Subject Specific Grant Guide

Grants to Support Grid Modernization Projects

This guide identifies potential funding opportunities to support grid modernization projects. The opportunities chosen for inclusion in this guide are opportunities that are typically reoccurring. Past funding opportunities that seemed relevant but presented no indication of being funded in the future were not included.

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FEDERAL
GRANT PROFILE

Department: U.S. Department of Agriculture (USDA)
Agency: Rural Utilities Service

FY 2023 Empowering Rural America (New ERA) Program

Grant Overview

This program provides financial assistance to eligible entities, to achieve the greatest reductions in greenhouse gas (GHG) emissions through electric cooperatives' voluntary transformation of rural electric systems in a way that promotes resiliency and reliability of rural electric systems and affordability for their members. Eligible applicants are electric cooperatives described in section 501(c)(12) or 1381(a)(2) of the Internal Revenue Code of 1986 who are currently or have been in the past a RUS electric loan borrower pursuant to the RE Act, electric cooperatives serving predominantly rural areas, or wholly or jointly owned subsidiaries of such electric cooperatives.

Program History

This is a new program appropriated through the Inflation Reduction Act (IRA).

Key Information

Total Funding: $9.7 billion
Award Range: $970 million
Match: 25% (cash match or equity investment)
Solicitation date: May 16, 2023
Letter of Interest (LOI) due: August 31, 2023

https://www.federalregister.gov/documents/2023/05/16/2023-10392/notice-of-funding-opportunity-for-the-empowering-rural-america-new-era-program

Tips:

- LOIs will be accepted starting on July 31, 2023. Applicants must submit an LOI to be considered for an Innovation to Proceed. Those receiving an Invitation will have 60 days to submit an ERA full application from the date received.
- The most competitive applications will receive the best financial offerings in terms of grant amounts and interest rates.

Department: U.S. Department of Agriculture (USDA)
Agency: Rural Utilities Service

FY 2023 Empowering Rural America (New ERA) Program

Detailed Summary

The purpose of this program is to provide financial assistance to eligible entities to achieve reductions in GHG emissions from rural electric systems in a way that promotes resiliency, reliability, and affordability of rural electric service. Project eligibility is broad and includes any Portfolio of Actions related to generation, transmission and distribution, including distributed energy resources.

Such actions include, but are not limited to:

- The purchase or construction of:
  - Renewable Energy
  - Renewable Energy Systems
  - Zero-Emission Systems
  - Carbon Capture and Storage Systems
- Activities that will enable the deployment of the aforementioned systems and/or improve energy efficiency including:
  - Instituting grid-edge, microgrid solutions, and other distributed energy strategies
  - Deploying energy Storage Systems in support of GHG emission reductions or Renewable Energy Systems
  - Installing or upgrading software and hardware to enable the integration and other system improvements
  - Modifying or refinancing existing loans from RUS or refinancing non-RUS loans for retiring non-Renewable Energy assets on an accelerated basis with savings reinvested into clean energy investments
  - Entering a long-term agreement to purchase power from a Renewable Energy System or Zero-Emissions System
  - Upgrading existing Renewable Energy Systems or Zero-Emission Systems or related transmission facilities that increase the operating energy efficiency of these systems
  - Improving transmission that can significantly enable Renewable Energy Systems and Zero-Emissions Systems, reduce congestion, and improve the efficiency of the system
  - Activities that will significantly reduce energy demand and GHG emissions

Applicants may request either a Project Award or a System Award. A Project Award is backed by assets and revenues associated with project seeking funding, while a System Award is secured with assets and revenues from the applicant's entire system. Project awards will require a greater level of cash reserves than System Awards, and a Power Purchase Agreement (PPA) associated with a project award will require specific arrangements with RUS.

Applicant Eligibility

Eligible applicants are electric cooperatives described in section 501(c)(12) or 1381(a)(2) of the Internal Revenue Code of 1986 who are currently or have been in the past a RUS electric loan borrower pursuant to the RE Act, electric cooperatives serving predominantly rural areas, or wholly or jointly owned subsidiaries of such electric cooperatives.

For the purposes of this program, the term "predominantly rural" shall mean a service territory that must include at least 50 percent Rural Areas. RUS defines Rural Areas as those with less than 50,000 inhabitants adjusted to exclude individuals incarcerated on a long-term or regional basis or the first 1,500 individuals who reside in on-base military housing.

Funding

In FY 2023, approximately $9.7 billion is available to support awards through this program, through September 30, 2031. No one applicant may receive an amount equal to more than 10 percent of the total $9.7 billion, which equals $970 million.

The applicant's Portfolio of Actions may cost more than $970 million as long as the funded application uses less than $970 million in budget authority.

The following types of financial assistance are offered through this program:

- Loan Only: An applicant may request an award to finance any project or combination of projects in its application with a loan only award. The interest rate for a loan only award may be set at a fixed percent at 2 percent, zero percent, or at a rate tied to the Federal government's cost of money, based, at least in part, on level of carbon reduction. A zero percent interest rate is available to refinance stranded assets or for projects that serve predominantly distressed, disadvantaged, or energy communities.
- Loan and Grant Combinations: An applicant may request an award to finance any project or combination of projects in its application with a grant or grant/loan combination where the grant amount equals no more than 25% of the Eligible Award Costs. The interest rate for a loan only award may be set at a fixed percent at 2 percent, zero percent, or at a rate tied to the Federal government's cost of money, based, at least in part, on level of carbon reduction. Applicants may propose substituting cash for the loan component, or any portion of the loan component, at the time of the application.
- Grants Only: An Applicant may request an award to finance any project or combination of projects in its application with a 100 percent grant. A 100 percent grant award may finance no more than 25 percent of the total eligible Project costs.
- Loan Refinancing or Loan Modification: An applicant may request to modify existing RUS or RUS guaranteed debt, or refinance debt from a third party, but only as such modification or refinancing relates to a stranded asset. The applicant must demonstrate that it will utilize the benefits of such refinancing or modification to pay for or otherwise finance eligible activities. The interest rate for a loan only award may be set at a fixed percent at 2 percent, zero percent, or at a rate tied to the Federal government's cost of money , based, at least in part, on level of carbon reduction.

Anticipated award announcements for this program will begin on March 1, 2024. The performance period for this program is five years from the date of environmental clearance, but no later than September 30, 2031.

Matching and Cost Sharing

For project loans, RUS will finance up to 75 percent of the total capitalized cost of the project in the loan component of a project award. The awardee will be required to initially provide and maintain for the term of the project award at least 25 percent of the project's total capitalized cost in the form of cash or an equity investment.

Applicants may propose substituting cash for the loan component, or any portion of the loan component, at the time of the application.

Contact Information

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https://www.federalregister.gov/documents/2023/05/16/2023-10392/notice-of-funding-opportunity-for-the-empowering-rural-america-new-era-program

FEDERAL
GRANT PROFILE

Department: U.S. Department of Agriculture (USDA)
Agency: Rural Development - Rural Utilities Service (RUS)

FY 2023/2024 Powering Affordable Clean Energy (PACE) Program

Grant Overview

This program will support clean, affordable energy growth across America. The program will provide loans to projects that construct renewable electric generation and storage facilities to resale to rural and nonrural residents. Eligible applicants are for-profit organizations, state or local governments, Indian tribes, nonprofits, Alaska Native corporations, institutions of higher education, community-based organizations, distribution cooperatives, and generation or transmission cooperatives.

