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# **Guidebook for Federal Funding Opportunities: BIL, IRA, Disaster Preparedness, and Community Resilience**

Prepared for the National Association  
of Regulatory Utility Commissioners

# ABOUT NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS



Founded in 1889, the National Association of Regulatory Utility Commissioners (NARUC) is a non-profit organization dedicated to representing the state public service commissions who regulate the utilities that provide essential services such as energy, telecommunications, power, water, and transportation.

NARUC's mission is to serve in the public interest by improving the quality and effectiveness of public utility regulation. Under state law, NARUC's members have an obligation to ensure the establishment and maintenance of utility services as may be required by law and to ensure that such services are provided at rates and conditions that are fair, reasonable, and nondiscriminatory for all consumers.

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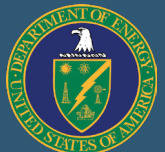
## ABOUT CONVERGE STRATEGIES, LLC



Converge Strategies, LLC (CSL) is a consulting company focused on the intersection of clean energy, resilience, and national security. CSL works with civilian and military partners to develop new approaches to energy resilience policy and planning in the face of rapidly evolving threats, vulnerable infrastructure, and determined adversaries.

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# TABLE OF CONTENTS

<b>Introduction</b>	3
Key Terms	5
Acronym List	6
<b>Section 1 Overview: Pre- and Post- Disaster Funding</b>	8
Overview of Programs	10
Stafford Disaster Relief and Emergency Assistance Act	11
FEMA Hazard Mitigation Grant Program	14
Building Resilient Infrastructure & Communities Program	18
State Homeland Security Program	22
Community Development Block Grant Mitigation Program	25
Installation Resilience Program	33
Defense Community Infrastructure Pilot Program	36
<b>Section 2 Overview: Bipartisan Infrastructure Law (BIL)</b>	39
Overview of Programs	40
Summary of Community Benefits Plans	43
Program Profiles	44
Programs for Regulator Monitoring	60
<b>Section 3 Overview: Inflation Reduction Act</b>	68
Overview of Programs	69
Tax Credit Summaries	71
Loan and Loan Guarantee Programs	75
Grant Program Profiles	78

## HOW TO USE THIS GUIDEBOOK

This Guidebook is intended as a resource for utility regulators to understand federal funding opportunities as they consider energy resilience and disaster planning investments. The goal of the Guidebook is to equip regulators to evaluate how federal funding opportunities might best serve ratepayer interests and state objectives. Each section has several components, including program summaries, eligibility requirements, important deadlines, and key takeaways.



# INTRODUCTION

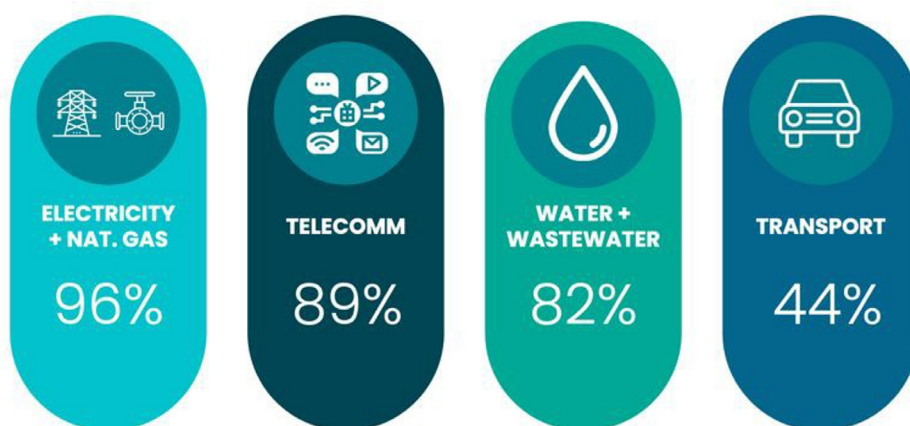
The United States is making historic investments in infrastructure resilience and renewal through legislation such as the [Bipartisan Infrastructure Law](#) (BIL), and the [Inflation Reduction Act](#) (IRA). The goal of the Guidebook is to equip regulators to evaluate how federal funding opportunities might best serve ratepayer interests and state objectives.

The BIL includes approximately \$1.2 trillion for energy, water, broadband, and rail and transit infrastructure. The IRA authorizes \$783 billion in spending on energy security, climate change, and drought resilience. These laws create immense opportunities to modernize the electric grid, accelerate the clean energy transition, invest in community resilience, and prepare for and respond to extreme weather events. At the same time, the country faces a collective challenge to effectively, efficiently, and prudently put these funds to work.

In parallel with the new programs created by the BIL and the IRA, existing federal programs focusing on emergency management, community development, and national security have expanded in size and scope. The Building Resilient Infrastructure and Communities and the Defense Community Infrastructure Pilot (DCIP) programs, for example, have both seen increased budgets and an expanded focus on energy investment. Governments, utilities, and other stakeholders are pursuing these and other programs to improve utility and community resilience.

State utility regulators have critical roles to play in this period of unprecedented infrastructure investment. Regulators play a central role in considering and approving electric grid reliability and resilience investments. Regulators in most states also regulate multiple types of utilities and are well-positioned to consider the resilience implications of critical infrastructure interdependencies. Of the 55 regulatory commissions that span the United States, NARUC has found that 96% have authority over electricity and natural gas, 89% regulate communications, 82% regulate water and wastewater, and 44% regulate transportation. Regulators may also consider resilience investments for specific critical facilities, such as microgrids to support [community lifelines](#) or [military installations](#).

In addition to their regulatory role, [utility commissions in many states](#) play a formal role in emergency management, helping to coordinate resources and to enable timely system restoration following power outages.





# INTRODUCTION

The objectives of this Guidebook are to:

- Provide utility regulators and their staff with background materials on available federal funding for energy resilience and disaster planning.
- Equip regulators to ask informed questions about whether or not utilities and other stakeholders are pursuing available federal funding opportunities.
- Enable state-level alignment around project criteria, state objectives, and performance metrics related to federally supported infrastructure investments.
- Support emerging conversations related to infrastructure investment, such as how federal resources can be integrated with traditional utility cost recovery models.

The Guidebook is structured as follows:

- Section 1 provides an overview of pre- and post-disaster federal funding.
- Section 2 provides an overview of BIL funding.
- Section 3 provides an overview of IRA funding.

This Guidebook is an updated version of NARUC's [\*2021 Federal Funding Opportunities for Pre- and Post-Disaster Resilience Guidebook\*](#). The Pre- and Post-Disaster section has been updated to reflect funding, eligibility, and program changes since 2021. The BIL and IRA sections are new historic laws signed since the 2021 Guidebook. These two laws are monumental funding streams that regulators should be familiar with. The programs outlined in the BIL and IRA section are the ones most relevant to utility regulators.

The information in the Guidebook is accurate as of October 2023. This document does not provide, nor intend to provide, readers of this manual with tax advice related to the IRA. If you have questions concerning any tax and/or legal issues, please reference the respective agency's website and/or consult a tax advisor and/or lawyer.



# KEY TERMS

**Funding opportunities.** This term refers to a range of federal programs and incentives that include, for example, grants, cooperative agreements, loan programs, tax credits, and others.

**Public utility commissions (PUCs).** The term “PUCs” refers broadly to state utility regulatory bodies, such as public service commissions, corporation commissions, utility boards, public utilities departments, etc.

**Resilience.** The term “resilience” is the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions. [Resilience](#) includes the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents. [Energy resilience](#) includes the robustness and recovery characteristics of utility infrastructure and operations, which avoid or minimize interruptions of service during an extraordinary and hazardous event.

**Utility.** The terms “utility” and “utilities” refer broadly to entities regulated by PUCs, such as vertically integrated utilities, regulated distribution companies, etc. Cooperative utilities are regulated by state PUCs in 16 states.



# ACRONYM LIST

<b>ALRD</b>	Administrative and Legal Requirements Document	<b>GFR</b>	General Field Representative
<b>BIL</b>	Bipartisan Infrastructure Law	<b>GRIP</b>	Grid Resilience and Innovation Partnerships
<b>BRIC</b>	Building Resilient Infrastructure and Communities	<b>HMA</b>	Hazard Mitigation Assistance
<b>CBP</b>	Community Benefits Plan	<b>HMGP</b>	Hazard Mitigation Grant Program
<b>CCS</b>	Carbon Capture and Storage	<b>HSGP</b>	Homeland Security Grant Program
<b>CDBG</b>	Community Development Block Grant	<b>IRA</b>	Inflation Reduction Act
<b>CPRG</b>	Climate Pollution Reduction Grants	<b>ITC</b>	Investment Tax Credit
<b>DAC</b>	Disadvantaged Community	<b>LMI</b>	Low-To-Moderate Income
<b>DCIP</b>	Defense Community Infrastructure Pilot	<b>MID</b>	Most Impacted and Distressed
<b>DEIA</b>	Diversity, Equity, Inclusion, and Accessibility	<b>MIT</b>	Community Development Block Grant – Mitigation
<b>DRGR</b>	Disaster Recovery Grant Reporting	<b>NEVI</b>	National Electric Vehicle Infrastructure
<b>EDRC</b>	Economically Disadvantaged Rural Communities	<b>PREPA</b>	Puerto Rico Electric Power Authority
<b>EIR</b>	Energy Infrastructure Reinvestment	<b>PTC</b>	Production Tax Credit
<b>ERA</b>	Energy Improvements in Rural or Remote Areas	<b>RMUC</b>	Rural and Municipal Utility Advanced Cybersecurity Grant And Technical Assistance Program
<b>FOA</b>	Funding Opportunity Announcement	<b>SHSP</b>	State Homeland Security Program
<b>FMA</b>	Flood Mitigation Assistance		



# ACRONYM LIST

Agency Logo	Agency	Acronym	Agency Logo	Agency	Acronym
	U.S. Department of Agriculture	USDA		U.S. Department of Treasury	TREAS
	U.S. Department of Commerce	DOC		Energy Efficiency and Renewable Energy	EERE
	U.S. Department of Defense	DoD		Federal Emergency Management Agency	FEMA
	U.S. Department of Energy	DOE		Federal Highway Administration	FHWA
	U.S. Environmental Protection Agency	EPA		Grid Deployment Office	GDO
	U.S. Department of Homeland Security	DHS		Loan Programs Office	LPO
	U.S. Department of Housing and Urban Development	HUD		Office of Clean Energy Demonstrations	OCED
	U.S. Department of State	DOS		Office of Cybersecurity, Energy Security, and Emergency Response	CESER
	U.S. Department of Transportation	DOT		Office of Fossil Energy and Carbon Management	FECM

# SECTION 1 OVERVIEW: PRE- AND POST-DISASTER FUNDING

The increasing frequency and severity of natural disasters, ranging from wildfires to hurricanes and flooding, is damaging critical infrastructure and harming communities across the country. This section is intended as a resource for utility regulators as they consider investments in disaster planning and energy resilience for the electricity system.

The federal government defines [disaster and emergency preparedness](#) as a shared, whole community responsibility with five interrelated mission areas: prevention, protection, mitigation, response, and recovery. These mission areas can be broadly grouped into activities that occur pre-disaster (i.e., prevention, protection, and mitigation) and activities that occur during or post-disaster (i.e., response and recovery). A related distinction is that some of the programs are triggered episodically (e.g., by a disaster), whereas others are available on a regular basis (e.g., annually).

This section provides summaries of federal pre- and post-disaster programs that can be used to make investments in energy resilience. Depending on the program, energy resilience investments may focus on electricity transmission and distribution system upgrades, strategies to address utility interdependencies, and/or backup power for critical facilities.

The section is organized by federal agency and includes programs from:

## **U.S. Department of Homeland Security (DHS).**

The DHS programs include Federal Emergency Management Agency (FEMA) programs that focus on emergency management and homeland security. The FEMA program overviews begin with a description of the Stafford Disaster Relief and Emergency Assistance Act (“the Stafford Act”) of 1988, which laid the groundwork for the current system of pre- and post-disaster funding. The section also includes detailed overviews of the Hazard Mitigation Grant Program (HMGP) and the Building Resilient Infrastructure and Communities program, both of which are part of the broader portfolio of Stafford Act programs.

## **U.S. Department of Housing and Urban Development (HUD).**

The HUD programs include Community Development Block Grant (CDBG) programs that relate specifically to disasters: the CDBG Mitigation program, which focuses on pre-disaster investments, and the CDBG Disaster Recovery program, which focuses on post-disaster investments.

## **U.S. Department of Defense (DoD).**

The DoD Office of Local Defense Community Cooperation (OLDCC) supports the readiness and resilience of military installations and defense communities through a range of programs. The Installation Resilience program provides funding for resilience planning, and the DCIP program provides funding to address deficiencies in utility and other infrastructure that supports military installations.

# SECTION 1 OVERVIEW: PRE- AND POST-DISASTER FUNDING
















Each program summary includes a description of eligibility criteria, timelines, and example case studies. The case studies focus primarily on electricity system investments, although some focus on adjacent and interdependent infrastructure (e.g., the water system). The case studies also focus primarily on regulated utilities, although in some cases illustrative examples from municipal utility projects are included.

The programs profiled in this section were selected in consultation with NARUC. For a list of other existing federal mitigation and resilience programs, please see the U.S. Department of Energy (DOE) [Mitigation and Resilience Federal Funding Sources](#) reference list.





# OVERVIEW OF PROGRAMS

Program	Agency	Project Timeline	Funding Amount	Cost Share Required	Mission Area
Stafford Disaster Relief and Emergency Assistance Act		Varies by program avenue	Varies by program	Varies by program avenue	Both
Hazard Mitigation Grant Program (HMGP)		2 years	\$3.46 billion (FY21)		Hazard Mitigation
Building Resilient Infrastructure and Communities (BRIC)		3 years	\$2.295 billion (FY22)		Hazard Mitigation
State Homeland Security Program (SHSP)		3 years	\$415 million (Annually)		Hazard Mitigation
Community Development Block Grant – Mitigation (CDBG-MIT)		12 years	\$16 billion (Total Allotted)		Hazard Mitigation
Community Development Block Grant –Disaster Recovery (CDBG-DR)		6 years	\$3 billion (FY23)		Disaster-Relief
Installation Resilience Program		1–1.5 years	\$7.2 million (FY22)		Hazard Mitigation
Defense Community Infrastructure Pilot (DCIP) Program		5 years	\$100 million (FY22)		Hazard Mitigation

# STAFFORD DISASTER RELIEF AND EMERGENCY ASSISTANCE ACT



Enacted by the 100th United States Congress on November 23, 1988

## PROGRAM SUMMARY

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (“Stafford Act”) set up a federal funding mechanism and a recovery planning process for state and local governments after disasters, including through FEMA programs such as Public Assistance (PA). The act established eligibility for certain entities to receive federal funding after a Presidential Disaster Declaration.

There are several ways that entities apply for Stafford Act funds, depending in part on whether the funding is available annually or episodically. For example, the state applies on behalf of subapplicants for the annual Hazard Mitigation Assistance (HMA) Flood Mitigation Assistance (FMA) program. Non-state entities, such as public and qualifying private nonprofit entities (i.e., publicly owned utilities, electric cooperatives), might be applicants or subapplicants for programs that are triggered after a Presidential Disaster Declaration, such as the HMGP and PA.

After a disaster event, state and federal officials perform a Preliminary Damage Assessment (PDA) to calculate the impact of the disaster on people and public property. The governor includes this assessment in their request to the President. Based on this request, the President may declare the emergency a Presidential Disaster, thus triggering a variety of federal programs to support post-disaster response and recovery. Visit [Preliminary Damage Assessments](#) for more information on how the PDA process works. This section provides broad background on the Stafford Act and related programs.



## PRESIDENTIAL DISASTER DECLARATION

A Presidential Disaster Declaration opens the door to Stafford Act funding. Historically, a small number of states are eligible for this type of funding because a state’s eligibility is based on a Presidential or Emergency Disaster Declaration. However, after the COVID-19 pandemic, all states received a Presidential Disaster Declaration status, allowing them to apply for programs that they might not have qualified for in the past. It is important to understand the declaration [incident timelines per state](#) and cross-reference disaster status with each program’s eligibility requirements.

# STAFFORD DISASTER RELIEF AND EMERGENCY ASSISTANCE ACT



Enacted by the 100th United States Congress on November 23, 1988

## PROGRAM OVERVIEW

The Stafford Act delineates how to request and receive a Presidential Disaster Declaration, outlines different types of resources available from the federal government, and identifies the parameters for how to coordinate with FEMA to pursue that assistance. The Stafford Act also introduces two types of disaster declarations: **Emergency Declarations**, which provide states up to \$5 million to lessen or avert a disaster threat, and **Major Disaster Declarations**, which provide funds for both emergency and permanent work that can amount to billions of dollars. Additional details about this process are found at [How a Disaster Gets Declared](#).



**Key Takeaway:** Electric utility repairs and upgrades are eligible for funding under multiple FEMA programs authorized under the Stafford Act.

## PROGRAM ELIGIBILITY

Several types of funding options are available depending on the type of disaster and type of project an entity wants to pursue. Funding can be available to states, tribes, local governments, individuals, and specific types of private nonprofit organizations either after disasters or on a yearly basis.



