Policy Matters Ohio

Federal investments in climate & clean energy infrastructure in Ohio

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Over the past several years, the Biden administration has accelerated climate action across the country by passing the most expansive climate legislation in U.S. history. The Inflation Reduction Act (IRA), complemented by its predecessor, the Bipartisan Infrastructure Law (BIL),[1] marks the largest ever federal investment in the clean energy economy. With resources provided by these bills, the federal government provides local communities with the financial and material capacity to transition from the fossil fuel economy and build resilience to face a changing climate.

A new administration: Implications for U.S. climate policy

Throughout his 2024 presidential campaign, President-elect Trump has been direct about his goals to dismantle existing federal legislation and undermine efforts to advance climate and clean energy goals in the U.S. Though the ultimate impacts of another Trump administration are still unclear, since winning the 2024 presidential election, his threats to double down on fossil fuels, eliminate the IRA, and roll back environmental regulations indicate he intends to follow through on his campaign promises. Despite an uncertain future for climate action in the U.S., it's critical to understand the breadth of opportunity offered by federal infrastructure and clean energy spending and what is at risk with federal retrenchment.

Federal climate legislation opens opportunities to reverse the impacts of public disinvestment in and private extraction from historically marginalized communities, enabling us to make a **Just Transition:** the "unifying and place-based set of principles, processes, and practices that build economic and political power to shift from an extractive economy[2] to a regenerative economy."[3] But the road to a Just Transition doesn't end with federal supports and corresponding funding opportunities. There is still a lot of work to do to ensure these efforts deliver long-term benefits for communities that have been historically left out.

Thankfully, the federal government's **Justice40 Initiative** provides guidance for delivering 40% of the benefits spurred by federal climate and infrastructure spending to communities with disproportionate environmental and economic burdens. To achieve Justice40 goals, broad awareness and understanding of the opportunities under the BIL and IRA are critical. Policymakers, community-based organizations, and other community stakeholders can play a pivotal role in expanding opportunities to participate in the clean energy transition, so no Ohioan is left behind.

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[1] Officially, the BIL is the Infrastructure Investment and Jobs Act. For consistency, this report uses BIL throughout.

[2] The Climate Justice Alliance's Just Transition framework defines an extractive economy as one that "relies on the extraction of labor, of natural resources, of culture and of community."

[3] "Just Transition: A Framework for Change," Climate Justice Alliance.

Timeline: U.S. commitment to global climate action

Unlike consistently rising global temperatures, the United States' position on global climate talks has been hot and cold.

September 2016: President Obama accepts the Paris Agreement, a product of the 2015 Paris climate conference. The agreement affirms nations' formal commitments to meeting emissions reduction targets.[4]

November 2020: The U.S. withdraws from the Paris Agreement as the first Trump administration approaches its end.

January 2021: President Biden authorizes the U.S. to rejoin the Paris Agreement and signs Executive Order 14008, establishing the Justice40 Initiative. Justice40 set the goal to deliver 40% of the benefits from federal investments in climate, clean energy, and affordable and sustainable housing to "disadvantaged communities that are marginalized by underinvestment and overburdened by pollution."[5]

November 2021: BIL signed into law.[6]

August 2022: IRA signed into law.[7]

April 2023: President Biden signs Executive Order 14096, establishing stronger directives for Justice40 implementation.

November 2024: At time of publication, the federal government has announced more than $16.5 billion awarded to projects in Ohio, creating a projected 74,000 jobs per year.

Figure 1

Ohio outcomes to date

Total investments
$16,518,002,403

State rank
8th

	Announced funding	State rank
BIL	$15,128,763,020	7th
IRA	$1,389,239,383	10th

Projected number of jobs created each year: 74,000

Announced funding estimates drawn from Investing in America Map data, provided by Invest.gov, updated November 15, 2024. Estimates do not include funding for multi-state initiatives or loans. Annual job creation projections from State Fact Sheet: Ohio from Political Economy Research Institute data brief, prepared for the National Skills Coalition and the BlueGreen Alliance, June 2024.

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[4] The scope of these metrics varies, depending on levels of development and countries' respective economy.

[5] Justice40: A Whole-of-Government Initiative, The White House.

[6] Both U.S. senators from Ohio voted in favor, while Ohio-based representatives' positions split across party lines, with democrats in favor and republicans against.

[7] All democratic U.S. Congress members representing Ohio vote in favor, while republican Congress members vote against the IRA's passage.

The Bipartisan Infrastructure Law

The BIL represents a historic federal investment in U.S. infrastructure, ranging across broadband, rail and transit, clean energy, and water infrastructure. The BIL allocates $1.2 trillion in federal funding to more than 350 new and existing programs, administered by over a dozen federal agencies and departments.[8] The BIL offers a landmark opportunity to reinvest in communities of color that have been historically excluded from public policy benefits due to race neutral or racist policy crafting. Public infrastructure is critical to meeting our daily needs, and as more and more communities begin to grapple with the effects of a changing climate, the BIL can generate meaningful benefits for Ohio at a pivotal time.

