

Empowering States for Emission-Free Power: Unleashing IRA's Electricity Initiatives

The electricity sector was the second largest sector of greenhouse gas emissions in the United States in 2021 ([Sources of Greenhouse Gas Emissions | US EPA](#)), making decarbonizing the electricity sector vital to achieving the U.S.'s climate goals. In addition, many other sectors can achieve greater reductions with clean power to rely on. Coal power and fossil fuel continue to phase out due to increasing economic infeasibility up against solar and wind power ([Levelized Costs of New Generation Resources in the Annual Energy Outlook 2023](#)), yet the US still relies on gas power.

The IRA investments present a critical opportunity to accelerate the transition away from fossil fuel-generated electricity. Clean energy tax credits will help promote renewable energy and drive down its cost to stimulate greater production and investment. Cleaner electricity will become more important as homes and vehicles electrify. The carbon footprint of EVs and heat pumps is greatly decreased when the electricity for those technologies is supplied by renewable sources.

Altogether, these policies amounting to over \$15.5 billion, could drive emissions down by 47% - 83% by 2030 from 2005 levels ([Emissions and energy impacts of the Inflation Reduction Act](#)). This funding estimate excludes cross-cutting measures such as the Greenhouse Gas Reduction Fund (GGRF).

Highlights

- ▶ The Investment Tax Credit (ITC) and Production Tax Credit (PTC) can incentivize the building and production of clean energy generation and storage respectively, becoming technology neutral beginning in FY2025
- ▶ Competitive grants through the \$27 billion Greenhouse Gas Reduction Fund (GGRF) specifically sets aside funds for low income and disadvantaged communities to deploy low and zero emission technologies
- ▶ Bonus credits for ITC and PTC projects sourcing domestically and located in energy or low income communities offer opportunities for state and utility collaboration
- ▶ Rural communities can benefit from loan and grant opportunities for rural electric cooperatives and renewable energy
- ▶ Affordable financing through Title 17 Department of Energy (DOE) loans provide capital for clean energy deployment
- ▶ Decarbonizing the electricity sector is uniquely necessary for reducing emissions across the entire economy

Implementation Opportunities in the Inflation Reduction Act

1. The PTC and ITC greatly increase for projects that meet labor requirements of prevailing wage and registered apprenticeships, increasing from 6% of project cost to 30% of project cost
2. Focusing on equity, states and local governments can work with communities to consider the siting of renewable projects as the energy community and low income community bonus offer avenues for increasing the base credit amounts for the ITC and PTC by 10%
3. Developers, utilities, and government entities can support domestic industries by further incentivizing the use of domestically produced and sourced materials for renewable energy projects, adding 10% to the existing ITC and incremental increase to PTC eligible projects
4. State and local governments can engage rural electric cooperatives, rural businesses and agriculture, and other stakeholders in taking advantage of the USDA programs for deploying renewables through facilitation of planning and providing technical assistance
5. Government officials can provide technical assistance and engage utilities and developers about the affordable loans offered through Title 17 programs from the DOE
6. Through engaging and prioritizing low income and disadvantaged communities, governments can work toward distributive and procedural justice through the various competitive grants, loans, and tax credits, some of which are specifically set aside for communities traditionally left behind

Key Provisions of the Inflation Reduction Act

Provision

Challenges

Opportunities



Investment Tax Credit (ITC) (sec. 13102, 13702)

Solar energy has greatly decreased in price, but other renewables and installation can be costly

To reach state and local goals for emissions reductions, government officials can educate developers, homeowners, and others on how to leverage this tax credit to employ renewables - direct pay of credit available for tax-exempt entities



Production Tax Credit (PTC) (sec. 13101, 13701)

Energy generation from renewables is not always economically favorable compared to fossil fuels

Making the economics of renewables more attractive, utilities and local officials can educate project developers and energy providers on the PTC and increasing benefits for projects that meet the labor requirements



Domestic Content Bonus (see ITC, PTC sections)

IRA seeks to onshore manufacturing of renewable energy components

States and local officials can maximize the ITC and PTC by using domestically sourced materials, increasing the tax credit by up to 10% and direct pay is available for some entities



Energy Communities & Low Income Communities Bonus (sec. 13103)

As energy systems transition, some communities and workers could be left behind

Using transferable skills and existing transmission infrastructure, states can focus on just transitions and smart energy planning by involving local communities in repurposing closing fossil fuel power plants for clean energy



Alternative Energy Credits (sec. 13105, 13204, 13104)

A diverse set of technologies are needed to provide energy and reduce climate pollution

States, local officials, and utilities can leverage more federal funds for these alternative energy sources available through credits based on weight of hydrogen produced, amount of energy produced, and amount of CO2 captured and sequestered, respectively



Rural Renewable Energy Programs through USDA (sec. 22001, 22002, 22004)

Rural communities are often left behind and have unique energy and electricity needs

Rural community members, businesses, and governments can all be part of leveraging USDA competitive grants, loans, and technical assistance - a collective effort that builds trust for the energy transition in rural communities



Title 17 Loan Guarantee Programs (DOE) (sec. 50141, 50144, 50145)

Financing clean energy projects or energy infrastructure updates can be expensive

New and existing programs (ICE, EIR, TELGP) allow states, utilities, developers, tribes, and other to leverage affordable financing through DOE loans for large scale clean energy projects



Greenhouse Gas Reduction Fund (EPA) (sec. 60103)

Low income (LI) and disadvantage communities often lack the funding to reduce greenhouse gas emissions

To promote equity, specific funding for LIM and disadvantaged communities gives states and local governments an opportunity to provide technical assistance for these competitive grants, ensuring all are involved in reducing greenhouse gas emissions

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Additional Information

Building A Clean Energy Economy. The White House. January 2023, Version 2. Accessed 08/2023. [Inflation-Reduction-Act-Guidebook.pdf \(whitehouse.gov\)](#).

A User Guide to the Inflation Reduction Act. BlueGreen Alliance. Accessed 08/2023. [BGA-IRA-User-Guide-Print-FINAL-Web.pdf \(bluegreenalliance.org\)](#).

Bistline, John, et al. "Emissions and energy impacts of the Inflation Reduction Act." *Science* 380.6652 (2023): 1324-1327. [Emissions and energy impacts of the Inflation Reduction Act | Science](#)

Sources of Greenhouse Gas Emissions. EPA. 2023. [Sources of Greenhouse Gas Emissions | US EPA](#)

Inflation Reduction Act of 2022. [Text - H.R.5376 - 117th Congress \(2021-2022\): Inflation Reduction Act of 2022 | Congress.gov | Library of Congress](#)

Glassman, J. et al. Breaking Down the Inflation Reduction Act. Rocky Mountain Institute. Updated July 2023. [Breaking Down the Inflation Reduction Act. Program by Program. Incentive by Incentive. - RMI](#)