**Key Takeaway:** The PA program may be a valuable funding source for cooperatives and publicly owned utilities. Note: Investor-owned utilities are not eligible for this program.

Program	Applicants	Relevant Information
Hazard Mitigation Assistance (HMA)	States, counties, cities, and tribal nations	Several programs support mitigation planning and projects after a Presidential Disaster Declaration, such as <a href="#">Building Resilient Infrastructure and Communities (BRIC)</a> , <a href="#">Hazard Mitigation Grant Program (HMGP)</a> , <a href="#">HMGP Post Fire</a> , and the <a href="#">Flood Mitigation Assistance (FMA)</a> .
Public Assistance (PA)	Public and qualifying private nonprofit entities (i.e., publicly owned utilities, electric cooperatives)	Eligible activities include specific emergency services and the repair or reconstruction of disaster-damaged public facilities.



# STAFFORD DISASTER RELIEF AND EMERGENCY ASSISTANCE ACT



Enacted by the 100th United States Congress on November 23, 1988

## EXAMPLES OF ELIGIBLE PROJECTS

### Puerto Rico Electric Power Authority (PREPA) \$9.6 billion

In 2017, Hurricane Maria severely damaged the public power authority's infrastructure, and PREPA sought support in restoring their grid. Per the Stafford Act, PREPA was eligible for **PA** funding for "the repair, restoration, and replacement of public facilities." Utility regulators and stakeholders can connect with their counterparts in Puerto Rico to hear about the progress Puerto Rico and FEMA have made toward coming to consensus on project funding and use that information to jumpstart their own potential projects. [Puerto Rico to receive nearly \\$10 billion from FEMA to rebuild its grid.](#)

### McCone Electric Cooperative, Montana \$1.2 million

According to the Stafford Act, electric cooperatives and publicly owned utilities are eligible for FEMA funds. In 2022, FEMA [approved \\$1.2 million](#) of additional **PA** funding to help five counties in northeast Montana recover from severe storms. FEMA awarded McCone Electric Cooperative funding to cover costs of restoring electric service and replacing power poles and transformers damaged by high winds. McCone Electric also implemented hazard mitigation measures to strengthen the power lines to better withstand wind damage.



# FEMA HAZARD MITIGATION GRANT PROGRAM



U.S. Department of Homeland Security – Federal Emergency Management Agency

## PROGRAM SUMMARY

FEMA's HMGP is foundational to the emergency management community. Any state, county, local, tribal, or territorial government entity with an approved Hazard Mitigation Plan that identifies risks, hazards, and potential mitigation strategies can apply. Additionally, these funds are only made available in states that were impacted by a Presidential Disaster Declaration.

Energy infrastructure, specifically “retrofits to utilities and other infrastructure to enhance resistance to natural hazards,” is explicitly identified as an example of an eligible project. The merits of project applications are evaluated based on their ability to reduce the cost of future disasters by making assets more survivable in the face of recurring natural or human-made threats. The program also requires a 10%-25% non-federal cost share from the applicant.

PUCs can ensure that staff are familiar with the HMGP to better understand the federal funding process and how methodologies such as the FEMA benefit-cost analysis might intersect with regulatory processes. Regulator engagement with eligible utilities that have reliability issues or known infrastructure vulnerabilities can help ensure that those issues can be integrated into state and local hazard mitigation planning and funding requests.

For more information, visit FEMA's [Hazard Mitigation Grant Program](#) website.



# FEMA HAZARD MITIGATION GRANT PROGRAM



U.S. Department of Homeland Security – Federal Emergency Management Agency

## PROGRAM OVERVIEW

FEMA's HMGP provides funding to state, local, tribal, and territorial governments so they can rebuild in a way that reduces, or mitigates, future disaster losses in their communities. This grant funding is available after a Presidential Disaster Declaration.



**Key Takeaway:** HMGP is a proven avenue for providing grants to eligible utilities and can be used for transmission and distribution system upgrades that reduce risk of failure caused by natural hazards. HMGP can also be used to provide backup power to critical facilities.

## PROGRAM ELIGIBILITY

States, territories, and tribal nations with a Presidential Disaster Declaration can apply for HMGP funding online via [NEMIS](#), a grants management system, on behalf of subapplicants. Applicants must have a FEMA-approved local Hazard Mitigation Plan in place.



**Key Takeaway:** Cooperatives and public utilities qualify as subapplicants within HMGP and must work with applicants to attain grants. A government partner must be engaged to support the application and provide a letter of support that explains their level of engagement, support, and awareness. Note: Investor-owned utilities are not eligible for HMGP.

Applicants	States, territories, and tribal governments with an approved Hazard Mitigation Plan	Return on Investment
Subapplicants	Local governments, including cities, townships, counties, state agencies, and tribal governments	A <a href="#">study</a> by the Multi-hazard Mitigation Council showed that each dollar spent on hazard mitigation saves society an average of four dollars.
Subapplicant Partners	Utilities, homeowners, business operators, and nonprofit organizations, including electric cooperatives	



# FEMA HAZARD MITIGATION GRANT PROGRAM



U.S. Department of Homeland Security – Federal Emergency Management Agency

## PROJECT EXECUTION TIMELINE



## PROGRAM FUNDING & REPORTING

Grant funding is available after a Presidential Disaster Declaration. States with enhanced Hazard Mitigation Plans can receive up to 20% of the total cost of the declared disaster through HMGP. States without enhanced Hazard Mitigation Plans can receive funding up to a defined percent of the estimated total or aggregate cost of the declared disaster. In FY21, HMGP administered \$3.46 billion in grants. Quarterly progress reports must be submitted to FEMA on funded mitigation activities. Final reports must be delivered during standard closeout.

Estimated Total Cost of Disaster	HMGP Funding Available*
First \$2 billion	Up to 15%
Amounts between \$2 billion and \$10 billion	Up to 10%
Amounts between \$10 billion and \$35.333 billion	Up to 7.5%

\*For states without an enhanced Hazard Mitigation Plan.

Note: States with [enhanced Hazard Mitigation Plans](#) can receive up to 20%, not to exceed \$35.333 billion.



**Key Takeaway:** HMGP funding is available for every state and federally recognized territory, including any county within a state or territory that has been impacted by a Presidential Disaster Declaration.



**Cost Share Requirement:** A non-federal cost share is required for all subapplications. In most cases, the federal and non-federal governments split the cost 75% federal/ 25% local match. Some disadvantaged communities can qualify for a 90% federal/10% local split. The cost share match does not have to be cash; in-kind services or materials may be used.

# FEMA HAZARD MITIGATION GRANT PROGRAM



U.S. Department of Homeland Security – Federal Emergency Management Agency

## CASE STUDIES



**Key Takeaway:** HMGP provides funding to directly address infrastructure that experiences recurring impacts but lacks the economic incentives or adequate customer investments to make the necessary improvements. Each example listed below reflects how HMGP has been used by electric utilities.

### FLORIDA KEYS ELECTRIC COOPERATIVE

Florida Keys Electric Cooperative implemented mitigation funds on four [projects](#) totaling \$26 million to upgrade and harden the electricity system that serves the Florida Keys. This was done in partnership with the Keys Energy Services, the public power utility that serves the lower Florida Keys. These projects included hardening or relocating water-crossing transmission poles, and installing new, self-supporting transmission and distribution poles following Hurricane Irma.



### PUERTO RICO ELECTRIC POWER AUTHORITY

Puerto Rico Electric Power Authority (PREPA) was awarded \$26.2 million in HMGP funds split between two projects: the engineering and design of a new combined cycle generation plant at the Palo Seco Energy Plant and the acquisition and installation of 11 gas turbines in five additional PREPA facilities. [Learn more.](#)





# BUILDING RESILIENT INFRASTRUCTURE & COMMUNITIES



U.S. Department of Homeland Security – Federal Emergency Management Agency

## PROGRAM SUMMARY

The [Building Resilient Infrastructure and Communities](#) (BRIC) program is an annual program supporting capability and capacity-building activities, mitigation projects, and management costs to “reduce or eliminate risk and damage from future natural hazards.” This innovative risk reduction program replaced FEMA’s Pre-Disaster Mitigation program in 2021. Eligible applicants include all 50 states, U.S. territories, federally recognized tribal governments, and D.C. A state/territory needs to have received a Presidential Disaster Declaration in the last 7 years to be eligible. Jurisdictions applying for BRIC funds must have approved Hazard Mitigation Plans, and potential projects must meet the relevant [Consensus-Based Codes](#).

What separates BRIC from other large funding sources is that this program funds capacity-building projects, such as project scoping, building code projects, wildfire mitigation planning, and climate resilience strategies. BRIC specifically calls out community lifeline projects, such as energy (power and fuel) projects as one of the program’s priorities. The program’s guiding principles include promoting partnership, enabling large infrastructure projects, and encouraging and enabling innovation.



# BUILDING RESILIENT INFRASTRUCTURE & COMMUNITIES



U.S. Department of Homeland Security – Federal Emergency Management Agency

## PROGRAM OVERVIEW

In FY22, FEMA's BRIC program set aside \$112 million for states or territories, \$50 million for federally recognized tribes, and \$2.1 billion for national competitive applicants. This general \$2.1 billion was for projects that meet BRIC priorities, some of which include promoting public infrastructure projects and mitigating risk to one or more lifelines. More information from the Notice of Funding Opportunity can be found [here](#).



**Key Takeaway:** FEMA BRIC funding is usually allocated 1 year prior to being disbursed. The increase in federal funding allowed all 10 FEMA regions to receive an influx of support.

## PROGRAM ELIGIBILITY

FEMA requires that applicants and subapplicants have an approved Hazard Mitigation Plan upon application and award and have received a major disaster declaration during the previous 7 years. Eligibility requirements can be found at [Before You Apply for Building Resilient Infrastructure and Communities \(BRIC\) Funds](#).



**Key Takeaway:** Similar to the HMGP, BRIC funds can be used to support transmission and distribution system upgrades, and investments in backup power systems such as generators, microgrids, and solar+storage systems.

Applicants	All 50 states, U.S. territories, federally recognized tribal governments, and D.C.	Snapshot
Subapplicants	Local governments, tribal governments, state agencies, and tribal agencies	Utility and Infrastructure Protection ranked second in terms of funding requested under BRIC. FEMA received \$1 billion in FY22 across 113 subapplications.
Subapplicant Partners	Homeowners, business operators, and nonprofit organizations, including electric cooperatives. Investor-owned utilities are not eligible.	Requests for Generators ranked fourth, with \$169 million requested across 56 subapplications in FY22.  See more information about <a href="#">2022 allocations</a> .



# BUILDING RESILIENT INFRASTRUCTURE & COMMUNITIES



U.S. Department of Homeland Security – Federal Emergency Management Agency

## PROJECT EXECUTION TIMELINE



## PROGRAM FUNDING & REPORTING

BRIC funding is available each year on an annual cycle. In 2022, each state and territory was allocated up to \$2 million per applicant, of which half (\$1 million) could be used for mitigation planning and planning-related activities. During FY22, the national competition total was \$2.1 billion with a maximum of up to \$50 million per project.



**Cost Share Requirement:** In most cases, the federal and non-federal governments split the costs 75%/25%. Economically Disadvantaged Rural Communities (EDRCs) of fewer than 3,000 people may be eligible for up to 90% of their requested funding. FEMA provides 100% federal cost share funding for management costs.



**Reporting Requirement:** Grant recipients must submit financial and tracking reports each quarter throughout the period of performance. Reporting also must occur during partial calendar quarters and periods when no activity funded by the grant takes place. See [After You Apply for BRIC Funds](#).

## FY22 FUNDING CYCLE

FEMA received 803 BRIC subapplications totaling \$4.6 billion in federal cost share in FY22. This included 55 subapplications from states and territories, and 37 tribes requesting \$56.2 million, surpassing the \$50 million set aside for tribes.

See more information about [FEMA BRIC FY22](#).

# BUILDING RESILIENT INFRASTRUCTURE & COMMUNITIES



U.S. Department of Homeland Security – Federal Emergency Management Agency

## CASE STUDIES

### Honolulu Board of Water Supply Master Plan



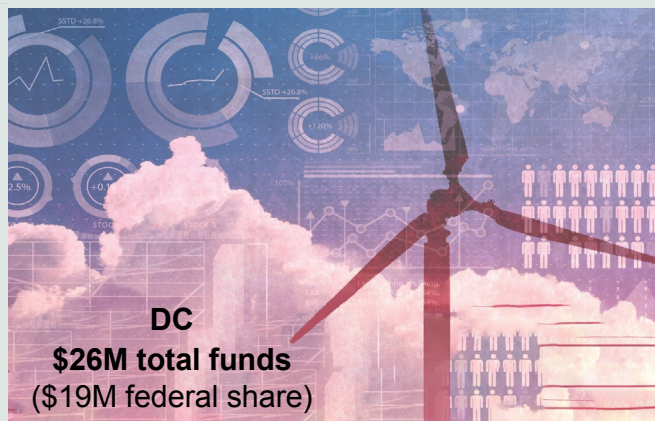
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**\$100,000 total funds**  
(\$75,000 federal share)

In FY21, states were able to use up to \$500,000 of their \$1 million allotment to fund planning activities. The Honolulu Board of Water Supply leveraged BRIC funding to create a [Water Master Plan](#) to ensure reliable and sustainable water supply for the residents and businesses of Oahu.

The Water Master Plan outlined strategies to manage water demand, protect water resources, and increase the use of alternative water sources. One of the key indicators and metrics of the Water Master Plan relates to emergency power for the water system. The Water Master Plan is a comprehensive approach to water resource management that includes the entire water lifecycle, from source to tap. The plan considered current water demand, climate change impacts, and the need to maintain water quality. The development of the plan involved partnerships with academic institutions, consulting firms, and other organizations with expertise in water resource management.

### Saint Elizabeth's Hospital Campus & D.C. Emergency Comms. Microgrid Project



DC

**\$26M total funds**  
(\$19M federal share)

Critical lifelines are an important part of the BRIC program. The Washington, D.C. Homeland Security and Emergency Management Agency, in partnership with the Office of the Deputy Mayor for Planning and Economic Development, the Office of Unified Communications, the Department of Energy and Environment, and the Department of General Services, leveraged BRIC to fund [a microgrid at Saint Elizabeth's Hospital Campus](#) in southeast Washington, D.C.

The microgrid will use a combination of solar power and energy storage to provide backup power to the Saint Elizabeth's Hospital Campus and surrounding community during power outages. This project is part of a broader effort by the city to increase energy resilience and reduce greenhouse gas emissions.

# STATE HOMELAND SECURITY PROGRAM



## U.S. Department of Homeland Security – Federal Emergency Management Agency

### PROGRAM SUMMARY

The [State Homeland Security Program \(SHSP\)](#) allocates \$415 million annually to implement risk-driven, capabilities-based homeland security priorities under FEMA's [Homeland Security Grant Program \(HSGP\)](#). This program helps states, territories, high-risk urban areas, and tribes create, maintain, and deliver the tools needed to prevent, plan for, protect against, and fight terrorism. The program can be used to fund generators, batteries, and power cells, among other projects.

County and state agencies, nonprofits, associations, and other organizations can apply directly to their state or territory. Utility regulators and stakeholders should consult with their [state's Homeland Security Advisor](#) to learn more about their state's process for accepting projects.

Once an organization collects 5 to 10 potential project ideas from their area, they apply to SHSP. At least one project in the application must be based on each of the national priorities identified in the Notice of Funding Opportunity.

The six priority areas in the FY23 Notice of Funding Opportunity were:

1. Enhancing cybersecurity.
2. Enhancing the protection of soft targets/crowded places.
3. Enhancing information and intelligence sharing and analysis, and cooperation with federal agencies, including DHS.
4. Combating domestic violent extremism.
5. Community preparedness and resiliency.
6. Election security.

Applications must ensure a minimum percentage (usually 5%-7.5%) of funding is allocated toward addressing each priority area, as outlined above.



# STATE HOMELAND SECURITY PROGRAM



## U.S. Department of Homeland Security – Federal Emergency Management Agency

### PROGRAM OVERVIEW

DHS awards funds based on DHS's relative risk methodology and statutory minimums, which are derived from the amended Homeland Security Act of 2002. States must receive at least 0.35% of total funding, while territories must receive at least 0.08%. Each grant recipient must submit an Investment Justification (IJ) that addresses how they will spend the money in relation to each of the priority areas. Recipients must also complete a Threat and Hazard Identification and Risk Assessment (THIRA)/Stakeholder Preparedness Review (SPR). Visit the [National Risk and Capability Assessment website](#) for more information about the THIRA and SPR processes.