Program History

This is a new program funded through the Inflation Reduction Act.

Key Information and Tips

Total Funding: $1 billion
Award Range: $1 million - $100 million
Match: Varies
Solicitation date: May 16, 2023
Application due: September 29, 2023 (Letter of Intent). Full applications will be due approximately 60 days after being invited by the funding agency to apply.

https://www.rd.usda.gov/programs-services/electric-programs/powering-affordable-clean-energy-pace-program

USDA

Tips

- Projects must use technologies that are commercially available
- Applicants are encouraged to work with Distressed and Disadvantaged Communities, Energy Communities, Puerto Rico, the United States Virgin Islands (USVI), Guam, American Samoa or other U.S. territories or Compact of Free Association (COFA) states, tribal entities, and rural partner network communities

Department: U.S. Department of Agriculture (USDA)
Agency: Rural Development - Rural Utilities Service (RUS)

FY 2023/2024 Powering Affordable Clean Energy (PACE) Program

Detailed Summary

This program will support clean, affordable energy growth across America. The program will provide loans to projects that construct renewable electric generation and storage facilities to resale to rural and nonrural residents. The funding agency encourages applicants to consider projects that will advance the following key priorities:

- Assisting rural communities to recover economically through more and better market opportunities and through improved infrastructure;
- Ensuring all rural residents have equitable access to Rural Development (RD) programs and benefits from RD funded projects; and
- Reducing climate pollution and increasing resilience to the impacts of climate change through economic support to rural communities.

Eligible projects under this program include:

- Developing new renewable power generation from renewable energy resource (RER) and energy storage systems (ESS) for use by Off-Takers through a power purchase agreement (PPA) or a financial guarantee that ensures Financial Feasibility.
- Establishing new facilities that generate electricity from an RER, including facilities that store electricity that support such assets, however, RUS will not approve facilities that violate the terms of an applicant's existing wholesale power contract.
- New linear facilities, including microgrids, and equipment that are necessary to operate the Project including, but not limited to, transmission or distribution facilities that are needed to export, transmit, and deliver power from the generating facility to the Off-Taker.
- Upgrading existing linear facilities and equipment that are necessary to operate the project including, but not limited to, transmission or distribution facilities that are needed to export, transmit, and deliver power from the generating facility to the Off-Taker.
- Installing RERs and ESSs so that the RER can provide energy and any ancillary services for resale to rural and nonrural residents located in eligible service areas.
- Requesting interconnection and other costs associated with being able to deliver the RER and/or the ESS to Off-Takers, including related microgrid investments. Successful applicants may also recover a portion of their capitalizable pre-application costs pursuant to 7 CFR part 1767 and this notice.

Facilities may be co-located to operate interconnectedly or independently or constructed at separate sites.

Projects may benefit both rural and nonrural residents however, at least 50 percent of the population served by a proposed renewable energy project must live in communities with populations of 20,000 or fewer. The rural percentage of an eligible service territory will be calculated at the applicant's choosing by either:

- The population located in the Rural Areas of a service territory versus the total population of the entire service territory; or
- Meters served in the Rural Areas of a service territory versus meters served in the entire service territory.

Eligible projects include projects where construction began after August 16, 2022, the effective date of the Inflation Reduction Act.

Applicant Eligibility

Eligible applicants are for-profit organizations, state or local governments, Indian tribes, nonprofits, Alaska Native corporations, institutions of higher education, community based organizations, distribution cooperatives, and generation or transmission cooperatives.

Applicants are encouraged to work with distressed and disadvantaged communities, energy communities, Puerto Rico, the United States Virgin Islands (USVI), Guam, American Samoa or other U.S. territories or Compact of Free Association (COFA) states, tribal entities, and rural partner network communities.

Entities that plan to submit or have submitted applications under the RUS Empowering Rural America (New ERA) program may not apply for the same project under this program.

Funding

In FY 2023 and 2024, approximately $1 billion is available to support loans ranging from $1 million to $100 million through this program. Loan terms are the shorter of 35 years, the useful life of the equipment financed, the term of the PPA, or the term of any leased real property. Project interest rates are determined by the RUS municipal rate in effect at the time of the advance. These rates are set quarterly. Funding will be provided through with varying levels of loan forgiveness as follows:

- Category 1: Provides up to 20 percent total loan forgiveness for applicants if they meet the minimum set of standards set forth in the funding guidance.
- Category 2: Provides up to 40 percent total loan forgiveness if the project is in or serves 50 percent or more of the population of a designated energy community, disadvantaged community, or distressed community.
- Category 3: Provides up to 60 percent total loan forgiveness if:
  - The project is located in U.S. territories or in Compact of Free Association areas
  - Serves areas with Tribal populations of 60 percent or greater, are owned by a Tribal government, or are in a Substantially Underserved Trust Area.

The funding agency will offer both Project Loans and System Loans as described below:

Project Loans: This loan type applies to applicants that are not eligible for, or have decided not to pursue, a System Loan. Project Loans will be used to finance specific eligible projects where the award will be secured through a senior security interest on the project's assets and the revenues generated from the project's assets. A project may also require the awardee to commit additional cash reserves. Further, to the extent that a PPA is in place with respect to the project's assets, the awardee must collaterally assign the PPA to the funding agency as security, with the Off-Taker's consent to such assignment. The funding agency may consider tax credits or direct payments in lieu of tax credits the awardee receives under the Internal Revenue Code

when calculating equity investment requirements for an applicant's proposed Project. Further, the funding agency may utilize its authority under Section 306F of the RE Act and finance up to 100 percent of the cost of projects benefiting substantially underserved trust areas. Project award funds will only be released after commercial operation of the project has commenced and the funding agency has confirmed that the awardee has satisfied all other conditions specified in the award.

System Loans: These loans are only available to currently operating electric utilities. An applicant will provide, if it has not already provided, the funding agency with a perfected senior lien on all of its existing assets, both real and personal, including intangible personal property, as well as after-acquired property. Applicants which are generation and transmission suppliers may be permitted to secure a System Loan through an indenture, provided that the funding agency is granted a perfected senior security interest in all its assets by the trustee. System Loans may finance 100 percent of the project costs included in an application. At the discretion of the funding agency, System Loan funds can be released to finance projects for costs incurred during construction of the facilities; however, loan forgiveness will not occur until the project has been completed and the funding agency has confirmed that the awardee has satisfied all other conditions specified in the award.

The period of performance will be five years from the date of environmental clearance, but no later than September 30, 2031. The anticipated start date will be from September 2023 to December 2025.

Matching and Cost Share

Project loan awardees will be required to provide at least 25 percent of the project's total capitalized cost in the form of cash or equity investments for project loans. System loans will not require a match.

Contact Information

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https://www.rd.usda.gov/programs-services/electric-programs/powering-affordable-clean-energy-pace-program

FEDERAL
GRANT PROFILE

Department: U.S. Department of Agriculture
Agency: Office of Rural Development

FY 2023 Electric Infrastructure Loan and Loan Guarantee Program

Grant Overview

The electric program makes loans and loan guarantees to maintain and improve electric infrastructure in rural communities nationwide in order to increase economic opportunities and quality of life. The loans and loan guarantees finance the construction of electric distribution, transmission, and generation facilities, including system improvements to improve electric service in rural areas, as well as demand side management, smart grid, energy efficiency and conservation programs, and on-grid and off-grid renewable energy systems. Eligible applicants are state and local government entities, federally recognized tribes, nonprofits, and for-profit businesses.

