation Reduction Act expands the 48C Advanced Energy Project Credit to include projects that reduce greenhouse gas emissions by at least 20 percent at an industrial or manufacturing facility by installing low-carbon heat systems, carbon capture systems, energy efficiency measures, and other pollution reduction technologies and practices. (This program is described in more detail earlier in the guidebook on page 27).

- **Extension and expansion of the 45Q tax credit for carbon capture, utilization, and sequestration (CCUS)**. The law extends the existing 45Q tax credit, adds an enhanced credit for direct air capture (DAC), and lowers the carbon capture threshold requirements for certain facilities to benefit from the credit. Facilities meeting prevailing wage and registered apprenticeship requirements can qualify for bonus credits. This tax credit complements funding in the Bipartisan Infrastructure law for CCUS and DAC, including $2.537 billion for the Carbon Capture Demonstration Projects Program, $937 million for Carbon Capture Large-Scale Pilot Programs, and $3.5 billion for Regional Clean Direct Air Capture Hubs.

- **$1.55 billion to cut methane pollution from oil and gas industry operations.** EPA received $1.55 billion to provide financial and technical assistance to accelerate the reduction of methane and other greenhouse gas emissions from petroleum and natural gas systems by improving and deploying new equipment, supporting technological innovation, permanently shutting in and plugging wells, and other activities. In addition to these financial incentives, the Inflation Reduction Act imposes a waste emissions charge on facilities with methane emissions that exceed a certain threshold. This EPA program complements nearly $4.7 billion in the Bipartisan Infrastructure Law to plug and remediate orphaned oil and gas wells on Tribal, federal, state, and private lands.

- **$38.5 million to implement the American Innovation and Manufacturing (AIM) Act**, a bipartisan law to phase down the production and consumption of hydrofluorocarbons (HFCs), maximize reclamation and minimize releases from equipment, and facilitate the transition to next-generation technologies through sector-based restrictions.

Programs Covered in This Chapter				
Agency	**IRA Section**	**Tax Code Section**	**Program Name**	**Amount**
Department of the Treasury	13104	45Q	Credit for Carbon Oxide Sequestration	
Department of Energy	50161	-	Advanced Industrial Facilities Deployment Program	$5,812,000,000
Environmental Protection Agency	60113	-	Methane Emissions Reduction Program	$1,550,000,000
Environmental Protection Agency	60109	-	Implementation of the AIM Act	$38,500,000

The Credit for Carbon Oxide Sequestration (45Q) is eligible for direct pay. Section 13801 of the Inflation Reduction Act, adding Section 6417 of the Internal Revenue Code, extends many of the law's tax incentives, including the 45Q credit, to entities that generally do not benefit from income tax credits, such as state, local, and Tribal governments and other tax-exempt entities. Specifically, these entities can elect to receive these tax credits in the form of direct payments. Certain businesses also can elect to receive the 45Q tax credits in the form of direct payments. **The 45Q tax credit also is transferable.** Section 13801 adds Section 6418 of the Internal Revenue Code and makes certain tax credits transferable. Taxpayers that are generally ineligible for direct payment of credits may transfer all or a portion of certain credits to an unrelated party in exchange for cash.

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Credit for Carbon Oxide Sequestration

Federal Agency: Department of the Treasury

IRA Statutory Location: 13104

Tax Code Location: 26 U.S. Code § 45Q

Tax Provision Description: Provides a credit for carbon dioxide sequestration coupled with permitted end uses within the United States.

Period of Availability: Credit can be claimed for 12 years after a facility is placed in service. Facilities must be placed in service before 1/1/33.

Tax Mechanism: Production tax credit based on carbon capture and sequestration, injection for enhanced oil recovery (EOR), or utilization

New or Modified Provision: Extended and modified, tying the credit amounts to meeting prevailing wage and registered apprenticeship requirements, providing an enhanced credit for direct air capture (DAC), and lowering the carbon capture threshold requirements at facilities.

Eligible Recipients: U.S. facilities within minimum volumes: 1,000 metric tons of CO_2 per year for DAC facilities; 18,750 metric tons for electricity generating facilities (with carbon capture capacity of 75% of baseline CO_2 production); 12,500 metric tons for other facilities.

Tribal Eligibility: Yes

Base Credit Amount: $17/metric ton of carbon dioxide captured and sequestered; $12/metric ton for carbon dioxide that is injected for enhanced oil recovery or utilized. Those amounts are $36 and $26, respectively, for direct air capture facilities.

Bonus Credit Amount: 5 times the base amounts if the facility meets prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here.

Direct Pay Eligibility: Yes, for tax-exempt organizations, states, political subdivisions, the Tennessee Valley Authority, Indian Tribal governments, Alaska Native Corporations, and rural electricity co-ops (applicable entities). Entities other than applicable entities are eligible for up to 5 years of direct pay (which is less than the full credit period and expires at the end of 2032) if they make an election. Applies to carbon capture equipment (CCE) that is originally placed in service after December 31, 2022. Applies separately with respect to CCE placed in service during a taxable year.

Transferability: Yes

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Stackability: Credit reduced for tax-exempt bonds with similar rules as section 45(b)(3).

Relevant Announcements: Request for Comments on the Credit for Carbon Oxide Sequestration (11/3/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

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Advanced Industrial Facilities Deployment Program

Federal Agency: Department of Energy
Bureau or Office: Office of Manufacturing and Energy Supply Chains, Office of Clean Energy Demonstrations

IRA Statutory Location: 50161

Program Description: To provide competitive financial support to owners and operators of facilities engaged in energy intensive industrial processes to complete demonstration and deployment projects that reduce a facility's greenhouse gas emissions through installation or implementation of advanced industrial technologies and early-stage engineering studies to prepare a facility to install or implement advanced industrial technologies.

Funding Amount: $5,812,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Grants, Rebates, and/or Cooperative Agreements

New or Existing Program: New

Eligible Recipients: Owners or operators of domestic, nonfederal, nonpower industrial or manufacturing facilities engaged in energy-intensive industrial processes.

Tribal Eligibility: Yes

Eligible Uses: To carry out projects for 1) purchase and installation or implementation of advanced industrial technologies at eligible facilities; 2) retrofits, upgrades, or operational improvements at eligible facilities to install or implement advanced industrial technologies; or 3) engineering studies and other work needed to prepare eligible facilities for activities described in (1) or (2).

Cost Share Requirements: At least 50%

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Methane Emissions Reduction Program

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60113

Program Description: To provide financial and technical assistance to accelerate the reduction of methane and other greenhouse gas emissions from petroleum and natural gas systems. The statute also establishes a waste emissions charge for applicable facilities that report more than 25,000 metric tons of CO_2 equivalent per year (to the petroleum and natural gas systems source category of the Greenhouse Gas Reporting Program) and that exceed statutorily specified waste emissions thresholds.

Funding Amount: $1,550,000,000

Period of Availability: To remain available until September 30, 2028

Funding Mechanism: Grants, rebates, contracts, and other activities

New or Existing Program: New

Eligible Recipients: States, Counties, Cities/Townships, Special Districts, Territories, Tribal Governments (federally recognized), Tribal Governments (other than federally recognized), Public Higher Education Institutions, Private Higher Education Institutions, Nonprofits with 501(c)(3) status, Nonprofits without 501(c)(3) Status, Small Businesses, Businesses (other than small businesses), and Individuals

Tribal Eligibility: Yes

Eligible Uses: To provide funding for financial and technical assistance for preparing and submitting greenhouse gas reports, monitoring methane emissions, and reducing methane and other greenhouse gas emissions from petroleum and natural gas systems, including improving and deploying equipment to reduce emissions, supporting innovation, permanently shutting in and plugging wells, mitigating health effects in low-income and disadvantaged communities, improving climate resiliency, and supporting environmental restoration.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Implementation of the American Innovation and Manufacturing Act

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60109

Program Description: To fund EPA's implementation of the American Innovation and Manufacturing (AIM) Act, a bipartisan law to phase down the production and consumption of listed hydrofluorocarbons (HFCs), maximize reclamation and minimize releases from equipment, and facilitate the transition to next-generation technologies through sector-based restrictions.

Funding Amount: $38,500,000

Period of Availability: To remain available until September 30, 2026

Funding Mechanism: Competitive grants and direct federal spending

New or Existing Program: New (grant program) and Existing (direct federal spending)

Eligible Recipients: For the grant program only: States, Counties, Cities/Townships, Public Higher Education Institutions, Private Higher Education Institutions, Nonprofits with 501(c)(3) status, Nonprofits without 501(c)(3) status, Small Businesses, Businesses (other than small businesses), and Individuals

Tribal Eligibility: Yes

Eligible Uses: (1) Provide funding for EPA for AIM Act implementation to carry out subsections (a) through (i) and subsection (k) of the statute; (2) To deploy new implementation and compliance tools to carry out subsections (a) through (i) and subsection (k) of the statute; (3) For competitive grants for reclaim and innovative destruction technologies under subsections (a) through (i) and subsection (k) of the statute.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Investing in Clean Hydrogen

Clean hydrogen is a major component of President Biden's plan to decarbonize the industrial sector. In June 2021, the Department of Energy launched the Hydrogen Shot, an effort to accelerate breakthroughs in hydrogen technology and cut the cost of clean hydrogen by 80 percent to $1 per kilogram in one decade. The Bipartisan Infrastructure Law included $9.5 billion for clean hydrogen initiatives, including $8 billion for Regional Clean Hydrogen Hubs that will create jobs, markets, and infrastructure to expand use of clean hydrogen in the industrial sector and beyond; $1 billion for a Clean Hydrogen Electrolysis Program to reduce the cost of hydrogen produced from clean electricity; and $500 million for Clean Hydrogen Manufacturing and Recycling Initiatives to support equipment manufacturing and strong domestic supply chains for clean hydrogen.

Funding Overview

The Inflation Reduction Act creates a new **Hydrogen Production Tax Credit** to incentivize the domestic production of clean hydrogen, which will make this emerging low-carbon fuel source more cost-competitive and help the country meet the ambitious goals of the Hydrogen Shot.

The Hydrogen Production Tax Credit (45V) is eligible for direct pay. Section 13801 of the Inflation Reduction Act, adding Section 6417 of the Internal Revenue Code, extends many of the law's tax incentives, including the 45V credit, to entities that generally do not benefit from income tax credits, such as state, local, and Tribal governments and other tax-exempt entities. Specifically, these entities can elect to receive these tax credits in the form of direct payments. Certain businesses also can elect to receive the 45V tax credits in the form of direct payments. **The 45V tax credit also is transferable.** Section 13801 adds Section 6418 of the Internal Revenue Code and makes certain tax credits transferable. Taxpayers that are generally ineligible for direct payment of credits may transfer all or a portion of certain credits to an unrelated party in exchange for cash.

Programs Covered in This Chapter			
Agency	**IRA Section**	**Tax Code Section**	**Program Name**
Department of the Treasury	13204	45V	Clean Hydrogen Production Tax Credit

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Clean Hydrogen Production Tax Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13204

Tax Code Location: 26 U.S. Code § 45V

Tax Provision Description: Provides a tax credit for the production of clean hydrogen at a qualified clean hydrogen production facility.

Period of Availability: Credit is for hydrogen produced after 12/31/22. Credit is available for facilities placed in service before 1/1/33 for their first 10 years in service.

Tax Mechanism: Production tax credit

New or Modified Provision: New. The existing excise tax credit for liquified hydrogen terminates after 12/31/22.

Eligible Recipients: Producers of hydrogen in the United States.

Tribal Eligibility: Yes

Base Credit Amount: $0.60/kg multiplied by the applicable percentage. The applicable percentage ranges from 20% to 100% depending on lifecycle greenhouse gas emissions. The $0.60/kg is adjusted for inflation.

Bonus Credit Amount: 5 times the base credit if the facility meets prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here.

Direct Pay Eligibility: Yes, for tax-exempt organizations, states, political subdivisions, the Tennessee Valley Authority, Indian Tribal governments, Alaska Native Corporations, and rural electricity co-ops (applicable entities). Applies to facilities placed in service after December 31, 2012. Applies separately with regard to each facility. Entities other than applicable entities are eligible for up to 5 years of direct pay, which is less than the full credit period and expires at the end of 2032, if they make an election.

Transferability: Yes

Stackability: Taxpayers can make an irrevocable election to choose the ITC in lieu of the 45V credit as long as they have not claimed the 45Q credit for carbon sequestration. Credit reduced for tax-exempt bonds with similar rules as section 45.

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Relevant Announcements: Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production (11/3/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

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Investing in Science and the Department of Energy's Core Research Mission

The climate crisis calls for a new moonshot. To achieve President Biden's goal of reaching net-zero emissions by no later than 2050, the United States needs to develop, demonstrate, and deploy the technologies that are available today while continuing transformative scientific and technological research that could lead to game-changing breakthroughs. At the Leaders Summit on Climate on Earth Day 2021, President Biden charged the Department of Energy with speeding the development of critical clean energy and carbon pollution reduction technologies. In response, the Department of Energy launched the Energy Earthshots initiative to accelerate technological breakthroughs and transform key energy technologies over the next decade—lowering costs, raising performance, creating new jobs, and helping to achieve the President's ambitious climate goal to achieve net zero emissions economywide no later than 2050.

The Inflation Reduction Act invests in the Department of Energy's core research mission and world-class laboratories to continue to build the scientific foundation for rapid decarbonization.

Funding Overview

The Inflation Reduction Act provides $2 billion to the Department of Energy's Office of Science and national laboratories.

- **$1.55 billion to the Department of Energy's Office of Science to support national laboratory infrastructure improvements**. On November 4, 2022, the Department of Energy announced how it will allocate this funding to upgrade scientific facilities, modernize infrastructure, and address deferred maintenance projects at the Department of Energy's national laboratories. This funding—one of the largest ever investments in national laboratory infrastructure—will advance solutions-driven research and innovation conducted by America's best scientists to tackle the nation's greatest challenges and put America in position to achieve the President's ambitious climate goals.
- **$450 million to support infrastructure improvements at three key national laboratories:** the National Energy Technology Laboratory, Idaho National Laboratory, and National Renewable Energy Laboratory.

Programs Covered in This Chapter

Agency	IRA Section	Program Name	Amount
Department of Energy	50172(a)	National Laboratory Infrastructure - Office of Science	$1,550,000,000
Department of Energy	50172(b)	National Laboratory Infrastructure - Office of Fossil Energy and Carbon Management	$150,000,000
Department of Energy	50172(c)	Idaho National Laboratory Infrastructure Investments	$150,000,000
Department of Energy	50172(d)	National Laboratory Infrastructure - Office of Energy Efficiency and Renewable Energy	$150,000,000

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National Laboratory Infrastructure - Office of Science

Federal Agency: Department of Energy
Bureau or Office: Office of Science

IRA Statutory Location: 50172(a)

Program Description: To support science laboratory infrastructure improvements and projects across seven Office of Science programs.

Funding Amount: $1,550,000,000

Period of Availability: To remain available through September 30, 2027.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Providing funding for existing infrastructure improvements and projects at laboratories and universities.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Relevant Announcements: Biden-Harris Administration Announces $1.5 Billion From Inflation Reduction Act to Strengthen America's National Laboratories (11/4/2022)

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National Laboratory Infrastructure -
Office of Fossil Energy and Carbon Management

Federal Agency: Department of Energy
Bureau or Office: Office of Fossil Energy and Carbon Management

IRA Statutory Location: 50172(b)

Program Description: To support infrastructure improvements at the three complexes at the National Energy Technology Laboratory.