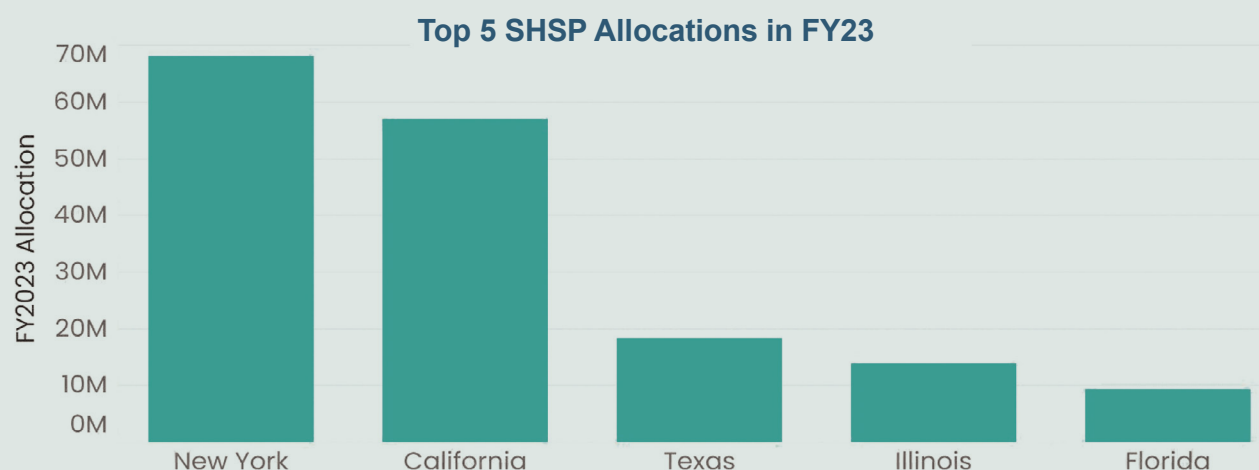
**Key Takeaway:** There are a few federal implementation policies for this program, such as the requirement to allocate around 30% of funding to the national priority areas. After that, applicants are able to structure their programs to administer the funding in a way that works for them. Utilities can work with the Homeland Security Advisor to explore projects that fall within the program's flexible scope.

### PROGRAM ELIGIBILITY

Eligible entities include all 56 states and territories. SHSP recipients, excluding American Samoa and the Commonwealth of the Northern Mariana Islands, must join the Emergency Management Assistance Compact. Grant applications must take national priorities into account and address long-lasting needs. States are also required to pass-through at least 80% of SHSP funds to local or tribal units of government.



**Key Takeaway:** Most states and territories receive ~\$4.5 million, so smaller projects (e.g., backup power) are a fit with this program. The chart below outlines the top five allocations for FY23 based on the FEMA relative risk formula.





# STATE HOMELAND SECURITY PROGRAM



U.S. Department of Homeland Security – Federal Emergency Management Agency

## PROJECT EXECUTION TIMELINE



## PROGRAM FUNDING & REPORTING



**Key Takeaway:** Subapplicants will need a champion, like the Homeland Security Advisor, to help navigate the process and secure funding for their projects.



**Cost Share Requirement:** There was no cost share requirement in FY23.

## GOVERNANCE

- States are required to establish a Senior Advisory Committee (SAC), organized by the Homeland Security Advisor or the State Administering Agent, to propose, review, and approve SHSP projects.
- State regulatory commissions should seek representation on the SAC. The goal of doing so is to ensure the risks, needs, and priorities of the energy sector are represented.

## CASE STUDIES

The SHSP has not been widely used for energy infrastructure investments. Currently, the only energy-related projects funded through the program are emergency backup generators designed for use at a single facility. An energy infrastructure investment is eligible for this funding source if it addresses one of the priority areas of funding identified by DHS.

# COMMUNITY DEVELOPMENT BLOCK GRANT – MITIGATION



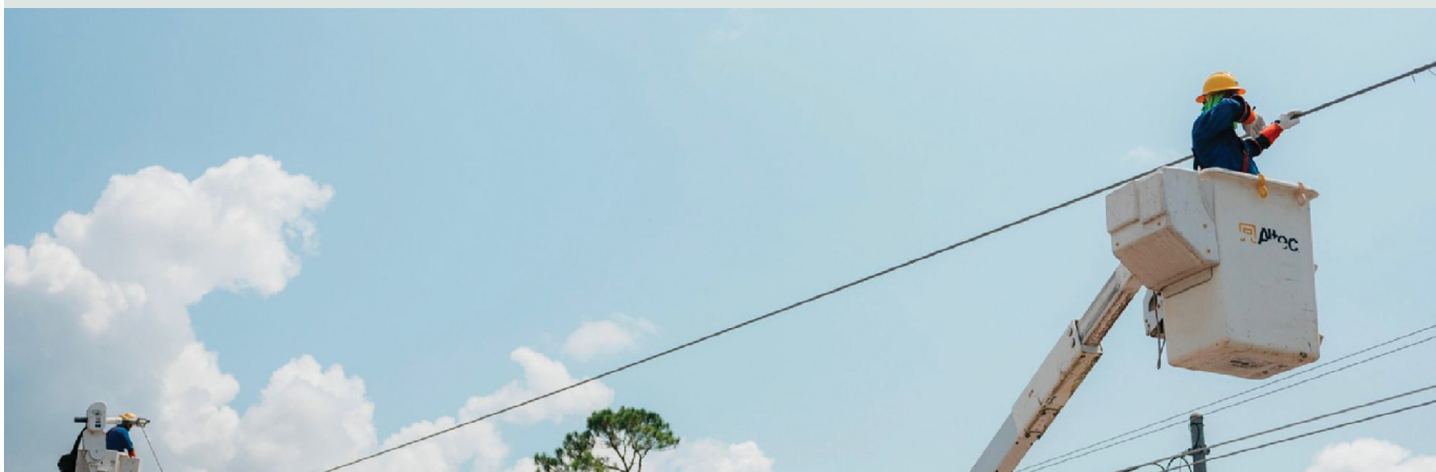
## U.S. Department of Housing and Urban Development

### PROGRAM SUMMARY

The Community Development Block Grant – Mitigation (CDBG-MIT) program is the first CDBG program primarily focused on mitigation. It operates differently than recovery funding streams that are authorized on an annual basis because CDBG-MIT is only authorized by Congress in response to particular disasters. Additionally, unlike other federal mitigation programs, no cost share is required for a CDBG-MIT application.

Since 2018, Congress has designated nearly \$16 billion for mitigation activities in areas impacted by federally declared disasters between 2015 and 2017. As of February 2022, additional funding has been allocated for 2019 and 2020. Four Federal Register Notices ([84 FR 45838](#), [84 FR 47528](#), [85 FR 4676](#), and [86 FR 569](#)) identified states, cities, counties, and U.S. territories that are eligible to apply for funding. HUD created this funding block for these jurisdictions to carry out high-impact mitigation activities. The high-impact mitigation activities must be related to repetitive loss of property and critical infrastructure that serve mostly low-to-moderate income (LMI) people in “most impacted and distressed” (MID) areas over the course of 12 years. No non-federal match is required. For a deeper dive, see [CDBG Mitigation Funds](#).

To apply, eligible grantees (identified jurisdictions, usually at the state level) prepare a CDBG-MIT Action Plan, which includes a Mitigation Needs Assessment outlining how the applicant intends to spend the CDBG-MIT funds and submits it to HUD for approval. After accepting the CDBG-MIT Action Plan, HUD provides the funds to state or local development offices, which then administer the grant to subrecipients. Learn about Action Plan requirements at [CDBG-MIT Action Plan Requirements](#).



# COMMUNITY DEVELOPMENT BLOCK GRANT – MITIGATION



## U.S. Department of Housing and Urban Development

### PROGRAM OVERVIEW

HUD's CDBG-MIT program sets aside \$16 billion for activities that increase future community resilience, decrease loss of life, and reduce the impact of future natural disasters. Some examples of these activities include supporting infrastructure projects, disaster preparedness, and planning efforts. Award recipients must spend at least 50% of funding in MID counties and at least 50% of funding on activities that benefit LMI populations per census tracts. HUD defined the term mitigation activities in [FR-6239-N-01](#), as those that "reduce the risk to community services that benefit human health and safety or economic security, from being severely affected by natural disasters." Reference FR-6239-N-01 at [Federal Register/Vol. 86, No. 3/Wednesday, January 6, 2021/Notices](#) for more information.



**Key Takeaway:** Utilities can determine if their jurisdictions are pursuing CDBG-MIT funding and collaborate with other stakeholders to help align CDBG-MIT funding with electricity system investment priorities. Note: Investor-owned utilities are only eligible for this program if they are granted a HUD waiver.

### PROGRAM ELIGIBILITY

The Federal Register includes a [list of eligible applicants](#). Applicants must complete an action plan prior to receiving funding. An action plan includes a Mitigation Needs Assessment that quantifiably assesses the potential impacts and risks of hazards affecting critical service areas. Once HUD approves the plan, subapplicants can apply for funding directly from the applicant.

**Applicants:** States, territories, counties, and cities impacted by 2015, 2016, and 2017 disasters identified in FR-6109-N-02, FR-6109-N-03, and FR-6109-NO4. As of February 2022, [additional funding](#) to states and territories has been allocated for 2019 and 2020.

**Subapplicants:** Connect with the state administering the funds for more granular details regarding eligibility criteria. Below are some example allocations made since 2017. See the most updated list of [2023 allocations here](#).

### CDBG-MIT PROGRAM ELIGIBILITY CRITERIA

- Meet relevant action plan criteria
- Meet HUD's "mitigation" definition
- Address needs identified in the Mitigation Needs Assessment
- Make an impact in or be located in a MID
- Reduce risk for LMI (80% area median income and below)
- Make an impact in or be located in a MID Reduce risk for LMI (80% area median income and below)

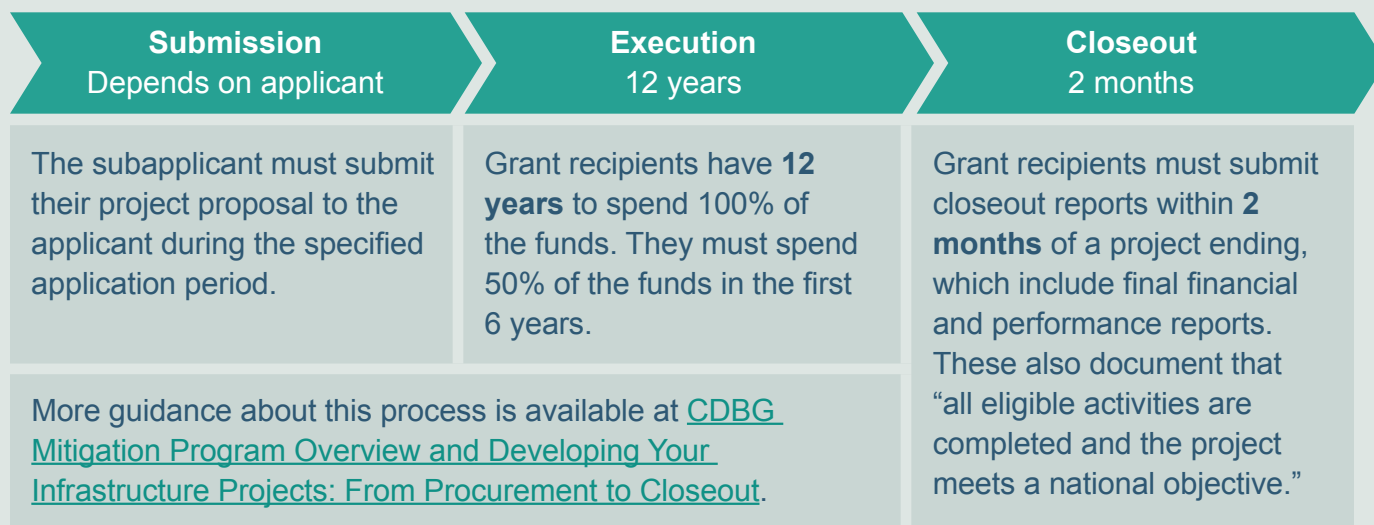


# COMMUNITY DEVELOPMENT BLOCK GRANT – MITIGATION






U.S. Department of Housing and Urban Development

## PROJECT EXECUTION TIMELINE



## PROGRAM FUNDING & REPORTING

	<b>Key Takeaway:</b> The CDBG-MIT program’s focus on LMI communities can create synergies with existing utility low-income programs and can inform regulatory proceedings that are focusing on issues such as <a href="#">energy equity</a> and justice.
	<b>Cost Share Requirement:</b> The CDBG-MIT program does not require any cost share. These funds can also serve as the non-federal cost share for other types of funding like FEMA’s BRIC program if there is no “duplication of benefit across all funding sources and the BRIC-approved project also meets all CDBG-MIT eligibility and national objective requirements.” Review the <a href="#">Hazard Mitigation Assistance (HMA) Cost Share Webinar</a> for more details.
	<b>Reporting Requirement:</b> Subapplicants must submit reports indicated in the agreement in accordance with HUD and state/county reporting requirements via Grants Network. Depending on the jurisdiction, states may have additional reporting requirements.

# COMMUNITY DEVELOPMENT BLOCK GRANT – MITIGATION



U.S. Department of Housing and Urban Development

## CASE STUDIES



**Key Takeaway:** As of July 2021, most Action Plans related to funding for prior disasters have been accepted by HUD. Below are summaries of how this program is being implemented in several areas. Note: Some metropolitan cities have a [joint grant](#) agreement with an urban county to administer their CDBG funds.



### NORTH CAROLINA

**Funds: \$168 million**

Expanding on its initial Action Plan in 2019, North Carolina's [4th Amended CDBG-MIT Action Plan](#) allocated \$168 million in CDBG-MIT funds to be administered by the U.S. Department of Commerce (DOC), Rural Economic Development Division in 2022. The Action Plan clearly outlines improving lifelines as one of its goals, proposing ideas for counties to submit power delivery projects, such as smart grids and emergency backup power.



### PUERTO RICO

**Funds: \$8.285 billion**

HUD released \$8.285 billion of CDBG-MIT funds to the Commonwealth of Puerto Rico in April 2021. Since then, Puerto Rico has collected a [list of projects](#) in a log to help determine how to award the funding. One proposed project is a \$4.5 million combined heat and power plant installation for the University of Puerto Rico to provide 30% of energy demand for the University of Puerto Rico campus and reduce annual energy costs, combining economic fuel (propane or natural gas) and the inclusion of an absorption chiller. For more details, see Puerto Rico's [2022 CDBG-MIT Action Plan Amendment 1](#).



### CALIFORNIA

**Funds: \$378 million**

California's Action Plan was approved by HUD on June 4, 2020. Since then, five programs have been established. In FY21, CDBG supported services, such as utility assistance, for more than 15,000 homes in LMI neighborhoods. The program also supports services such as homebuyer assistance and job retention programs for businesses. The State of California ranks second in the nation and first in its program year group for average expenditure ratio since July 2021.

Review the [State of California 2020–2024 Federal Consolidated Plan](#) for more details.

# COMMUNITY DEVELOPMENT BLOCK GRANT – MITIGATION



## U.S. Department of Housing and Urban Development

### PROGRAM SUMMARY

HUD has managed Community Development Block Grant – Disaster Recovery (CDBG-DR) funds since 1992. Unlike other programs, this supplemental block of funding is not an annual program nor permanently authorized. Rather, after a Presidential Disaster Declaration, Congress may appropriate a specific amount of CDBG-DR funds for disaster relief, long-term recovery, restoration of infrastructure, or economic revitalization in MID areas affected by major disaster. More details about eligibility can be found [here](#).

When funding is available, HUD informs eligible states, cities, and counties of their eligibility, announces their allocations, and invites them to apply. Applicants then complete an assessment of disaster impacts and unmet needs, and submit an Action Plan that communicates on which programs and activities the applicant will spend the funding. After HUD awards the funds, states and local governments administer the program and distribute the funds to the subrecipients. Eligible activities must have a direct tie to the disaster, serve LMI populations, and not duplicate benefits. For instance, a public facility improvement must benefit residents in areas where 51% or more fall into the LMI category. More information about CDBG-DR's history and processes can be found at [CDBG-DR Overview](#).

HUD approved several states' Action Plans related to 2018 and 2019 disasters, and states are in the process of collecting potential projects that support their goals. Utility regulators can read their state's latest Action Plan and connect with the state office that manages the CDBG-DR program to find out if they are currently collecting applications. HUD also published a \$2 billion [notice for electrical power systems in Puerto Rico and the U.S. Virgin Islands](#) in 2021.

Eligible project types that may be relevant to utility regulators are:

- Restoring infrastructure that was damaged by an event covered under a Presidential Disaster Declaration.
- Water and sewer facilities.
- Construction, rehabilitation, reconstruction, or installation of public facilities.
- Energy efficiency improvements.



# COMMUNITY DEVELOPMENT BLOCK GRANT – MITIGATION



## U.S. Department of Housing and Urban Development

### PROGRAM

In FY '23, the CDBG-DR program provided \$3 billion to assist recovery efforts from events in 2022 and onward. Since its inception, the CDBG-DR program has allocated \$99.8 billion across 232 grants to state and local jurisdictions. HUD headquarters manages large grants of more than \$500 million, while the HUD Community Planning and Development Field Offices manage all other grants.

CDBG-DR funds can help jumpstart recovery efforts in LMI neighborhoods that might otherwise not be completed due to limited resources. This grant is explicitly tied to rebuilding and recovery. For a breakdown of how Congress has appropriated CDBG-DR funding, visit the [CDBG-DR Overview](#).



**Key Takeaway:** This program requires that a majority of the funds be spent to benefit LMI populations.

### PROGRAM ELIGIBILITY

A full list of CDBG-DR Laws, Regulations, and Federal Register Notices, which includes a list of eligible jurisdictions, are consistently updated on the [HUD Exchange website](#) and [2023 CDBG-DR Overview](#). Potential projects must meet at least one of the following national objectives proposed in section 104(b)(3) of the Housing and Community Development Act:

- Benefit LMI persons, or
- Aid in the prevention or elimination of slums or blight, or
- Meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other financial resources are not available to meet such needs (Urgent Need).

