



Accessing Federal Funding for Buildings in US States, Regions, and Localities

Infrastructure Investment and Jobs Act and Inflation Reduction Act

Briefing Summary

This summary memo provides an **overview of the funding opportunities for the buildings sector under the Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law, or BIL) and the Inflation Reduction Act (IRA).** It covers funding opportunities that can be leveraged by state and local governments to support climate change investments, economic progress, and disadvantaged and rural communities.

This memo was developed as part of the "Accessing federal funding in US" project implemented by the Green Recovery Alliance. This is the **fourth of a series of memos** that have been developed during the project implementation and focused in more detail on specific funding opportunities for the energy supply and transportation sector and the requirements of environmental justice.

Building Sector Coverage

The IIJA and IRA funding opportunities addressed in this memo covers the following: infrastructure improvements, workforce development, building codes, resiliency, and applicable tax credits.

Infrastructure Investment and Jobs Act

Objectives

The passage of IIJA on November 5th, 2021, came with several key **objectives** for the Biden Administration. The bill's primary goals include major investments in upgrading the US's infrastructure, investing in climate change mitigation and adaptation, expanding, and developing America's workforce, and addressing environmental justice issues.

Scale

The IIJA authorizes \$1.2 trillion for infrastructure spending with \$550 billion going toward "new" investments and programs. Funding from the IIJA covers energy and power infrastructure, transportation, water, climate resilience and access to broadband internet. This memo focuses only on the buildings sector.

Funding from IIJA includes **formula-based programs** where specific grant awards are allocated to specific recipients and **competitive or discretionary grant programs** where grant awards are allocated to applicants based on merit. Both competitive and formula-based programs are open to governmental and nongovernmental organizations unless specified otherwise.

¹ The Green Recovery Alliance is a partnership between the Climate Group and the Center for Climate Strategies, and this project is implemented with support from the New York Community Trust.

Eligible recipients for funding are states, tribes, local governments, communities, and utilities.

Timing

Funding programs under the IIJA have many upcoming deadlines with many already passed. More details on deadlines and application requirements for buildings funding programs are provided below.

Coverage

Buildings

Many of the programs and grants address infrastructure upgrades for building electrification, weatherization, energy audits, workforce development, and other carbon reduction activities across the sector. In particular, the IIJA contains:

- \$250 million for an energy efficiency revolving loan fund
- \$500 million to improve energy efficiency and quality of health retrofits in schools
- \$40 million for workforce training and development
- Funding for the State Energy Program, Weatherization Assistance Program, and Low Income Home Energy Assistance Program

Environmental Justice

Many IIJA programs and grants must meet certain requirements under the **Justice 40 (J40)** initiative to be eligible for funding. J40 is a whole-of-government effort to ensure that at least 40 percent of overall benefits from federal investments in climate change and clean energy are directed to disadvantaged communities (DACs).² The White House Environmental Justice Council has provided a variety of recommendations and principles to guide the work of J40.³ Federal agencies are still in the process of defining criteria for J40 compliance and are relying on interim guidance and tools, and some of them have come up with their own interim criteria⁴ for determining whether a community is disadvantaged. The Climate and Economic Justice Screening Tool (CEJST) under development by the White House Council on Environmental Quality (CEQ) can be used to determine whether any given community is considered disadvantaged or not for the purpose of J40 and federal funding.⁵ It is unclear how other state and federal screening tools will factor into agency awards under J40.

² https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

³https://www.epa.gov/environmentaljustice/whejac-justice40-climate-and-economic-justice-screening-tool-executive-order

⁴Such as, (1) *US DOT Transportation Disadvantaged Census Tracts (Historically DACs) Tool* developed by US Department of Transportation (USDOT) to help grant applicants determine whether the locations of their proposed projects were in a DAC based on the above indicators:

https://usdot.maps.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

⁽²⁾ The Electric Vehicle (EV) Charging Justice40 Map Tool developed by USDOT and UD Department of Energy (USDOE) is a tool to help EV charging planning efforts align with the Justice40 goal by displaying multiple data layers identifying DACs, Federal Highway Administration (FHWA) designated EV corridors, public DC fast charge stations (non-Tesla), and electrical substations:

https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30bf476099923224a1c1b3ee