Funding Amount: $150,000,000

Period of Availability: To remain available through September 30, 2027.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Providing funding for infrastructure improvements at the National Energy Technology Laboratory.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

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Idaho National Laboratory Infrastructure Investments

Federal Agency: Department of Energy
Bureau or Office: Office of Nuclear Energy

IRA Statutory Location: 50172(c)

Program Description: To support infrastructure improvements at the two complexes at the Idaho National Laboratory (INL). On October 25, 2022, the Department of Energy announced that this funding will support nearly a dozen projects at INL's Advanced Test Reactor and Materials Fuels Complex, both of which have been operational for more than 50 years and serve an instrumental role in advancing nuclear technologies for federal agencies, industry, and international partnerships.

Funding Amount: $150,000,000

Period of Availability: To remain available through September 30, 2027.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Providing funding for infrastructure improvements at the Idaho National Laboratory.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Relevant Announcements: Biden-Harris Administration Announces $150 Million To Improve Nuclear Research and Development Infrastructure at Idaho National Laboratory (10/25/2022)

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National Laboratory Infrastructure - Office of Energy Efficiency and Renewable Energy

Federal Agency: Department of Energy
Bureau or Office: Office of Energy Efficiency and Renewable Energy

IRA Statutory Location: 50172(d)

Program Description: To support infrastructure improvements at three campuses at the National Renewable Energy Laboratory.

Funding Amount: $150,000,000

Period of Availability: To remain available through September 30, 2027.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Providing funding for infrastructure improvements at the National Renewable Energy Laboratory.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Protecting Communities from Harmful Air Pollution

Levels of harmful air pollution have fallen steadily across the United States over the last 50 years—thanks to the Clean Air Act—while the U.S. economy has continued to grow. Some communities, however, continue to face exposure to unhealthy levels of pollution, including toxic pollution from legacy sources that have burdened communities for decades. As described in the previous sections, the Inflation Reduction Act invests billions to quickly deploy advanced energy technologies that will reduce pollution from the electricity, transportation, and industrial sectors. The law also provides billions of dollars to Tribes, states, local governments, community organizations, and others to cut greenhouse gas emissions and other harmful air pollutants from targeted local sources, particularly in areas with environmental justice concerns.

Cutting Air Pollution that Harms Public Health and the Climate

The Inflation Reduction Act empowers communities to tackle their unique environmental challenges and pollution burdens. In addition to the historic investments to deploy clean energy, clean vehicles, clean buildings, and clean manufacturing, the law also adds a powerful complement to these technology-focused programs: billions of dollars for grants to Tribes, states, local governments, community organizations, and others to cut greenhouse gas emissions and other harmful air pollutants that impose a disproportionate burden on underserved and vulnerable communities. These programs have a particular benefit for communities that experience and endure pollution from multiple stationary and mobile sources.

Funding Overview

The Inflation Reduction Act creates several new programs to help Tribes, states, municipalities, community-based organizations, and the private sector to cut air pollution, including greenhouse gases, with a particular focus on the communities that carry a disproportionate pollution burden. All of these funds will advance the President's Justice40 Initiative. Highlights include:

- **$3 billion for Environmental and Climate Justice Block Grants.** The Environmental Protection Agency's (EPA) new Office of Environmental Justice and External Civil Rights will provide grants and technical assistance to community-based organizations, alone or in partnerships, to reduce indoor and outdoor air pollution, including greenhouse gases; monitor for pollution; improve community resilience to the impacts of climate change, including extreme heat and wildfire; and build the capacity of these organizations to engage with state and federal decision-making processes.

- **$5 billion for Climate Pollution Reduction Grants.** EPA received $5 billion to provide grants to Tribes, states, air pollution control agencies, and local governments to develop and implement plans for reducing greenhouse gas emissions.

- **$4 billion to reduce harmful air pollution from the transportation sector.** EPA received $1 billion for a Clean Heavy-Duty Vehicle Program for grants to Tribes, state and local governments, and other entities to offset the costs of replacing heavy-duty Class 6 and 7 commercial vehicles with zero-emission vehicles and deploying related infrastructure. EPA received an additional $3 billion to provide grants to port authorities; Tribal, state, and local government entities; and other eligible entities to reduce harmful air pollution at ports by purchasing and installing zero-emission port equipment and technology.

- **More than $3.2 billion for the Neighborhood Access and Equity Grant Program**. This Department of Transportation grant program will support projects to improve walkability, safety, and affordable transportation access in communities; to clean up existing and prevent new environmental harms caused by transportation projects in disadvantaged communities; and provide planning and capacity building support to disadvantaged and underserved communities. This program complements the Department of Transportation's Reconnecting Communities Pilot Program, created and funded by the Bipartisan Infrastructure Law to restore community connectivity by removing, retrofitting, or mitigating highways or other transportation facilities that create barriers to community cohesion.

- **$1.55 billion to cut methane pollution from oil and gas industry operations.** EPA received $1.55 billion to provide financial and technical assistance to accelerate the reduction of methane and other greenhouse gas emissions from petroleum and natural gas systems. Cutting methane pollution has the co-benefit of reducing emissions of smog-forming volatile organic compounds. The Inflation Reduction Act also imposes a waste emissions charge on facilities with methane emissions that exceed a certain threshold. (This program is described in more detail earlier in the guidebook on page 71).

See the table on the next page for a full list of the programs summarized in this chapter.

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Programs Covered in This Chapter			
Agency	**IRA Section**	**Program Name**	**Amount**
Environmental Protection Agency	60201	Environmental and Climate Justice Block Grants	$3,000,000,000
Environmental Protection Agency	60114	Climate Pollution Reduction Grants	$5,000,000,000
Department of Transportation	60501	Neighborhood Access and Equity Grant Program	$3,205,000,000
Environmental Protection Agency	60101	Clean Heavy-Duty Vehicles	$1,000,000,000
Environmental Protection Agency	60102	Grants to Reduce Air Pollution at Ports	$3,000,000,000
Environmental Protection Agency	60104	Diesel Emissions Reductions	$60,000,000
Environmental Protection Agency	60106	Funding to Address Air Pollution at Schools	$50,000,000
Environmental Protection Agency	60105(d)	Funding to Address Air Pollution: Emissions from Wood Heaters	$15,000,000
Environmental Protection Agency	60105(f)	Funding to Address Air Pollution: Clean Air Act Grants	$25,000,000
Environmental Protection Agency	60105(g)	Funding to Address Air Pollution: Mobile Source Grants	$5,000,000
Environmental Protection Agency	60107	Low Emissions Electricity Program	$87,000,000

Advancing Equity and Environmental Justice by Cutting Localized and Legacy Pollution

The full promise of the Inflation Reduction Act will only be realized if Tribes, low-income communities, rural areas, communities with environmental justice concerns, energy communities, and other underserved parts of the United States benefit from the law's historic investments.

Several provisions are designed to direct dollars to these areas. The Environmental Protection Agency (EPA) received $3 billion for a new Environmental and Climate Justice Block Grant Program, which will allow the agency to provide more funding to communities than ever before. The Inflation Reduction Act ensures that community-based organizations will be the primary beneficiaries of this historic funding, as Tribal and local governments and academic institutions are only eligible for funding if they partner with a community organization.

Knowledge is power, and the Inflation Reduction Act includes several programs to expand and improve pollution monitoring. Among other eligible activities, EPA's Environmental and Climate Justice Block Grant Program will support community-led projects to monitor and clean up legacy pollution. EPA also received $117 million for community air pollution monitoring at or near the fenceline of industrial facilities; $50 million to help state, local, and Tribal air agencies to add new monitoring sites in communities and replace aging equipment at existing sites; and $3 million to make special air quality sensors available to low-income and disadvantaged communities.

The Inflation Reduction Act targets air pollution from the transportation sector, which can have a disproportionate impact on low-income communities and communities of color living along heavily traveled roadways and near busy ports. EPA received $4 billion for two grant programs to replace heavy-duty trucks and port equipment with cleaner, zero-emission alternatives. In addition, poorly designed or sited transportation projects can harm communities by increasing dangerous traffic for pedestrians, limiting access to economic opportunities, or even dividing communities. The Federal Highway Administration received more than $3.2 billion for the Neighborhood Access and Equity Grant Program, which will support work to mitigate the negative impacts of transportation projects and to improve walkability, safety, and accessibility. More than $1.2 billion is dedicated to projects in economically disadvantaged communities.

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Environmental and Climate Justice Block Grants

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Environmental Justice and External Civil Rights

IRA Statutory Location: 60201

Program Description: To provide grants and technical assistance to community-based organizations, alone or in partnerships, to reduce indoor and outdoor air pollution, including greenhouse gases; monitor for pollution; improve community resilience to the impacts of climate change, including extreme heat and wildfire; and build the capacity of these organizations to engage with state and federal decision-making processes.

Funding Amount: $3,000,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Primarily competitive grants, with potentially a limited number of noncompetitive grants and contract support.

New or Existing Program: New and Existing

Eligible Recipients: (1) A community-based nonprofit organization; (2) A partnership of community-based nonprofit organizations; or (3) A partnership between a community-based nonprofit organization and an Indian Tribe, local government, or an institution of higher education.

Tribal Eligibility: Yes

Eligible Uses: (1) 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; (2) Mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions, and wildfire events; (3) Climate resiliency and adaptation; (4) Reducing indoor toxics and indoor air pollution; or (5) Facilitating engagement of disadvantaged communities in state and federal advisory groups, workshops, rulemakings, and other public processes

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.614; others still to be developed; some existing ones will be revised.

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Climate Pollution Reduction Grants

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60114

Program Description: To provide grants to Tribes, states, air pollution control agencies, and local governments to develop and implement plans for reducing greenhouse gas emissions.

Funding Amount: $5,000,000,000. Includes $250,000,000 for planning grants and $4,750,000,000 for implementation grants.

Period of Availability: Planning grant funds to remain available until September 30, 2031. EPA must publish the planning grant funding availability by May 13, 2023 (270 days after enactment). Implementation grant funds to remain available until September 30, 2026.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients:

> **For planning grants:** States, Territories, District of Columbia; air pollution control agencies; municipalities; Tribes; or groups of such eligible entities.
>
> **For implementation grants:** Those states, territories, District of Columbia; air pollution control agencies; municipalities; Tribes; or groups of such eligible entities that are covered by a plan developed with funding from a planning grant awarded under this section.

Tribal Eligibility: Yes

Eligible Uses: To develop and implement plans for reducing greenhouse gas air pollution.

Cost Share Requirements: No

Formula Funding: TBD

SAM.gov Assistance Listing: TBD

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Neighborhood Access and Equity Grant Program

Federal Agency: Department of Transportation
Bureau or Office: Federal Highway Administration

IRA Statutory Location: 60501

Program Description: To award competitive grants for context-sensitive projects that improve walkability and safety and provide affordable transportation access; to mitigate or remediate negative impacts on the human or natural environment in disadvantaged communities from a surface transportation facility; and for planning and capacity building activities in disadvantaged or underserved communities.

Funding Amount: $3,205,000,000

Period of Availability: Available until September 30, 2026.

Funding Mechanism: Competitive Grant Program

New or Existing Program: New

Eligible Recipients: (1) A state, unit of local government, political subdivision of a state, MPO, or U.S. territory; (2) Federally recognized Indian Tribe; (3) A special purpose district or public authority with a transportation function; or (4) A non-profit organization or institution of higher education that partners with an eligible entity described above to compete for grants for planning and capacity building activities in disadvantaged or underserved communities.

Tribal Eligibility: Yes

Eligible Uses: Grants to implement context-sensitive projects that improve walkability and safety and provide affordable transportation access; mitigate or remediate negative impacts on the human or natural environment from a surface transportation facility in a disadvantaged or underserved community; and to implement planning and capacity building activities in disadvantaged or underserved communities. Other eligible activities include the provision of guidance, technical assistance, templates, training, or tools to facilitate efficient and effective contracting, design, and project delivery by units of local government; and subgrants to units of local governments to build capacity to assume responsibilities to deliver surface transportation projects. Funds cannot be used to add capacity for single-occupant passenger vehicles. Of the $3.205 billion appropriated, $1.262 billion is reserved for economically disadvantaged communities, and $50 million is reserved for technical assistance.

Cost Share Requirements: The federal share shall not be more than 80%, unless the project is in a disadvantaged community.

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Clean Heavy-Duty Vehicles

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60101

Program Description: To provide funding to offset the costs of replacing heavy-duty Class 6 and 7 commercial vehicles with zero-emission vehicles; deploying infrastructure needed to charge, fuel, or maintain these zero-emission vehicles; and developing and training the necessary workforce.

Funding Amount: $1,000,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Competitive grants and rebates

New or Existing Program: New

Eligible Recipients: (1) a state; (2) a municipality; (3) an Indian Tribe; (4) a nonprofit school transportation association. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: Program covers up to 100 percent of costs for (1) incremental cost of replacing an existing heavy-duty vehicle with a zero-emission vehicle; (2) purchasing and operating associated infrastructure; (3) workforce development and training; (4) planning and technical activities.

Cost Share Requirements: TBD

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Grants to Reduce Air Pollution at Ports

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60102

Program Description: To purchase and install zero-emission port equipment and technology, conduct associated planning or permitting activities for this equipment and technology, and develop climate action plans to further address air pollution at ports.

Funding Amount: $3,000,000,000

Period of Availability: To remain available through September 30, 2027.

Funding Mechanism: Rebates and competitive grants

New or Existing Program: New

Eligible Recipients: (1) A port authority; (2) A state, regional, local, or Tribal agency that has jurisdiction over a port authority or a port; (3) An air pollution control agency; or (4) A private entity (including a nonprofit organization) that applies for a grant in partnership with an entity described in (1)-(3) and owns, operates, or uses the facilities, cargo-handling equipment, transportation equipment, or related technology of a port. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: (1) To purchase or install zero-emission port equipment or technology for use at, or to directly serve, one or more ports; (2) To conduct any relevant planning or permitting in connection with the purchase or installation of such zero-emission port equipment or technology; and (3) To develop qualified climate action plans.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Diesel Emissions Reductions

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60104

Program Description: 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.

Funding Amount: $60,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Grants, rebates, and loans

New or Existing Program: Existing

Eligible Recipients: (A) a regional, state, local, or Tribal agency or port authority with jurisdiction over transportation or air quality; (B) a nonprofit organization or institution that (i) represents or provides pollution reduction or educational services to persons or organizations that own or operate diesel fleets; or (ii) has, as its principal purpose, the promotion of transportation or air quality; and (C) any private individual or entity that (i) is the owner of record of a diesel vehicle or fleet operated pursuant to a contract, license, or lease with a Federal department or agency or an entity described in (A); and (ii) meets such timely and appropriate requirements as the Administrator may establish for vehicle use and for notice to and approval by the Federal department or agency or entity described in (A) with respect to which the owner has entered into a contract, license, or lease as described in (C)(i). The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: 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.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.039

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Funding to Address Air Pollution at Schools

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60106

Program Description: To provide funding for grants and other activities to monitor and reduce pollution and greenhouse gas emissions at schools in low-income and disadvantaged communities. To provide technical assistance to schools in low-income and disadvantaged communities to develop school air and environmental quality plans and to identify and mitigate ongoing air pollution hazards.