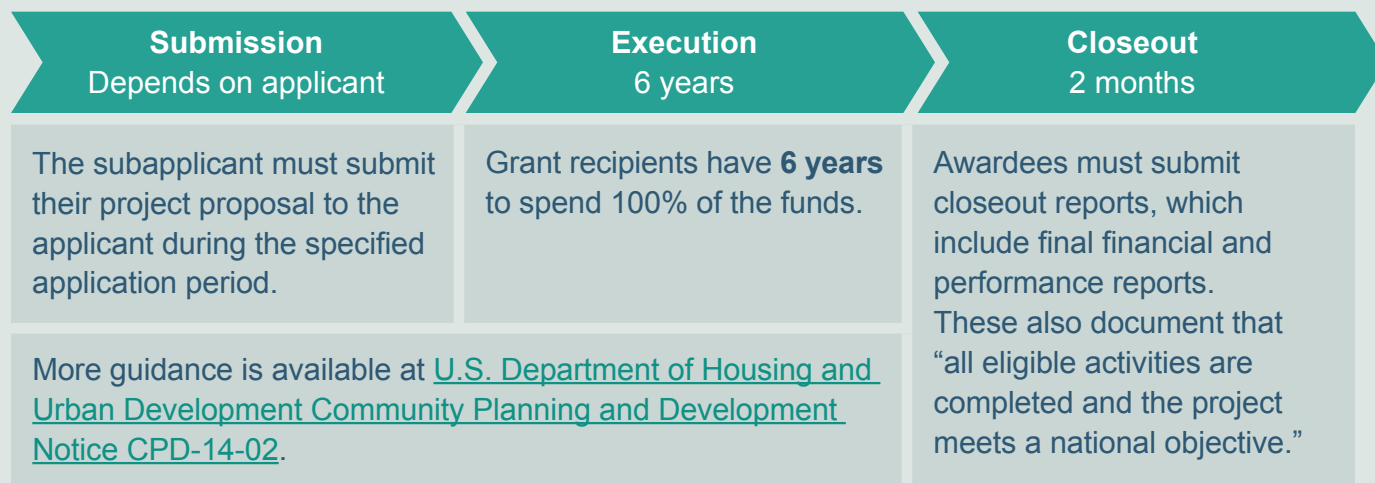
<b>Applicants</b>	State or local governments designated through Federal Register Notices
<b>Subapplicants</b>	Local governments, tribal governments, state agencies, and tribal agencies
<b>Subapplicant Partners</b>	Households with housing needs, business operators with economic development or recovery needs, utilities, and nonprofit organizations providing public services

# COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY



U.S. Department of Housing and Urban Development

## PROJECT EXECUTION TIMELINE



## PROGRAM FUNDING & REPORTING



**Key Takeaway:** The Disaster Recovery Grant Reporting System (DRGR) [website](#) provides a list of approved project concepts. Stakeholders can build their understanding of this program by reviewing the grantees, grant amounts, remaining balances, and funded activities.



**Cost Share Requirement:** No local match is required. These funds can be used as the match for other federal funding sources, if there is no duplication in benefits. Read [fact sheet about duplication in benefits](#).



**Reporting Requirement:** The applicant develops two Action Plans: a hard copy outlining the program and activities that the applicant intends to pursue, and an electronic plan submitted via the DRGR. The grantee is required to enter parts of its hard copy Action Plan into the DRGR to explain each activity or project executed under each program. DRGR data is available to the public on the [DRGR Public Data Portal](#). Grantees also produce and submit Quarterly Performance Reports for HUD each quarter.

# COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY



U.S. Department of Housing and Urban Development

## CASE STUDIES



**Key Takeaway:** This funding mechanism is flexible in terms of the project types that can be funded. The lengthy execution window is useful in long-lead infrastructure projects.



### PUERTO RICO & U.S. VIRGIN ISLANDS

**Total Funds: \$2 billion**

In June 2021, HUD authorized the use of \$2 billion in CDBG-DR funds for electric power system enhancements and improvements in Puerto Rico and the U.S. Virgin Islands after the destructive 2017 hurricanes. Prior to the authorization, Puerto Rico was not able to access these funds, so they were unavailable immediately following the events. While CDBG-DR proved to be a significant funding source for the islands, utility regulators should be aware of the extended time frame of this program, compared to other federal funding programs. A copy of the notice can be found on the [HUD Exchange website](#).



### CALIFORNIA

**Total Funds: \$3.5 million**

California created a program to use their CDBG-DR funds as the non-federal cost share for FEMA PA projects. The funds ensure that critical infrastructure recovery needs related to utility and water infrastructure are met. Visit [Implementation Guidance for Use of CDBG-DR Funds as Non-Federal Cost Share for the Public Assistance Program](#) to learn more about this program.



### NEW YORK CITY

**Total Funds: \$4.2 billion**

New York City was awarded \$4.2 billion in CDBG-DR funds in 2013–2014 in the aftermath of Superstorm Sandy. The city continues to manage these programs and issued its most recent Action Plan in November 2022, which includes a broad range of energy resilience investments. This includes energy resilience investments to support community lifelines in Hunts Point neighborhood, coordination with Con Edison to implement transmission line protections in parallel with coastal flood protection measures in east Manhattan, and \$30 million to help small businesses improve resilience of their energy and telecommunications infrastructure.



# INSTALLATION RESILIENCE PROGRAM



## U.S. Department of Defense – Office of Local Defense Community Cooperation

### PROGRAM OVERVIEW

The DoD Office of Local Defense Community Cooperation (OLDCC) Installation Resilience program provides states, territories, and communities with financial and technical assistance to support military installation resilience. Eligible activities may include vulnerability and resilience assessments, utility interdependency analyses, land use and encroachment planning, and table-top exercises. Projects may be initiated either through military service nomination or by community inquiry. OLDCC awarded \$7.2 million in FY22 and expects to obligate \$10 million in FY23. Since FY20, OLDCC has awarded [86 installation resilience](#) projects across the country.

The Installation Resilience program does not provide construction grants. Community partners identify an installation's risk "outside the fence line" and use project findings to develop implementation strategies and find funding for high-priority concepts. The project should result in an action plan. For detailed information about the Installation Resilience program, see the [Installation Resilience Fact Sheet](#).



**Key Takeaway:** There are not many programs that support vulnerability analyses and project planning across different types of utilities. The Installation Resilience program can fund utility infrastructure assessments and identify the optimal mix of public and private financing to implement high-priority project concepts.

### PROGRAM ELIGIBILITY

States, territories, counties, municipalities, and other political subdivisions of a state; special purpose units of a state or local government; other instrumentalities of a state or local government; and tribal nations are eligible. Only projects focusing on community (off-installation) infrastructure and systems qualify for program funding.

Applicants must make the case that there is a threat to military installation resilience or encroachment of a civilian origin on the local military mission that involves, or may be significantly impacted by, resources or activities outside of the military installation, and this threat is likely to impair the installation's ability to maintain, improve, or rapidly re-establish installation mission assurance and mission-essential functions. [Projects may include:](#)

- A comprehensive review of natural and man-made threats and vulnerabilities;
- Targeted studies/plans concerning, but not limited to, transportation, land use, utility services, housing, stormwater management, sewer, and communications; and,
- Table-top exercises with local military and civilian (public and private) leadership to review capacities of hard infrastructure and public services to respond to disruptions.



**Key Takeaway:** The Installation Resilience program can help scope regional resilience projects and position them for funding. Several communities have used the results from the program to secure funding from DoD, DOE, and others to fund project construction.

# INSTALLATION RESILIENCE PROGRAM



U.S. Department of Defense – Office of Local Defense Community Cooperation

## PROJECT EXECUTION TIMELINE

Submission Rolling basis	Execution 1 year	Closeout TBD
Submit an expression of interest and a request for assistance to OLDCC. A statement of support from the appropriate DoD branch must be included.	Projects have a not-to-exceed 18-month grant period, and typically come with a 12-month timeline of execution following the initial award.	OLDCC technical and financial assistance may also be available to carry out implementation recommendations.

## PROGRAM FUNDING & REPORTING



### Roles and Responsibilities:

- **Community.** Provide cost share, convene stakeholders, and implement project. The community is the awardee for this funding.
- **Installation.** Recommend and support community nomination, represent installation interests, and participate as stakeholders and data providers.
- **OLDCC.** Confirm need for assistance, provide guidance, make an award, and facilitate communication. OLDCC technical and financial assistance may also be available to carry out implementation recommendations.



**Key Takeaway:** The typical award range is \$50,000-\$500,000, with some exceptions.



**Cost Share Requirement:** The cost share for this program is 10%. Most projects are executed by county or regional planning organizations with the ability to provide in-kind cost share through staffing allocation.



**Reporting Requirement:** Program reports, progress reports, expenditure reports, and performance reports are required and vary based on the project's scope of work. Details about the frequency of these reports are identified in the terms and conditions of each individual award, and many provide publicly available versions after completion.

# INSTALLATION RESILIENCE PROGRAM



U.S. Department of Defense – Office of Local Defense Community Cooperation

## CASE STUDIES



**Key Takeaway:** The pool of eligible applicants is broad, offering latitude for a state or community to identify partners and scope program objectives. More than two dozen projects have been completed and can serve as benchmarks.

### MacDill Air Force Base FL

The [Tampa Bay Regional Planning Council](#) partnered with the City of Tampa to conduct a resilience study analyzing energy, water, and wastewater vulnerabilities and transportation limitations, as well as the impact on associated critical infrastructure and services. The goal was to create an action plan that supports the continued mission readiness of MacDill Air Force Base.

### U.S. Military Academy & U.S. Army Garrisons at West Point NY

The U.S. Military Academy and the U.S. Army Garrisons at West Point are [undertaking several concurrent initiatives](#) to harden their energy infrastructure, increase their energy supply, and diversify their energy portfolio. These initiatives include installing on-site generation, battery storage, and a microgrid to build a “layered defense” for energy resilience on campus.

### U.S. Army Garrison Detroit Arsenal & Selfridge ANGB MI

Macomb County, Michigan, U.S. Army Garrison Detroit Arsenal, and Selfridge ANGB used Installation Resilience program funds to execute the [Detroit Arsenal Regional Defense Assessment of Resilience \(DAR2\)](#). DAR2 was a comprehensive installation resilience analysis used to understand the installation’s vulnerabilities, and assess the resilience of the interdependent electric, gas, and water utilities.

## ADDITIONAL RESOURCES

- [Installation Resilience Fact Sheet](#): A Tool to Support Military Mission Sustainment
- [Installation Resilience](#): Overview of the OLDCC’s Installation Resilience program



# DEFENSE COMMUNITY INFRASTRUCTURE PILOT PROGRAM



U.S. Department of Defense – Office of Local Defense Community Cooperation

## PROGRAM SUMMARY

The resilience of U.S. military installations is closely tied to the resilience of surrounding communities. Many military personnel and their families live off-site, and U.S. military installations are heavily dependent on their local civilian electricity, water, telecommunications, and natural gas utilities. Congress funded the DCIP program as a 10-year pilot program in FY20. This competitive grant program funds projects to enhance resilience, military value, and military family quality of life at installations by addressing infrastructure deficiencies. Examples of eligible projects include electricity distribution infrastructure, water and wastewater projects, critical facility upgrades, and transportation system improvements.

The DCIP program is managed by the DoD OLDCC. Since 2021, the DCIP budget has steadily increased. In FY22, the program was funded at \$90 million, and the FY23 funding amount is \$100 million. In FY23, the maximum funding potential for an individual project is \$20 million, and the historical average has been \$3 million per grant. From 2020 to 2022, there was a 50% growth in resilience-focused grants.

DCIP-funded projects must be construction-ready, off-base (or on-base if the project is within an area subject to a real estate agreement such as an easement or a lease), and supportive of community facilities (e.g., school, hospital, police, fire, emergency response), or utility infrastructure projects (e.g., water, wastewater, telecommunications).

Construction-ready projects are projects that can “turn dirt,” or begin physical construction of the project, within 12 months of receiving the grant. Projects must be completed no later than 5 years following the obligation of the funds and require a 30% cost share from the recipient.

**Application Opening:** March to April (each year)

**Application Closing:** June to July (each year)

**New FY23 criteria includes:** OLDCC expanded application criteria for strategic seaports, leased land, historically Black colleges and universities, and ROTC facilities to be eligible for funding.

Learn more about the FY23 program on the [DCIP program site](#).

# DEFENSE COMMUNITY INFRASTRUCTURE PILOT PROGRAM



U.S. Department of Defense – Office of Local Defense Community Cooperation

## PROGRAM OVERVIEW

OLDCC released the Notice of Funding Opportunity or the FY23 DCIP program in March 24, 2023, with completed proposals due June 23, 2023. This timeline is expected to be consistent over the next several years as funding continues. The FY23 Scoring Approach comprises three criteria: (1) Prioritization of Program Enhancement, which includes enhancing military resilience, military value criteria, training of cadets, or enhancing military family quality of life, (2) Construction-Readiness, and (3) Assessment of Project Need.

Military Value Assessment Criteria considers:

- The current and future mission capabilities and the impact on operational readiness of the DoD's total force.
- The availability and condition of land, facilities, and associated airspace at both existing and potential receiving locations.
- The ability to accommodate contingency, mobilization, and future total force requirements.
- The cost of operations and the manpower implications.



**Key Takeaway:** This DoD program extends beyond the installation itself into the community. It is explicitly intended for infrastructure investments, such as energy resilience projects.

## PROGRAM ELIGIBILITY

Eligible applicants include state and local governments. Projects owned by nonprofit, member-owned utility services are eligible, and these utilities may partner with state and local government as a subrecipient. DCIP-funded projects must:

- Be construction-ready and off-base.
- Support a military installation; and
- Be owned by a state or local government or a nonprofit, member-owned utility.

A commander must endorse the DCIP program proposal. For additional information, please refer to [Guidance Regarding Installation Endorsement Letters](#).

A full list of funded projects can be found on the [OLDCC website](#).

# DEFENSE COMMUNITY INFRASTRUCTURE PILOT PROGRAM



U.S. Department of Defense – Office of Local Defense Community Cooperation

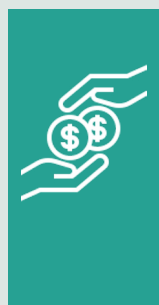
## PROJECT EXECUTION TIMELINE



## PROGRAM FUNDING & REPORTING



**Key Takeaway:** Military installations contribute a [substantial amount](#) to state economies. This program creates an opportunity to simultaneously support utility resilience objectives, national security, and state economic development priorities.



**Cost Share Requirement:** No cost share requirement for rural areas. For projects in non-rural areas (>100,000 residents), the subapplicant must contribute 30% or more of the project's funding. The funds must be sourced and available for explicit use in the construction of the proposed project. More details about cost share/match requirements can be found in [DCIP Notice of Funding Opportunity FY23 Frequently Asked Questions](#).

## CASE STUDIES

DCIP is a new program as of 2023. Energy resilience projects are underway but not yet complete. Examples of relevant projects funded in FY22 include:

### Philadelphia Navy Yard Annex, Philadelphia Authority for Industrial Development.

\$1.04 million was awarded to the Philadelphia Authority for Industrial Development, Pennsylvania, in support of the [Philadelphia Navy Yard Annex](#). This project completed an east-west connection for the Philadelphia Navy Yard's fiber-optic network, enabling secure, direct control, and monitoring of each electric grid substation, and other security enhancements at the installation.

### Joint Base Elmendorf-Richardson, Municipality of Anchorage, Alaska.

\$5.3 million was awarded to the Municipality of Anchorage, Alaska, in support of [Joint Base Elmendorf-Richardson](#) to undertake a \$7.6 million project to construct a new Port of Alaska microgrid, battery energy storage, and electrical infrastructure to provide energy resilience for the region.



## SECTION 2 OVERVIEW: BIPARTISAN INFRASTRUCTURE LAW

The BIL was signed in mid-November 2021. The BIL allocates \$1.2 trillion in funding to more than 350 distinct programs across more than a dozen federal departments and agencies. The BIL creates programs to modernize the power grid, accelerate clean energy infrastructure, demonstrate and deploy new energy technologies, and support resilience in the face of climate change, cyberattacks, and other hazards.

The BIL contains more than \$65 billion in funding for energy infrastructure. This section of the Guidebook provides overviews for BIL programs totaling \$36.8 billion that have been selected by NARUC based on the programs' relevance to regulators. The Guidebook focuses primarily on energy programs and also includes profiles of programs that support adjacent sectors such as telecommunications and cybersecurity. For information on other programs, PUCs can refer to the [White House Guidebook](#), which covers the BIL in its entirety.

This section is structured as follows:

**A summary of Community Benefits Plans.** DOE requires Community Benefits Plans (CBPs) as part of all BIL funding opportunity announcements (FOAs) and loan applications.