⁽³⁾ The Low-Income Energy Affordability Data (LEAD) Tool, developed by USDOE is a mapping tool design to help states, communities and other stakeholders to understand low-income housing and energy characteristics such as annual energy burden (% of income), and annual energy cost: https://www.energy.gov/eere/slsc/maps/lead-tool
https://www.whitehouse.gov/ceq/news-updates/2022/02/18/ceq-publishes-draft-climate-and-economic-justice-screening-tool-key-component-in-the-implementation-of-president-bidens-justice40-initiative/">https://www.energy.gov/eere/slsc/maps/lead-tool

IIJA Federal Funding Programs

FEDERAL FUNDING PROGRAM	RELEVANT ACTIONS	KEY DATES
Weatherization Assistance Program (IIJA Sec 40551), Formula	Low-income household weatherization; address J40 communities	Applications are closed for 2022
State Energy Program (IIJA Sec 40109), Formula	Weatherization for low to middle income households; addresses J40 communities	Closed, next round TBD
Energy Efficiency Revolving Loan Fund Capitalization Grant Program (IIJA Sec 40502), Formula	Energy efficiency upgrades and audits for commercial and residential buildings	Applications are due April 21st, 2023
Building Codes Implementation for Efficiency and Resilience (IIJA Sec 40511), Competitive grant	New and existing residential and commercial building codes updates and training	Applications expected to open at end of 2022
Efficient and Healthy Schools (IIJA Sec 40541), Competitive Grant	Energy efficiency and health improvements of public schools; address J40 communities	Notice of Funding Opportunity (NOFO) expected late summer or early fall 2022
Energy Auditor Training Grant Program (IIJA Sec 40503)	Training for energy audits and surveys for commercial and residential buildings	Application opening date TBD
Deployment of Technologies to Enhance Grid Flexibility (IIJA Sec 40107), Competitive grant	Smart grid investments that allow buildings to engage in demand flexibility or Smart Grid functions.	Application expected to open end of 2022
Energy Efficiency Materials Pilot Program, Cooperative Agreement	Grant to provide non-profits with energy efficiency materials	Application expected to open 1 st quarter 2023 (RFI open until December 22nd, 2022)
Low Income Home Energy Assistance Program (LIHEAP)	Assistance to reduce energy burden for low-income households; addresses J40 communities	Applications closed for 2022
Building Resilient Infrastructure and	Mitigation activities that provide significant resilience benefits,	Applications now open, close January 27th, 2023.

FEDERAL FUNDING PROGRAM	RELEVANT ACTIONS	KEY DATES
Communities (BRIC) program	including building code adoption and enforcement efforts; address J40 communities	

1. Weatherization Assistance Program

Scope and Level of Funds

- The U.S. Department of Energy (DOE) Weatherization Assistance Program (WAP) reduces energy costs for **low-income households** by increasing the energy efficiency of their homes.
- Formula grant program: funding flows from DOE to state and territorial governments and then to local governments and weatherization agencies.
- Federal cost share is 100%.
- Measures eligible include insulation, space-heating equipment, energy-efficient windows, water heaters, and efficient air conditioners.
- States design the plan and choose the allocation of funds.
- Specific allocation to support workforce development activities. Plan should specify
 - O How to attract, retain, or transition a local workforce
 - Use of workforce partners, unions, community colleges, potential supportive services, and use of Registered Apprenticeships or other joint, labor-management partnerships training programs, or other high-quality training models.
 - Comprehensive training on a regular basis,
 - Support for good-paying jobs
 - o 15% of total allocation is granted at time of initial award
 - o 35% of total allocation is granted upon DOE approval of the grantee plan that identifies the quarterly milestones over the 5-year period of performance (due by July 1, 2022)
 - Balance of total allocation (50%) is based on the grantee demonstrating progress in meeting expenditures goals, production targets and reporting requirement compliance.