Funding Amount: $50,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Competitive grants and technical assistance

New or Existing Program: New

Eligible Recipients: State, local, Tribal agencies, not for profit organizations and others for projects supporting schools in low-income and disadvantaged communities. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: (1) To address environmental issues affecting air quality in schools; (2) To develop school air and environmental quality plans that include standards for school building, design, construction, or renovation; (3) To identify and mitigate ongoing air pollution hazards in schools; (4) To provide technical assistance addressing air quality to schools in low-income and disadvantaged communities.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.034

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Funding to Address Air Pollution: Emissions from Wood Heaters

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60105(d)

Program Description: To fund testing and other agency activities to address particulate emissions from residential wood heaters, which can cause significant localized concentrations of fine particle pollution.

Funding Amount: $15,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants and other activities. Note: Activities to mitigate emissions from wood heaters also are eligible under sections 60201 and 60114.

New or Existing Program: Existing

Eligible Recipients: TBD

Tribal Eligibility: Yes

Eligible Uses: To complete the ongoing wood heater test method development; to continue research on emissions from residential wood combustion to better understand key elements including fuel species, wet fuel impacts, emissions of air toxics and other criteria pollutants, and emission factors and control options; to provide grants to state, local, and Tribal air agencies to better understand how this sector impacts their airsheds and how they may choose to manage those emissions including certified model re-testing; to support enhancement and improvement of EPA's certification process.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.034

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Funding to Address Air Pollution: Clean Air Act Grants

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60105(f)

Program Description: To provide general funding for EPA's Clean Air Act research, development, planning, and grants program.

Funding Amount: $25,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Grants

New or Existing Program: Existing

Eligible Recipients: Air pollution control agencies as defined by the Clean Air Act, which includes states, local governments, and Tribal agencies responsible for the control of air pollution. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: For EPA's Clean Air Act research, development, and grants program.

Cost Share Requirements: No

Formula Funding: TBD

SAM.gov Assistance Listing: 66.034

Funding to Address Air Pollution: Mobile Source Grants

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60105(g)

Program Description: To provide grants to states to adopt and implement California's greenhouse gas and zero-emission standards for on-road mobile sources.

Funding Amount: $5,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: States and others TBD. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: TBD

Eligible Uses: To provide grants to states covered by section 177 of the Clean Air Act to adopt and implement California's greenhouse gas and zero-emission standards for on-road mobile sources.

Cost Share Requirements: No

Formula Funding: TBD

SAM.gov Assistance Listing: TBD

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Low Emissions Electricity Program

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60107

Program Description: To fund a wide range of activities to encourage low emissions electricity generation and use through education, technical assistance, and partnerships with consumers, low income and disadvantaged communities, industry, and state, local, and Tribal governments. To do an assessment of anticipated greenhouse gas reductions from changes in domestic electricity generation and use and to ensure that reductions in greenhouse gases are achieved through the existing authorities of the Clean Air Act.

Funding Amount: $87,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: N/A

Eligible Uses: Provide funding to EPA to do a variety of activities related to reducing greenhouse gas emissions from electricity generation and use, including (1) for consumer-related education and partnerships; (2) for education, technical assistance, and partnerships within low-income and disadvantaged communities; (3) for industry-related outreach, technical assistance, and partnerships; (4) for outreach and technical assistance to, and partnerships with, state, Tribal, and local governments; (5) to assess the reductions in greenhouse gas emissions that result from changes in domestic electricity generation and use that are anticipated to occur on an annual basis through fiscal year 2031; (6) to ensure that reductions in greenhouse gas emissions are achieved through use of the existing authorities of the Clean Air Act, incorporating the assessment described in (5).

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

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Improving Pollution Monitoring and Tracking

Monitoring for pollution is critical for protecting communities from dangerous health impacts. It supports enforcement of environmental laws and helps communities to understand how they are affected by pollution, pinpoint a localized pollution source, and document the severity of a problem. The Inflation Reduction Act includes several programs to help communities and state, local, and Tribal air agencies add new pollution monitors, including at the fenceline of industrial facilities. In addition, the law gives the White House Council on Environmental Quality new resources to enhance the availability of national level data sets that can help characterize the disproportionate impacts of pollution, climate change, and other socioeconomic burdens on communities; provide a pathway to quantify and address the cumulative burdens on communities; and identify ways to improve outcomes for communities with environmental justice concerns. Funding for air pollution monitoring will advance the President's Justice40 Initiative.

Programs Covered in This Chapter			
Agency	**IRA Section**	**Program Name**	**Amount**
Environmental Protection Agency	60105(a)	Funding to Address Air Pollution: Fenceline Air Monitoring	$117,500,000
Environmental Protection Agency	60105(b)	Funding to Address Air Pollution: Multipollutant Monitoring	$50,000,000
Environmental Protection Agency	60105(c)	Funding to Address Air Pollution: Air Quality Sensors in Low-Income and Disadvantaged Communities	$3,000,000
Environmental Protection Agency	60105(e)	Funding to Address Air Pollution: Methane Monitoring	$20,000,000
Council on Environmental Quality	60401	Environmental and Climate Data Improvement	$32,500,000
Environmental Protection Agency	60110	Funding for Enforcement Technology and Public Information	$25,000,000
Environmental Protection Agency	60111	Greenhouse Gas Corporate Reporting	$5,000,000

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Funding to Address Air Pollution: Fenceline Air Monitoring

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60105(a)

Program Description: EPA's National Air Monitoring Program will use this funding to enhance and extend community air monitoring at or near the fenceline by developing and refining air toxics monitoring methods including appropriate fenceline monitoring approaches; building and enhancing capacity to conduct short term monitoring for local pollutant concerns; and expanding the nation's criteria and air toxics monitoring capabilities.

Funding Amount: $117,500,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Grants and other activities

New or Existing Program: Existing

Eligible Recipients: State/local/Tribal air agencies and other public or private nonprofit institutions or organizations. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: To deploy, support, and maintain community and state, local, and Tribal air agency monitoring at or near the fenceline; to improve fenceline and emerging air toxics monitoring methods; to enhance mobile monitoring capabilities to address local air toxics concerns especially in low-income and disadvantaged communities and on Tribal lands; to expand national air toxics trend stations and community monitoring efforts.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.034

Relevant Announcements: EPA Announces $53 Million for Community Air Pollution Monitoring Projects (11/3/2022)

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Funding to Address Air Pollution: Multipollutant Monitoring

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60105(b)

Program Description: EPA's National Air Monitoring Program will provide funding to sustain, enhance, modernize, and expand the nation's ambient air monitoring network, which will allow state, local, and Tribal air agencies to add new monitoring sites in communities; to replace aging equipment at existing sites; and to use the latest monitoring technology to improve measurement and delivery of information to the public.

Funding Amount: $50,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Grants and other activities

New or Existing Program: Existing

Eligible Recipients: State/local/Tribal air agencies. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: To expand the national ambient air quality monitoring network through establishment of new, additional multipollutant monitoring stations; to upgrade existing air quality monitoring sites via replacement, repair, operation, and maintenance of monitors and other equipment.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.034

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Funding to Address Air Pollution: Air Quality Sensors in Low-Income and Disadvantaged Communities

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60105(c)

Program Description: EPA's National Air Monitoring Program will provide funding to make air quality sensor technology available to low-income and disadvantaged communities, helping them to inexpensively screen for certain air pollutants.

Funding Amount: $3,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Grants and other activities

New or Existing Program: Existing

Eligible Recipients: State/local/Tribal air agencies and other public or private nonprofit institutions or organizations. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: To purchase, deploy, integrate, and operate air quality sensors in low-income and disadvantaged communities and on Tribal lands; to support the EPA Regional Sensor Loan program.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.034

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Funding to Address Air Pollution: Methane Monitoring

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60105(e)

Program Description: To provide funding to monitor methane emissions from significant sources not covered by other parts of the Inflation Reduction Act: flaring and fugitive sources.

Funding Amount: $20,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Grants and other activities

New or Existing Program: Existing

Eligible Recipients: State/local/Tribal air agencies. The Clean Air Act defines "state" to mean a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

Tribal Eligibility: Yes

Eligible Uses: To enhance and expand the method development of new technologies capable of real time flare measurement and monitoring; to develop methods to measure fugitive sources of methane (e.g., landfills); to provide grants to state, local, and Tribal air agencies to develop methane monitoring capabilities to determine effectiveness of emission mitigation efforts.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 66.034

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Environmental and Climate Data Improvement

Federal Agency: Council on Environmental Quality

IRA Statutory Location: 60401

Program Description: To improve the quality, availability, and use of data to support the federal government's efforts to address environmental injustice and to better protect all communities from the impacts of pollution and climate change; to update and improve the Climate and Economic Justice Screening Tool to inform federal investments and decision-making; to enhance the availability of national level data sets that can help characterize the disproportionate impacts of pollution, climate change, and other socioeconomic burdens on communities and provide a pathway to quantify and address these cumulative burdens; and identify ways to improve outcomes for communities with environmental justice concerns.

Funding Amount: $32,500,000

Period of Availability: To remain available until September 30, 2026.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: See program description.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

Relevant Announcements: Biden-Harris Administration Launches Version 1.0 of Climate and Economic Justice Screening Tool, Key Step in Implementing President Biden's Justice40 Initiative (11/22/2022)

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Enforcement Technology and Public Information

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Enforcement and Compliance Assurance

IRA Statutory Location: 60110

Program Description: To update the EPA Integrated Compliance Information System (ICIS) and any associated systems, infrastructure, or tools and to provide grants to states and state pollution control agencies to update their systems to communicate with ICIS.

Funding Amount: $25,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Direct federal spending and competitive grants

New or Existing Program: New (grants) and Existing

Eligible Recipients: For the grant program only: States and state pollution control agencies

Tribal Eligibility: No

Eligible Uses: For the grant program: To update systems to ensure communication with the Integrated Compliance Information System of the Environmental Protection Agency and any associated systems.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Greenhouse Gas Corporate Reporting

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Air and Radiation

IRA Statutory Location: 60111

Program Description: To provide funding for EPA to improve standardization and transparency of corporate climate action commitments and plans to reduce greenhouse gas emissions; to support corporate progress toward meeting such commitments and implementing such plans; and to enhance transparency regarding corporate progress.

Funding Amount: $5,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: N/A

Eligible Uses: Provide funding for EPA to support enhanced standardization and transparency of corporate climate action commitments and plans to reduce greenhouse gas emissions; (2) Support enhanced transparency regarding progress toward meeting such commitments and implementing such plans; (3) Support progress toward meeting such commitments and implementing such plans.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Making Homes and Buildings Cleaner and More Efficient to Save Consumers Money and Cut Pollution

President Biden's economic plan focuses on lowering energy costs for American families so they can keep their homes warm in the winter and cool in the summer. Monthly energy bills can be a particular burden for families trying to make ends meet. The Inflation Reduction Act will help households afford energy efficient appliances and upgrades when they need to make home repairs, so they can save money on their energy bills for years to come. Modernizing and upgrading the nation's residential and commercial buildings to be affordable, resilient, energy efficient, and electrified will create new domestic manufacturing opportunities for electric heating and cooling technology, create good-paying jobs in the building trades, and drive down greenhouse gas emissions from the building sector.

Lowering Energy Costs for Households

The Inflation Reduction Act empowers and equips homeowners who want to make upgrades so they can save energy and reduce their energy costs. Families can save money on their monthly energy bills by choosing energy efficient appliances that use less electricity. They can fix inefficiencies, like drafty windows and poor insulation, that lead to energy waste. New tax credits and deductions in the Inflation Reduction Act can reduce the cost of energy-efficient home upgrades, including heat pumps and other appliances, windows, doors, and more; offset the cost of adding residential clean energy sources, including solar panels and battery storage; and make constructing energy-efficient single and multi-family homes cheaper and easier. The law also includes nearly $9 billion for consumer home energy rebate programs to electrify home appliances and perform energy efficient retrofits, with a focus on low-income consumers.

The programs in the Inflation Reduction Act build on investments in the Bipartisan Infrastructure Law, including the Bipartisan Infrastructure Law's $3.5 billion expansion of the Weatherization Assistance Program to improve home energy efficiency for low-income families; $250 million for the Energy Efficiency Revolving Loan Fund Capitalization Grant Program, through which states can provide loans and grants for energy efficiency audits, upgrades, and retrofits to buildings; and $550 million for the Energy Efficiency and Conservation Block Grant Program, which is designed to assist states, local governments, and Tribes in implementing strategies to reduce energy use and improve energy efficiency.

Funding Overview

Highlights include:

- **Nearly $9 billion for states and Tribes for consumer home energy rebate programs,** enabling communities to make homes more energy efficient, upgrade to electric appliances, and cut energy costs. The Department of Energy estimates that these historic home energy efficiency and electrification consumer rebates, targeted to lower-income consumers, will save households up to $1 billion annually.

- **The Energy Efficiency Home Improvement Credit provides up to $3,200 annually in tax credits to lower the cost of energy efficient upgrades by up to 30 percent,** including the purchase of heat pumps, insulation, efficient doors and windows, electrical panel upgrades, and energy audits. Heat pumps alone can save households up to $500 in energy costs every year.

- **The Residential Clean Energy Credit provides a 30 percent tax credit to lower the installation cost of residential clean energy,** including rooftop solar, wind, geothermal, and battery storage. The credit steps down to 22 percent by 2034. The Residential Clean Energy Credit offers more households access to and freedom to choose renewable energy that can lower monthly energy bills and cut air pollution from power plants.

- **The New Energy Efficient Home Credit provides up to $5,000 in tax credits for each new energy-efficient home and up to $1,000 for each unit in a multi-family building.** This credit incentivizes builders to lower monthly energy costs for future owners and renters. Single and multi-family dwellings that meet Energy Star requirements are eligible.

Programs Covered in This Chapter

Agency	IRA Section	Tax Code Section	Program Name	Amount
Department of the Treasury	13301	25C	Energy Efficient Home Improvement Credit	-
Department of the Treasury	13302	25D	Residential Clean Energy Credit	-
Department of the Treasury	13304	45L	New Energy Efficient Homes Credit	-
Department of Energy	50121	-	Home Energy Performance-Based, Whole-House Rebates	$4,300,000,000
Department of Energy	50122	-	High-Efficiency Electric Home Rebate Program	$4,500,000,000
Department of Energy	50123	-	State-Based Home Efficiency Contractor Training Grants	$200,000,000

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Energy Efficiency Home Improvement Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13301

Tax Code Location: 26 U.S. Code § 25C

Tax Provision Description: Provides a tax credit for energy-efficiency improvements of residential homes.

Period of Availability: 2022-2032

Tax Mechanism: Consumer tax credit

New or Modified Provision: Modified and extended. Credit rate increased from 10% to 30%. Eligibility and standards are modified. $500/per taxpayer lifetime limit eliminated and replaced with increased annual limits.

Eligible Recipients: Homeowners; renters for certain improvements

Tribal Eligibility: Yes

Base Credit Amount: 30% of cost, with limits for each type of improvement and total per year. Credit capped at $600 for "energy property," e.g. efficient heating and cooling equipment; $600 for windows; $250 per door, $500 total for doors; $2,000 for heat pumps; $1,200 for qualified energy efficiency improvements to the building envelope, including insulation and air sealing. Total annual credit capped at $1,200, with a separate annual $2,000 limit for heat pumps. $150 credit for home energy audits.