**Detailed profiles of programs supporting electricity systems, construction, sustainment, or improvement of utility-scale generation facilities.** This includes the Grid Resilience and Innovation Partnership (GRIP), Grid Resilience State and Tribal Formula Grant Program, and the National Electric Vehicle Infrastructure (NEVI) Formula Program, as well as programs for nuclear power plants, hydroelectric facilities, and carbon capture and storage (CCS) for coal and natural gas generation.

**Snapshots of programs for regulator monitoring.** Some of these programs have recently concluded a first round of funding, whereas other programs are still under development. These include programs focused on cybersecurity, remote and rural areas, energy storage, carbon storage, broadband, and transformers.

Each program profile provides information on program funding, eligibility, and timeline. The title of each program is accompanied by the section of the BIL under which the program was created. In some cases, DOE has renamed the programs, which are noted.

# OVERVIEW OF PROGRAMS

Program	Agency	Project Timeline	Funding Amount	Cost Share Required	Project Examples
Grid Innovation Program		60-96 months	\$5 billion		<ul style="list-style-type: none"> <li>• Interregional connectivity</li> <li>• Behind the meter operations</li> <li>• Monitoring and control technologies</li> </ul>
Smart Grid Grants		60 months	\$3 billion		<ul style="list-style-type: none"> <li>• Dynamic line rating</li> <li>• Software</li> <li>• Sensors</li> </ul>
Preventing Outages and Enhancing the Resilience of the Electric Grid Grants (Utility and Industry)		60 months	\$2.5 billion		<ul style="list-style-type: none"> <li>• Weatherization technologies</li> <li>• Wildfire protection systems</li> <li>• Undergrounding</li> </ul>
Preventing Outages and Enhancing the Resilience of the Electric Grid Grants (States, Territories, and Tribes)		60 months	\$2.3 billion		<ul style="list-style-type: none"> <li>• Weatherization technologies</li> <li>• Wildfire protection systems</li> <li>• Undergrounding</li> </ul>
National Electric Vehicle Infrastructure (NEVI) Formula Program		60 months	\$5 billion		<ul style="list-style-type: none"> <li>• EV chargers</li> <li>• Distribution lines</li> <li>• O&amp;M/labor</li> </ul>

# OVERVIEW OF PROGRAMS

Program	Agency	Project Timeline	Funding Amount	Cost Share Required	Project Examples
Carbon Capture Demonstration Projects Program		10–14.5 years	\$2.5 billion		<ul style="list-style-type: none"> <li>• Carbon capture, transport, or storage demonstrations</li> </ul>
Civil Nuclear Credit Program		48 months	\$6 billion	N/A	<ul style="list-style-type: none"> <li>• Plant operations</li> <li>• Payment credits</li> </ul>
Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative		12–60 months	\$10 million		<ul style="list-style-type: none"> <li>• Project design</li> <li>• Transmission studies</li> <li>• Permitting</li> </ul>
Hydroelectric Production Incentives		10 years	\$125 million	N/A	<ul style="list-style-type: none"> <li>• Plant operations</li> </ul>
Hydroelectric Efficiency Improvement Incentives		TBA	\$75 million		<ul style="list-style-type: none"> <li>• Facility efficiency (TBA)</li> </ul>
Maintaining and Enhancing Hydroelectricity Incentives		TBA	\$553.6 million		<ul style="list-style-type: none"> <li>• Ancillary services</li> <li>• Dam maintenance</li> <li>• Water purification</li> </ul>
Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance (RMUC) Program		TBA	\$250 million	TBA	<ul style="list-style-type: none"> <li>• TBA</li> </ul>

# OVERVIEW OF PROGRAMS

Program	Agency	Project Timeline	Funding Amount	Cost Share Required	Project Examples
Energy Improvements in Rural or Remote Areas (ERA)		7 years	\$1 billion		<ul style="list-style-type: none"> <li>• Microgrids</li> <li>• Clean energy generation</li> <li>• Transmission</li> </ul>
Carbon Storage Validation and Testing		Up to 9.5 years	\$2.5 billion		<ul style="list-style-type: none"> <li>• Feasibility study</li> <li>• Drilling and construction of wells</li> </ul>
ReConnect Loan and Grant Program		N/A	\$1.9 million	Depends on the program	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Environmental review</li> <li>• Acquisition of supplies</li> </ul>
Middle Mile Broadband Deployment Grants		10 years	\$980 million		<ul style="list-style-type: none"> <li>• Construction</li> <li>• Engineering design</li> <li>• Personnel costs</li> </ul>
Energy Storage Demonstration and Pilot Grant Program		TBA	\$355 million	TBA	<ul style="list-style-type: none"> <li>• Improve security of critical infrastructure</li> <li>• Load management</li> </ul>
Long-Duration Energy Storage Demonstration Initiative and Joint Program		TBA	\$150 million	TBA	<ul style="list-style-type: none"> <li>• TBA</li> </ul>
Energy Efficient Transformer Rebates		N/A	\$10 million	TBA	<ul style="list-style-type: none"> <li>• Replacement of distribution transformers</li> </ul>



# COMMUNITY BENEFITS PLAN



## U.S. Department of Energy

### PLAN OVERVIEW

The DOE requires [CBPs](#) as part of all BIL and IRA FOAs and Administrative and Legal Requirements Documents (ALRDs). CBPs are based on four administration policy priorities: (1) community and labor engagement, (2) investing in the American workforce, (3) Diversity, Equity, Inclusion, and Accessibility (DEIA), and (4) Justice40 Initiative. CBPs are flexible but must be specific, actionable, and measurable. CBPs are a contractual obligation for funding recipients and summaries are publicly posted on DOE's website for transparency and accountability.

### PRIORITY AREAS OF FOCUS



**Community and Labor Engagement.** Aimed at engaging local stakeholders, such as labor unions, local and tribal governments, and community organizations that support Disadvantaged Communities (DACs). [Community Benefits Agreements](#), [Community Workforce Agreements](#), and other types of community agreements are highly encouraged.



**Investing in the American Workforce.** Aimed at demonstrating an investment in people, which can include creating [good-paying jobs](#), allowing workers to organize, and demonstrating responsibility as an employer. Can include Collective Bargaining Agreements or Project Labor Agreements, among others.



**Diversity, Equity, Inclusion, and Accessibility.** Aimed at advancing equity, civil rights, racial justice, and equal opportunity, including access to jobs and other economic opportunities. Approaches may include providing DEIA training to employees or examining recruitment and hiring practices, among others.



**Justice40 Initiative.** A White House [initiative](#) aimed at ensuring that at least 40% of overall benefits of certain federal investments are directed to DACs. Examples of benefits to DACs may include decreased energy burden, increased job creation and training, and increased energy resilience.

### TOOLS

- [Climate and Economic Justice Screening Tool](#)
- [DOE Energy Justice Mapping Tool](#)
- [EPA Environmental Justice Screening & Mapping Tool](#)
- [BLS Wages, Earnings, and Benefits](#)

# GRID INNOVATION PROGRAM SECT. 40103 (b)



U.S. Department of Energy – Grid Deployment Office

## PROGRAM OVERVIEW

The [Grid Innovation Program](#) is designed to demonstrate innovative approaches to transmission, storage, and distribution infrastructure that enhance grid resilience and reliability at the local, regional, and interregional scales. It is Topic Area 3 of [DOE's GRIP program](#) and FOA.

There are three tracks within the program to differentiate applications: transmission, distribution, and combination of both. Transmission applications should demonstrate enhanced transmission system operational flexibility or capacity while enhancing reliability. Distribution applications should demonstrate improved cost-value characteristics relative to alternative approaches, managing distribution grid integration costs and traditional asset upgrade costs, while maintaining or enhancing system reliability and service provision. Cross-system applications should improve joint resilience and functionality across the transmission and distribution systems.

## What to Know for a Successful Application

DOE is looking for projects that increase coordination between electric sector stakeholders, promote decarbonization, and maximize system and community benefits. Applications must demonstrate project replicability and scalability, the project's value proposition versus alternative approaches, measurable metrics for success, and project viability.

## Other Requirements

Note: This provision requires a CBP, as well as a Cybersecurity Plan ([Appendix E of the FOA](#)).



# GRID INNOVATION PROGRAM SECT. 40103 (b)



U.S. Department of Energy – Grid Deployment Office

## PROGRAM FUNDING

There is a total of \$5 billion available from FY22 to FY26. The first [FOA](#) combined FY22 and FY23, making a total of \$1.82 billion available. DOE expects \$2 billion to be made available for FY24 with an announcement in the first quarter of FY24. The funds require a 50% cost share from applicants and will be distributed through cooperative agreements, meaning DOE will act as a partner during the project's period of performance.



**Key Takeaway:** The FOA calls out projects with uncommon or innovative regulatory structures, and projects that are a product of innovative planning, modeling, or cost-allocation approaches, among others.

## PROGRAM ELIGIBILITY

States (individual or a combination of two or more), tribes, local governments, and/or PUCs may apply for and receive funds, which can be distributed to subapplicants. Teaming is allowed, and community engagement is encouraged.



**Key Takeaway:** States can take advantage of this opportunity to address resource adequacy and challenges with backlogged interconnection queue times for clean energy resources.

## PROJECT EXECUTION OVERVIEW

### Pre-Application

Applicants submit a concept paper to DOE in response to a FOA. DOE encourages or discourages applicant from moving on to full application.

### FOA Application

Applicants will be given several weeks (likely months) between DOE response and full application submission.

### Period of Performance

This provision has a period of performance of 60-96 months.

## EXAMPLE PROJECT IDEAS

### Topic 1. Transmission

Projects that address interregional connectivity, increasing capacity, and innovative HDVC technology.

### Topic 2. Distribution

Projects that address microgrid/islanding ability, grid control, support decarbonization, and behind the meter operations.

### Topic 3. Combination

Projects that address monitoring and control technologies, and energy storage to address transmission congestion.

# SMART GRID GRANTS SECT. 40107



U.S. Department of Energy – Grid Deployment Office

## PROGRAM OVERVIEW

The [Smart Grid Grants](#) program aims to deploy and catalyze technology solutions that increase the flexibility, efficiency, reliability, and resilience of the electric power system, with particular focus on enhancing the system's capabilities. It is Topic Area 2 of [DOE's GRIP program](#) and FOA.

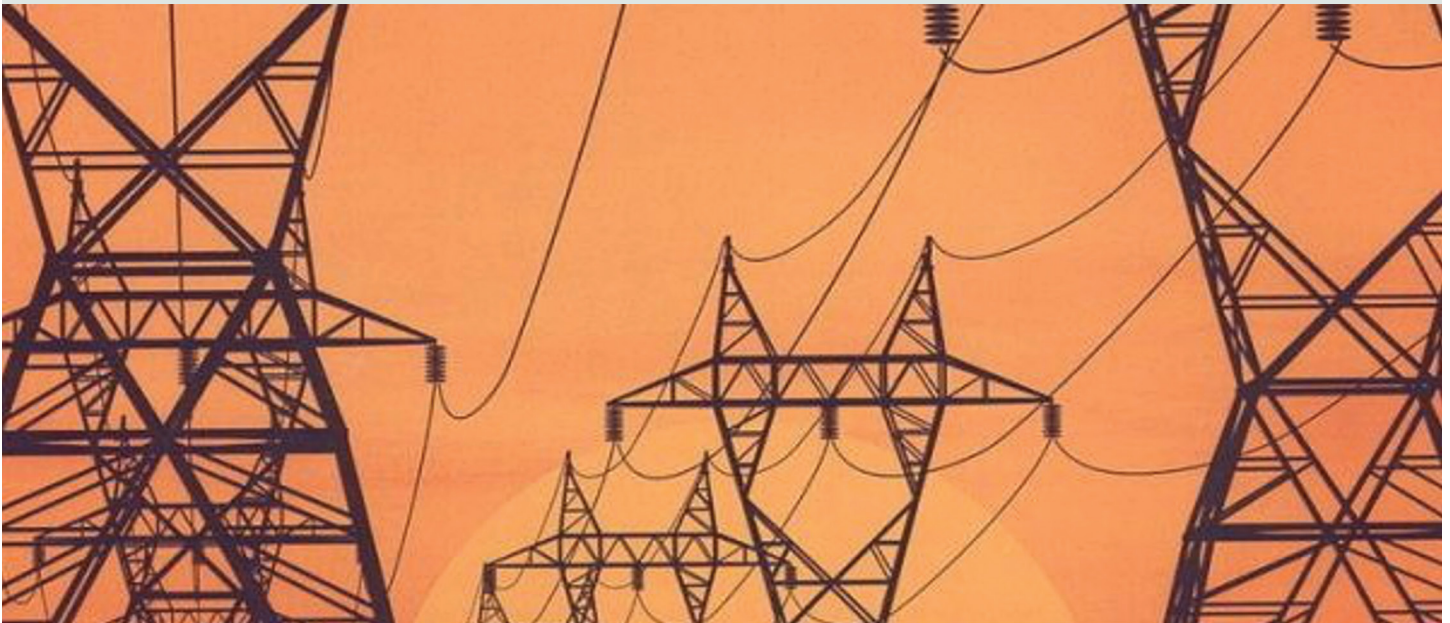
The program focuses on four areas: transmission capacity, wildfire prevention, renewable energy integration, and aggregation and integration of electrification at the grid edge (e.g., electric vehicles (EVs), household appliances, etc.).

### What to Know for a Successful Application.

DOE is looking for projects that deploy grid enhancing technologies to modernize the grid and have a viable pathway to market adoption. Applicants must demonstrate that new or innovative technology solutions will catalyze additional private sector, or other non-federal, investments. The projects supported by these grants will accelerate the development of a smart grid. The public benefits provided by a proposed project should be clearly highlighted in the application.

### Other Requirements.

Note: This provision requires a CBP.





# SMART GRID GRANTS SECT. 40107



U.S. Department of Energy – Grid Deployment Office

## PROGRAM FUNDING

There is a total of \$3 billion available from FY22 to FY26. The first [FOA](#) combined FY22 and FY23, making \$1.08 billion available. The second round of funding is scheduled to be announced in winter 2023. The program was originally created under the Energy Independence and Security Act of 2007.



**Key Takeaway:** The grants require a 50% cost share. The cost share must be based on the total project costs, and the funding must come from non-federal sources.

## PROGRAM ELIGIBILITY

The program has broad eligibility. It is open to domestic entities, including utilities, for-profit and nonprofit entities, higher education institutions, state and local governments, and tribal nations. Teaming is encouraged.



**Key Takeaway:** The FOA emphasizes that applicants should engage regulatory stakeholders, among others, when developing their project approach.

## PROJECT TIMELINE

### Pre-Application

Applicants submit a concept paper to DOE in response to a FOA. DOE encourages or discourages applicants from moving on to full application.

### FOA Application

Applicants will be given several weeks (likely months) between the DOE response and full FOA application submission.

### Period of Performance

This provision has a period of performance of 60 months.

## EXAMPLE PROJECT IDEAS

DOE identified six types of project technologies as priority investments. There are two examples of each project type in parentheses.

- Increasing transmission and transfer capacity (dynamic line rating, flow control)
- Assisting grid operators with system visibility (data analytics, sensors)
- Enhancing secure communication and data flow between distribution components (fiber, wireless broadband)
- Aggregation and integration of distributed energy resources and other “grid-edge” devices (EV charging infrastructure, smart building technologies)
- Enhancing interoperability and data architecture of systems (software, sensors)
- Anticipating and mitigating the impacts of extreme weather or natural disaster on grid resiliency (energy storage, grid hardening)

# PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID GRANTS (Grid Resilience Utility and Industry Grants)

## SECT. 40101 (c)



U.S. Department of Energy – Grid Deployment Office

### PROGRAM OVERVIEW

The [Grid Resilience Utility and Industry Grants](#) program is designed to support the modernization of the electric grid to reduce impacts due to extreme weather, wildfires, and natural disasters. It is Topic Area 1 of [DOE's GRIP program](#) and FOA.

#### What to Know for a Successful Application.

DOE is looking for projects that demonstrate a transformational, comprehensive approach to mitigating one or more hazards across a region or within a community. DOE is putting an emphasis on applications that address adaptive storage deployment, microgrid deployment, and undergrounding of existing power lines.

A successful application will propose solutions that support state and tribal energy plans and regional resilience or State Energy Security Plans. Selected projects from this program will produce a high rate of return on investment due to the emphasis on community benefits and benefits from grid resilience.

Applications will be graded across four criteria: the overall project vision and technical viability, project plan and financial feasibility, project team and management, and the CBP. Projects should be replicable and scalable in other jurisdictions.

The next page contains a list of eligible project ideas. Projects that include generation, a large-scale battery storage facility that is not used for enhancing system adaptive capacity during disruptive events, transmission lines above 69 kV, and cybersecurity projects are not eligible for this provision. The same project cannot be submitted for this and 40101(d).

#### Other Requirements.

Note: This provision requires a CBP and a Report on Resilience Investments ([see p. 70 of the FOA](#)).

### PROGRAM FUNDING

There is a total of \$2.5 billion available from FY22 to FY26. The first [FOA](#) combined FY22 and FY23, making \$918 million available. DOE is expecting to award 10 projects through competitive grants. The program also requires 30% of funds be directed to small utilities (i.e., those selling no more than 4 million megawatt-hours (MWh) of electricity per year).



**Key Takeaway:** The [FOA](#) articulates DOE's expectation that regulatory stakeholders be engaged in the application process to ensure appropriate cost recovery of the concepts.

# PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID GRANTS (Grid Resilience Utility and Industry Grants) SECT. 40101 (c)



U.S. Department of Energy – Grid Deployment Office

## PROGRAM ELIGIBILITY

This provision is open to domestic entities that are either electric grid operators, electricity generators, electricity storage operators, transmission owners or operators, distribution providers, or fuel suppliers.



**Key Takeaway:** Eligible entities must match 100% of the amount of the federal funds provided through the grant (rather than the total project cost). Small utilities that sell no more than 4 million MWh of electricity per year are only required to match one third of the grant.

## PROJECT OVERVIEW

### Pre-Application

Applicants submit a concept paper to DOE in response to a FOA. DOE encourages or discourages applicants from moving on to full application.

### FOA Application

Applicants will be given several weeks (likely months) between the DOE response and full FOA application submission.

### Period of Performance

This provision has a period of performance of 60 months.

## EXAMPLE PROJECT IDEAS

DOE provided many sample project areas to address within a proposal. Some of the projects include:

- Monitoring and control technologies
- Undergrounding and upgrades of electrical equipment
- Infrastructure operations and maintenance
- The use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events
- New distribution lines below 69 kV

# PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID GRANTS (States, Territories, and Tribes) (Grid Resilience Grants) SECT. 40101 (d)



U.S. Department of Energy – Grid Deployment Office

## PROGRAM FUNDING

There is a total of \$2.3 billion available from FY22 to FY26. The first [FOA](#) made \$471.6 million available. DOE estimates that \$459 million will be made available annually in the remaining FYs. The funds are allocated to states, territories, and tribes through formula grants. There is a 15% cost match for prime recipients, and a 100% cost match for subawardees (e.g., large utilities).

Utilities that sell less than 4 million MWh per year must only provide a one-third cost match as subawardees. Funds can also be used for the training, recruitment, retention, and reskilling of workers to execute projects for this program.



**Key Takeaway:** The annual formula grants for states, territories, and federally recognized tribes can be [found here](#).

## PROGRAM ELIGIBILITY

All states, territories, and federally recognized tribes are eligible for a formula grant. Eligible subawardees include electric grid operators, electricity generators, electricity storage operators, transmission owners or operators, distribution providers, or fuel suppliers.



**Key Takeaway:** States, territories, and tribes must set aside an amount of funding for small utilities, proportional to the amount of customers that the utilities serve.

## PROJECT OVERVIEW

### Application & Award

Applicants submit a full grant application package to DOE in response to an ALRD. DOE releases funds after receiving a compliant application.

### Program Implementation

States, tribes, and territories disperse the funds to eligible entities using their own guidelines and program designs.

### Period of Performance

This provision has a period of performance of 60 months.



# PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID GRANTS (States, Territories, and Tribes) (Grid Resilience Grants) SECT. 40101 (d)



U.S. Department of Energy – Grid Deployment Office

## EXAMPLE PROJECT IDEAS

Project examples include monitoring and control technologies, undergrounding and upgrades of electrical equipment, infrastructure operations and maintenance, and the use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events. New distribution lines below 69 kV, construction of new electric generation, a large-scale battery-storage facility that is not used for enhancing system adaptive capacity during disruptive events, and cybersecurity are not eligible for funds under this program.



# PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID GRANTS (Grid Resilience State and Tribal Formula Grant Program) SECT. 40101 (d)



U.S. Department of Energy – Grid Deployment Office

## PROGRAM OVERVIEW

The [Grid Resilience State and Tribal Formula Grant Program](#) is designed to improve the resilience of the electric grid against disruptive events. This program allocates funding to the states, territories, and tribes via a formula. The states, territories, and tribes can administer that funding through their own grant programming in alignment with state policy goals, and make subawards to utilities, fuel suppliers, and other energy system owners and operators. DOE requires that grant recipients develop and apply objectives and performance metrics related to reliability, resilience, and jobs to their programs.

### What to Know for a Successful Application.

DOE is looking for projects that have measurable outcomes, enable consumers to access low-cost clean energy, increase the nation's ability to meet 2035 Carbon Pollution Free Electricity goals, and create good-paying jobs.

### Other Requirements.

Note: This provision requires a CBP.



**Key Takeaway:** NARUC is providing technical assistance to states to administer and implement these funds. A few state PUCs have been designated by the governor of their state as lead applicants for this funding opportunity.





# NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE FORMULA PROGRAM

Division J, Title VIII, Highway Infrastructure Program



U.S. Department of Transportation – Federal Highway Administration

## PROGRAM OVERVIEW

The [National Electric Vehicle Infrastructure \(NEVI\) Formula Program](#) provides funding to states to strategically deploy EV charging infrastructure and establish an interconnected network to facilitate data collection, consumer access, and grid reliability. This funding aims to accelerate the equitable adoption of EVs, reduce transportation-related greenhouse gas emissions, and assert the United States as the world leader in transportation electrification.

The applications require that, for example, EV charging stations must be non-proprietary, allow for open-access payment methods, be publicly available or available to authorized commercial motor vehicle operators from more than one company, and be located along designated [Federal Highway Administration \(FHWA\) Alternative Fuel Corridors](#). There can be exceptions regarding Alternative Fuel Corridor placement.

An EV charging network will reshape how consumers interact with the grid. U.S. Department of Transportation's (DOT) [FAQs](#) highlights the unique roles that utilities and PUCs play. Utilities will be integral in generating enough electricity to meet demand, providing electrical infrastructure to ensure EVs can charge, and ensuring smooth operations of the electric grid. PUCs will need to review future grid planning and determine how rate-recovery will work with new infrastructure projects.



**Key Takeaway:** PUCs should contact their state DOT to discuss the DOT's charging corridor vision. Many state DOTs have not historically engaged with regulators or the electric sector, so this new program may require a learning curve for grid planning. Federal guidance states that state DOTs should consult with regulators on their EV Infrastructure Deployment Plans to ensure charging site viability, cost-effectiveness, and timeliness of deployment.



# NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE FORMULA PROGRAM

Division J, Title VIII, Highway Infrastructure Program



U.S. Department of Transportation – Federal Highway Administration

## PROGRAM FUNDING

There is a total of \$5 billion available from FY22 to FY26. The [first round of funding](#) provided \$615 million to states. DOT estimates \$885 million will be available for each of the remaining FYs. The funds are determined through formula grants, and they can be used for up to 80% of total project costs. Projects under this application can apply to other [DOT funding for EV charging infrastructure](#).

NEVI includes the Grants for Charging and Fueling Infrastructure program (Sect. 11401), a [\\$2.5 billion program](#) that aims to deploy publicly-accessible EV charging infrastructure. Funds will be distributed in two separate tracks: the community charging program and the corridor program. This program is a subcategory of NEVI.



**Key Takeaway:** Utilities will be important stakeholders in ensuring their states' EV charging visions become reality. PUCs should work with their utilities and corresponding DOT to identify funding needs and understand how projects can be funded through NEVI versus rate-recovery.

## PROGRAM ELIGIBILITY

State and territory DOTs are eligible to apply for funds and are responsible for distributing the funds.

## PROJECT TIMELINE

### State EV Infrastructure Deployment Plans

Each state DOT must submit a plan (by August 1) to FHWA to apply for NEVI funding.

### Plan Approval and Funding

NEVI formula funds are available for state DOTs to obligate to eligible expenses upon plan approval by FHWA.

### Period of Performance

States obligate and distribute NEVI formula funds for different projects on different timelines.

## EXAMPLE PROJECT IDEAS

DOT provided a [list of eligible project ideas](#) that are clarified in the program's [FAQs document](#). Some of the areas DOT calls out are physical charger infrastructure (e.g., transformers, switch gears), supportive grid upgrades (e.g., distribution line capacity, on-site clean energy generation), data sharing, operations and maintenance, and labor. DOT also published [Minimum Standards and Requirements](#) for NEVI-funded projects. The standards and requirements apply to a range of project development phases, from planning to price modeling.



# CARBON CAPTURE DEMONSTRATION PROJECTS PROGRAM SECT. 41004 (B)



U.S. Department of Energy – Office of Clean Energy Demonstrations

## PROGRAM OVERVIEW

The purpose of this program is to create replicable CCS systems to be deployed at fossil generation facilities and heavy carbon emitting industrial facilities. These CCS systems will help heavy carbon emitters lower their carbon footprint in an effort to reach net-zero emissions. DOE is looking for proposals that focus on integrated carbon capture, transport, and storage technologies and infrastructure that can be replicated and deployed at power plants and other industrial sources of carbon dioxide (CO<sub>2</sub>). Successful applications should demonstrate significant improvements in the efficiency, effectiveness, cost, and operational and environmental performance of existing carbon capture technologies. In early 2023, DOE selected [nine projects](#) to award funding. The [most recent FOA](#), which had a submission deadline of May 2023, sought to make awards to six additional projects.

Note: This provision requires a CBP.



**Key Takeaway:** There are three types of eligible CCS projects: coal generation, natural gas generation, and industrial facilities whose purpose is not electricity generation. Facilities must achieve at least 90% carbon capture efficiency over baseline emissions.

## PROGRAM ELIGIBILITY

Eligible entities include industry stakeholders, national laboratories, institutions of higher education, and for-profit entities; nonprofit entities, tribal nations, state and local governmental entities, and incorporated consortia; and unincorporated consortia.



## PROGRAM FUNDING

There is up to \$2.54 billion spanning FY22-FY26. Funds will be distributed through cooperative agreements, and DOE will fund up to a 50% project cost share.

## PROJECT TIMELINE

### Pre-Application

Applicants submit a letter of intent to DOE in response to the FOA. DOE encourages or discourages applicants from moving on to full application.

### FOA Application

Applicants will be given several weeks (likely months) between the DOE response and full FOA application submission.

### Period of Performance

There are four post-award phases that, in all, can last up to 14.5 years.

# CIVIL NUCLEAR CREDIT PROGRAM

## SECT. 40323



U.S. Department of Energy – Grid Deployment Office

### PROGRAM OVERVIEW

The purpose of the [Civil Nuclear Credit Program](#) is to preserve the existing nuclear reactor fleet. Applications should highlight the reactor's projected closure due to economic reasons and explain how a closure will lead to a rise in air pollutants and carbon emissions. For example, [these states](#) saw increased emissions from nuclear reactor closures.



**Key Takeaway:** [Awarded credits](#) will be available after an annual audit and paid all at once. Credits are requested at a price per megawatt-hour basis. The maximum value that can be requested is calculated as the difference between projected costs plus risks and revenues. The FY22 and FY23 [funding rounds have already been announced](#).

### PROGRAM ELIGIBILITY

The first funding round was only for owners and operators that announced intentions to close within the 4-year award period, while the second round was open to reactors at risk of closure by the end of the 4-year award period. Guidance is not yet available for future years.



### PROGRAM FUNDING

This is a \$6 billion program with funding allocated from FY22 to FY26, with \$1.2 billion allocated per year. If selected, credits will be distributed over a 4-year period.



### CASE STUDY: DIABLO CANYON POWER PLANT

FY22 funding was [awarded](#) to Diablo Canyon Power Plant in California. Units 1 and 2 of Diablo Canyon provide about 15% of California's clean energy and were scheduled to be decommissioned beginning in 2024 and 2025. A closure of these facilities would drastically increase the state's greenhouse gas emissions. These reactors account for 1,500 jobs. The \$1.1 billion in funding will keep the plant operational and help bridge the transition to further clean energy deployment on the grid.

### PROJECT EXECUTION TIMELINE

#### Award Cycle

DOE issues guidance and requests certification applications and sealed bids. Applicants have multiple weeks to submit.

#### Award Years

There is a 4-year award performance period for each award. Selected nuclear reactors must submit payment certificates for payment of annual credits each year.

# PUMPED STORAGE HYDROPOWER WIND AND SOLAR INTEGRATION AND SYSTEM RELIABILITY INITIATIVE SECT. 40334



U.S. Department of Energy – Energy Efficiency and Renewable Energy

## PROGRAM OVERVIEW

The purpose of the [Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative](#) is to support studies that facilitate the licensing and eventual construction and commissioning of new pumped storage hydropower facilities. The provision builds on Energy Efficiency and Renewable Energy's (EERE) existing [HydroWIRES program](#).

The funds from this provision can be used to carry out project design, transmission studies, power market assessments, and permitting for a pumped storage hydropower project to facilitate the long-duration storage of intermittent renewable electricity. DOE is looking for projects that can expedite the costs and timing for pre-construction and permitting activities. A successful application should outline the proposed project and how the funding will help that project.

Note: The FY22 FOA required a CBP.



**Key Takeaway:** Projects must be designed to provide at least 1,000 megawatts (MW) of storage capacity, and be able to store electricity generated by variable renewable energy located on tribal land.

## PROGRAM ELIGIBILITY

This program is open to electric utilities, tribes, state energy offices, and higher education institutions. Projects must be able to provide energy and capacity to more than one organized electric market, and have received a preliminary permit from the Federal Energy Regulatory Commission (FERC).



## PROGRAM FUNDING

There is \$10 million available across FY22-FY26. The FY22 FOA awarded one project for \$2 million.



# HYDROELECTRIC PRODUCTION INCENTIVES SECT. 40331



U.S. Department of Energy – Grid Deployment Office

## PROGRAM OVERVIEW

The [Hydroelectric Production Incentives program](#) supports hydropower development by incentivizing the generation and the sale of electricity. The program provides a \$ per kilowatt-hour (kWh) payment for power produced from eligible hydroelectric generation facilities placed in operation between 2005 and 2027 (see below). This BIL provision provides funding for [Section 242 of the Energy Policy Act of 2005](#). This program has been funded annually since 2014, but at lower levels.

Hydroelectric facilities can receive payments for up to 10 consecutive years, subject to the availability of appropriated funds. The period for payment under this program ends with FY36.



**Key Takeaway:** The incentive is paid to hydroelectric facilities on a \$/kWh basis. The base rate is 1.8¢/kWh, adjusted for inflation for each FY beginning after calendar year 2005. The maximum that any facility can receive in any calendar year is \$1 million.

## PROGRAM ELIGIBILITY

This program is open to non-federal hydroelectric facilities. Facilities that have added generating capability to existing dams are eligible. Facilities 20 MW and smaller are eligible if they serve areas that lack grid access, that experience frequent outages, or that face high electricity prices. Full eligibility requirements can be found in the [program's guidance](#).



## PROGRAM FUNDING

This is a \$125 million program with funds to be awarded until the program funds are fully expended. The first [FOA](#) was specific to hydroelectric generation sold in calendar years 2021 and 2022.





# HYDROELECTRIC EFFICIENCY IMPROVEMENT INCENTIVES SECT. 40332



U.S. Department of Energy – Grid Deployment Office

## PROGRAM OVERVIEW

The [Hydroelectric Efficiency Improvement Incentives program](#) provides incentive payments to the owners or operators of hydroelectric facilities at existing dams for capital improvements directly related to improving facility efficiency by at least 3%. This BIL provision provides funding for [Section 243 of the Energy Policy Act of 2005](#) (previously unfunded).

This provision should be used on capital infrastructure projects that will increase a facility's efficiency by at least 3%. DOE clarifies that capital improvements must be (a) on the hydroelectric facility side of the point of interconnection with the electric utility or (b) in a facility that remotely controls hydroelectric facility operations. Each facility can only receive up to \$5 million of incentives, and the payment cannot be more than 30% of the total improvement cost.

Note: This program requires a CBP for all applications and a Cybersecurity Strategy if advanced controls will be part of the improvement project.



**Key Takeaway:** Small projects under 10 MW represent more than 75% of the nation's hydropower fleet; 25% of the program's funding is directed to small projects owned by small businesses, municipal entities, nonprofit organizations, electric cooperatives, or tribes.

## PROGRAM ELIGIBILITY

This program is open to all hydroelectric owners and operators as long as their facility was in service by November 15, 2021, and the facility was still operating when the application for this program was submitted.



## PROGRAM FUNDING

This is a \$75 million program with funds to be awarded until they are fully expended. Funds will be distributed through incentive payments.



# MAINTAINING AND ENHANCING HYDROELECTRICITY INCENTIVES SECT. 40333



U.S. Department of Energy – Grid Deployment Office

## PROGRAM OVERVIEW

The [Maintaining and Enhancing Hydroelectricity Incentives program](#) is designed to ensure generators continue to provide clean electricity while supporting grid resilience, improving dam safety, and reducing environmental impacts. This BIL provision provides funding for [Section 247 of the Energy Policy Act of 2005](#) (previously unfunded).

Each facility can only receive up to \$5 million of incentives, and the payment cannot be more than 30% of the total improvement cost.

The [FOA](#) requires projects to submit a letter of intent by June 22, 2023. [Full applications](#) for the current round are due October 6, 2023. Note: This program requires a CBP for all applications.



**Key Takeaway:** Eligible grid resilience activities include providing ancillary services, integrating renewables, adapting to changing grid conditions, and managing reservoir sediments.

## PROGRAM ELIGIBILITY

This program is open to hydroelectric operations that are licensed by FERC, permitted prior to June 10, 1920, licensed pursuant to the Federal Power Act, or operational before November 15, 2021.