Eligible Parties

States submit the plan to US DOE

Important Dates and Next Steps

Monitor current plan for readiness for the next plan

Resources

• Program page: https://www.energy.gov/eere/wap/weatherization-assistance-program

2. State Energy Program

Scope and Level of Funds

- The US DOE Energy Program (SEP) provides funding and technical assistance to states and territories for energy conservation measures, renewable energy measures, and programs to increase deployment of clean energy technologies in buildings.
- SEP's objectives are: increase energy efficiency, implement energy security, resiliency, and emergency preparedness plans, reduce energy costs and energy waste, expand the use of energy resources, promote economic growth
- A State Energy Security Plan is required as part of the submission starting from FY 2023
- J40 requirements: specify how to engage **disadvantaged communities** (DACs) as well as how much of annual SEP funding will be delivered to these communities and how delivery or benefit to these communities is measured. No definition of DACs is provided.
- The program scope is broad across energy supply and demand issues and their development and implementation, including education and installation. Technical assistance for state agencies could be supported as part of these components.

Eligible Parties

States

Important Dates and Next Steps

Closed, next round TBD

Resources

Program page: https://www.energy.gov/eere/wipo/state-energy-program

3. Energy Efficiency Revolving Loan Fund Capitalization Grant Program

Scope and Level of Funds

- US DOE Formula grant to establish a revolving loan fund that states will use to administer grants for residential and commercial energy efficiency audits, upgrades, and retrofits to increase efficiency and comfort of residential and commercial buildings.
- \$250 Million for formula grants. State allocation not defined yet

Eligible Parties

States

Important Dates and Next Steps

• Estimated application opening date 4th quarter 2022

Resources

Program page: https://www.energy.gov/bil/energy-efficiency-revolving-loan-fund-capitalization-grant-program

4. Building Codes Implementation for Efficiency and Resilience

Scope and Level of Funds

- US DOE competitive grant for building codes updates for new and existing residential and commercial buildings (including multifamily); development of building codes implementation plans; training to builders, contractors and building codes officials; address various implementation needs in rural, suburban, and urban areas
- \$225 million available nationally until expended.

Eligible Parties

States and State Partnerships

Important Dates and Next Steps

• Applications expected to open at the end of 2022.

Resources

Program page: https://www.energy.gov/bil/building-codes-implementation-efficiency-and-resilience

5. Efficient and Healthy Schools

Scope and Level of Funds

- US DOE grant for energy efficiency, renewable energy, and alternative-fueled vehicles improvements at public school facilities that result in direct reduction of energy costs, energy savings and health improvement
- Schools and districts are allowed to leverage multiple sources of funding, including federal and state resources, internal financing, debt financing, leasing arrangements, and energy service performance contracts. Priority will be given to projects that leverage other public and private sector funds
- \$500 Million in competitive grants from IIJA
- DOE Loan Programs Office Renewable Energy and Efficient Energy Solicitation can provide an additional \$3 billion in loan guarantees for retrofits.
- DOE intends to prioritize and support projects that leverage other private and public sector funds
- Priority will be given to public school in DACs

Eligible Parties

States

Important Dates and Next Steps

Applications are due April 21, 2023.

Resources

Program page: https://www.energy.gov/clean-energy-infrastructure/grants-energy-improvements-public-school-facilities

6. Energy Auditor Training Grant Program

Scope and Level of Funds

- Cooperative Agreements and Management and Operating Contracts at National Laboratories to provide grants for training individuals to conduct energy audits and surveys for commercial and residential buildings
- Training can be provided by States or State certified third party training programs
- \$40 million available nationally until expended.

Eligible Parties

States

Important Dates and Next Steps

Opening TBD

Resources

• Program page: https://www.energy.gov/bil/energy-auditor-training-grant-program#:~:text=Description%3A%20To%20provide%20grants%20to,pollution%20from%20building%20energy%20use.

7. Deployment of Technologies to Enhance Grid Flexibility

Scope and Level of Funds

- US DOE Competitive grant for smart grid upgrades and technologies that allow buildings to engage in demand flexibility or Smart Grid functions.
- Eligible investments include metering, control, and other devices, sensors, and software; communications and broadband technologies to support smart grid deployment; Workforce training associated with Smart grid installation and maintenance is also eligible.
- \$3 billion in total
 - \$600 million appropriated annually for Y22 through FY26- available until expended.
- Federal cost share is 50%.