Bonus Credit Amount: None

Direct Pay Eligibility: No

Transferability: No

Stackability: No rules

Relevant Announcements: Request for Comments on Incentive Provisions for Improving the Energy Efficiency of Residential and Commercial Buildings (10/5/2022)
Frequently asked questions about energy efficient home improvements and residential clean energy property credits (12/22/2022)

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Residential Clean Energy Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13302

Tax Code Location: 26 U.S. Code § 25D

Tax Provision Description: Provides a tax credit for the purchase of residential clean energy equipment, including battery storage with capacity of at least 3 kWh.

Period of Availability: 2022-2032, with phasedown over 2033-2034.

Tax Mechanism: Consumer tax credit

New or Modified Provision: Modified and extended. Credit extended at 30% through 2032, with phasedown through 2034. Battery storage newly eligible in 2023; biomass fuel property credit eliminated.

Eligible Recipients: Homeowners (including renters)

Tribal Eligibility: Yes

Base Credit Amount: 30% of cost of equipment through 2032; 26% in 2033; 22% in 2034.

Bonus Credit Amount: None

Direct Pay Eligibility: No

Transferability: No

Stackability: No rules

Relevant Announcements: Request for Comments on Incentive Provisions for Improving the Energy Efficiency of Residential and Commercial Buildings (10/5/2022)
Frequently asked questions about energy efficient home improvements and residential clean energy property credits (12/22/2022)

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New Energy Efficient Homes Credit

Federal Agency: Department of the Treasury

IRA Statutory Location: 13304

Tax Code Location: 26 U.S. Code § 45L

Tax Provision Description: Provides a tax credit for construction of new energy efficient homes.

Period of Availability: 2023-2032

Tax Mechanism: Tax credit for homebuilders

New or Modified Provision: Existing, but the credit had previously expired at end of 2021. Retroactively extended with new rules effective for homes acquired after 2022.

Eligible Recipients: Homebuilders

Tribal Eligibility: Yes

Base Credit Amount: $2,500 for new homes meeting Energy Star standards; $5,000 for certified zero-energy ready homes. For multifamily, base amounts are $500 per unit for Energy Star and $1000 per unit for zero-energy ready.

Bonus Credit Amount: For multifamily homes, 5 times the base amount if prevailing wage requirements are met. Initial guidance on the labor provisions is available here.

Direct Pay Eligibility: No

Transferability: No

Stackability: Yes. Taxpayers claiming the Low-Income Housing Tax Credit do not have to reduce basis for 45L credits claimed.

Relevant Announcements: Request for Comments on Incentive Provisions for Improving the Energy Efficiency of Residential and Commercial Buildings (10/5/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act

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Home Energy Performance-Based, Whole-House Rebates

Federal Agency: Department of Energy
Bureau or Office: Office of State and Community Energy Programs

IRA Statutory Location: 50121

Program Description: To award grants to state energy offices to develop a whole-house energy saving retrofits program that will provide rebates to homeowners and aggregators for whole-house energy saving retrofits.

Funding Amount: $4,300,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: States

Tribal Eligibility: No

Eligible Uses: States may use up to 20% for planning, administration, or technical assistance. The remaining funds will be utilized for eligible equipment that significantly reduces energy consumption in a home or multi-family building.

Cost Share Requirements: Yes. Cost share requirement dependent on income level.

50% if AMI exceeds 80% AMI
20% if AMI is below 80% AMI

Formula Funding: Yes

SAM.gov Assistance Listing: TBD

Relevant Announcements: Biden-Harris Administration Announces State and Tribe Allocations for Home Energy Rebate Program (11/2/2022)

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High-Efficiency Electric Home Rebate Program

Federal Agency: Department of Energy
Bureau or Office: Office of State and Community Energy Programs

IRA Statutory Location: 50122

Program Description: To award grants to state energy offices and Tribal entities to develop and implement a high-efficiency electric home rebate program.

Funding Amount: $4,500,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: States and Tribal entities. $225,000,000 is allocated for Tribes.

Tribal Eligibility: Yes

Eligible Uses: A state energy office or Indian Tribe may use up to 20 percent of the grant amount for planning, administration, or technical assistance. The remaining funds are for rebates for the purchase of high-efficiency electric home appliances.

Cost Share Requirements: Yes. Cost share requirement dependent on income level and price of the appliance.

Formula Funding: Yes

SAM.gov Assistance Listing: TBD

Relevant Announcements: Biden-Harris Administration Announces State and Tribe Allocations for Home Energy Rebate Program (11/2/2022)

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State-Based Home Efficiency Contractor Training Grants

Federal Agency: Department of Energy
Bureau or Office: Office of State and Community Energy Programs

IRA Statutory Location: 50123

Program Description: To provide financial assistance to states to develop and implement a program to provide training and education to contractors involved in the installation of home energy efficiency and electrification improvements, including improvements eligible for rebates under sections 50121(d) and 50122(d) of the Inflation Reduction Act.

Funding Amount: $200,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: States

Tribal Eligibility: Yes

Eligible Uses: State may use funding to (1) to reduce the cost of training contractor employees; (2) to provide testing and certification of contractors trained and educated under a state program; and (3) to partner with nonprofit organizations to develop and implement a state program. States' administrative costs may not exceed 10 percent.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Supporting Investment in Energy-Efficient and Low-Carbon Buildings

Although they do not have smokestacks, buildings—including their construction, their powering and heating/cooling, and the manufacturing of building materials—are a large source of greenhouse gas emissions in the United States. In June 2022, President Biden announced a National Initiative to Advance Building Codes that will help state, local, Tribal, and territorial governments adopt the latest building codes and standards for energy efficiency and safety, which will create good-paying jobs, lower energy bills, and protect communities from extreme weather. On December 7, 2022, the Biden-Harris Administration announced a Federal Building Performance Standard that directs federal agencies to cut energy use and electrify equipment and appliances to achieve zero direct greenhouse gas emissions in 30 percent of the building space owned by the federal government by square footage by 2030.

The Inflation Reduction Act supports these programs and provides tax incentives, grants, and loans to make commercial and residential buildings, including federally-assisted housing, more energy efficient and resilient to the impacts of a warming climate. It complements investments in the Bipartisan Infrastructure Law, including $225 million for the Building Codes Implementation for Efficiency and Resilience Program at the Department of Energy, to help states support sustained, cost-effective implementation of updated building energy codes.

Funding Overview

The Inflation Reduction Act invests in programs to make buildings part of the climate solution. Highlights include:

- **$1 billion for the Green and Resilient Retrofit Program** at the Department of Housing and Urban Development (HUD), which will provide funding to the owners of HUD-assisted multifamily properties for projects to improve energy or water efficiency; enhance indoor air quality or sustainability; implement the use of zero-emission electricity generation, low-emission building materials or processes, energy storage, or building electrification strategies; or make the properties more resilient to climate impacts. HUD also will conduct energy and water benchmarking of HUD-assisted properties.

- **$1 billion for Department of Energy grants to state and local governments to adopt updated building energy codes,** including zero-energy codes. Homes that are zero-energy ready are so energy efficient that a renewable energy system could offset most or all the home’s annual energy use.

- **Extension and expansion of the energy efficient commercial buildings deduction.** Buildings that increase their energy efficiency by at least 25 percent will be able to claim this tax deduction, with bonuses for higher efficiency improvements. The claimant can earn additional bonus deductions by meeting prevailing wage and registered apprenticeship requirements.

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Programs Covered in This Chapter				
Agency	**IRA Section**	**Tax Code Section**	**Program Name**	**Amount**
Department of the Treasury	13303	179D	Energy Efficient Commercial Buildings Deduction	-
Dept of Housing and Urban Development	30002(a)(1)	-	Green and Resilient Retrofit Program - Grants and Loans	$837,500,000
Dept of Housing and Urban Development	30002(a)(3)	-	Green and Resilient Retrofit Program - Contracts and Cooperative Agreements	$60,000,000
Dept of Housing and Urban Development	30002(a)(4)	-	Green and Resilient Retrofit Program - Benchmarking	$42,500,000
Department of Energy	50131	-	Assistance for Latest and Zero Building Energy Code Adoption	$1,000,000,000

Energy Efficient Commercial Buildings Deduction

Federal Agency: Department of the Treasury

IRA Statutory Location: 13303

Tax Code Location: 26 U.S. Code § 179D

Tax Provision Description: Provides a tax deduction for energy efficiency improvements to commercial buildings, such as improvements to interior lighting; heating, cooling, ventilation, and hot water; and building envelope.

Period of Availability: Permanent; new rules generally begin in 2023.

Tax Mechanism: Business tax deduction

New or Modified Provision: Modified and extended. Efficiency requirements updated.

Eligible Recipients: Owners and long-term lessees of commercial buildings. Designers of energy efficient building property (architects, engineers). Tax-exempt owners of commercial properties, pending Treasury guidance on deduction allocation.

Tribal Eligibility: Yes

Base Credit Amount: \$0.50-\$1 per square foot, depending on increase in efficiency, with deduction over four year periods capped at \$1 per square foot. Inflation adjusted. Alternatively, taxpayers can deduct adjusted basis in "qualified retrofit plans" that reduce a building's energy use intensity by at least 25%.

Bonus Credit Amount: 5 times the base amount if the project meets prevailing wage and registered apprenticeship requirements. Initial guidance on the labor provisions is available here.

Direct Pay Eligibility: No

Transferability: No

Stackability: No rules

Relevant Announcements: Request for Comments on Incentive Provisions for Improving the Energy Efficiency of Residential and Commercial Buildings (10/5/2022)
Prevailing Wage and Apprenticeship Initial Guidance (11/29/2022)
FAQ: Prevailing Wage and the Inflation Reduction Act
FAQ: Apprenticeships and the Inflation Reduction Act

Green and Resilient Retrofit Program - Grants and Loans

Federal Agency: Department of Housing and Urban Development
Bureau or Office: Office of Housing, Multifamily Housing, Office of Recapitalization

IRA Statutory Location: 30002(a)(1)

Program Description: To provide grants and loans to HUD-assisted properties to improve energy or water efficiency; enhance indoor air quality or sustainability; implement the use of zero-emission electricity generation, low-emission building materials or processes, energy storage, or building electrification strategies; or make the properties more resilient to climate impacts. The law provides up to $4,000,000,000 in loan authority.

Funding Amount: $837,500,000

Period of Availability: Funds for grants and direct loans available until September 30, 2028.

Funding Mechanism: Competitive grants, loans

New or Existing Program: New

Eligible Recipients: Owner or sponsor of properties assisted pursuant to section 202 of the Housing Act of 1959, section 202 of the Housing Act of 1959 as such section existed before the enactment of the Cranston-Gonzalez National Affordable Housing Act, section 811 of the Cranston-Gonzalez National Affordable Housing Act, section 8(b) of the United States Housing Act of 1937, section 236 of the National Housing Act, or a Housing Assistance Payments contract for Project-Based Rental Assistance in fiscal year 2021.

Tribal Eligibility: Yes

Eligible Uses: To fund projects at an eligible property that improve energy or water efficiency; enhance indoor air quality or sustainability; implement the use of zero-emission electricity generation, low-emission building materials or processes, energy storage, or building electrification strategies; or address climate resilience.

Cost Share Requirements: TBD

Formula Funding: No

SAM.gov Assistance Listing: TBD

Green and Resilient Retrofit Program - Contracts and Cooperative Agreements

Federal Agency: Department of Housing and Urban Development
Bureau or Office: Office of Housing, Multifamily Housing, Office of Recapitalization

IRA Statutory Location: 30002(a)(3)

Program Description: To cover expenses of contracts or cooperative agreements administered by the Secretary for the purpose of implementing the Green and Resilient Retrofit Program.

Funding Amount: $60,000,000

Period of Availability: Until September 30, 2029

Funding Mechanism: Contracts, cooperative agreements

New or Existing Program: New

Eligible Recipients: N/A

Tribal Eligibility: No

Eligible Uses: Contracts or cooperative agreements involved in implementation of the program.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Green and Resilient Retrofit Program – Benchmarking

Federal Agency: Department of Housing and Urban Development
Bureau or Office: Office of Housing, Multifamily Housing, Office of Asset Management

IRA Statutory Location: 30002(a)(4)

Program Description: To conduct energy and water benchmarking of HUD-assisted properties, provide associated data analysis and evaluation at the property and portfolio level, and develop information technology systems necessary for the collection, evaluation, and analysis of such data.

Funding Amount: $42,500,000

Period of Availability: Until September 30, 2028

Funding Mechanism: Federally-funded third party contract support

New or Existing Program: New

Eligible Recipients: Owner or sponsor of properties assisted pursuant to section 202 of the Housing Act of 1959, section 202 of the Housing Act of 1959 as such section existed before the enactment of the Cranston-Gonzalez National Affordable Housing Act, section 811 of the Cranston-Gonzalez National Affordable Housing Act, section 8(b) of the United States Housing Act of 1937, section 236 of the National Housing Act, or a Housing Assistance Payments contract for Project-Based Rental Assistance in fiscal year 2021.

Tribal Eligibility: Yes

Eligible Uses: Energy and water benchmarking, along with associated data analysis and evaluation at the property and portfolio level, and the development of information technology systems necessary for the collection, evaluation, and analysis of such data.

Cost Share Requirements: TBD

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Assistance for Latest and Zero Building Energy Code Adoption

Federal Agency: Department of Energy
Bureau or Office: Office of State and Community Energy Programs

IRA Statutory Location: 50131

Program Description: To provide grants to states or units of local government to adopt updated building energy codes, including the zero energy code.

Funding Amount: $1,000,000,000

Period of Availability: To remain available through September 30, 2029.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: States and local government with authority to adopt building codes.

Tribal Eligibility: No

Eligible Uses: Grants to assist states and units of local government that have authority to adopt and implement building codes to (1) adopt codes for residential buildings that meet or exceed the 2021 International Energy Conservation Code; and/or (2) adopt a building energy code for commercial buildings that meet or exceed the ANSI/ASHRAE/IES Standard 90.1–2019.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: TBD

Investing in a Sustainable, Lower-Carbon Federal Government

As the largest direct purchaser of goods and services in the world, the U.S. government has the power to catalyze private sector investment in cleaner materials, products, and services by changing how it builds, buys, and manages electricity, vehicles, buildings, and other procurements. By executive order, President Biden committed the federal government to transform its procurement and operations and transition to clean, zero-emission technologies.

The Federal Sustainability Plan outlines how the federal government can achieve net-zero emissions from overall federal operations by 2050, including achieving a net-zero greenhouse gas emissions building portfolio by 2045 and a 50 percent reduction in emissions by 2032. On December 7, 2022, the Biden-Harris Administration announced a Federal Building Performance Standard that directs federal agencies to cut energy use and electrify equipment and appliances to achieve zero direct greenhouse gas emissions in 30 percent of the building space owned by the federal government by square footage by 2030.

The President also has committed to achieving net-zero emissions from federal procurement by 2050 while increasing the sustainability of federal supply chains. The Biden-Harris Administration launched a Federal Buy Clean Initiative to promote the purchase of American-made, lower-carbon construction materials, such as steel, concrete, asphalt, and flat glass products, in federal procurement and federally-funded projects. By leveraging the U.S. government's purchasing power, President Biden is ensuring that American manufacturing is positioned to compete and lead while catalyzing markets and accelerating innovation across the country. The Inflation Reduction Act includes several investments to make progress toward these ambitious goals.