Program History

	Total Funding	# of Awards
2022	$2.7 billion	64

Key Information and Tips

Total Funding: Unspecified
Match: Not required
Proposal due: Rolling

- Projects must serve qualified rural areas and applicants should contact the appropriate general field representative to confirm eligibility

https://www.rd.usda.gov/programs-services/electric-infrastructure-loan-loan-guarantee-program

Awardee Profile

C & L Electric Cooperative Corporation

LOAN AMOUNT: $45,235,000
YEAR: 2018

This Rural Development investment will be used to connect 2,964 consumers and build and improve 331 miles of line. This loan includes various smart grid projects in the amount of $11,467,700 including the installation of 273 miles of fiber cable for the backbone communications network

Department: U.S. Department of Agriculture
Agency: Office of Rural Development

FY 2023 Electric Infrastructure Loan and Loan Guarantee Program

Detailed Summary

The purpose of this program is to maintain and improve electric infrastructure in rural communities nationwide in order to increase economic opportunities and quality of life. This program provides investment capital in the form of insured loans and loan guarantees for the construction of electric distribution, transmission, and generation facilities, including system improvements and replacement required to furnish and improve electric service in rural areas, as well as demand-side management, energy conservation programs, and on-grid and off-grid renewable energy systems.

Funds may be used to finance:

- Maintenance
- Upgrades
- Expansion
- Replacement of distribution, subtransmission, and headquarters facilities
- Energy efficiency
- Renewable energy systems

The program may also provide hardship loans for qualified applicants in rural areas that are either economically distressed or recovering from an unavoidable event, such as a natural disaster.

All facilities receiving financing through this program must be used for public purposes.

Applicant Eligibility

Eligible applicants are state and local government entities, federally recognized tribes, nonprofits, and for-profit businesses. Eligible nonprofits include cooperatives and limited dividend or mutual associations.

Projects must serve qualified rural areas. Applicants should contact the appropriate general field representative (GFR) of the funding agency for their region to determine whether the proposed service area of the project qualifies as rural.

Applicants must have the legal authority to provide, construct, operate, and maintain the proposed facilities or services. Partnerships with federal, state, local, private, and nonprofit entities are encouraged.

Funding

In FY 2023, an unspecified amount of funding is available to support insured loans and loan guarantees through this program.

Loan Guarantees up to 100% allow the Federal Financing Bank (FFB) 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.

The interest rate for Treasury-rate loans and loan guarantees will be fixed at the time of each advance, based on rates established daily by the U.S. Treasury plus 1/8 of 1 percent. The interest rate of hardship loans will be fixed at 5 percent for up to 35 years.

In general, loan repayments may not exceed the useful life of the facility being financed, with a maximum repayment schedule of 35 years. Power supply borrowers will be limited by the terms of their wholesale power contracts.

Match and Cost Sharing

There are no stated matching requirements for this program.

Contact Information

Reach out to your General Field Representative in order to begin the application process.

Program Staff
(202) 720-0848

https://www.rd.usda.gov/programs-services/electric-infrastructure-loan-loan-guarantee-program

FEDERAL
GRANT PROFILE

Department: U.S. Department of Agriculture

Agency: Rural Development

FY 2023 Rural Energy for America Program (REAP): Energy Audits (EA) and Renewable Energy Development Assistance (REDA) Grants

Grant Overview

This program assists small rural businesses and agricultural producers by conducting and promoting energy audits and providing renewable energy development assistance. Eligible applicants are state and local governments, federally recognized Indian tribes, institutions of higher education, rural electric cooperatives, public power utilities, instrumentalities of state, local, or tribal governments and resource conservation and development councils.

Program History

Year	Total REAP Funding	# of Awards
2022	$1.1 million	12

Key Information

Total Funding: $50 million
Award Range: Up to $100,000
Match: 25 percent
Solicitation date: December 16, 2022
Proposal due: February 1, 2023

- Funding through this program is also available for the Renewable Energy Systems and Energy Efficiency Improvement Assistance Program

https://www.rd.usda.gov/programs-services/rural-energy-america-program-energy-audit-renewable-energy-development-assistance

Awardee Profile
University of Alabama
Tuscaloosa, AL

Year: 2022
Amount: $100,000

University of Alabama assist farmers, ranchers, and rural small businesses statewide in developing renewable energy system improvements to their operations. The university will use this investment to conduct approximately 26 renewable energy site assessments or renewable energy technical assistance projects for rural small businesses and agricultural producers across Alabama. Additional funding includes an applicant contribution of $20,327. This project will benefit 4,779,736 rural residents across Alabama.

Department: U.S. Department of Agriculture

Agency: Rural Development

FY 2023 Rural Energy for America Program (REAP): Energy Audits (EA) and Renewable Energy Development Assistance (REDA) Grants

Detailed Summary

The purpose of this program is to strengthen American energy independence by increasing the private sector supply of renewable energy and decreasing the demand for energy through energy-efficiency improvements. Funding will support eligible organizations to establish programs to assist rural small businesses and agricultural producers by conducting and promoting energy audits (EAs) and providing renewable energy development assistance (REDA), including renewable energy technical assistance and renewable energy site assessments. Additional consideration will be given to projects that meet one or more of the following criteria:

- Have a service area that consists of more than a single county or municipality
- Serve 11 or more ultimate recipients

Projects must serve agricultural producers and rural small businesses. Rural small businesses must be located in eligible rural areas; however, this restriction does not apply to agricultural producers. For the purposes of this program, rural areas are defined as areas outside of cities and towns with a population of greater than 50,000 inhabitants and the urbanized areas contiguous and adjacent to these cities or towns.

Applicant Eligibility

Eligible applicants are states, local governments, federally recognized Indian tribes, institutions of higher education, rural electric cooperatives, public power utilities, instrumentalities of state, tribal, and local governments, and resource conservation and development councils.

Applicants must assist agricultural producers and rural small businesses. Rural small businesses must be located in eligible rural areas; however, this restriction does not apply to agricultural producers. For the purposes of this program, rural areas are defined as areas outside of cities and towns with a population of greater than 50,000 inhabitants and the urbanized areas of those cities or towns. A map of eligible rural areas can be found online at eligibility.sc.egov.usda.gov.

Projects that have a service area that consists of more than a single county or municipality will be awarded additional points during the application evaluation process.

In addition, applicants that demonstrate two years or more of experience in providing proposed energy audit (EA) or renewable energy development assistance (REDA) activities will be awarded additional points during the application evaluation process.

An applicant may submit no more than one energy audit award application and one renewable energy development assistance award application for the current funding cycle, and separate applications must be submitted for each type of funding. Applications for a combination of energy audit awards and renewable energy development assistance awards will not be accepted.

Funding

An unspecified amount of funding is available to support awards of up to $100,000 each through this program.

The funding agency will determine, based on the applicable departmental regulations, whether awarded funds will be provided on an advance or reimbursement basis.

Applicants for energy audit awards must require the agricultural producer or rural small business receiving the audit to pay at least 25 percent of the cost of audits.

Applicants should detail any additional matching contributions for the project in the application. Applicants that provide at least 5 percent of the total project cost via matching contributions will be awarded additional points during the application evaluation process.

Project income must be used to further the objectives of the project or energy audit services offered. Administrative expenses are limited to 5 percent of the award amount.