Two years in, the U.S. Treasury identified several key impacts the BIL had already made: First, after decades of dwindling infrastructure investments from state and local governments,[9] state and local infrastructure spending recovered to pre-pandemic levels, suggesting local policymakers mobilized to complement huge injections of federal funds with additional funding to maximize their impact. Second, BIL funding announcements are more concentrated in states with insufficient infrastructure, indicating that the BIL is delivering for states that need it most. Finally, states with lower median household incomes – a determinant of infrastructure spending capacity – are more likely to receive more BIL funding per capita.[10]

The Inflation Reduction Act

The IRA is the largest federal investment in climate change mitigation and resilience in U.S. history. Its provisions cover a broad range of both federal award programs and tax incentives for pollution reduction and the deployment of renewable energy, sustainable building and manufacturing, and clean transportation. Preliminary estimates show the IRA, coupled with BIL investments, offers an opportunity to reduce greenhouse gas (GHG) emissions by 40% (compared to 2005 levels) by 2030. The IRA's program areas span several key opportunities for emissions reduction: Power, industry, buildings, transportation, agriculture, and forestry. Overall, IRA provisions are centered around reducing costs and generating benefits for workers and families, with a particular focus in the energy economy.

The White House's guidebook to the IRA summarizes its aims across several categories:

1. Advancing and deploying American-made clean energy technologies.
2. Protecting communities from harmful air pollution.

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[8] Bipartisan Infrastructure Law Guidebook, The White House, January 2024.

[9] The U.S. Treasury's analysis uses state and local capital investments as a proxy for infrastructure investment, measured by capital investments as a share of total state and local funding.

[10] "Infrastructure Investments in the United States," Eric Van Nostrand, U.S. Department of the Treasury, November 2023.

3. Making homes and buildings cleaner and more efficient to save consumers money and cut pollution.
4. Investing in a sustainable, lower-carbon federal government.
5. Harnessing nature-based solutions and climate-smart agriculture to deliver economic, climate, and resilience benefits.
6. Increasing the resilience of our communities in a changing climate.
7. Making permitting of energy infrastructure more efficient and effective.

Demystifying IRA funding mechanisms

The IRA is an expansive and innovative piece of legislation. It employs a wide array of funding mechanisms and covers an even wider range of policy issues. The IRA authorizes billions of dollars allocated to more than 100 new and existing federal programs, with funding mechanisms spanning several different types of federal awards, loans, and investments in technical assistance programming.[11] The climate and clean energy provisions also include around two dozen tax credits to incentivize investments in renewable energy and clean transportation, and to revitalize sustainable American manufacturing.[12]

Initial estimates place total IRA investments at $433 billion: $369 billion for energy security and climate change programming, and $64 billion for the Affordable Care Act extension.[13] However, the total value of the IRA's clean energy tax credits is more challenging to estimate, as their uptake depends entirely on private investments. In fact, other estimates for the cost of the climate and clean energy provisions alone range between $800 billion and $1.2 trillion.[14]

The primary value of the IRA is in these tax credits, largely contingent on private investments delivered in response to federal incentives. Notably, most of these tax credits are uncapped (meaning the only bounds placed on the monetary value of the tax credits is the level of private investment) and available through 2032, though periods of availability vary by technology, pending the incoming administration's efforts to dismantle existing climate legislation.[15] For the first time, tax-exempt entities (e.g., state and local governments, public schools, nonprofits, and other public entities) who traditionally don't have a federal tax liability can now access clean energy tax incentives in the form of **direct pay:** Eligible tax credits can be unlocked by tax-exempt entities that apply for direct funding in the amount of the tax credit.

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[11] The BlueGreen Alliance offers a helpful overview of how the IRA's funding models work.

[12] "Clean Energy Tax Provisions in the Inflation Reduction Act," the White House.

[13] "Summary: The Inflation Reduction Act of 2022," Senate Democrats, U.S. Senate, 2022.

[14] "The Inflation Reduction Act: One Year In," Sophie Latham, Climate Program Portal, September 2023.

[15] Despite growing bipartisan support for some IRA tax credits, their durability through an administration change is uncertain; this uncertainty alone poses greater investment risks, potentially hindering their uptake. Reversing IRA tax provisions would involve the lengthy and difficult task of changing the tax code. Columbia Law School's Sabin Center for Climate Change Law outlines several other strategies a new administration may use instead.

The direct pay provision is a huge opportunity for local governments and nonprofits, allowing them to save on the up-front costs of renewable energy projects, essentially reimbursing a portion of a qualified investment.[16] Direct pay opens a variety of opportunities for local governments to expand renewable energy use and reduce costs for residents, build out public EV charging infrastructure, electrify public vehicle fleets, and advance municipally-owned utility models – and that's only scraping the surface.

Expanding high-road pathways to good union jobs

The BIL's primary goal is to build a better America by connecting communities with transportation improvements, broadband deployment, and a cleaner, more resilient energy system – ambitious, but possible with $1.2 trillion in investments[17] over five years. But for necessary infrastructure improvements to materialize, we need to support the workforce behind it. Recognizing that U.S. infrastructure and the workers who build it are the backbone of our country, the BIL and IRA authorize several programs that offer training and other supports for workers.