Funding Overview

The Inflation Reduction Act creates and funds several programs that will help us meet the ambitious goal of net-zero federal procurement while building the market for low-carbon construction materials and other advanced technologies. Highlights include:

- **Clean Postal Service Vehicles.** The Inflation Reduction Act includes $3 billion for the U.S. Postal Service to purchase zero-emission delivery vehicles and associated infrastructure.

- **Environmental Product Declaration (EPDs).** The Inflation Reduction Act provides $250 million to support the development and standardization of Environmental Product Declaration (EPDs)—a document that presents environmental information on the lifecycle of a product—including measurements of the embodied greenhouse gas emissions of construction materials and products.

- **Low Carbon Labeling for Construction Materials.** The Inflation Reduction Act provides $100 million for the Environmental Protection Agency to work with the Federal Highway Administration (FHWA) and General Services Administration (GSA) to develop and implement a program to identify and label construction materials and products that have substantially lower levels of embodied greenhouse gas emissions.

- **Procurement of Clean Construction Materials.** The Inflation Reduction Act provides billions to expand government procurement and funding of clean, lower-carbon construction materials and products, expanding the market for these crucial materials. The GSA received $2.15 billion to acquire and install construction materials and products that have substantially lower levels of embodied greenhouse gas emissions. The FHWA received $2 billion to reimburse or incentivize the use of low-embodied carbon construction materials and products in federally-funded highway projects.

Programs Covered in This Chapter

Agency	IRA Section	Program Name	Amount
U.S. Postal Service	70002	U.S. Postal Service Clean Fleets	$3,000,000,000
Environmental Protection Agency	60112	Environmental Product Declaration Assistance	$250,000,000
Environmental Protection Agency	60116	Low Embodied Carbon Labeling for Construction Materials	$100,000,000
General Services Administration	60502	Assistance for Federal Buildings	$250,000,000
General Services Administration	60503	Use of Low-Carbon Materials	$2,150,000,000
General Services Administration	60504	General Services Administration Emerging Technologies	$975,000,000
Department of Transportation, Federal Highway Administration	60506	Low-Carbon Transportation Materials Program	$2,000,000,000
Department of Homeland Security	70001	DHS Office of Chief Readiness Support Officer	$500,000,000

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U.S. Postal Service Clean Fleets

Federal Agency: U.S. Postal Service

IRA Statutory Location: 70002

Program Description: To purchase zero-emission delivery vehicles and to purchase, design, and install the requisite infrastructure to support zero-emission delivery vehicles at U.S. Postal Service facilities.

Funding Amount: $3,000,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: N/A

Eligible Uses: To purchase zero-emission delivery vehicles and to purchase, design, and install the requisite infrastructure to support zero-emission delivery vehicles at U.S. Postal Service facilities.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

Relevant Announcements: USPS Intends to Deploy Over 66,000 Electric Vehicles by 2028, Making One of the Largest Electric Vehicle Fleets in the Nation (12/20/2022)

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Environmental Product Declaration Assistance

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Chemical Safety and Pollution Prevention

IRA Statutory Location: 60112

Program Description: To support the development and standardization of environmental product declarations, including measurements of the embodied greenhouse gas emissions of construction materials and products.

Funding Amount: $250,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Competitive grants, cooperative agreements, contracts, technical assistance, direct federal spending

New or Existing Program: New

Eligible Recipients: Businesses that manufacture construction materials/products, and states, Tribes, and nonprofit organizations that will support such businesses

Tribal Eligibility: Yes

Eligible Uses: Developing and verifying environmental product declarations; technical assistance; other activities that assist in measuring, reporting, and steadily reducing the quantity of embodied carbon in construction materials and products.

Cost Share Requirements: No

Formula Funding: TBD. Exploring both non-competitive formula funding and competitive grants.

SAM.gov Assistance Listing: TBD

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Low Embodied Carbon Labeling for Construction Materials

Federal Agency: Environmental Protection Agency
Bureau or Office: Office of Chemical Safety and Pollution Prevention

IRA Statutory Location: 60116

Program Description: To develop and implement a program to identify and label construction materials and products that have substantially lower levels of embodied greenhouse gas emissions.

Funding Amount: $100,000,000

Period of Availability: To remain available until September 30, 2026

Funding Mechanism: Competitive grants, cooperative agreements, contract, technical assistance, direct federal spending

New or Existing Program: New

Eligible Recipients: TBD

Tribal Eligibility: Yes

Eligible Uses: Work associated with identifying and labelling construction materials and products that have substantially lower levels of embodied greenhouse gas emissions.

Cost Share Requirements: No

Formula Funding: TBD. Exploring both non-competitive formula funding and competitive grants.

SAM.gov Assistance Listing: TBD

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Assistance for Federal Buildings

Federal Agency: General Services Administration
Bureau or Office: Real Property Activities

IRA Statutory Location: 60502

Program Description: To convert GSA facilities to high-performance green buildings, as part of the Federal Buildings Fund.

Funding Amount: $250,000,000

Period of Availability: Through September 30, 2031

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Measures that improve a building's environmental performance, including those that reduce energy, water, and material resource use; improve indoor environmental quality; reduce air and water pollution and waste generation; increase the use of environmentally preferable products; increase reuse and recycling opportunities; integrate systems in the building; and reduce the environmental and energy impacts of transportation to and from the building.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Relevant Announcements: GSA Administrator Visits Arizona to Announce First Inflation Reduction Act Projects at Federal Facilities (12/19/2022)

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Use of Low-Carbon Materials

Federal Agency: General Services Administration
Bureau or Office: Real Property Activities

IRA Statutory Location: 60503

Program Description: To acquire and install construction materials and products, for use in the construction or alteration of GSA buildings, that have substantially lower levels of embodied greenhouse gas emissions, as part of the Federal Buildings Fund.

Funding Amount: $2,150,000,000

Period of Availability: Through September 30, 2026

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Providing for the construction and renovation of GSA federal buildings using materials and products determined by the U.S. Environmental Protection Agency to have substantially lower levels of embodied greenhouse gas emissions as compared to industry averages for similar materials or products.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Relevant Announcements: GSA Administrator Visits Arizona to Announce First Inflation Reduction Act Projects at Federal Facilities (12/19/2022)

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General Services Administration Emerging Technologies

Federal Agency: General Services Administration
Bureau or Office: Real Property Activities

IRA Statutory Location: 60504

Program Description: To support emerging and sustainable technologies and related sustainability and environmental programs, as part of the Federal Buildings Fund.

Funding Amount: $975,000,000

Period of Availability: Through September 30, 2026

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Providing for the purchase, installation, and implementation of emerging and sustainable technologies, along with GSA's related sustainability and environmental programs.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Relevant Announcements: GSA Administrator Visits Arizona to Announce First Inflation Reduction Act Projects at Federal Facilities (12/19/2022)

Low-Carbon Transportation Materials Program

Federal Agency: Department of Transportation
Bureau or Office: Federal Highway Administration

IRA Statutory Location: 60506

Program Description: To reimburse or provide incentives to eligible recipients for the use of low-embodied carbon construction materials and products in federally-funded highway projects.

Funding Amount: $2,000,000,000

Period of Availability: Available until September 30, 2026.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: (1) A state, unit of local government, political subdivision of a state, MPO, or U.S. territory; (2) Federally recognized Indian Tribe; (3) A special purpose district or public authority with a transportation function; or (4) Federal Land Management Agencies.

Tribal Eligibility: Yes

Eligible Uses: To reimburse or provide incentives to eligible recipients for the use, in projects, of construction materials and products that have substantially lower levels of embodied greenhouse gas emissions associated with all relevant stages of production, use, and disposal as compared to estimated industry averages of similar material or products.

Cost Share Requirements: The total federal share payable for the project for which the reimbursement or incentive is provided shall be up to 100%.

Formula Funding: No

SAM.gov Assistance Listing: N/A

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Department of Homeland Security
Office of Chief Readiness Support Officer

Federal Agency: Department of Homeland Security
Bureau or Office: Office of Chief Readiness Support Officer

IRA Statutory Location: 70001

Program Description: To execute and implement investments associated with sustainability and the environment across the Department.

Funding Amount: $500,000,000

Period of Availability: To remain available until September 30, 2028

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Real and Personal Property Sustainability, Resilience, Energy, Regional Management, Environmental Compliance, Environmental Justice, and Lease Consolidations/Efficiencies Investments.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

Harnessing Nature-Based Solutions and Climate-Smart Agriculture to Deliver Economic, Climate, and Resilience Benefits

Nature-based solutions—actions to protect, sustainably manage, or restore natural or modified ecosystems to address societal challenges—offer tremendous opportunity in the fight against the climate crisis. Nature-based solutions include a range of practices, such as protection and conservation of natural areas, restoration of habitats, and sustainable management of farms, fisheries, forests, or other resources. These practices have the dual benefit of mitigating climate change by removing and sequestering carbon while making ecosystems, forests, and agricultural land more resilient to climate impacts, including drought and wildfires. The Inflation Reduction Act invests billions in nature-based solutions and climate-smart sustainable agriculture to reduce greenhouse gas emissions, encourage new economic activity in rural areas, and protect the communities most vulnerable to wildfires, coastal floods, and other impacts of climate change.

Supporting Climate-Smart Agriculture and Rural Economic Development

Our nation's farmers and ranchers are responsible for harvesting much of the food and products that we depend on, but they are particularly vulnerable to climate change, as droughts, extreme rainfall events, and less predictable weather patterns can harm crop yields and livestock. These impacts can reverberate in local rural economies and throughout the U.S. economy as a whole.

In Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," President Biden recognized the important role that America's farmers, ranchers, and forest landowners can play in combating the climate crisis and reducing emissions by sequestering carbon in soils, grasses, trees, and other vegetation and sourcing sustainable bioproducts and fuels. The Inflation Reduction provides $19 billion to the U.S. Department of Agriculture (USDA) to support farmers and ranchers in adopting and expanding climate-smart activities and systems.

The Inflation Reduction Act also includes billions to support economically distressed farm loan borrowers, including those affected by pandemic-related market disruptions and climate-fueled natural disasters, and agriculture producers who may have experienced discrimination in USDA's farm lending programs. These and other programs to provide financial and technical assistance to underserved farmers and ranchers will boost rural economies and support farmers, ranchers, and forest landowners who may have not benefited from USDA's programs in the past.

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Funding Overview

The Inflation Reduction Act provides billions of dollars to USDA to invest in rural America, partner with the agricultural sector to support sustainable and resilient food systems, and respond to the climate challenge. Highlights include:

- **$8.45 billion for the Environmental Quality Incentives Program,** which will provide technical and financial assistance to producers to address natural resource concerns and deliver environmental benefits, such as improving soil carbon and sequestering carbon dioxide.

- **$4.95 billion for the Regional Conservation Partnership Program,** which will support partner-driven conservation projects that help agricultural producers and nonindustrial private forestland owners improve soil carbon, sequester carbon dioxide, or otherwise reduce emissions.

- **$3.25 billion for the Conservation Stewardship Program,** which will offer technical and financial assistance to compensate agricultural and forest producers who adopt conservation practices.

- **$3.1 billion to provide relief to distressed farm loan borrowers,** many of whom have been hard hit by market disruptions during the COVID-19 pandemic or natural disasters fueled by climate change. This assistance will help keep farmers on their land so they can produce the food, fiber, and fuel the country needs. On October 18, 2022, USDA provided nearly $800 million in assistance to distressed borrowers to cure delinquent accounts and resolve loan debts for borrowers in foreclosure.

See the table on the next page for a full list of the programs summarized in this chapter.

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Programs Covered in This Chapter			
Agency	**IRA Section**	**Program Name**	**Amount**
Department of Agriculture	21001(a)(1)	Environmental Quality Incentives Program	$8,450,000,000
Department of Agriculture	21001(a)(2)	Conservation Stewardship Program	$3,250,000,000
Department of Agriculture	21001(a)(3)	Agricultural Conservation Easement Program	$1,400,000,000
Department of Agriculture	21001(a)(4)	Regional Conservation Partnership Program	$4,950,000,000
Department of Agriculture	21002(a)(1)	Conservation Technical Assistance	$1,000,000,000
Department of Agriculture	21002(a)(2)	Conservation Technical Assistance - Greenhouse Gas Emission Quantification Program	$300,000,000
Department of Agriculture	22006	Assistance for Distressed Borrowers	$3,100,000,000
Department of Agriculture	22007	USDA Assistance and Support for Underserved Farmers, Ranchers, Foresters: Technical and Other Assistance	$125,000,000
Department of Agriculture	22007	Increasing Land, Capital, and Market Access (Increasing Land Access) Program	$250,000,000
Department of Agriculture	22007	Equity Commission	$10,000,000
Department of Agriculture	22007	From Learning to Leading: Cultivating the Next Generation of Diverse Food and Agriculture Professionals	$250,000,000
Department of Agriculture	22007	Assistance and Support for Underserved Farmers, Ranchers, and Foresters	$2,200,000,000

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Environmental Quality Incentives Program (EQIP)

Federal Agency: Department of Agriculture
Bureau or Office: Natural Resources Conservation Service

IRA Statutory Location: 21001(a)(1)

Program Description: To support the Environmental Quality Incentives Program (EQIP), which provides technical and financial assistance to producers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, increased soil health and reduced soil erosion and sedimentation, improved or new wildlife habitat, and mitigation against drought and increasing weather volatility.

Funding Amount: $8,450,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Cooperative Agreements, Grants, Contracts

New or Existing Program: Existing

Eligible Recipients: Agriculture producers (including nonindustrial private forest landowners and Indian Tribes), farmers, ranchers, and forest landowners

Tribal Eligibility: Yes

Eligible Uses: Technical and financial assistance to eligible agricultural producers to help implement conservation practices that address resource concerns related to organic production; soil, water, and air quality; wildlife habitat; nutrient management associated with crops and livestock; pest management; ground and surface water conservation; irrigation management; drought resiliency measures; adapting to and mitigating against increasing weather volatility; energy conservation; and related resource concerns. This funding will support practices that directly improve soil carbon, reduce nitrogen losses, or reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide emissions associated with agricultural production.

Cost Share Requirements: Varies

Formula Funding: No

SAM.gov Assistance Listing: 10.912

Relevant Announcements: USDA Requests Public Input on Implementation of Inflation Reduction Act Funding (11/17/2022)

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Conservation Stewardship Program (CSP)

Federal Agency: Department of Agriculture
Bureau or Office: Natural Resources Conservation Service

IRA Statutory Location: 21001(a)(2)

Program Description: To support the Conservation Stewardship Program (CSP), which offers technical and financial assistance to compensate agricultural and forest producers who agree to increase their level of conservation by adopting additional conservation activities and maintaining their baseline level of conservation.

Funding Amount: $3,250,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Cooperative Agreements, Grants, Contracts

New or Existing Program: Existing

Eligible Recipients: Agriculture producers, farmers, ranchers, and forest landowners

Tribal Eligibility: Yes

Eligible Uses: Development of a conservation plan that outlines and enhances existing efforts, using new conservation practices or activities, based on management objectives for the operation to expand on the benefits of cleaner water and air, healthier soil, and better wildlife habitat, all while improving agricultural operations. CSP offers annual payments for implementing these practices on land and operating and maintaining existing conservation efforts. This funding will support practices that directly improve soil carbon, reduce nitrogen losses, or reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide emissions associated with agricultural production.