Contact Information

Questions should be directed to the appropriate State Rural Development Energy Coordinator listed here.

https://www.rd.usda.gov/programs-services/rural-energy-america-program-energy-audit-renewable-energy-development-assistance

FEDERAL
GRANT PROFILE

Department: U.S. Department of Agriculture
Agency: Rural Development

FY 2022 Rural Energy for America Program (REAP) Energy Audits and Renewable Energy Development Assistance Grants

Grant Overview

This program assists small rural businesses and agricultural producers by conducting and promoting energy audits and providing renewable energy development assistance. Eligible applicants are states, local governments, federally recognized Indian tribes, land-grant colleges as well as other universities and institutions of higher education, rural electric cooperatives, public power utilities, and resource conservation and development councils.

Program History

A program history could not be found.

Key Information and Tips

Total Funding: Unspecified
Award Range: Up to $100,000
Match: Varies
Solicitation date: April 22, 2022
Proposal due: Rolling

- Applications for this program are accepted year-round through the local office
- Funds cannot be used for construction-related activities, purchasing and leasing of equipment, debt service payments

More information can be found here.

Tips

- For the purposes of this program, rural areas are defined as areas outside of cities and towns with a population of greater than 50,000 inhabitants and the urbanized areas of those cities and towns
- An applicant may submit no more than one energy audit award application and one renewable energy development assistance award application in the same funding cycle

Department: U.S. Department of Agriculture
Agency: Rural Development

FY 2022 Rural Energy for America Program (REAP):Energy Audits and Renewable Energy Development Assistance Grants

Detailed Summary

The purpose of this program is to strengthen American energy independence by increasing the private sector supply of renewable energy and decreasing the demand for energy through energy-efficiency improvements. Funding will support eligible organizations to establish programs to assist rural small businesses and agricultural producers by conducting and promoting energy audits (EAs) and providing renewable energy development assistance (REDA), including renewable energy technical assistance and renewable energy site assessments. Eligible project costs may include:

- Salaries directly related to the project
- Travel expenses directly related to conducting energy audits or renewable energy development assistance
- Office supplies.
- Administrative expenses, up to a maximum of 5 percent of the grant, which include but are not limited to utilities, office space, operation expenses of office and other project related equipment

Assistance through this program will consist of:

- Energy audits
- Renewable energy technical assistance
- Renewable energy site assessments

Additional consideration will be given to projects that meet one or more of the following criteria:

- Have a service area that consists of more than a single county or municipality
- Serve 11 or more ultimate recipients

Projects must serve rural areas, defined as areas outside of cities and towns with a population of greater than 50,000 inhabitants and the urbanized areas of those cities or towns.

Applicant Eligibility

Eligible applicants are states, local governments, federally recognized Indian tribes, land-grant colleges as well as other universities and institutions of higher education, rural electric cooperatives, public power utilities, and resource conservation and development councils.

Projects must assist agricultural producers and rural small businesses. Rural small businesses must be located in eligible rural areas. For the purposes of this program, rural areas are defined as areas outside

of cities and towns with a population of greater than 50,000 inhabitants and the urbanized areas of those cities or towns. A map of eligible rural areas can be found online at eligibility.sc.egov.usda.gov.

Applicants that demonstrate two years or more of experience in providing proposed EA or REDA activities will be awarded additional points during the application evaluation process.

An applicant may submit no more than one EA award application and one REDA award application for the current funding cycle, and separate applications must be submitted for each type of funding. Applications for a combination of energy audit awards and renewable energy development assistance awards will not be accepted.

Funding

In FY 2023, an unspecified amount of funding is available to support awards of up to $100,000 through this program. The funding agency will determine, based on the applicable departmental regulations, whether awarded funds will be provided on an advance or reimbursement basis.

Applicants for EA awards must require the agricultural producer or rural small business receiving the audit to pay at least 25 percent of the cost of the audit. Applicants should detail any additional matching contributions for the project in the application. Applicants that provide at least 5 percent of the total project cost via matching contributions will be awarded additional points during the application evaluation process.

The project period is 24 months.

Contact Information

Questions should be directed to the appropriate state Rural Development energy coordinator here.

https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-energy-audit-renewable-energy-development-assistance-grants#:~:text=What%20are%20the%20grant%20terms,Federal%20fiscal%20year%20is%20%24100%2C000

FEDERAL
GRANT PROFILE

Department: U.S. Department of Agriculture
Agency: Rural Business Cooperative Service

FY 2023 Rural Energy for America (REAP) Technical Assistance Grant (TAG) Program

Grant Overview

The purpose of this program is to enable applicants to provide technical assistance to agricultural producers and rural small businesses applying to the funding agency's Rural Energy for America Program (REAP). Eligible applicants are units of state, tribal, or local government; land-grant colleges and universities and other institutions of higher education; electric cooperatives; public power entities; investor-owned utilities; councils, as defined under the resource conservation and development program; nonprofit entities; for-profit entities; sole proprietor businesses; and other business entities.

Program History

This is a new program funded under the Inflation Reduction Act.

Key Information

Total Funding: $21,250,000
Award Range: $100,000 - $500,000
Match: Not required
Solicitation date: July 14, 2023
Application due: August 15, 2023

https://www.rd.usda.gov/inflation-reduction-act/rural-energy-america-program-reap

Tips

- Priority will be given to applicants assisting distressed or disadvantaged communities
- Priority will also be given to applicants pursuing projects using underutilized technologies or seeking grants under $20,000
- Detailed information regarding the REAP program can be found here

Department: U.S. Department of Agriculture
Agency: Rural Business Cooperative Service

FY 2023 Rural Energy for America (REAP) Technical Assistance Grant (TAG) Program

Detailed Summary

The purpose of this program is to enable applicants to provide technical assistance to agricultural producers and rural small businesses applying to the funding agency's Rural Energy for America Program (REAP), with priority for applicants assisting distressed or disadvantaged communities and for applicants pursuing projects using underutilized technologies or seeking grants under $20,000.

Eligible project activities include:

- Assisting agricultural producers or rural small businesses to apply for assistance under REAP for energy efficiency improvements or renewable energy systems
- Providing information on how to improve the energy efficiency of the operations and use renewable energy technologies and resources in their operations
- Conducting and promoting energy assessments and audits
- Preparing technical reports
- Assisting with filing for System Award Management (SAM) and Unique Entity Identifier (UEI) registrations
- Assisting with completing a REAP grant application
- Assisting with planning construction and development
- Assisting with completion of environmental reports and/or documentation required for the submission of applications

Funds may be used for salaries, travel expenses, office supplies, and limited project administration costs.

Applicant Eligibility

Eligible applicants are units of state, tribal, or local government; land-grant colleges and universities and other institutions of higher education; electric cooperatives; public power entities; investor-owned utilities; councils, as defined under the resource conservation and development program; nonprofit entities; for-profit entities; sole proprietor businesses; and other business entities.

Applicants must have sufficient capacity to perform the activities proposed in their applications. In addition, applicants must have the legal authority necessary to apply for funds and carry out projects.

Applicants applying for multiple states must submit separate applications to each applicable funding agency state office. Applicants applying in multiple states are encouraged to contact all funding agency state offices where they intend to apply for instructions in completing an application prior to the application submission deadline.

Funding

In FY 2023, a total of $21.25 million is available to support an unspecified number of awards ranging from $100,000 to $500,000 through this program.

Awards are expected to be made before September 30, 2023.

The project period will be up to three years. Applicants may reapply for continuation awards upon the conclusion of the project period.