Eligible Parties

Utilities

Important Dates and Next Steps

Applications expected to open at the end of 2022.

Resources

Program page: https://www.energy.gov/bil/deployment-technologies-enhance-grid-flexibility

8. Energy Efficiency Materials Pilot Program, Cooperative Agreement

Scope and Level of Funds

- US Department of Energy Cooperative Agreement to provide non-profits with energy efficiency
 materials including (i) a roof or lighting system or component of the system; (ii) a window; (iii) a
 door, including a security door; and (iv) a heating, ventilation, or air conditioning system or
 component of the system (including insulation and wiring and plumbing improvements needed
 to serve a more efficient system).
- \$50 million, available until expended

Eligible Parties

Non-Profit Organizations apply directly to DOE

Important Dates and Next Steps

• Estimated application opening date, 1st quarter 2023.

Resources

• https://www.energy.gov/bil/energy-efficiency-materials-pilot-program

9. Low Income Home Energy Assistance Program (LIHEAP)

- US Department of Health and Human Services grant program for low-income households with high energy burdens from heating and cooling in dwellings for managing energy bills, energy crises, weatherization, minor energy-related home repairs.
- Grant recipients can use funds for heating and/or cooling costs, as well as up to 15% of their funding (or 25% with a waiver) for weatherization assistance.
- Household funding depends on income. It begins at \$20,385 and increases to \$7,080 per person.
- \$3.8 billion in block grant for FY22.
 - Additional \$500 million under IIJA for the next five fiscal years, of which \$100 million released for FY22.
 - Funds can be used for heating and/or cooling costs, as well as up to 15% for weatherization assistance.
 - o 90% of their award to be obligated by September 30, 2022, and 10% may be carried over to obligate in FY 2023

States and Tribes

Important Dates and Next Steps

• State applications **due** September 1 every year.

Resources

- Fact sheet: https://www.acf.hhs.gov/ocs/fact-sheet/liheap-fact-sheet
- Funding release FY2022: https://www.acf.hhs.gov/ocs/policy-guidance/liheap-dcl-2022-05-infrastructure-funding-release-fy2022

10. Building Resilient Infrastructure and Communities (BRIC) program

Scope and Level of Funds

- The program supports mitigation activities that provide significant resilience benefits, including building code adoption and enforcement efforts as a capability- and capacity- building activity under the BRIC State/Territory Allocation and BRIC Tribal Set- Aside.
- The program covers also:
 - Development of professional workforce capabilities through technical assistance and training
 - o 90% of the cost of eligible mitigation activities for **economically disadvantaged rural communities** (i.e., a community of 3,000 or fewer individuals with an average per capita annual income not exceeding 80 percent of the national per capita income, based on best available data).
- Total \$1 billion for FY 2021 of which: \$56 million allocated to states and territories; up to 25% cost-sharing (cash, donated or third-party in-kind services, materials, or any combination thereof), \$ 25 million allocated to tribes, the remaining will be included in the national competition for mitigation projects.

Eligible Parties

 State, tribal, and territorial governments; local governments may submit sub- applications to their states or territories; homeowners, business operators, and non-profit organizations cannot apply as sub-applicants, but can be included in a sub-application submitted by an eligible subapplicant.

Important Dates and Next Steps

• Applications are now open, with a deadline of January 27th, 2023.

Resources

https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities

Inflation Reduction Act

Objectives

The passage of the IRA on August 12th, 2022 came with several key objectives. The bill's primary goals include reducing inflation and hastening economic recovery, while at the same time investing in climate change mitigation, environmental justice, and increasing workforce diversity.

Scale

The IRA results in \$369 billion in spending for climate change related programs and grants. Analysts suggest the bill would put the U.S. on a path to roughly 40% emissions reduction by 2030.⁶

Two-thirds of this funds is in the form of federal tax credits. These tax credits will lower the cost to households and businesses of investing in purchasing **home** energy technologies, as well as energy efficiency improvements in housing.