Cost Share Requirements: Varies

Formula Funding: No

SAM.gov Assistance Listing: 10.924

Relevant Announcements: USDA Requests Public Input on Implementation of Inflation Reduction Act Funding (11/17/2022)

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Agricultural Conservation Easement Program (ACEP)

Federal Agency: Department of Agriculture
Bureau or Office: Natural Resources Conservation Service

IRA Statutory Location: 21001(a)(3)

Program Description: To support the Agriculture Conservation Easement Program (ACEP), which helps landowners, land trusts, and other entities protect, restore, and enhance wetlands or protect working farms and ranches through conservation easements.

Funding Amount: $1,400,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Cooperative Agreements, Grants, Contracts, Easements

New or Existing Program: Existing

Eligible Recipients: Conservation entities, agriculture producers, farmers, ranchers, and forest landowners

Tribal Eligibility: Yes

Eligible Uses: Protection, restoration, and enhancement of wetlands or protection of working farms and ranches through conservation easements. This funding will support easements or interests in land that will most reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide emissions.

Cost Share Requirements: Varies

Formula Funding: No

SAM.gov Assistance Listing: 10.931

Relevant Announcements: USDA Requests Public Input on Implementation of Inflation Reduction Act Funding (11/17/2022)

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Regional Conservation Partnership Program (RCPP)

Federal Agency: Department of Agriculture
Bureau or Office: Natural Resources Conservation Service

IRA Statutory Location: 21001(a)(4)

Program Description: To support the Regional Conservation Partnership Program (RCPP), a partner-driven approach to conservation that funds solutions to natural resource challenges on agricultural land by leveraging collective resources and collaborating to implement natural resource conservation activities.

Funding Amount: $4,950,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Cooperative Agreements, Grants, Contracts

New or Existing Program: Existing

Eligible Recipients: Native American Organizations, Farmer/Rancher/Agriculture Producer, Land/Property Owner, State/Local Sponsored Organization, Federally Recognized Indian Tribal Governments. Producers in an approved partner project area who have priority resource concerns related to soil, water, and related natural resources, or who need assistance with complying with federal and state environment laws. A participant may be an owner, landlord, operator, or tenant of eligible agricultural lands or non-industrial forestlands. Limited resource producers, small-scale producers, social disadvantaged individuals, federally recognized Indian Tribal governments, Alaska natives, and Pacific Islanders are encouraged to apply.

Tribal Eligibility: Yes

Eligible Uses: RCPP projects may include a range of on-the-ground conservation activities implemented by farmers, ranchers, and forest landowners such as land management, improvement, and restoration practices; land rentals; and entity-held and U.S.-held easements. This funding will prioritize partnerships that support implementation of conservation projects that directly improve soil carbon, reduce nitrogen losses, or reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide emissions associated with agricultural production.

Cost Share Requirements: Varies

Formula Funding: No

SAM.gov Assistance Listing: 10.932

Relevant Announcements: USDA Requests Public Input on Implementation of Inflation Reduction Act Funding (11/17/2022)

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Conservation Technical Assistance

Federal Agency: Department of Agriculture
Bureau or Office: Natural Resources Conservation Service

IRA Statutory Location: 21002(a)(1)

Program Description: To provide conservation technical assistance, which offers our nation's farmers, ranchers, and forestland owners the knowledge and tools they need to conserve, maintain, and restore the natural resources on their lands and improve the health of their operations for the future.

Funding Amount: $1,000,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Cooperative Agreements, Grants, Contracts

New or Existing Program: Existing

Eligible Recipients: Individuals, groups, and communities that make natural resource management decisions on private, Tribal, and other non-federal lands (e.g. conservation entities, agriculture producers, farmers, ranchers and forest landowners).

Tribal Eligibility: Yes

Eligible Uses: NRCS offers this assistance at no cost to the producers we serve. The goal is to give farmers, ranchers, and forestland owners personalized advice and information, based on the latest science and research, to help them make informed decisions.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: 10.938

Relevant Announcements: USDA Requests Public Input on Implementation of Inflation Reduction Act Funding (11/17/2022)

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Conservation Technical Assistance - Greenhouse Gas Emission Quantification Program

Federal Agency: Department of Agriculture
Bureau or Office: Natural Resources Conservation Service

IRA Statutory Location: 21002(a)(2)

Program Description: To provide conservation technical assistance through partnerships that will leverage the expertise, experience, and capacity of other organizations to address climate change and to broaden the footprint of climate-smart agriculture. These monitoring and evaluation efforts will support the quantification of carbon sequestration and greenhouse gas emissions reductions, directly tied to the conservation program investments.

Funding Amount: $300,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Cooperative Agreements, Grants, Contracts

New or Existing Program: Existing

Eligible Recipients: Individuals, groups, and communities that make natural resource management decisions on private, Tribal, and other non-federal lands (e.g. conservation entities, agriculture producers, farmers, ranchers, and forest landowners).

Tribal Eligibility: Yes

Eligible Uses: To carry out a program to quantify carbon sequestration and carbon dioxide, methane, and nitrous oxide emissions, through which the Natural Resources Conservation Service shall collect field-based data to assess carbon sequestration and reduction in carbon dioxide, methane, and nitrous oxide emissions outcomes and use the data to monitor and track those carbon sequestration and emissions trends through the Greenhouse Gas Inventory and Assessment Program of the Department of Agriculture.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: 10.938

Relevant Announcements: USDA Requests Public Input on Implementation of Inflation Reduction Act Funding (11/17/2022)

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Assistance for Distressed Borrowers

Federal Agency: Department of Agriculture
Bureau or Office: Farm Service Agency

IRA Statutory Location: 22006

Program Description: To expedite assistance to distressed borrowers of direct or guaranteed loans administered by USDA's Farm Service Agency (FSA) whose operations face financial risk. In October 2022, with funding from the Inflation Reduction Act, USDA provided nearly $800 million in payments to distressed borrowers to help cure delinquencies and resolve uncollectable farm loan debts.

Funding Amount: $3,100,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: Yes. Tribal governments as well as individual Tribal members or organizations.

Eligible Uses: Direct federal spending to expedite assistance to distressed borrowers of direct or guaranteed loans administered by USDA's Farm Service Agency whose operations face financial risk.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

Relevant Announcements: USDA Provides Payments of nearly $800 Million in Assistance to Help Keep Farmers Farming (10/18/2022)

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USDA Assistance and Support for Underserved Farmers, Ranchers, Foresters: Technical and Other Assistance

Federal Agency: Department of Agriculture
Bureau or Office: Office of the Secretary

IRA Statutory Location: 22007

Program Description: To provide funding for outreach, mediation, financial training, capacity building training, cooperative development and agricultural credit training and support, and other technical assistance on issues concerning food, agriculture, agricultural credit, agricultural extension, rural development, or nutrition to underserved farmers, ranchers, or forest landowners, including veterans, limited resource producers, beginning farmers and ranchers, and farmers, ranchers, and forest landowners living in high poverty areas.

Funding Amount: $125,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Cooperative Agreements

New or Existing Program: New

Eligible Recipients: Non-profit organizations and institutions of higher education

Tribal Eligibility: No

Eligible Uses: Technical assistance and outreach to underserved farmers, ranchers, and foresters

Cost Share Requirements: 0%

Formula Funding: No

SAM.gov Assistance Listing: 10.234

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Increasing Land, Capital, and Market Access (Increasing Land Access) Program

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Federal Agency: Department of Agriculture
Bureau or Office: Farm Service Agency

IRA Statutory Location: 22007

Program Description: To help underserved producers by increasing land, capital, and market access. The program funds cooperative agreements or grants for projects that help move underserved producers from surviving to thriving.

Funding Amount: $250,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants, Cooperative Agreements

New or Existing Program: New

Eligible Recipients: Government entities from local to Tribal, not-for-profit educational institutions, and non-profit organizations. The non-profit organizations can include Community Development Financial Institutions, foundations, and Tribal financial institutions with a 501(c)(3) status.

Tribal Eligibility: Yes

Eligible Uses: Projects to improve land access (including heirs' property and fractionated land issues) for underserved farmers, ranchers, and forest landowners, including veterans, limited resource producers, beginning farmers and ranchers, and farmers, ranchers, and forest landowners living in high poverty areas.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 10.968

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Equity Commission

Federal Agency: Department of Agriculture
Bureau or Office: Office of the Secretary

IRA Statutory Location: 22007

Program Description: To fund the activities of one or more equity commissions that will address racial equity issues within the USDA and the programs of the USDA.

Funding Amount: $10,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: N/A

Eligible Uses: Activities of one or more equity commissions.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

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From Learning to Leading: Cultivating the Next Generation of Diverse Food and Agriculture Professionals (NEXTGEN)

Federal Agency: Department of Agriculture
Bureau or Office: National Institutes of Food and Agriculture

IRA Statutory Location: 22007

Program Description: To enable 1890 institutions, 1994 institutions, Alaska Native-serving institutions and Native Hawaiian-serving institutions, Hispanic-serving institutions, and insular area institutions of higher education located in the U.S. territories to build and sustain the next generation of the food, agriculture, natural resources, and human sciences workforce including the future USDA workforce primarily by (a) providing student scholarship support, meaningful paid internships, fellowships, and job opportunity matching, and (b) facilitating opportunities to learn the processes and pathways leading to training and employment in the federal sector.

Funding Amount: $250,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: 1890 institutions, 1994 institutions, Alaska Native-serving institutions and Native Hawaiian-serving institutions, Hispanic-serving institutions, and insular area institutions of higher education located in the U.S. territories.

Tribal Eligibility: No

Eligible Uses: To support and supplement agricultural research, education, and extension, as well as scholarships and programs that provide internships and pathways to agricultural sector or federal employment.

Cost Share Requirements: 0%

Formula Funding: No

SAM.gov Assistance Listing: 10.237

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Assistance and Support for Underserved Farmers, Ranchers, and Foresters

Federal Agency: Department of Agriculture
Bureau or Office: Office of the Secretary

IRA Statutory Location: 22007

Program Description: To provide financial assistance to producers that have experienced discrimination in the Department of Agriculture's farm lending programs prior to January 1, 2021. USDA recently solicited public input through a Request for Information (RFI) on how USDA should design and administer the program. The RFI is an important step in making sure farmers, advocates, academics, legislators, Tribal governments, and other experts can share their perspectives to assist USDA in implementing these provisions and fulfilling the intent of Congress.

Funding Amount: $2,200,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: TBD

New or Existing Program: New

Eligible Recipients: TBD

Tribal Eligibility: Yes. Tribal governments as well as individual Tribal members or organizations.

Eligible Uses: TBD

Cost Share Requirements: TBD

Formula Funding: TBD

SAM.gov Assistance Listing: TBD

Relevant Announcements: USDA Seeking Public Comment on a New Provision to Provide Assistance to Agricultural Producers Who Have Experienced Discrimination (10/13/2022)

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Preserving and Protecting the Nation's Lands and Waters for Climate Mitigation and Resilience

In the first days of his Administration, President Biden issued Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," which called for a bold, all of government approach to climate mitigation and resilience, including conserving, connecting, and restoring 30 percent of our lands and waters by 2030. To meet the ambition of that conservation goal, the Biden-Harris Administration launched America the Beautiful, a decade-long challenge to pursue a locally led and voluntary nationwide effort to conserve, connect, and restore the lands, waters, and wildlife upon which we all depend. In October of 2021, the Administration also stood up the Ocean Policy Committee, which is working to develop the nation's first ever Ocean Climate Action Plan to recruit the natural capacity of the ocean in fighting the climate crisis.

On Earth Day 2022, President Biden took the next step and issued Executive Order 14072, "Strengthening the Nation's Forests, Communities, and Local Economies," which called for science-based, sustainable forest and land management; conservation of America's mature and old-growth forests; investment in forest health and restoration; and deployment of climate-smart forestry practices and other nature-based solutions to improve the resilience of our lands, waters, wildlife, and communities in the face of worsening climate impacts. At COP27 in Egypt, the Biden-Harris Administration released the Nature-Based Solutions Roadmap for how the United States can unlock the full potential of nature-based solutions to address climate change, nature loss, and inequity.

The Inflation Reduction Act makes critical investments in the nation's lands and waters to protect ecosystems, encourage new economic activity around recreation, protect and restore important carbon sinks, and make landscapes more resilient to wildfires. In addition, the law invests in urban areas without adequate greenspace to mitigate heat island impacts and extreme heat emergencies. This funding complements investments in the Bipartisan Infrastructure Law for nature-based climate mitigation and resilience solutions, including significant resources for coastal ecosystems and wildfire prevention and response.

Funding Overview

The Inflation Reduction Act recognizes the importance of conserving, connecting, and restoring the nation's coasts, marshes, forests, and landscapes as a means to sequester carbon and deploy nature-based defenses to climate impacts. The law also prioritizes reducing the risks posed by catastrophic wildfires. Highlights include:

- **$2.6 billion to support coastal resilience and conservation, restoration, and protection of coastal and marine habitat and resources, including fisheries.** This complements nearly $3 billion in funding in the Bipartisan Infrastructure Law that will support vital ecosystems and the blue economy by reopening stream and river passage for fish, restoring marsh habitats that buffer storm surge and flooding, protecting corals from climate stress to serve as natural wave breaks that protect coastal economies, and restoring habitat nationwide.

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- **$1.8 billion to complete hazardous fuels reduction projects on National Forest System land within the wildland-urban interface,** which is where structures and other human development meet or intermingle with undeveloped wildland. This investment complements more than $5 billion funding under the Bipartisan Infrastructure Law for hazardous fuels reduction and other wildfire mitigation and response efforts, including $1 billion for the new U.S. Forest Service Community Wildfire Defense Grant Program for At-Risk Communities and billions of dollars for hazardous fuels management strategies and wildfire management practices, particularly in areas within the wildland-urban interface.

- **$1.5 billion for the Urban and Community Forestry Assistance Program** for tree planting and related activities. Urban and community forestry offers significant benefits for public health and local economies and mitigates the impact of dangerous heat waves.

- **$700 million for the Forest Legacy Program** to acquire lands that offer natural carbon sequestration benefits and **$500 million to carry out conservation, habitat restoration, and resiliency projects** on lands administered by the Bureau of Land Management and the National Park Service.

See the table on the next page for a full list of the programs summarized in this chapter.

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Programs Covered in This Chapter			
Agency	**IRA Section**	**Program Name**	**Amount**
Department of Agriculture	23001(a)(1)	Hazardous Fuels Reduction Projects in Wildland Urban Interface	$1,800,000,000
Department of Agriculture	23001(a)(2)	Vegetation and Watershed Management Projects	$200,000,000
Department of Agriculture	23001(a)(4)	Develop and Implement Activities and Tactics for Old Growth	$50,000,000
Department of Agriculture	23002(a)(1)	Assistance to Underserved Forest Landowners - Climate Mitigation and Forest Resilience Practices	$150,000,000
Department of Agriculture	23002(a)(2)	Assistance to Underserved Forest Landowners - Emerging Private Markets for Climate Mitigation and Forest Resilience	$150,000,000
Department of Agriculture	23002(a)(3)	Assistance to Forest Landowners with <2,500 Acres of Forestland - Emerging Private Markets for Climate Mitigation and Forest Resilience	$100,000,000
Department of Agriculture	23002(a)(4)	Payments to Private Forestland Landowners for Implementation of Forestry Practices	$50,000,000
Department of Agriculture	23002(a)(5)	Wood Innovations Grant Program	$100,000,000
Department of Agriculture	23003(a)(1)	Forest Legacy Program	$700,000,000
Department of Agriculture	23003(a)(2)	Urban and Community Forestry Assistance Program	$1,500,000,000
Department of the Interior	50221	Conservation and Resilience	$250,000,000
Department of the Interior	50222	Conservation and Ecosystem Restoration	$250,000,000
Department of the Interior	50223	National Park Service Employees	$500,000,000
Department of the Interior	50224	National Park Service Deferred Maintenance	$200,000,000
Department of the Interior	60301	Endangered Species Act Recovery Plans	$125,000,000
Department of the Interior	60302	Refuge System Resiliency	$125,000,000
Department of Commerce	40001	Investing in Coastal Communities and Climate Resilience	$2,600,000,000
Department of Commerce	40002	Facilities of the National Oceanic and Atmospheric Administration and National Marine Sanctuaries	$200,000,000

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Hazardous Fuels Reduction Projects in Wildland Urban Interface

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23001(a)(1)

Program Description: To complete hazardous fuels reduction projects on National Forest System land within the wildland-urban interface.