Matching and Cost Sharing

Matching funds are not required for this program.

Contact Information

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https://www.rd.usda.gov/inflation-reduction-act/rural-energy-america-program-reap

FEDERAL
GRANT PROFILE

Department: U.S. Department of Agriculture
Agency: Rural Business Cooperative Service

FY 2023/2024 REAP: Renewable Energy Systems and Energy Efficiency Improvement Guaranteed Loans and Grants in California

Grant Overview

This program provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements. Agricultural producers may also apply for new energy efficient equipment and new system loans for agricultural production and processing. Eligible applicants for grants are agricultural producers with at least 50 percent of gross income coming from agricultural operations and small businesses. Eligible borrowers for loan guarantees include rural small businesses and agricultural producers. A map of eligible rural areas can be found here.

Program History

There is no available history for this program.

Key Information

Total Funding: Up to $145,000,000
Award Range: Varies
Match: Varies
Solicitation date: Unspecified
Application due: December 31, 2023, March 31, 2024, June 30, 2024, and September 30, 2024

https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-renewable-energy-systems-energy-efficiency-improvement-guaranteed-loans/ca

USDA

Tips

- Projects must be located in rural areas with populations of 50,000 residents or less.
- Because citations and other information may be subject to change, please always consult the program regulations listed in the section titled “What law governs this program?” under the program’s overview. You may also contact your local office for assistance.

Department: U.S. Department of Agriculture
Agency: Rural Business Cooperative Service

FY 2023/2024 REAP: Renewable Energy Systems and Energy Efficiency Improvement Guaranteed Loans and Grants in California

Detailed Summary

The purpose of this program is to provide guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements. Agricultural producers may also apply for new energy efficient equipment and new system loans for agricultural production and processing.

Funding will support renewable energy systems, such as:

- Biomass, such as biodiesel and ethanol, anaerobic digesters, and solid fuels
- Geothermal for electric generation or direct use
- Hydropower below 30 megawatts
- Hydrogen
- Small and large wind generation
- Small and large solar generation
- Ocean, including tidal, current, and thermal, generation

Funding will also support the purchase, installation, and construction of energy efficiency improvements, such as:

- High-efficiency heating, ventilation, and air conditioning systems (HVAC)
- Insulation
- Lighting
- Cooling or refrigeration units
- Doors and windows
- Electric, solar, or gravity pumps for sprinkler pivots
- Switching from a diesel to electric irrigation motor
- Replacement of energy-inefficient equipment

All projects must have technical merit and utilize commercially available technology and will require an environmental review prior to award or construction.

Applicant Eligibility

Eligible applicants for grants are agricultural producers with at least 50 percent of gross income coming from agricultural operations and small businesses. Small businesses must be located in eligible rural areas and one of the following:

- Private for-profit entity (sole Proprietorship, Partnership, or Corporation)
- A Cooperative [including those qualified under Section 501(c)(12) of IRS Code]
- An electric utility (including a Tribal or governmental electric utility) that provides service to rural consumers and operates independent of direct government control)
- A Tribal corporation or other Tribal business entities that are chartered under Section 17 of the Indian Reorganization Act (25 USC 477) or have similar structures and relationships with their Tribal entity without regard to the resources of the Tribal government.
- Must meet the Small Business Administration size standards in accordance with 13 CFR 121.

Eligible borrowers for loan guarantees include rural small businesses and agricultural producers. Individual borrowers must be citizens of the United States or reside in the U.S. after being legally admitted for permanent residence. Private-entity borrowers must demonstrate that loan funds will remain in the United States.

Projects must be located in rural areas with populations of 50,000 residents or less. A map of eligible rural areas can be found here.

Applicants for guaranteed loans must meet the following requirements:

- Own or be the prospective owner of the project
- Own or control the site for the project at the time of application
- Have available, or be able to demonstrate, at the time of application satisfactory sources of revenue in an amount sufficient to provide for the operation, management, maintenance, and any debt service of the project for the term of the loan
- Have the legal authority necessary to apply for and carry out the purpose of the guaranteed loan

Funding

In FY 2023 and 2024, up to $145 million is available to support up to 700 loan and grant awards through the Rural Energy for America Program (REAP).

Awards provided through this program will be in the form of grants, guaranteed loans, or a combination of grants and guaranteed loans, as follows:

- Loan guarantees on loans up to 75 percent of total eligible project costs
- Grants for up to 50 percent of total eligible project costs
- Combinations of grants and guaranteed loans for up to 75 percent of the total eligible project costs

Grant terms are as follows:

- $2,500 to $1,000,000 for Renewable Energy System Grants
- $1,500 to $500,000 for Energy Efficiency Grants

Energy efficiency projects require an energy audit or assessment.

Matching and Cost Sharing

Applicants must provide matching funds if applying for a grant only.

50% federal grant share is limited to projects that meet one of the following:

- Project is a Renewable Energy System (RES), or RES retrofit that produces zero greenhouse gas emissions (Carbon Dioxide, Methane, Nitrous Oxide, or Fluorinated Gases) at the project level.
- Project is located in an Energy Community as defined in 26 USC 45(b)(11)(B) and determined by the Department of the Treasury.
- Project is an Energy Efficiency Improvement (EEI).
- Projects proposed from an eligible Tribal Corporation or other Tribal Business entity (including agriculture operations) as described in 7 CFR part 4280.

All other projects are limited to 25% federal grant share.

Applicants must provide at least 25 percent of the project cost if applying for a loan.

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https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-renewable-energy-systems-energy-efficiency-improvement-guaranteed-loans/ca

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Wind Energy Technologies Office

FY 2023 Bipartisan Infrastructure Law (BIL): Address Key Deployment Challenges for Offshore, Land-Based, and Distributed Wind

Grant Overview

This program will enable the innovations needed to advance U.S. wind systems, reduce the cost of electricity, and accelerate the deployment of wind power, maximize the benefits of the clean energy transition as the nation works to curb the climate crisis, empower workers, and advance environmental justice. Eligible applicants are local and state governments, nonprofits, for-profits, and institutions of higher education who are domestic entities.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $27.9 million
Award Range: Varies
Match: Varies
Proposal due: January 20, 2023 (Concept Papers), March 10, 2023 (Full Application)

https://eere-exchange.energy.gov/Default.aspx#Foaldac8901f4-e765-482b-9931-f425cb8e1fbd

Tips

- Teaming partnerships are highly recommended
- Projects are expected to advance diversity, equity, inclusion and accessibility, contribute to energy equity; and invest in America's workforce
- Applicants are required to submit a concept paper prior to a full application

Department: U.S. Department of Energy
Agency: Wind Energy Technologies Office

FY 2023 Bipartisan Infrastructure Law (BIL): Address Key Deployment Challenges for Offshore, Land-Based, and Distributed Wind

Detailed Summary

The purpose of this program is to enable the innovations needed to advance U.S. wind systems, reduce the cost of electricity, and accelerate the deployment of wind power, maximize the benefits of the clean energy transition as the nation works to curb the climate crisis, empower workers, and advance environmental justice. This program consists of four separate topic areas:

Topic Area 1: High Voltage Direct Current (HVDC) for Offshore Wind: The HVDC Topic Area addresses gaps in HVDC standards and benchmark systems for offshore wind, multi-terminal HVDC controls and functional requirements, and curriculum development for education and workforce training. Addressing these gaps is expected to facilitate development of HVDC transmission, which in turn will enhance deployment of offshore wind. The funding agency is soliciting projects through three subtopic areas:

- Subtopic 1a: HVDC Standards and Benchmark System Development for Offshore Wind: The goals of this Subtopic Area are to establish vendor-neutral HVDC standards for new HVDC systems connecting offshore wind to the existing Alternative Current (AC) or Direct Current (DC) grid; and to establish at least one HVDC benchmark system and relevant standardized scenarios, conditions, and reference results that can be used for future offshore wind HVDC studies and research.
- Subtopic 1b: Multi-Terminal HVDC Controls and Functional Requirements: This Subtopic Area intends to leverage international experiences and address certain HVDC deployment barriers including Muti-terminal HVDC (MTDC) by developing and validating innovative controls that enable reliable operation of multi-terminal HVDC grid; and establishing basic functional requirements of HVDC converters at the AC interfaces and DC interfaces to enable multi-vendor interoperability of HVDC converters with an existing AC or DC grid and enable DC grid expansion. Proposed projects must:
    - Develop HVDC converter controls that respond to a central grid controller, or automatically respond to local measurements for reliable grid operation of both AC and MTDC systems
    - Include verification of the effectiveness of the controls through simulation or emulation in terms of:
        - Operation of a hybrid AC/DC system and coordination between the AC and DC sides to ensure power delivery, power quality, and potentially provide grid forming functionality
        - Transient and dynamic performance during large disturbances
    - Identify basic functional requirements at AC and DC interfaces that include but are not limited to:
        - Control modes, including potential grid forming controls
        - Dynamic performance
        - Signals exchanged
        - Start-up and shutdown procedures

        - Protection strategies, and
        - Fault-ride-through capability
- Subtopic 1c: HVDC Curriculum Development for Education and Workforce Training: This Subtopic Area seeks to identify HVDC workforce gaps and provide educational materials to fill those gaps to support the future workforce to integrate HVDC technology reliably into the grid, with an emphasis on offshore wind integration. A successful proposal will develop modules that can be incorporated into degree and certificate programs and will provide access to outside academic institution (for example, an HVDC educational center where participants can take modules without getting a degree). A successful proposal will also offer a package of modular courses (these can be developed by different entities). The following is a list of potential curriculum topics, but other creative ideas are welcome based on identified training gaps and industry needs:
    - Overview of HVDC technology and applications, including economics of HVDC in planning and trade-offs between Line Commutated Convertors (LCC) and Voltage Source Convertors (VSC) technologies.
    - HVDC design process
    - Interactions between HVDC and the AC grid
    - Performing studies including HVDC (electromagnetic transient, load flow, short-circuit, transient stability)
    - Converter station and back-to-back (B2B) design and operational considerations. Power electronic circuits and rectifier circuits. Multilevel modular converters
    - Wind energy conversion systems and power electronics.
    - Transmission lines and submarine cables design and operational considerations
    - DC grid Protection including multi-terminal protection and protection of the conversions from DC to AC.
    - Controls
    - Offshore specific considerations including networks
    - Physical and cyber security considerations in HVDC systems
    - Use of the benchmark system developed in Subtopic 1a.

Topic Area 2: Advancing Deployment of Distributed (ADD) Wind: Through this topic, the funding agency envisions seeding collaboration between the distributed wind industry, local and/or state governments, utilities, and other important stakeholders with the goals of 1) addressing challenges in particular locations, 2) contributing to the development of a zoning, planning and permitting framework that jurisdictions can use more broadly when undertaking DW planning and permitting reform, and 3) developing metrics for measuring the impacts of planning and permitting reform and support communities in demonstrating DW market development readiness. In achieving these goals, ADD Wind projects should result in a growing toolkit for DW planning, zoning, and permitting applicable to multiple scales of DW technology that can be implemented broadly in locations across the country. Projects deliverables should:

- Address key zoning and permitting challenges related to DW at multiple scales of technology, including:
    - Identify specific permitting opportunities or challenges facing the deployment of distributed wind and specific solutions to overcome them
    - Specify the types and scales of DW applications (e.g., multi-MW turbines at industrial facilities) they propose to address and provide a compelling justification as to why their focus is appropriate, if not proposing to address the full range of DW types and scales

    - Make a compelling case that the proposed solution will address the applicant identified opportunity or challenge
    - Establish clear project performance metrics to measure success, for example cost of permitting, time associated with permitting, or number of local governments reached
- Show the commitment of relevant local and/or state government and other important stakeholders to address those challenges
- Show a clear pathway to scaling the proposed zoning and permitting solutions beyond the targeted or participating locations
- Provide mechanisms such as technical assistance to support adoption and implementation of proposed solutions
- Demonstrate that the solution will be replicable and broadly applicable
- If the project has a regional focus, make a compelling case that the region has favorable wind and economic conditions for DW deployment and market development
- Demonstrate that the solution will generate clear benefits for disadvantaged communities
- Provide a compelling plan on how the solution will be disseminated and adopted.

Topic Area 3: Offshore Wind Energy Social Science Research: This topic area seeks to better understand the positive and negative effects of expanded offshore wind development on affected communities' workforce, economies, and relationships to the marine environment and other resources, and to help communities build capacity to participate in the offshore wind development process. The funding agency is particularly interested in projects that consider cumulative impacts of offshore wind development–including but not limited to impacts of multiple wind farms in one geography and of one wind farm across multiple parts of a local economy; include community members and community organizations as full members of the project team; and include participatory methods such as Community-Based Participatory Research methods The funding agency is soliciting projects in two subtopic areas:

- Subtopic 3a: Research on Community Impacts of Offshore Wind Development: This subtopic area aims to define impacts (positive and negative) of offshore wind development on communities and assess the magnitude and reach (temporal and geographic) of those impacts over time and through multiple phases of offshore wind development, from planning to construction to operations. Proposals should describe practical and broad implications of the proposed research. Cross-sectional approaches, mixed methods strategies (e.g. surveys, case studies, focus groups, and/or expert elicitations), and participatory approaches are encouraged where appropriate
- Subtopic 3b: Capacity Building for Community Participation in Offshore Wind: This subtopic area focuses on bridging communities with the full offshore wind development process through community-driven, collaborative capacity building. Potential activities could include offshore wind education, structured dialogue on issues of concern, peer-to-peer learning, and the creation of tools and resources that communities need to engage in offshore wind development more fully. The funding agency is particularly interested in proposals that will develop sustainable communities of practice or design tools and/or resources in partnership with communities that target needs expressed by community members.

Topic Area 4: Bat Deterrent Technology Development: This topic area supports the advancement of bat deterrent technologies to expand the toolbox of effective, reliable, and predictable measures that reduce impacts to bats and enable cost-effective and sustainable wind-wildlife coexistence. Particular interests under this Topic Area are:

- Targeted behavioral research studying deterrent stimuli on bats: The objectives are to 1) address knowledge gaps related to how bat species of concern react and respond to various stimuli, and 2) develop novel or updated deterrent stimuli recommendations for field testing at a wind energy facility.
- In situ bat deterrent testing at one or more commercial scale wind energy facilities: The objectives of in situ bat deterrent testing at one or more commercial scale wind energy facilities are to 1) validate the effectiveness of novel deterrent stimuli/signals or novel deterrent configurations across one or more operational wind energy facilities, and 2) understand how bats behave around deterrents installed at a commercial wind energy facility.
- Hardware Advancement: The objective of hardware advancement is to advance bat deterrent technology hardware, software, communications, and installation infrastructure to improve performance, reliability, and compatibility with wind turbines.