Timing

The Treasury released a request for comment on six tax credits and extensions on October 5th. The deadline to reply was November 4th, 2022. The announcement of the National Accelerator is also expected later this year. Other agencies are expected to issue funding guidance for grants and loans by early 2023.

Key Components

Tax Credits and Direct Pay

The IRA creates a range of tax credits applying across multiple sectors including buildings. A direct pay option equal to the amount of certain specified credits is also established with corporations, nonprofits and tax-exempt organizations, local governments, and community organizations eligible. For tax-exempt entities that do not file tax returns, guidance will be issued by the Treasury Department addressing the timing and process for claiming the direct pay tax credit.

Key incentive programs for buildings include:

- Energy efficient home upgrades
- Home renewable energy
- Commercial building efficiency upgrades

Grants and Loans

New grant and loan programs managed by multiple government agencies will become available to support **low carbon activities by both government and private entities**. The grants and loans will largely be managed by the US Department of Energy, Department of Transportation, EPA, and Department of Agriculture, with others as well. For the buildings sector, this includes:

• Funding for home retrofits

⁶ Please refer to the following analyses: https://rhg.com/research/inflation-reduction-act/?inflation-reduction-act/?inflation-reduction-act/?inflation-reduction-act-with-inflation-reduction-act-with-inflation-reduction-act-with-inflation-reduction-act-with-inflation-reduction-act-with-inflation-reduction-act-of-2022.pdf

- Building code upgrades and adoption
- Affordable housing upgrades
- National Green Bank funding

Environmental Justice

The IRA will continue to **support the Biden Administration's J40** initiative with targeted loans and grants. A 10% investment tax credit is included in the bill along with workforce diversity and domestic content requirements. More specifically:

- \$60 billion in funds for environmental justice related projects.
- \$3 billion for the Environmental and Climate Justice Block Grants program for projects in disadvantaged communities related to environmental and climate justice.

IRA Buildings Federal Funding Programs

1. High Efficiency Electric Home Rebate Program

Scope and Level of Funds

- \$4.275 billion in grants for FY22
- Installation of high efficiency, electric appliances in low to moderate income family homes, or in buildings with 50% or great low to moderate income households.
- Rebates can be issued to governmental entities for installation of appliances.
- Qualified appliances include:
 - Electric heat pumps
 - Electric cooking appliances
 - Insulation
 - Air sealing materials
 - Ventilation improvements
 - Electric wiring
- Funding available through FY31

Eligible Parties

States, local governments, government entities

Important Dates and Next Steps

Guidance to be issued soon.

2. School Air Pollution Reduction Grants

Scope and Level of Funds

- \$37.5 million in grants for distribution by EPA
- Eligible activities include air pollution monitoring and GHG emission reductions near schools in low income and disadvantaged areas
- \$12.5 million in technical assistance to schools
 - Address environmental issues
 - Develop environmental quality plans
 - Mitigate air pollution issues
- Funding available until FY31

Eligible Parties

Local governments and air pollution agencies

Important Dates and Next Steps

• Guidance to be issued soon.

3. Building Energy Code Adoption

Scope and Level of Funds

- \$1 billion for FY22 in grants distributed by DOE
- Adopt and implement latest or zero energy building codes in commercial and residential buildings
- Funding available through FY29

Eligible Parties

States and Local governments

Important Dates and Next Steps

Guidance to be issued soon.

4. Energy and Water Efficiency in Affordable Housing

- \$1 billion in FY22 for HUD to provide grants and loans
- \$837.5 million for eligible projects in affordable housing include:
 - Energy and water efficiency projects
 - Indoor air quality improvements

- Low emissions building materials
- Energy storage
- Building electrification
- Climate resilience
- \$42.5 million for energy and water efficiency benchmarking in affordable housing properties.
- Funding available through FY28

Owners of affordable housing properties

Important Dates and Next Steps

• Guidance to be issued soon.

5. Environmental Justice Block Grants

Scope and Level of Funds

- \$3 billion in grants for FY22 administered by EPA
- Climate and health risk mitigation
 - Urban heat island
 - Extreme heat events
 - Wood heater emissions
 - Wildfires
 - o Indoor air pollution reduction
- Facilitating engagement of disadvantaged communities with federal and state groups and agencies
- Funding available through FY26

Eligible Parties

• State and Local governments.