With increasing labor demand generated by federal infrastructure spending, federal investments in the workforce can open equitable pathways to good union jobs in construction, manufacturing, transportation, and clean energy. Building out America's union workforce is key to ensuring the jobs created by BIL investments – estimated at 8.8 million jobs over five years[18] – deliver family-sustaining wages, benefits, safe working conditions, and other protections.

The IRA's clean energy provisions squarely complement the BIL's infrastructure investments, layering on broad incentives for clean energy deployment to decarbonize the electricity grid while increasing energy supply to meet anticipated demand. With strong labor provisions embedded in these incentives – in addition to the emphasis on labor and workforce considerations in other IRA-provisioned programs – the IRA sets guardrails that further ensure high-quality job creation through local implementation of federal industrial policy.

Finally, many IRA clean energy tax provisions feature a base credit, which can be increased to five times the base amount if **prevailing wage** and **apprenticeship requirements** are met.[19] The prevailing wage and apprenticeship requirements have the

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[16] The only tax credit not available for direct pay/transferability is 168(e)(3)(B), cost recovery for qualified facilities, qualified property, & energy storage technology.

[17] "Infrastructure Investments in the United States," Eric Van Nostrand, U.S. Dept. of the Treasury, November 2023.

[18] "Unprecedented Opportunity: Meeting the Workforce Demands of New Clean Energy, Manufacturing, and Infrastructure Investments," LaPrad et al., Political Economy Research Institute, prepared for the National Skills Coalition and the BlueGreen Alliance, June 2024.

[19] The credit's value can increase further if a project meets certain requirements, such as a domestic content requirement for steal, iron, and manufactured products — see guidance from the U.S. Treasury and IRS — or if the project is in a brownfield site; a locality with high unemployment *and* large fossil fuel industry presence; or a census tract with a recent coal mine or coal plant closure. (The Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization offers a detailed definition and map of these communities on its Energy Community Tax Credit Bonus resource.)

potential to move the needle on job quality and worker power. The Davis-Bacon Act established standards for prevailing wage requirements for federal construction contracts, setting a standard for compensation and benefits for laborers and mechanics working on federally-funded projects. While prevailing wage determinations vary by geography and scope of work, workers who are paid the locally prevailing wage have higher earnings and better benefits across the board.

At the same time, the apprenticeship requirements incentivize the provision of paid, on-the-job training opportunities. Registered apprenticeships expand pathways to good-paying jobs in the trades by mitigating barriers for workers without formal training, allowing them to gain hands-on experience while earning a livable wage. Coordination between pre-apprenticeship and union apprenticeship programs have proven benefits for workers. Pre-apprenticeship programs generally serve participants from specific populations – like Black and Latine workers, low-income workers, or women – by providing training and other support resources. Pre-apprenticeship programs often connect participants to apprenticeship opportunities, and union apprenticeship programs connect workers to high-road union careers.

Since a large share of IRA investments are driven by tax incentives for the private sector, the prevailing wage and apprenticeship requirements for maximizing clean energy tax credits is a gamechanger for working families. Moreover, contracting with union employers is one of the most effective ways to guarantee a project qualifies for the bonus credits – presenting an opportunity to build union membership and workers' collective bargaining power across the country.

Advancing Justice40 goals for a Just Transition

Federal climate legislation under the Biden administration has given local communities a lot to celebrate. The Justice40 Initiative is a huge step toward an equitable energy transition in the U.S., representing a government-wide strategy to address the climate crisis while centering historically marginalized communities facing disproportionate social and economic burdens. Justice40 acknowledges the intersection between racial and environmental justice, offering an opportunity to reverse the impacts of chronic disinvestment in Black and brown communities.

Justice40 covers programs designed to direct federal investments in climate, clean and efficient energy, related workforce training, affordable and sustainable housing, environmental remediation and pollution reduction, and clean water and waste infrastructure. The Environmental Justice Scorecard's phase two data show funding allocations for Justice40-covered programs have exceeded $600 billion.[20]

Delivering on Justice40

Great opportunities are often followed by a daunting amount of work to fully realize them. Most importantly, meeting Justice40 goals is contingent on effective collaboration

[20] Environmental Justice Scorecard, U.S. Office of Management and Budget and Council on Environmental Quality.

across all levels of government, community-based organizations, and other community stakeholders. The impact of these partnerships hinges on meaningful community engagement and robust accountability mechanisms for Justice40 implementation, which will largely fall to local agencies and administrators.

The Trump administration's efforts to reverse progress toward environmental justice won't be completed overnight. The coming months will be pivotal to build capacity for and expand coalitions for climate and environmental justice, while advocating for state and local support for delivering cleaner air and a healthier environment. Justice40's role in the distribution of federal investments has already laid the foundation for countless meaningful, cross-cutting partnerships organized around a vision for meaningful change in their communities. Ohioans must build on this momentum with continued commitment to environmental justice to revitalize our communities and the infrastructure we rely on, built for and by Ohio's working families.