Funding Amount: $1,800,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: National Forests and Grasslands

Tribal Eligibility: No

Eligible Uses: "Hazardous fuels reduction project" means an activity, including the use of prescribed fire, to protect structures and communities from wildfire that is carried out on National Forest Service lands. Focus for projects is within the wildland-urban interface, as defined in section 101 of the Healthy Forests Restoration Act of 2003.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

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Vegetation and Watershed Management Projects

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23001(a)(2)

Program Description: To enhance ecological integrity and restoration as prescribed in a Water Source Protection Plan or Watershed Restoration Action Plan.

Funding Amount: $200,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: National Forests and Grasslands

Tribal Eligibility: No

Eligible Uses: Watershed improvement; vegetation treatments

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

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Develop and Implement Activities and Tactics for Old Growth

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23001(a)(4)

Program Description: To establish definitions for mature and old-growth forests; conduct an inventory of forest conditions; and develop a policy or process to conserve those conditions.

Funding Amount: $50,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: National Forests and Grasslands

Tribal Eligibility: No

Eligible Uses: Inventory of old growth and mature forests, policy development.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

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Assistance to Underserved Forest Landowners - Climate Mitigation and Forest Resilience Practices

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23002(a)(1)

Program Description: To assist underserved forest landowners in carrying out climate mitigation or forest resilience practices.

Funding Amount: $150,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: Non-Industrial Private Forests

Tribal Eligibility: Yes

Eligible Uses: Technical assistance to underserved forest landowners

Cost Share Requirements: 20%

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Assistance to Underserved Forest Landowners - Emerging Private Markets for Climate Mitigation and Forest Resilience

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23002(a)(2)

Program Description: To support the participation of underserved forest landowners in emerging private markets for climate mitigation or forest resilience.

Funding Amount: $150,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: Non-Industrial Private Forests

Tribal Eligibility: Yes

Eligible Uses: Technical assistance with emerging markets

Cost Share Requirements: 20%

Formula Funding: No

SAM.gov Assistance Listing: TBD

Assistance to Forest Landowners with <2,500 Acres of Forestland - Emerging Private Markets for Climate Mitigation and Forest Resilience

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23002(a)(3)

Program Description: To support the participation of forest landowners who own less than 2,500 acres of forestland in emerging private markets for climate mitigation or forest resilience.

Funding Amount: $100,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: Non-Industrial Private Forests

Tribal Eligibility: Yes

Eligible Uses: Technical assistance to forest landowners with less than 2,500 acres

Cost Share Requirements: 20%

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Payments to Private Forestland Landowners for Implementation of Forestry Practices

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23002(a)(4)

Program Description: To assist states and other eligible entities in providing payments to private forestland landowners for implementation of forestry practices on private forest land that provide measurable increases in carbon sequestration and storage beyond customary practices on comparable land.

Funding Amount: $50,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: New

Eligible Recipients: Non-Industrial Private Forests

Tribal Eligibility: Yes

Eligible Uses: Financial assistance to private forestland landowners

Cost Share Requirements: 20%

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Wood Innovations Grant Program

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23002(a)(5)

Program Description: To provide grants under the wood innovation grant program under section 8643 of the Agriculture Improvement Act, including for the construction of new facilities that advance the purposes of the program and for the hauling of material removed to reduce hazardous fuels to locations where that material can be utilized.

Funding Amount: $100,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: Existing

Eligible Recipients: Existing forest product businesses

Tribal Eligibility: Yes

Eligible Uses: Wood products innovations, construction of facilities

Cost Share Requirements: 20%

Formula Funding: No

SAM.gov Assistance Listing: 10.674

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Forest Legacy Program

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23003(a)(1)

Program Description: To provide competitive grants to states through the Forest Legacy Program to acquire land and interests in land.

Funding Amount: $700,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: Existing

Eligible Recipients: States

Tribal Eligibility: Yes

Eligible Uses: To purchase interest in land or easements

Cost Share Requirements: 25%, but any non-federal cost-share requirement otherwise applicable to projects carried out under this section may be waived at the discretion of the Secretary.

Formula Funding: No

SAM.gov Assistance Listing: 10.676

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Urban and Community Forestry Assistance Program

Federal Agency: Department of Agriculture
Bureau or Office: Forest Service

IRA Statutory Location: 23003(a)(2)

Program Description: To provide grants through the Urban and Community Forestry Assistance Program for tree planting and related activities.

Funding Amount: $1,500,000,000

Period of Availability: To remain available until September 30, 2031.

Funding Mechanism: Grants

New or Existing Program: Existing

Eligible Recipients: A state agency, a local governmental entity, an agency or governmental entity of the District of Columbia, an agency or governmental entity of an insular area (as defined in section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3103)), an Indian Tribe, or a nonprofit organization.

Tribal Eligibility: Yes

Eligible Uses: Tree planting and related activities

Cost Share Requirements: 50%, but any non-federal cost-share requirement otherwise applicable to projects carried out under this section may be waived at the discretion of the Secretary.

Formula Funding: No

SAM.gov Assistance Listing: 10.675

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Conservation and Resilience

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Land Management and National Park Service

IRA Statutory Location: 50221

Program Description: To carry out projects for the conservation, protection, and resiliency of lands and resources administered by the Bureau of Land Management and the National Park Service.

Funding Amount: $250,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Direct Federal Spending, Grants, Contracts, and/or Financial Assistance Agreements

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: Yes

Eligible Uses: To carry out projects for the conservation, protection, and resiliency of lands and resources administered by the Bureau of Land Management and the National Park Service.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

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Conservation and Ecosystem Restoration

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Land Management and National Park Service

IRA Statutory Location: 50222

Program Description: To carry out conservation and ecosystem and habitat restoration projects on lands administered by the Bureau of Land Management and the National Park Service.

Funding Amount: $250,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Direct Federal Spending, Grants, Contracts, and/or Financial Assistance Agreements

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: Yes

Eligible Uses: To carry out conservation and ecosystem and habitat restoration projects on lands administered by the Bureau of Land Management and the National Park Service.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

National Park Service Employees

Federal Agency: Department of the Interior
Bureau or Office: National Park Service

IRA Statutory Location: 50223

Program Description: To hire employees to serve in units of the National Park System or national historic or national scenic trails administered by the National Park Service.

Funding Amount: $500,000,000

Period of Availability: To remain available through September 30, 2030.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: These funds will be used to hire employees to provide additional capacity to all eligible units and trails.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

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National Park Service Deferred Maintenance

Federal Agency: Department of the Interior
Bureau or Office: National Park Service

IRA Statutory Location: 50224

Program Description: To complete priority deferred maintenance projects within the boundaries of the National Park System.

Funding Amount: $200,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: The funds will be used to complete priority deferred maintenance projects within the boundaries of the National Park System and return assets to good condition.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

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Endangered Species Act Recovery Plans

Federal Agency: Department of the Interior
Bureau or Office: U.S. Fish and Wildlife Service

IRA Statutory Location: 60301

Program Description: To develop Species Status Assessments (foundational information and analysis for recovery planning) and recovery plans for listed species and to conduct recovery implementation actions.

Funding Amount: $125,000,000

Period of Availability: To remain available until expended.

Funding Mechanism: Grants, Cooperative Agreements, Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: States, Local Governments, Tribes, Private Landowners

Tribal Eligibility: Yes

Eligible Uses: Writing and updating recovery plans and implementing recovery actions for threatened and endangered species.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: 15.657

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Refuge System Resiliency

Federal Agency: Department of the Interior
Bureau or Office: U.S. Fish and Wildlife Service

IRA Statutory Location: 60302

Program Description: To fund projects on National Wildlife Refuges and state wildlife management areas that combat invasive species, restore and increase the resiliency of habitats, and/or build resilient infrastructure, with a focus on nature-based solutions where possible.

Funding Amount: $125,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Direct Federal Spending, Contracts

New or Existing Program: Existing

Eligible Recipients: Direct federal spending and individuals.

Tribal Eligibility: No

Eligible Uses: Rebuilding and restoring units of the National Wildlife Refuge System and state wildlife management areas by (1) addressing the threat of invasive species; (2) increasing the resiliency and capacity of habitats and infrastructure to withstand climate-induced weather events; and (3) reducing the amount of damage caused by climate-induced weather events.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Investing in Coastal Communities and Climate Resilience

Federal Agency: Department of Commerce
Bureau or Office: National Oceanic and Atmospheric Administration

IRA Statutory Location: 40001

Program Description: To support coastal resilience, coastal communities, and conservation, restoration, and protection of coastal and marine habitat and resources, including fisheries.

Funding Amount: $2,600,000,000

Period of Availability: To remain available until September 30, 2026

Funding Mechanism: Direct federal spending, contracts, grants, cooperative agreements, or technical assistance

New or Existing Program: Existing

Eligible Recipients: Coastal states (as defined in the Coastal Zone Management Act), the District of Columbia, Tribal governments, nonprofit organizations, local governments, and institutions of higher education.

Tribal Eligibility: Yes

Eligible Uses: Conservation, restoration, and protection of coastal and marine habitats and resources, including fisheries, to enable coastal communities to prepare for extreme storms and other changing climate conditions, and for projects that support natural resources that sustain coastal and marine resource dependent communities, and for related administrative expenses.

Cost Share Requirements: TBD

Formula Funding: TBD

SAM.gov Assistance Listing: TBD

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Facilities of the National Oceanic and Atmospheric Administration and National Marine Sanctuaries

Federal Agency: Department of Commerce
Bureau or Office: National Oceanic and Atmospheric Administration

IRA Statutory Location: 40002

Program Description: To support the construction of National Oceanic and Atmospheric Administration (NOAA) facilities and facilities that support the National Marine Sanctuary System.

Funding Amount: $200,000,000

Period of Availability: To remain available until September 30, 2026

Funding Mechanism: Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: Construction of new facilities (including facilities in need of replacement) including piers, marine operations facilities, and fisheries laboratories and construction of facilities to support the National Marine Sanctuary System.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

Increasing the Resilience of Our Communities in a Changing Climate

From wildfires engulfing entire towns, to more frequent and extreme heatwaves and drought conditions, to supercharged hurricanes and other storms battering our coasts, Americans of every stripe are affected by climate change. As we take urgent action to rapidly cut emissions fueling the crisis, the United States also needs to prepare for and adapt to the unavoidable impacts. The Bipartisan Infrastructure Law made a historic down payment on strengthening the country's climate resilience, and the Inflation Reduction Act will go even further with new funding to mitigate extreme drought, support Tribal and other communities that are most vulnerable to climate impacts, and improve the nation's ability to forecast extreme weather.

Strengthening Communities' Resilience to Drought, Flooding, and Other Climate Impacts

Communities across the country are already feeling the impacts of climate change in the form of more frequent and intense precipitation events, flooding, heat waves, drought, storms, and wildfires. According to the National Climate Assessment, lower-income and other marginalized communities may be the most vulnerable to these impacts, as they often live in higher-risk areas and have lower capacity to prepare for and cope with extreme weather and climate-related events. Although the world can avert the worst impacts of climate change with bold and urgent action to cut emissions, the U.S. government is working to strengthen communities' resilience to growing climate hazards and help them adapt in order to avoid additional damage to human health, neighborhoods, and livelihoods.

In addition to investing in nature-based climate resilience measures, as described earlier in this guidebook, the Inflation Reduction Act funds several programs to address the effects of extreme drought in the Western United States and provides financial and technical assistance to communities most at risk from climate impacts. This funding complements the investments in the Bipartisan Infrastructure Law, which included historic funding—nearly $38 billion—to protect the nation's infrastructure and communities from a range of natural and manmade hazards, from cyber threats to climate change.

Funding Overview

The Inflation Reduction Act provides much-needed resources for communities in the American West suffering from extreme drought and funding for parts of the United States—including Tribal lands and Insular Areas—that are particularly vulnerable to climate impacts. Highlights include:

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- $4 billion for Bureau of Reclamation projects to mitigate the extreme drought conditions in the Colorado River Basin, as well as other basins experiencing comparable levels of long-term drought. This funding builds on the $8.3 billion the Bureau of Reclamation received for drought mitigation and response under the Bipartisan Infrastructure Law to improve the resilience of Western water infrastructure.

- $550 million for Bureau of Reclamation projects to provide domestic water supplies to disadvantaged communities or households that do not have reliable access to domestic water supplies.

- $235 million to support Tribal climate resilience efforts, including fish hatcheries.

Programs Covered in This Chapter

Agency	IRA Section	Program Name	Amount
Department of the Interior	50231	Domestic Water Supply Projects	$550,000,000
Department of the Interior	50232	Canal Improvement Projects	$25,000,000
Department of the Interior	50233	Drought Mitigation	$4,000,000,000
Department of the Interior	80004	Emergency Drought Relief for Tribes	$12,500,000
Department of the Interior	50241	Climate Change Technical Assistance for Territories	$15,900,000
Department of the Interior	80001(a),(c)	Tribal Climate Resilience	$225,000,000
Department of the Interior	80001(b)	Tribal Climate Resilience: Fish Hatchery Operations and Maintenance	$10,000,000
Department of the Interior	80002	Native Hawaiian Climate Resilience	$25,000,000

Strengthening Resilience for Populations Most Vulnerable to Climate Impacts

Although climate change puts all residents of the United States at risk, some populations are more vulnerable than others. Climate-related changes in weather patterns interact with underlying socioeconomic factors, such as income level, age, and access to affordable health care and transportation. The National Climate Assessment has concluded that children, older adults, persons with disabilities, low-income communities, and some communities of color may be more exposed and sensitive to heat, pollution, and extreme weather events, live in the most risk-prone areas, and/or have the least access to resources to prepare for and recover from climate-related impacts.

As described earlier in this guidebook, the Inflation Reduction Act creates a $3 billion Environmental and Climate Justice Block Grant Program to provide grants and technical assistance to community-based organizations to improve community resilience to climate impacts, including extreme heat and wildfire, among other funded activities. The law also gives $1 billion to the Department of Housing and Urban Development for the Green and Resilient Retrofit Program to make America's affordable housing stock more energy efficient and resilient to extreme weather events.

For Tribes, climate change endangers more than their health and physical safety; it also threatens livelihoods and cultural values rooted in agriculture, hunting and gathering, and spiritual connections to certain ecosystems, nature-based practices, and sites. The Inflation Reduction Act includes $12.5 million in emergency drought relief for Tribes and $235 million for climate resilience planning to protect Tribal communities and sustain Tribes' natural and cultural resources, including funding for Tribal fish hatcheries.