Important Dates and Next Steps

• Guidance to be issued soon.

6. National Green Bank Accelerator

Scope and Level of Funds

• The IRA established the Greenhouse Gas Reduction Fund (GGRF) and a National Green Bank (NGB) Accelerator.

- Uses of funds by GGRF include Electric vehicles and equipment, including cars, trucks, and buses
- \$27 billion total
 - \$7 billion (estimated) from EPA to state designated entities for clean energy and climate investment, such as green banks and clean energy finance centers
 - o \$20 billion (estimated) to the National Green Bank (NGB) accelerator for distribution via:
 - Direct investment by NGB in large infrastructure projects
 - Indirect investment by NGB to state and local intermediaries
 - Distribution instruments include direct loans, grants, equity, secondary market investment to intermediaries
 - Intermediaries receiving funds from EPA or NGB can distribute to end users through a range of financial instruments, including loans, equity investments, and grants
 - For example, a state/local intermediary could receive national grant funding from EPA or NGB for distribution to consumers through low or no cost loans for purchase of EVs

- State designated clean energy or green bank financing entities for the EPA \$7 billion
- State, local, and nonprofit entities for the distribution of \$20 billion in NGB funds
- Redistribution to public and private parties including localities, public institutions, businesses, and households

Important Dates and Next Steps

Guidance to be issued soon by Treasury, EPA, and NGB.

IRA Buildings Tax Credits

1. Energy Efficient Home Improvement Tax Credit

- Extends previous credit through 2032
- Homeowners receive tax credit for efficiency upgrades
- Lesser of 30% credit rate or cap below
- \$1200 annual limit with applicable upgrades:
 - \$150 for energy efficiency audits
 - \$500 for exterior doors
 - \$600 for exterior windows
 - \$600 for air conditioning

- \$600 for electrical panels
- o \$600 for water heaters
- \$2000 credit exception for eligible heat pumps, water heaters, and certain stoves
- Not direct pay eligible

Home Owners

Important Dates and Next Steps

• Guidance to be issued soon.

2. Residential Clean Energy Tax Credit

Scope and Level of Funds

- Extends previous credit through 2034
- Homeowners receive 30% tax credit for eligible clean energy technologies generating at least 3 kWh
- Eligible technologies include
 - Solar electric and heating
 - Biomass
 - Geothermal heating
 - o Residential wind
 - o Fuel cells
 - Energy storage systems
- 30% until 2032 with phase down to 26% in 2033 and 22% in 2034
- Not direct pay eligible

Eligible Parties

Home Owners

Important Dates and Next Steps

• Guidance to be issued soon.

3. New Energy Efficient Homes Tax Credit

- Extends previous credit until 2032
- Per dwelling credit for new construction of residences

- For single family homes:
 - \$2500 for meeting Energy Star requirements
 - \$5000 for meeting DOE Zero Energy Ready requirements
- For multifamily homes base credit:
 - o \$500 per unit for meeting Energy Star requirements
 - \$1000 per unit for meeting DOE Zero Energy Ready requirements
 - o Bonus credits for meeting wage requirements
 - \$2500 per unit for meeting Energy Star requirements
 - \$5000 per unit for meeting DOE Zero Energy Ready requirements

Home Owners

Important Dates and Next Steps

• Guidance to be issued soon.

4. Efficient Commercial Buildings Deduction

Scope and Level of Funds

- Extends previous tax credit until 2032
- Allows deductions for energy efficiency upgrades including lighting, HVAC, and building controls
- Base credit begins at 25% energy savings with \$0.50 per square foot, increasing \$0.02 per 1% in energy savings
- Meeting wage and apprenticeship requirements: \$2.50, increasing \$0.10 per 1% in energy savings
- Max of 50% energy savings with \$1.00 per square foot without wage and apprenticeship requirements and \$5.00 per square foot with wage and apprenticeship requirements
- Direct pay eligible for tax exempt organizations

Eligible Parties

Commercial Building Owners

Important Dates and Next Steps

Guidance to be issued soon.