The following types of applications will be deemed nonresponsive and will not be reviewed or considered under specific Topic Areas or Subtopic Areas:

- Topic Area 1, Subtopic 1a:
  - Applications that propose standards that are not related to offshore wind development
  - Applications that propose standards work that is already being developed
- Topic Area 1, Subtopic 1b:
  - Applications that propose hardware design of HVDC converters.
  - Applications that propose vendor specific controls. •
  - Applications that propose functional requirements specifically targeting LCC technologies.
- Topic Area 1, Subtopic 1c:
  - Applications that propose individual courses.
  - Applications that propose in-house training that cannot be offered to the industry as a whole
- Topic Area 3, Subtopic 3b:
  - Applications with participatory Geographic Information System (GIS) projects
- Topic Area 4:
  - Applications for research projects focused solely on curtailment
  - Applications for research projects not specific to bats

Projects funded under this program are expected to:

- Advance diversity, equity, inclusion and accessibility
- Contribute to energy equity; and
- Invest in America's workforce

Applicant Eligibility

Eligible applicants are local and state governments, nonprofits, for-profits, and institutions of higher education who are domestic entities. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States. Federal agencies and instrumentalities (other than DOE) are eligible to participate as a subrecipient but are not eligible to apply as a prime recipient.

Under Topic Area 1 (all subtopics), Topic Area 3 (all subtopics), and Topic Area 4: Department of Energy Funding Agreements with Federally Funded Research and Development Centers are eligible to apply for funding as a prime recipient and participate as a subrecipient. Under Topic Area 2: Department of Energy Funding Agreements with Federally Funded Research and Development Centers are eligible to participate as a subrecipient but are not eligible to apply for funding as a prime recipient.

Funding

In FY 2023, approximately $27.9 million is available to support between 18 and 35 awards ranging from $500,000-$8 million. Specific funding amounts for each topic area is as follows:

Topic Area 1: High-Voltage Direct Current (HVDC) for Offshore Wind: Under this topic area an estimated $9.7 million is available to support between 2-6 awards. Funding for each subtopic area is as follows:

- **Subtopic 1a**: This subtopic area will support approximately 1-2 awards ranging from $1 million-$2 million. The minimum cost-share requirement is 20 percent of the total project's costs. The project period is 36 months.
- **Subtopic 1b**: This subtopic area will support approximately 2-4 awards ranging from $1 million-$3 million. The minimum cost-share requirement is 20 percent of the total project's costs. The project period is 36 months.
- **Subtopic 1c**: This subtopic area will support approximately 1 award ranging from $500,000-$700,000. There is no cost-share requirement for this subtopic area. The project period is 36 months.

Topic Area 2: Advancing Deployment of Distributed (ADD) Wind: Under this topic area an estimated $3.3 million is available to support between 2-4 awards ranging from $1 million-$2 million. The minimum cost-share requirement is 20 percent of the total project's costs. The project period is 24-36 months.

Topic Area 3: Offshore Wind Energy Social Science Research: Under this topic area an estimated $6.9 million is available to support between 4-8 awards ranging from $1 million-$2.5 million. Funding for each subtopic area is as follows:

- **Subtopic 3a**: This subtopic area will support approximately 2-4 awards ranging from $1 million-$2.5 million. The minimum cost-share requirement is 20 percent of the total project's costs. The project period is 60 months.
- **Subtopic 3b**: This subtopic area will support approximately 2-4 awards ranging from $200,000-$500,000. There is no cost-share requirement for this subtopic area. The project period is 18-36 months

Topic Area 4: Bat Deterrent Technology Development: Under this topic area an estimated $8 million is available to support between 3-8 awards ranging from $750,000-$2.75 million. The minimum cost-share requirement is 20 percent of the total project's costs. The project period is 36-72 months.

Contact Information

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https://eere-exchange.energy.gov/Default.aspx#FoaIdac8901f4-e765-482b-9931-f425cb8e1fbd

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs (SCEP)

FY 2023 Bipartisan Infrastructure Law (BIL) Weatherization Program Assistance (WAP) Enhancement & Innovation

Grant Overview

The purpose of this program is to expand the impact of the funding agency's existing residential weatherization programs by utilizing leveraged resources and enhanced community partnerships to perform deep energy retrofits of low-income residential buildings and empower local community representation within the energy workforce. The funding agency seeks proposals that drive innovative approaches to program coordination and service delivery, while fostering the collaboration of dynamic and diverse teams. Eligible applicants are domestic entities including state, local, and tribal governments who are existing WAP grantees and subgrantees, and 501(c)(3) nonprofit organizations.

Program History

There is no available award history for this program.

Key Information

Total Funding: $25 million
Award Range: $500,000 - $2 million
Match: There is no match or cost share requirement
Solicitation Date: June 27, 2023
Proposal due: August 31, 2023 (Concept Papers), January 5, 2024 (Full Applications)

https://www.energy.gov/scep/wap/weatherization-assistance-program

Tips

- Applicants are strongly encouraged to submit their Concept Papers, Full Applications, and Replies to Reviewer Comments at least 48 hours in advance of the submission deadline.
- Applicants may submit a full application regardless of whether they are encouraged or discouraged to do so.
- Applicants are encouraged to use awarded funds in conjunction with DOE WAP formula awards and other funding sources.

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs (SCEP)

FY 2023 Bipartisan Infrastructure Law (BIL) Weatherization Program Assistance (WAP) Enhancement & Innovation

Detailed Summary

The purpose of this program is to expand the impact of the funding agency's existing residential weatherization programs by utilizing leveraged resources and enhanced community partnerships to perform deep energy retrofits of low-income residential buildings and empower local community representation within the energy workforce. The funding agency seeks proposals that drive innovative approaches to program coordination and service delivery, while fostering the collaboration of dynamic and diverse teams.

DOE WAP addresses the needs of low-income housing in three topic areas: 1) multifamily housing; 2) single family and manufactured housing; and 3) workforce development. Within the three topic areas, applicants will address any of the following activities and initiatives including, but not limited to, major home repairs, decarbonization and renewable energy, enhanced indoor air quality and healthy homes, and new methods to streamline DOE WAP implementation.

Topic Area 1: Multifamily Housing

This Topic Area aims to increase the number of multifamily buildings receiving comprehensive, deep energy retrofits by making homes weatherization and electrification-ready, while also ensuring healthy indoor environments and protecting against displacement of low-income residents.

For the purposes of this program, multifamily buildings are defined as rental or owner-occupied buildings with 5 or more units. DOE policy allows for treatment of the full building as long as 66% of the units are occupied by income-eligible households or if the building is assisted by the U.S. Department of Housing and Urban Development (HUD) and is eligible. Benefits from weatherization services must accrue primarily to the low-income households occupying the buildings and protect against displacement of low-income households.

Eligible activities include but are not limited to:

- Developing protocols for identifying and preparing homes to become all-electric or electrification-ready, while also ensuring reduction in household energy burden;
- Developing innovative methods for braiding DOE awarded funds with leveraged resources to execute comprehensive deep energy retrofits, including enhanced health and safety measures, energy efficiency technologies, and renewable energy systems;
- Developing innovative methods for braiding DOE awarded funds with leveraged resources to address the causes of poverty and economic mobility for low-income households;

- Developing streamlined methods for identifying, marketing, confirming eligibility, and coordinating with prospective property owners to bring more multifamily buildings into the weatherization pipeline;
- Developing new methods and partnerships to shorten the timeframe for moving multifamily buildings through the retrofit process, from energy audit to completion and inspection; and
- Developing new scalable methods for incorporating non-energy benefits in the cost-effectiveness calculation performed during the pre-weatherization energy audit.