## PROGRAM FUNDING

This is a \$553.6 million program with funds to be awarded until they are fully expended. Funds will be distributed through incentive payments.



# RURAL AND MUNICIPAL UTILITY ADVANCED CYBERSECURITY GRANT AND TECHNICAL ASSISTANCE (RMUC) PROGRAM SECT. 40124



U.S. Department of Energy – Cybersecurity, Energy Security, and Emergency Response

## PROGRAM OVERVIEW

The goal of the [Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance \(RMUC\) Program](#) is to (1) enhance the security posture of rural electric cooperatives, municipally-owned electric utilities, other state-owned utilities, and small investor-owned utilities and (2) increase their participation in threat information-sharing programs.

DOE plans to prioritize awarding entities that have limited cybersecurity resources, are critical to the reliability of the bulk-power system, or support military facilities.

Note: This program requires a CBP and a Cybersecurity Plan.

## PROGRAM ELIGIBLE USES AND TIMELINE

DOE will provide both funding and technical assistance to eligible entities through this program. Program funds can be used for advanced cybersecurity deployment or participation in cybersecurity threat information-sharing programs. A first-round FOA for this program is expected in fall 2023.

DOE released the [RMUC Advanced Cybersecurity Technology 1 Prize](#) to help cooperatives and military-serving utilities to upgrade their cybersecurity systems. The first phase closes November 29, 2023.



## PROGRAM FUNDING

There is \$250 million across FY22-FY26. No FOA has been made as of publishing this Guidebook, meaning the \$250 million will likely be consolidated into fewer FYs. Funds will be awarded on a competitive basis through grants, cooperative agreements, or contracts.





# ENERGY IMPROVEMENTS IN RURAL OR REMOTE AREAS SECT. 40103 (C)



U.S. Department of Energy – Office of Clean Energy Demonstrations

## PROGRAM OVERVIEW

Energy Improvements in Rural or Remote Areas (ERA) is a [\\$1 billion program](#) to improve the resilience, safety, reliability, and availability of energy in rural or remote areas. The program also supports environmental protection from the adverse impacts of energy generation. The three core program components are to: deliver measurable benefits to energy customers in rural or remote areas, demonstrate new rural or remote energy system models, and build clean energy knowledge, capacity, and self-reliance in rural America. There are three different funding pathways:

- **Fixed Award Grant Funding Opportunity.** In its first year of funding, this funding avenue provides \$50 million for projects requiring \$500,000 to \$5 million in federal cost share.
- **Full ERA FOA.** In its first year of funding, this funding avenue provides \$300 million for projects requiring \$5-\$10 million in federal cost share.
- **Energizing Rural Communities Prize.** In its first year of funding, the prize program provided \$15 million to assist organizations in developing partnership plans or innovating funding strategies to help rural or remote communities. Applicants can apply to a [Partner or Finance track for phased funding](#).



**Program Eligibility:** Utilities, national laboratories, universities, state and local governments, community-based organizations, tribes, environmental groups, and cities, towns, or unincorporated areas with fewer than 10,000 inhabitants.



**Project Execution Timeline:** The \$50 million [FOA](#) is for ERA Fixed Award, and the \$300 million [FOA](#) is for ERA required concept papers. Full applications were due in October and August, 2023, respectively. Applications for the ERA Prize pool were due in May 2023 and are likely to re-open again in the second quarter of FY24.





# CARBON STORAGE VALIDATION AND TESTING SECT. 40305



## U.S. Department of Energy – Office of Fossil Energy and Carbon Management

This is a [\\$2.5 billion program](#) that is designed to establish a program for research, development, and deployment for carbon storage. The program expands on DOE's existing [CarbonSAFE Initiative](#). The program has three core components: site exploration and permitting, getting shovel-ready projects to the construction phase, and facility construction. The [first FOA round](#) has further details of the program. Note: This program requires a CBP.



**Program Eligibility:** The eligible entities are domestic higher education institutions, for-profit and nonprofit entities, state and local governments, and tribal nations.



**Project Execution Overview:** When a FOA is released, applicants have several weeks to complete a concept paper. DOE will encourage or discourage a full proposal.



# RECONNECT LOAN AND GRANT PROGRAM SECT. 40103 (c)



U.S. Department of Agriculture – National Telecommunications and Information Administration

## PROGRAM OVERVIEW

This is an [existing U.S. Department of Agriculture \(USDA\) program](#) that received \$1.9 billion in additional funding from the BIL. The program is designed to bring high-speed internet access to rural areas that lack sufficient access to broadband. There are five funding paths: 100% grants, 100% loans, 50-50 grant-loan combo, tribal governments, and areas where 90% of households lack sufficient access to broadband. Funds can be used for construction and improvements of wires, acquisition of existing systems, or pre-application expenses (including the environmental review).



**Program Eligibility:** For-profit and nonprofit organizations, state or local governments, and tribes. [Projects must be](#) in rural areas, serve areas that lack sufficient broadband, and serve all the premises in the proposed area.



**Project Execution Timeline:** This program has annual FOAs that are typically released in Q4 of the calendar year.





# MIDDLE MILE BROADBAND DEPLOYMENT GRANTS [JW16] SECT. 40103 (c)



Department of Commerce – National Telecommunications and Information Administration

## PROGRAM OVERVIEW

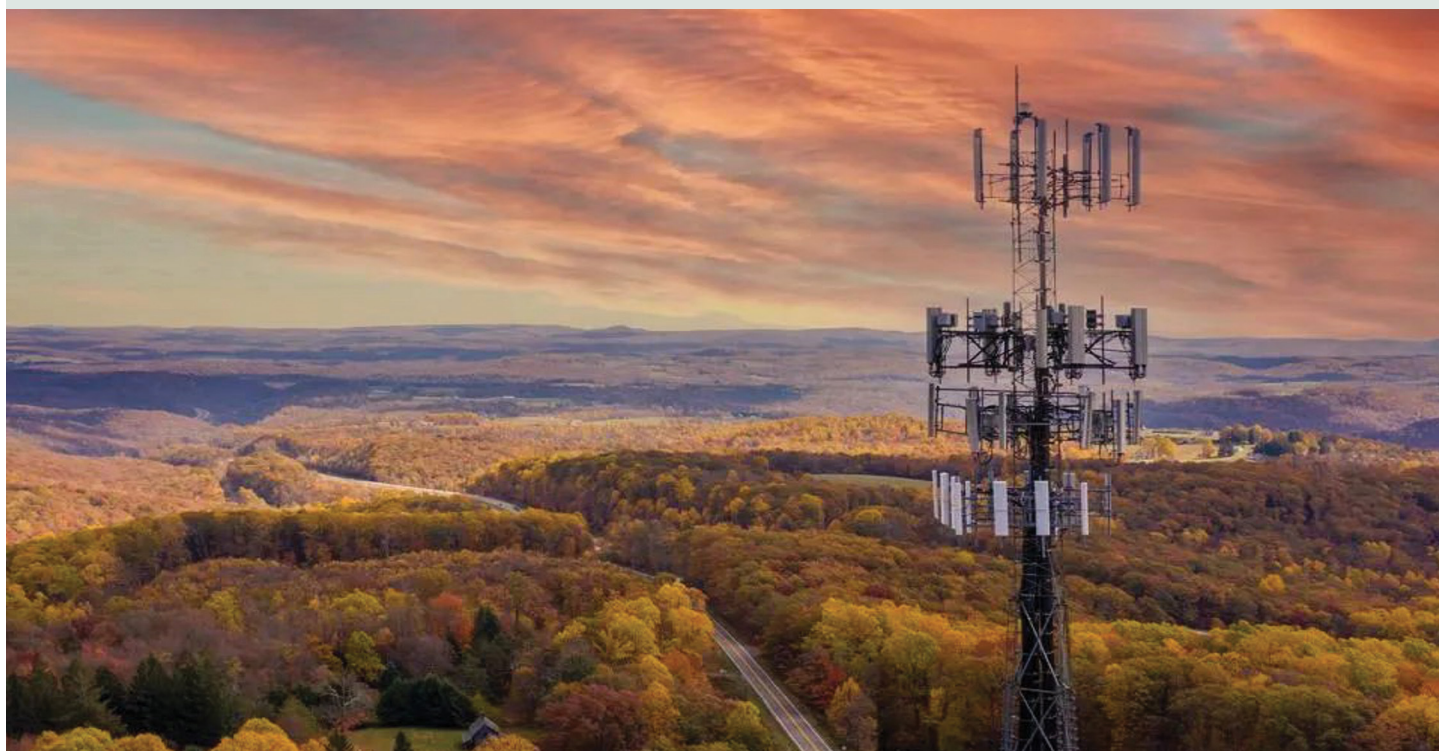
This is a [\\$1 billion program](#) that aims to connect local networks with high-capacity regional networks. The program's two objectives are to reduce the cost of connecting underserved areas to high-speed internet, and to promote broadband resilience through alternative connection paths. Note: This program requires a CBP.



**Program Eligibility:** Eligible applicants include state governments, tribal nations, utilities, cooperatives, telecommunications companies, and economic development organizations, among others. A full list of eligible entities can be found in the [2022 FOA](#).



**Project Execution Timeline:** When a FOA is released, applicants have several weeks to complete a concept paper. DOE will encourage or discourage the applicant to move forward with a full FOA submission.



# ENERGY STORAGE DEMONSTRATION AND PILOT GRANT PROGRAM SECT. 41001 (a)



U.S. Department of Energy – Office of Clean Energy Demonstrations

## PROGRAM OVERVIEW

This is a new [\\$355 million program](#) that aims to fund three types of energy storage demonstration projects. The proposed energy storage project should (among others) improve critical infrastructure and emergency response systems, improve reliability of transmission and distribution systems in rural areas, reduce peak loads for homes and businesses, integrate renewable energy deployment, or provide ancillary services for grid stability.



**Program Eligibility:** The program will be open to technology developers, state and local governments, tribes, community based organizations, national laboratories, and utilities.



**Project Execution Timeline:** The estimated application opening date for this program is the third quarter of calendar year 2023.

# LONG-DURATION ENERGY STORAGE DEMONSTRATION INITIATIVE AND JOINT PROGRAM SECT. 41001 (b)



U.S. Department of Energy – Office of Clean Energy Demonstrations

## PROGRAM OVERVIEW

This is a [\\$150 million program](#) that aims to develop long-duration energy storage technologies on a pathway to scalability. Proposals should demonstrate promising, long-duration energy storage technologies at different scales and help new, innovative long-duration energy storage technologies become commercially viable.



**Program Eligibility:** The program will be open to technology developers, state and local governments, tribes, community-based organizations, national laboratories, and utilities.



**Project Execution Timeline:** DOE issued a FOA for first-round funding in November 2022, with letters of intent due in December 2022 and full applications due March 2023. Expected notice of selection is in summer 2023. It is likely that a FOA for this program will be released again in winter 2023.



# ENERGY EFFICIENT TRANSFORMER REBATES SECT. 40555



## U.S. Department of Energy – Office of Manufacturing and Energy Supply Chains

This is a [\\$10 million program](#) that aims to provide rebates for replacing qualified, inefficient transformers with qualified energy-efficient transformers. This BIL provision provides funding for [Section 1006 of the Energy Act of 2020](#).

DOE will make rebate payments to qualified entities. Qualified applicants will be able to claim a maximum of \$25,000 per calendar year in rebates for eligible transformer purchases. Rebate payments will be calculated by:

$\$2/\text{watt} \times (\text{core loss from efficient transformer} - \text{core loss from inefficient transformer})$



**Program Eligibility:** The program will be open to owners of industrial or manufacturing facilities, commercial buildings, multifamily residential buildings, utilities, or energy service companies that purchase a qualified transformer to replace an energy-inefficient transformer.



**Project Execution Timeline:** The program is open, and funds will be available until distributed. Applicants need to create an account and apply through the program's [portal](#).



**Qualifications:** A transformer is eligible as “inefficient” if it is a distribution transformer, does not meet DOE’s efficiency standards, and was manufactured between January 1, 1992, and December 31, 2011. A transformer is eligible as “efficient” if it is rated for an identical capacity (kVA) and number of phases (single or three phase) as the qualified energy inefficient transformer, and meets or exceeds DOE’s 2016 efficiency standards.



# SECTION 3 OVERVIEW: INFLATION REDUCTION ACT

The IRA, which was signed into law in August 2022, aims to curb inflation and mitigate its impact on the U.S. economy. The IRA promotes economic growth and stability through measures to reduce the deficit, lower prescription drug prices, invest in domestic energy production, and support climate resilience.

The IRA authorizes \$783 billion in spending on energy security, clean energy, and climate change mitigation and resilience. This section of the Guidebook provides an overview IRA provisions selected by NARUC for their relevance to regulatory utility commissioners.

This section is structured as follows:

**Tax credit summaries.** This section provides an overview of tax credits available for clean energy projects and carbon sequestration.

**Loan and loan guarantee programs.** This section focuses on electricity infrastructure, power plant construction, investments in power plants that have ceased operations, and carbon capture and storage.

**Grant program profiles.** This section provides information on grant programs that focus on rural electric cooperatives, transmission siting, greenhouse gas and climate pollutant reductions, environmental and climate justice, and clean heavy duty vehicles.

Each program profile provides information on program structure, funding, and eligibility.




# OVERVIEW OF IRA

Program	Agency	Funding Type	Project Timeline	Funding Amount	Cost Share Required
<b>Renewable Electricity Production Tax Credit (PTC)</b>		Tax credits (Direct pay option available)	Applicable to projects beginning construction before Jan. 2025	N/A	
<b>Clean Electricity Production Tax Credit (PTC)</b>		Tax credits (Direct pay option available)	Applicable to projects beginning construction before Jan. 2025	N/A	
<b>Investment Tax Credit (ITC) for Energy Property</b>		Tax credits (Direct pay option available)	Applicable to projects beginning construction before Jan. 2025	N/A	
<b>Tax Credit for Carbon Dioxide Sequestration</b>		Tax credits	Applicable to carbon captured after Oct. 2008	N/A	
<b>Electric Infrastructure Loan &amp; Loan Guarantee Program</b>		Loans	Funding available through Sept. 2031	\$1 billion	Yes, but may be waived
<b>Energy Infrastructure Reinvestment (EIR) Financing</b>		Loans	To be announced	\$250 billion (includes \$5 billion from IRA)	To be announced
<b>Federal Loan Guarantees for Innovative Energy Technologies</b>		Loans	Applications open year-round through Sept. 2031	\$3 billion	



# OVERVIEW OF IRA

Program	Agency	Funding Type	Project Timeline	Funding Amount	Cost Share Required
Transmission Siting & Economic Development Grants Program		Grants	To be announced	\$760 million	
Methane Emissions Reduction Program		Financial & technical assistance	To be announced	\$1.55 billion	
Assistance for Rural Electric Cooperatives		Grants & loans	Funding available through Sept. 2031	\$9.7 billion	Varies by project
Environmental and Climate Justice Block Grants		Grants	Varies by program avenue	\$3 billion	To be announced
Clean Heavy-Duty Vehicle Program		Grants	To be announced	\$1 billion	To be announced
Greenhouse Gas Reduction Fund		Grants	To be announced	\$27 billion	To be announced
Climate Pollution Reduction Grants (CPRG)		Grants	To be announced	\$250 million (planning grants) & \$4.6 billion (implementation grants)	To be announced



# RENEWABLE ELECTRICITY PRODUCTION TAX CREDIT (PTC) SECT. 13101



U.S. Department of Treasury

## PROGRAM OVERVIEW

The [Renewable Electricity Production Tax Credit \(PTC\)](#) is a federal tax credit for facilities generating electricity from renewable energy projects. Projects must begin construction before January 1, 2025. The credit is available for the sale of electricity produced in the United States or

U.S. territories from qualified energy resources at a qualified facility. Direct pay is available for tax-exempt organizations, states, political subdivisions, the Tennessee Valley Authority, tribal governments, Alaska Native Corporations, and rural electric cooperatives.



**Key Takeaway:** Utilities can claim the PTC based on renewable energy production. State utility regulators can encourage their regulated utilities to pursue these tax incentives.

## PROGRAM ELIGIBILITY

Qualified facilities generating electricity from wind, biomass, geothermal, solar, small irrigation, landfill and trash, hydropower, and marine and hydrokinetic renewable energy are eligible.



## PROGRAM FUNDING

Base credit amount: 2.75¢/kWh (<1 MW) or 0.5¢/kWh (>1 MW), inflation adjusted for multiple solar and wind technologies, municipal solid waste, geothermal (electric), and tidal technologies, among others.

Bonus credit amount:

- +2.25¢/kWh for >1 MW projects meeting [prevailing wage](#) and [registered apprenticeship requirements](#) (“Full Rate”)
- + 0.3¢/kWh if project meets certain domestic content requirements for steel, iron, and manufactured products
- +0.3¢/kWh if located in an [“energy community”](#)



# CLEAN ELECTRICITY PRODUCTION TAX CREDIT (PTC) SECT. 13701



U.S. Department of Treasury

## PROGRAM OVERVIEW

The Clean Electricity PTC is a [federal tax credit](#) for the sale of [domestically produced zero-emission electricity](#). Starting January 1, 2025, the Inflation Reduction Act [replaces](#) the traditional PTC with the Clean Energy Production Tax Credit (§1 3701).