The Inflation Reduction Act also provides $25 million for Native Hawaiians to cope with the impacts of climate change on their unique community and nearly $16 million for technical assistance to American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, and Puerto Rico for climate change planning, adaptation, and resilience. These island territories are particularly vulnerable to sea level rise and often lack the resources to prepare for and recover from hurricanes and tropical storms.

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Domestic Water Supply Projects

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Reclamation

IRA Statutory Location: 50231

Program Description: To provide domestic water supplies to disadvantaged communities or households that do not have reliable access to domestic water supplies.

Funding Amount: $550,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Grants, Contracts, or Financial Assistance Agreements

New or Existing Program: New

Eligible Recipients: Disadvantaged communities in states covered by the Bureau of Reclamation.

Tribal Eligibility: Yes

Eligible Uses: To provide up to 100 percent of the cost of planning, design, or construction of water projects with the primary purpose of providing domestic water supplies to communities or households without reliable access to domestic water supplies in a Reclamation state or territory.

Cost Share Requirements: Cost share to be determined by the Commissioner of Reclamation.

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Canal Improvement Projects

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Reclamation

IRA Statutory Location: 50232

Program Description: To design, study, and implement projects to cover canals with solar panels.

Funding Amount: $25,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Direct Federal Spending

Tribal Eligibility: Yes

Eligible Uses: To fund the design, study, and implementation of projects (including pilot and demonstration projects) to cover water conveyance facilities with solar panels to generate renewable energy or other Reclamation projects that increase water efficiency and assist in clean energy goals.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: N/A

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Drought Mitigation

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Reclamation

IRA Statutory Location: 50233

Program Description: To complete short-term bridging actions and longer-term durable actions to protect the Colorado River and the 40 million people it serves as well as other basins experiencing a comparable level of long-term drought, such as the Sacramento-San Joaquin, Klamath, and Rio Grande Basins.

Funding Amount: $4,000,000,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Grants, Contracts, or Financial Assistance Agreements

New or Existing Program: Existing

Eligible Recipients: Public Entities and Indian Tribes

Tribal Eligibility: Yes

Eligible Uses: To provide funding for projects ensuring that (1) conserved water will benefit basins experiencing long-term drought and (2) the conserved water is not diverted for consumptive use for a period of time or in perpetuity based on certain criteria.

Cost Share Requirements: None required, but subject to determination by the Commissioner.

Formula Funding: No

SAM.gov Assistance Listing: 15.514

Related Announcements: Inflation Reduction Act Funds Landmark Agreements to Accelerate Salton Sea Restoration (11/28/2022)
Biden-Harris Administration Announces New Steps for Drought Mitigation Funding from Inflation Reduction Act (10/12/2022)

Emergency Drought Relief for Tribes

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Reclamation

IRA Statutory Location: 80004

Program Description: To fund near-term drought relief actions to mitigate drought impacts for Indian Tribes affected by the operation of a Bureau of Reclamation water project, including water shortages, and to mitigate the loss of Tribal trust resources.

Funding Amount: $12,500,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Grants or Cooperative Agreements, including but not limited to PL 93-638 agreements.

New or Existing Program: New

Eligible Recipients: Tribes

Tribal Eligibility: Yes

Eligible Uses: To fund projects designed to mitigate near-term drought impacts for Indian Tribes that are affected by the operation of a Bureau of Reclamation water project, including direct financial assistance to address drinking water shortages and to mitigate the loss of Tribal resources.

Cost Share Requirements: N/A

Formula Funding: No

SAM.gov Assistance Listing: 15.519

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Climate Change Technical Assistance for Territories

Federal Agency: Department of the Interior
Bureau or Office: Office of Insular Affairs

IRA Statutory Location: 50241

Program Description: To provide technical assistance the U.S. Insular Areas for climate change planning, mitigation, adaptation, and resilience, including American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, and Puerto Rico.

Funding Amount: $15,900,000

Period of Availability: To remain available through September 30, 2026.

Funding Mechanism: Grants, Interagency Agreements, and Direct Federal Spending

New or Existing Program: New

Eligible Recipients: Territorial Governments and Direct Federal Spending

Tribal Eligibility: No

Eligible Uses: The funds will support technical assistance to the U.S. Insular Areas for climate change planning, mitigation, adaptation, and resilience projects.

Cost Share Requirements: No

Formula Funding: No

SAM.gov Assistance Listing: 15.875

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Tribal Climate Resilience

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Indian Affairs

IRA Statutory Location: 80001(a),(c)

Program Description: To support climate resilience planning to help sustain Tribal ecosystems and natural and cultural resources, economies, infrastructure, human health, and safety.

Funding Amount: $225,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Direct Federal Spending, Grants, Contracts, or Financial Assistance Agreements

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending and Tribes

Tribal Eligibility: Yes

Eligible Uses: Habitat restoration and adaptation activities, community directed relocation, and other activities.

Cost Share Requirements: 0%

Formula Funding: No

SAM.gov Assistance Listing: 15.156

Relevant Announcements: Biden-Harris Administration Makes $135 Million Commitment to Support Relocation of Tribal Communities Affected by Climate Change (11/20/2022)

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Tribal Climate Resilience: Fish Hatchery Operations and Maintenance

Federal Agency: Department of the Interior
Bureau or Office: Bureau of Indian Affairs

IRA Statutory Location: 80001(b)

Program Description: To extend the life of 88 Tribal hatcheries across the nation and to support hatchery rearing and stocking programs.

Funding Amount: $10,000,000

Period of Availability: To remain available until September 30, 2031

Funding Mechanism: Direct Federal Spending, Grants, Contracts, or Financial Assistance Agreements

New or Existing Program: Existing

Eligible Recipients: Direct Federal Spending and Tribes

Tribal Eligibility: Yes

Eligible Uses: Fish hatchery maintenance and operations.

Cost Share Requirements: 0%

Formula Funding: No

SAM.gov Assistance Listing: 15.156

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Native Hawaiian Climate Resilience

Federal Agency: Department of the Interior
Bureau or Office: Office of Native Hawaiian Relations

IRA Statutory Location: 80002

Program Description: To develop and implement a new Native Hawaiian Climate Resilience Program that helps the Native Hawaiian Community cope with the effects of climate change by taking actions that maintain the integrity and identity of the Native Hawaiian Community while also building the capacity for adaptation, learning, and transformation.

Funding Amount: $25,000,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Direct Federal Spending, Grants, Contracts and/or Cooperative Agreements

New or Existing Program: New

Eligible Recipients: Direct Federal, State/Local Government, Native Hawaiian Community Representatives (Native Hawaiian Organizations), Universities, Non-Governmental Organizations

Tribal Eligibility:

Eligible Uses: Eligible uses may include climate change communication, education, and research; environmental hazard analysis; natural and cultural resource management and protection; socio-cultural communication, education, and research; adaptation planning; sustainability technical assistance; and access to related federal/state/county programs.

Cost Share Requirements: 0%

Formula Funding: No

SAM.gov Assistance Listing: TBD

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Improving Climate Science and Weather Forecasting

Strengthening America's resilience to climate change depends on continuing to hone scientists' ability to understand, model, and track potential climate impacts and extreme weather events with greater specificity and longer lead-times. Better scientific understanding of how a warmer ocean intensifies a hurricane or what path a potential hurricane may take, for example, can help federal, Tribal, state, and local governments make difficult decisions about evacuations, prepositioning of response assets, and resource allocations. Better seasonal and interannual forecasting of soil moisture, temperature, and precipitation can allow agricultural producers to make informed decisions about what to plant and when; municipalities to purchase deicing materials and contract for snow removal; and businesses to plan in advance. The Inflation Reduction Act invests in the latest forecasting science and technology and 3-D mapping programs at the National Oceanic and Atmospheric Administration and U.S. Geological Survey.

Programs Covered in This Chapter

Agency	IRA Section	Program Name	Amount
Department of Commerce	40004	Research and Forecasting for Weather and Climate	$200,000,000
Department of Commerce	40005	Computing Capacity and Research for Weather, Oceans, and Climate	$190,000,000
Department of Commerce	40006	Acquisition of Hurricane Forecasting Aircraft	$100,000,000
Department of the Interior	50271	USGS 3D Elevation Program (3DEP)	$23,500,000

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Research and Forecasting for Weather and Climate

Federal Agency: Department of Commerce
Bureau or Office: National Oceanic and Atmospheric Administration

IRA Statutory Location: 40004

Program Description: To support advancements and improvements in research, observation systems, modeling, forecasting, assessments, and dissemination of information related to weather, coasts, oceans, and climate, including climate research.

Funding Amount: $200,000,000

Period of Availability: To remain available until September 30, 2026

Funding Mechanism: Grants ($50 million); TBD ($150 million)

New or Existing Program: Existing

Eligible Recipients: TBD

Tribal Eligibility: TBD

Eligible Uses: Projects that accelerate advances and improvements in research, observation systems, modeling, forecasting, assessments, and dissemination of information related to weather, coasts, oceans, and climate, including climate research

Cost Share Requirements: TBD

Formula Funding: TBD

SAM.gov Assistance Listing: 11.459

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Computing Capacity and Research for Weather, Oceans, and Climate

Federal Agency: Department of Commerce
Bureau or Office: National Oceanic and Atmospheric Administration

IRA Statutory Location: 40005

Program Description: To procure additional high-performance computing, data processing capacity, data management, and storage assets and for transaction agreements under the Weather Research and Forecasting Innovation Act of 2017.

Funding Amount: $190,000,000

Period of Availability: To remain available until September 30, 2026

Funding Mechanism: Direct federal spending (procurement, transaction agreements)

New or Existing Program: Existing

Eligible Recipients: Direct federal spending

Tribal Eligibility: No

Eligible Uses: Procurement of additional high-performance computing, data processing capacity, data management, and storage assets and for transaction agreements under the Weather Research and Forecasting Innovation Act of 2017

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

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Acquisition of Hurricane Forecasting Aircraft

Federal Agency: Department of Commerce
Bureau or Office: National Oceanic and Atmospheric Administration

IRA Statutory Location: 40006

Program Description: To purchase new hurricane hunter aircraft.

Funding Amount: $100,000,000

Period of Availability: To remain available until September 30, 2026

Funding Mechanism: Direct federal spending (acquisition)

New or Existing Program: Existing

Eligible Recipients: Direct federal spending

Tribal Eligibility: No

Eligible Uses: Acquisition of hurricane hunter aircraft.

Cost Share Requirements: N/A

Formula Funding: N/A

SAM.gov Assistance Listing: N/A

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USGS 3D Elevation Program (3DEP)

Federal Agency: Department of the Interior
Bureau or Office: U.S. Geological Survey

IRA Statutory Location: 50271

Program Description: To help achieve complete national 3D Elevation Program (3DEP) baseline coverage, help to ensure efficient and timely data processing and delivery, and support research and acquisition to help establish the 3D National Topography Model (3DNTM). The 3DNTM is the terrestrial component of the 3D Nation vision shared with the National Oceanic and Atmospheric Administration for delivering a continuous information surface from the depths of our oceans to the peaks of our mountains. This program supports the U.S. Geological Survey's core mission to provide information that leads to reduced loss of life and damage to property and infrastructure from hazards like landslides, earthquakes, floods, hurricanes, and wildfires.

Funding Amount: $23,500,000

Period of Availability: To remain available through September 30, 2031.

Funding Mechanism: Contracts, Cooperative and Joint Funding Agreements, Direct Federal Spending

New or Existing Program: Existing

Eligible Recipients: Cooperative funding and joint funding agreements with federal/state/local governments/Tribes/private entities; task orders to private mapping firms and other government contractors via the USGS Geospatial Products and Services Contracts and Technical Services Support Contract.

Tribal Eligibility: Yes. Tribes are eligible to submit proposals to the 3DEP Broad Agency Announcement (BAA) solicitation.

Eligible Uses: Acquiring 3D Elevation data to advance the goal of completing national 3DEP baseline coverage; ensuring efficient and timely data processing and delivery; and supporting research and data acquisition to help establish the 3D National Topography Model

Cost Share Requirements: State and local applicants requesting an award in the form of a cooperative agreement must contribute a minimum of 25% state and/or local funds to the collective applicant cost share.

Formula Funding: No

SAM.gov Assistance Listing: 15.817

Making Permitting of Energy Infrastructure More Efficient and Effective

Achieving the President's ambitious goal of net-zero emissions by no later than 2050 will require building new transmission lines and clean energy projects at a pace and scale that is unprecedented in U.S. history and securing the critical minerals and materials to power the transition. To make this transformation happen, U.S. government agencies will need to conduct efficient and effective environmental reviews that protect America's air and water quality, address climate change, conserve important landscapes, consider impacts to communities with environmental justice concerns, and honor the nation's Tribal trust responsibilities. Robust, early public engagement and comment on proposed projects will be critical for building community trust in and support for these projects and helping ensure timely delivery of permits.

In May 2022, the Biden-Harris Administration released a new Permitting Action Plan to strengthen and accelerate federal permitting and environmental reviews. The Inflation Reduction Act provides more than $1 billion to support environmental reviews at key agencies and White House components. This includes:

- **$350 million for the Federal Permitting Improvement Steering Council,** which the Permitting Action Plan tasked with coordinating environmental review among federal agencies and resolving issues consistent with the Administration's climate, economic, and equity goals. The Bipartisan Infrastructure Law gave the Permitting Council new authorities, including the ability to facilitate infrastructure projects proposed by Tribes on Tribal lands, accelerate information sharing and troubleshooting to avoid and resolve potential conflicts and bottlenecks before they emerge, and help agencies find new resources as needed for permitting work.

- **$30 million for the Council on Environmental Quality (CEQ),** which oversees the implementation of the National Environmental Policy Act (NEPA), to improve the efficiency and effectiveness of federal environmental reviews to ensure that infrastructure is well-designed, well-built, and meets the needs of communities. CEQ plans to add staff to support federal agencies; bolster training for federal employees on how to conduct efficient and effective environmental reviews; and develop information tools, guidance, and techniques to increase efficiency and clarity and improve community engagement in federal decisions.

- **$625 million to multiple federal agencies** to support efficient environmental reviews that are timely, robust, and conducted through a transparent process that includes community engagement. Agencies will use funds to hire and train personnel and develop tools, techniques, and guidance to improve transparency, accountability, and public engagement.

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Funding for Effective and Efficient Environmental Reviews			
Agency	**IRA Section**	**Funding Availability**	**Amount**
U.S. Department of Agriculture, U.S. Forest Service	23001	Until 9/30/2031	$100,000,000
National Oceanic and Atmospheric Administration	40003	Until 9/30/2026	$20,000,000
Department of Energy	50301	Until 9/30/2031	$115,000,000
Federal Energy Regulatory Commission	50302	Until 9/30/2031	$100,000,000
Department of the Interior*	50303	Until 9/30/2026	$150,000,000
Environmental Protection Agency	60115	Until 9/30/2026	$40,000,000
Council on Environmental Quality	60402	Until 9/30/2026	$30,000,000
Department of Transportation, Federal Highway Administration	60505	Until 9/30/2026	$100,000,000
Federal Permitting Improvement Steering Council	70007	Until 9/30/2031	$350,000,000
			$1,005,000,000

* This is for the National Park Service, Bureau of Land Management, Bureau of Ocean Energy Management, Bureau of Reclamation, Bureau of Safety and Environmental Enforcement, and Office of Surface Mining Reclamation and Enforcement.

This section does not include one-page summaries for these programs, as they are primarily direct federal spending. Future versions of this guidebook may contain more detailed information.