Direct pay is available for tax-exempt organizations, states, political subdivisions, the Tennessee Valley Authority, tribal governments, Alaska Native Corporations, and rural electric cooperatives.



**Key Takeaway:** Utilities can claim the Clean Energy PTC for clean electricity generation. State utility regulators can encourage their regulated utilities to pursue these tax incentives.

## PROGRAM ELIGIBILITY

Facilities, such as solar or wind generation assets, [generating electricity with zero greenhouse gas emissions](#) are eligible. The PTC is available for facilities placed in service after December 31, 2024. Phase-out starts on whichever is later: (a) 2032 or (b) when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower.



## PROGRAM FUNDING

Base credit amount: 2.75¢/kWh (<1 MW) or 0.5¢/kWh (>1 MW), inflation adjusted for multiple solar and wind technologies, municipal solid waste, geothermal (electric), and tidal technologies, among others.

[Bonus credit](#) amount:

- +2.25¢/kWh for >1 MW projects meeting [prevailing wage](#) and registered [apprenticeship requirements](#) (“Full Rate”)
- + 0.3¢/kWh if project meets certain domestic content requirements for steel, iron, and manufactured products
- +0.3¢/kWh if located in an [“energy community”](#)

## COST RECOVERY FOR QUALIFIED FACILITIES

Section 1703 of the IRA offers an additional [accelerated depreciation schedule](#) for facilities or property qualifying for this PTC. 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 (e.g., equipment) faster than the value actually declines.

# INVESTMENT TAX CREDIT (ITC) FOR ENERGY PROPERTY SECT. 13102



U.S. Department of Treasury

## PROGRAM OVERVIEW

The Investment Tax Credit (ITC) for Energy Property extends and modifies the [Federal Investment Tax Credit](#) through the end of 2024 for investment in renewable energy projects. Projects must begin construction before January 1, 2025. Direct pay is available for tax-exempt organizations, states, political subdivisions, the Tennessee Valley Authority, tribal governments, Alaska Native Corporations, and rural electric cooperatives.



**Key Takeaway:** Utilities can claim the ITC for investing in renewable energy projects. State utility regulators can encourage their regulated utilities to pursue these tax incentives.

## PROGRAM ELIGIBILITY

Fuel cell, solar, geothermal, small wind, energy storage, biogas, microgrid controllers, and combined heat and power properties are eligible.

## PROGRAM FUNDING

Base tax credit: 30% (< 1 MW) or 6% (> 1 MW) for solar, wind, waste recovery, geothermal, tidal, fuel cell, energy storage, and microgrid control technologies, among others.

### Bonus credit amount:

- >1 MW projects: +24% for projects meeting [prevailing wage](#) and [registered apprenticeship requirements](#)
- All projects: +10% if project meets certain [domestic content](#) requirements for steel, iron, and manufactured products
- All projects: +10% if located in an [energy community](#)
- < 5 MW wind and solar: +10% if on tribal land or in a low-income community, +20% low-income residential, or +20% low-income “economic benefit”

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 CREDIT FOR CARBON DIOXIDE SEQUESTRATION SECT. 13104



U.S. Department of Treasury

## PROGRAM OVERVIEW

The [Tax Credit for Carbon Dioxide Sequestration](#) is a federal tax credit applicable to qualified facilities that capture and dispose of qualified carbon dioxide (CO<sub>2</sub>) in secure geological storage. This tax credit is applicable to CO<sub>2</sub> captured after October 3, 2008.

Qualified CO<sub>2</sub> is CO<sub>2</sub> that is captured from an industrial source that would otherwise be released into the atmosphere as industrial emission of greenhouse gases, measured at the source of capture and verified at the point of disposal or injection.



**Key Takeaway:** Gas utilities can apply for the tax credit for carbon sequestration projects. State utility regulators can encourage their regulated utilities to pursue these tax incentives to help reach state decarbonization policy goals.

## PROGRAM ELIGIBILITY

To be considered eligible for the tax credit, the CO<sub>2</sub> capture and disposal must take place at a qualified facility, defined as an industrial facility that is owned by the taxpayer, where carbon capture equipment is placed in service, and where at least 500,000 metric tons of qualified CO<sub>2</sub> is captured during the taxable year.



## PROGRAM FUNDING

Base credit amount:

- \$20 per metric ton of qualified CO<sub>2</sub> that is captured and disposed of in secure geological storage
- \$10 per metric ton of qualified CO<sub>2</sub> that is captured and used as a tertiary injectant in a qualified enhanced oil or natural gas recovery project (EOR project)





# ELECTRIC INFRASTRUCTURE LOAN & LOAN GUARANTEE PROGRAM SECT. 22001



U.S. Department of Agriculture

## PROGRAM OVERVIEW

The [Electric Infrastructure Loan and Loan Guarantee Program](#) makes insured loans and loan guarantees to nonprofit and cooperative associations, public bodies, and other utilities.

This program finances the construction of electric distribution, transmission, and generation facilities, including system improvements and replacement required to furnish and improve electric service in rural areas. The program also supports demand-side management, energy conservation programs, and on-grid and off-grid renewable energy systems. Funds may be used to finance maintenance; upgrades; expansion; replacement of distribution, sub-transmission, and headquarters facilities; energy efficiency; and renewable energy systems projects.

Program period of availability is through September 30, 2031.



**Key Takeaway:** Energy projects in rural areas should consider applying for this program. Applications are accepted year-round through a [General Field Representative \(GFR\)](#). GFRs are the local information conduit and keep stakeholders current on issues that profoundly impact their business.

## PROGRAM ELIGIBILITY

Most retail or power supply providers serving qualified rural areas are eligible to apply, including state and local governmental entities, federally recognized tribes, nonprofits including cooperatives and limited dividend or mutual associations, and for-profit businesses (must be a corporation or limited liability company). Program details may change over time. Before beginning an application, it is recommended to confirm the current information by contacting the relevant GFR for assistance.



## PROGRAM FUNDING

\$1 billion in loans and loan guarantees. Loan guarantees up to 100% allow the Federal Financing Bank to extend credit to qualified borrowers in rural areas. 100% of the construction work plan can be financed. Hardship loans may be used, at the sole discretion of the Rural Utilities Service, to assist applicants in rural areas that are either economically distressed or recovering from an unavoidable event, such as a natural disaster.

# ENERGY INFRASTRUCTURE REINVESTMENT (EIR) FINANCING SECT. 50144



U.S. Department of Energy – Loan Programs Office

## PROGRAM OVERVIEW

The [Energy Infrastructure Reinvestment \(EIR\) Financing program](#) allocates \$5 billion through September 30, 2026, in credit support for loan guarantees to projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operations. The loan guarantees can also be used to support projects that enable operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants, including CCS.



**Key Takeaway:** The amount of a guaranteed loan cannot exceed 80% of eligible project costs.

## PROGRAM ELIGIBILITY

Program design and rulemaking is underway to refine [eligibility requirements](#). Anticipated eligible entities include states, counties, cities/townships, special districts, tribal governments, independent school districts, public and private higher education institutions, public housing authorities, Indian housing authorities, nonprofits, small businesses, and businesses (other than small businesses).



## PROGRAM FUNDING

There is \$5 billion appropriated for this program. The Loans Program Office can guarantee up to \$250 billion in loans.



# FEDERAL LOAN GUARANTEES FOR INNOVATIVE ENERGY TECHNOLOGIES SECT. 50141



U.S. Department of Energy – Loan Programs Office

## PROGRAM OVERVIEW

The [Federal Loan Guarantees for Innovative Energy Technologies program](#) will provide loans for technologies that are new or significantly improved, compared to commercial technology in service in the United States at the time the loan guarantee is issued. Eligible projects should avoid, reduce, or sequester greenhouse gases, be located in the United States, and provide a reasonable prospect of repayment.

This program 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.



**Key Takeaway:** Projects related to new and/or improved energy technology may be eligible for funding under this program. Investor-owned utilities applying for these funds can offset capital investments that would otherwise be included in rate base.

## PROGRAM ELIGIBILITY

[Eligible entities](#) include states, counties, cities/townships, special districts, tribal governments, independent school districts, higher education institutions, public housing authorities, Indian housing authorities, nonprofits, small businesses, and businesses (other than small businesses)..



## PROGRAM FUNDING

[\\$3.6 billion](#) in total program funding is available through September 30, 2026. Applicants must demonstrate that they have sufficient funds to carry out a project.

## PROJECT EXECUTION OVERVIEW

**Step 1**  
Application Part I &  
Application Part II

**Step 2**  
Due Diligence &  
Term Sheet Negotiation

**Step 3**  
Loan Closing

# TRANSMISSION SITING & ECONOMIC DEVELOPMENT GRANTS PROGRAM

## SECT. 50152



U.S. Department of Energy – Grid Deployment Office

### PROGRAM OVERVIEW

The [Transmission Siting and Economic Development Grants Program](#) allocates \$760 million to support states and local communities in the siting and permitting of interstate and offshore electricity transmission lines. The [goal of this program](#) is to facilitate transmission projects by providing grants to expedite the siting and permitting process, and to support economic development activities in communities that may be affected by transmission projects.

Siting activities supported under this grant include studies, analyses, examination of alternate siting corridors, and/or participation in regulatory proceedings and negotiations.



**Key Takeaway:** PUCs are the [primary siting authority](#) for transmission lines in many states and could receive funding for various transmission siting-related projects.

### PROGRAM ELIGIBILITY

[Eligible entities](#) include transmission siting authorities and other state, local, or tribal governmental entities with authority to make a final determination regarding the siting, permitting, or regulatory status of a covered transmission project.

### TRANSMISSION FACILITY FINANCING

The [Transmission Facility Financing program](#), separate but related to Sect. 50152, is a direct loan program for financing the construction or modification of electric transmission facilities. This special program is under development by the DOE now.



### PROGRAM FUNDING

\$760 million in program funding. DOE will announce the process for distributing grants, as well as any funding caps, in a future issuance. The [federal share of costs](#) supported by grants is limited to 50% of the total cost (does not apply to economic development activities).

### PROJECT EXECUTION OVERVIEW

**Request for Information**  
Closed for comments  
February 2023

**Funding Opportunity  
Announcement**  
Expected mid-to-late 2023

**Period of Performance**  
To be announced



# METHANE EMISSIONS REDUCTION PROGRAM SECT. 60113



U.S. Environmental Protection Agency

## PROGRAM OVERVIEW

The [Methane Emissions Reduction Program](#) provides \$1.55 billion of financial and technical assistance to reduce methane and other greenhouse gases from petroleum and natural gas systems. Funding and technical assistance may be used for preparing and submitting greenhouse gas reports, monitoring methane emissions, and reducing methane and other emissions. Greenhouse gas reduction activities may include 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 resilience, and supporting environmental restoration. The program also establishes a waste emissions charge for applicable facilities that report more than 25,000 metric tons of CO<sub>2</sub> per year and exceed statutorily specified waste emissions thresholds.



**Key Takeaway:** A wide variety of projects could be funded under this program. PUCs can encourage regulated gas utilities, in particular, to explore funding for methane and greenhouse gas emissions reduction from petroleum and natural gas systems under this program. These tax incentives may help reach state decarbonization policy goals.

## PROGRAM ELIGIBILITY

[Eligible entities](#) include states, counties, cities/townships, special districts, territories, tribal governments, public and private higher education institutions, nonprofits, small businesses, businesses (other than small businesses), and individuals.



## PROGRAM FUNDING

\$1.55 billion in financial and technical assistance is available, at least \$700 million of which must be used for activities at marginal conventional wells. A \$3.5 million FOA for [Mitigating Emissions from Marginal Conventional Wells](#) has been released as of August 30, 2023 (timeline may be found below).

## PROJECT EXECUTION OVERVIEW

**Submission Deadline for Full Applications**  
September 30, 2023

**Expected Time Frame for Award Negotiations**  
2 months post FOA closing

**Expected Time Frame for Awards**  
1 month after negotiations end

# ASSISTANCE FOR RURAL ELECTRIC COOPERATIVES SECT. 22004



U.S. Department of Agriculture

## PROGRAM OVERVIEW

The USDA will distribute [\\$9.7 billion in loans and grants](#) 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 CO<sub>2</sub>, methane, and nitrous oxide emissions in rural areas. The program also supports demand-side management, energy conservation programs, and on-grid and off-grid renewable energy systems.



**Program Eligibility:** (1) Electric cooperatives that are, or have been, Rural Utilities Service borrowers, (2) electric cooperatives serving a predominantly rural area, or (3) a wholly or jointly owned subsidiary of such cooperatives. Tribes are also eligible.



**Project Execution Timeline:** Funding available through September 30, 2031. Application timeline to be announced.



# ENVIRONMENTAL AND CLIMATE JUSTICE BLOCK GRANTS SECT. 60201



U.S. Environmental Protection Agency

## PROGRAM OVERVIEW

U.S. Environmental Protection Agency (EPA) will distribute [\\$3 billion in grants and technical assistance](#) to reduce air pollution, mitigate climate and health risks from urban heat islands and extreme heat, and facilitate engagement of disadvantaged communities in public processes. Programs include the [Environmental and Climate Justice Program](#), the [Environmental Justice Thriving Communities Grantmaking Program](#), [Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program](#), and [Environmental Justice Government-to-Government Program](#).



**Program Eligibility:** Community-based nonprofit organizations, partnerships of community-based nonprofit organizations, or partnership between a community-based nonprofit organization and a tribe, local government, or an institution of higher education.



**Key Takeaway:** Utilities can apply for, or partner on, a grant application with local governments or nonprofits.



**Project Execution Timeline:** Grant timelines vary by program. Click on each link above for more details.





# CLEAN HEAVY-DUTY VEHICLE PROGRAM SECT. 60101



U.S. Environmental Protection Agency

## PROGRAM OVERVIEW

EPA will distribute \$1 billion in funding for the [Clean Heavy-Duty Vehicle Program](#) between now and 2031. The program includes grants and/or rebates for eligible recipients to replace existing heavy-duty vehicles with zero-emission vehicles, and funding for zero-emission vehicle infrastructure, workforce development and training, and planning and technical activities. EPA released a [Request for Information](#) to gather input on the program (comments closed in June 2023). Project timeline will be announced following Request for Information comments.



**Key Takeaway:** Utilities may not apply for funding, but may be included as a partnering entity. Regulators should be aware of how EV infrastructure will impact grid planning and load forecasts.

## PROGRAM ELIGIBILITY

States, municipalities, tribes, and nonprofit school transportation associations.





# GREENHOUSE GAS REDUCTION FUND SECTION 60103



U.S. Environmental Protection Agency

## PROGRAM OVERVIEW

The [Greenhouse Gas Reduction Fund](#) is a \$27 billion program, which aims to reduce greenhouse gas emissions and other air pollutants, deliver the benefits of greenhouse gas- and air pollution-reducing projects to American communities (particularly low-income and disadvantaged communities), and mobilize financing and private capital to stimulate additional deployment of greenhouse gas- and air pollution-reducing projects. The Greenhouse Gas Reduction Fund will be implemented via two competitive grants, which are expected to open by summer 2023.

- The [General and Low-Income Assistance competition](#) aims to reduce greenhouse gas emissions and other air pollutants, deliver benefits to low-income and disadvantaged communities, and mobilize financing and private capital to stimulate additional deployment of greenhouse gas- and air pollution-reducing projects.
- The [Zero-Emissions Technologies competition](#) aims to enable the deployment of residential rooftop solar, community solar, and associated storage and upgrades in low-income and disadvantaged communities so that all families have access to low-cost clean energy. EPA expects to award up to 60 grants under this competition.

## PROGRAM ELIGIBILITY

**General and Low-Income Assistance:** Eligible applicants are nonprofit organizations that can provide capital for low- or zero-emission technologies.

**Zero-Emissions Technologies:** States, tribes, municipalities, and eligible nonprofit entities are eligible to apply for a grant from the EPA. Communities, small businesses, and individual households, along with other “eligible beneficiaries” can seek funding from these grantees.



## PROGRAM FUNDING

EPA [will not provide grants directly to projects](#). Rather, EPA will provide grants to eligible entities (as outlined above), and those grantees will ultimately provide the financial assistance communities need to successfully deploy emissions and air pollution-reducing projects.

- [General and Low-Income Assistance](#): \$20 billion
- [Zero-Emissions Technologies](#): \$7 billion

# CLIMATE POLLUTION REDUCTION GRANTS SECT. 60114



U.S. Environmental Protection Agency

## PROGRAM OVERVIEW

The [Climate Pollution Reduction Grants \(CPRG\)](#) program will provide grants to develop and implement plans for reducing greenhouse gas emissions and other air pollutants, providing flexible support in climate planning and implementation processes. There is \$250 million allocated to noncompetitive planning grants, and \$4.6 billion for competitive implementation grants. Planning funds can be used to update existing climate, energy, or sustainability plans, or to develop new plans.



**Program Eligibility:** Planning grants are available to states, territories, D.C., air pollution control agencies, municipalities, tribes, or groups of such [eligible entities](#). Implementation grants are available to eligible groups noted above that are covered by a plan developed with funding from a planning grant awarded under this section.



**Key Takeaway:** This program can finance both project planning and implementation.



**Project Execution Timeline:** Notice of intent to participate required by March (states) or April (metropolitan areas) 2023.





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