Topic Area 2: Single Family & Manufactured Housing

This Topic Area aims to increase the number of single family and manufactured housing buildings receiving comprehensive, deep energy retrofits by making homes weatherization and electrification-ready, while also ensuring healthy indoor environments.

Applications must describe how projects will increase the number of single family and/or manufactured houses weatherized and outline the enhancements proposed for DOE WAP retrofits, which may include but are not limited to:

- Developing protocols for identifying and preparing homes to become all-electric or electrification-ready, while also ensuring reductions in household energy burden;
- Developing innovative methods for braiding DOE awarded funds with leveraged resources to execute comprehensive deep energy retrofits, including enhanced health and safety measures, energy efficiency technologies, and renewable energy systems;
- Developing innovative methods for braiding DOE awarded funds with leveraged resources to address the causes of poverty and economic mobility for low-income households;
- Developing new scalable methods for incorporating non-energy benefits in the cost-effectiveness calculation performed during the pre-weatherization energy audit;
- Bringing previously unserved homes off deferral/waitlists and into the weatherization pipeline by addressing high-cost repairs and health and safety hazards; and
- Developing new methods for targeting services to high energy-burden households and coordinating outreach and marketing with community-based organizations, utility programs and other federally funded low-income programs.

Topic Area 3: Workforce Development

This Topic Area aims to develop and implement innovative approaches not commonly used in WAP to recruit, hire, train, retain and support employees in their career development who are individuals from the community in which assistance is provided and from underrepresented groups in the home energy performance and energy efficiency workforce such as: people of color, women, veterans, individuals with disabilities, opportunity youth, returning citizens, and individuals who are socioeconomically disadvantaged.

Training shall be aligned with WAP installation standards and program requirements including energy auditing guidelines, the Standard Work Specifications, and Quality Control Inspections.

- Training shall follow the Guidelines for Home Energy Professionals for Energy Auditor (EA) and Quality Control Inspector (QCI).
- Regarding the provision of comprehensive training, coordination with a registered apprenticeship or an IREC-accredited training provider is preferred but not required. Applicants must provide the

qualifications, accreditation, and expertise for proposed training providers when describing the project team.

Applicants may propose workforce development initiatives and activities including but not limited to:

- Addressing and enhancing outreach, recruitment, hiring, and retention processes;
- Shortening the administrative time from initial recruitment to field readiness of new hires;
- Building a pipeline of fully trained workers to higher-level careers within and beyond the WAP network;
- Developing registered job-readiness, pre-apprenticeship, and apprenticeship programs for individuals to gain necessary skills before entering the home performance or clean energy industries;
- Including support services that reduce barriers to employment of underrepresented populations (e.g., mentoring, counseling, coaching, stipends for trainees [wages, childcare, transportation]);
- Developing formal partnerships with workforce development organizations, labor organizations and unions, trade schools, technical colleges, local agencies, and community-based organizations); and
- Establishing partnerships with existing training providers, labor, and community-based organizations to improve and expand existing workforce training programs in lieu of building new training center facilities.

Training shall be aligned with WAP installation standards and program requirements including energy auditing guidelines, the Standard Work Specifications, and Quality Control Inspections:

- Training shall follow the Guidelines for Home Energy Professionals for Energy Auditor (EA) and Quality Control Inspector (QCI).
- Coordination with a registered apprenticeship or an IREC-accredited training provider is preferred but not required.

Across all three topic areas, funds may be used for any combination of the following eligible activities:

- Making homes weatherization- and electrification-ready
- Installing renewable energy systems and energy efficiency technologies
- Ensuring healthy indoor environments by improving indoor air quality, accessibility, and enhancing measures and resources provided under the WAP
- Best practices and monitoring, including:
    - Innovative outreach and education regarding the benefits and availability of weatherization assistance and other assistance available
    - Quality control of work performed
    - Data collection, measurement, and verification
    - Program monitoring, oversight, evaluation, and reporting
    - Labor, training, and technical assistance
-

Applicant Eligibility

Eligible applicants must be domestic entities including state, local, and tribal governments who are existing WAP grantees and subgrantees, and 501© nonprofits. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Applicants may submit only one concept paper and one full application, and the concept paper and full application must address no more than one of the topic areas.

Funding

In FY 2023, approximately $25 million in funding is available to support between 13 and 17 awards of $500,000 to $2 million. The maximum project period is three years (36 months).

The expected date for DOE selection notifications is May 31, 2024.

Matching and Cost Sharing

There are no matching and cost sharing requirements for this funding opportunity.

Contact Information

Program Staff
Weatherization.Innovation@hq.doe.gov

https://www.energy.gov/scep/wap/weatherization-assistance-program

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Bipartisan Infrastructure Law: Energy Improvement in Rural or Remote Areas

Grant Overview

This program will provide financial investment, technical assistance, and other resources to advance clean energy demonstrations and energy solutions in rural and remote areas that can be replicated and scaled. Under this program a rural or remote area is defined as having less than 10,000 inhabitants. Eligible applicants include domestic institutions of higher education, nonprofits, for-profit entities, Tribal Nations, state and local governments, incorporated consortia, and unincorporated consortia.

Program History

This program is newly created by the Bipartisan Infrastructure Law, also known as the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $300 million
Award Range: Between $5 million and $100 million
Match: Varies
Solicitation date: March 1, 2023
Due Date: April 14, 2023 (Concept Paper), June 28, 2023 (Full Application)

https://oced-exchange.energy.gov/Default.aspx#FoaId90cf93a3-9947-4d2e-b1fb-f98d7b30cdab

Tips

- The funding agency encourages projects that position rural or remote communities with energy solutions that are resilient to anticipated regional climate changes
- Projects must identify at least one area in the United States (including U.S. territories) with a population of not more than 10,000 inhabitants that benefits from the proposal
- Applicants must submit a Community Benefits Plan
- Applicants will have approximately 60 days from DOE's posting of the Concept Paper Encourage/Discourage notification to prepare and submit an Application

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Bipartisan Infrastructure Law: Energy Improvement in Rural or Remote Areas

Detailed Summary

The purpose of this program is to provide financial investment, technical assistance, and other resources to advance clean energy demonstrations and energy solutions in rural and remote areas that can be replicated and scaled. Under this program a rural or remote area is defined as having less than 10,000 inhabitants. The program intends to improve the cost, reliability, environmental impact, and climate and economic resilience of energy systems in rural or remote communities by funding clean energy projects with commercially viable or near-commercially viable technologies. Projects funded through this program will de-risk investment in the energy infrastructure of rural or remote communities. Funded projects will provide insights for future investments, such as deployment of similar technologies, use of similar business models, or adoption of similar community engagement best practices and clarify pathways to future good paying union jobs. The program aims to fund clean energy projects with three specific goals in mind:

- Delivering measurable benefits to energy customers in rural or remote areas by funding replicable energy projects that lower energy costs, improve energy access and resilience, and/or reduce environmental harm
- Demonstrating new rural or remote energy system models using climate-resilient technologies, business structures that promote economic resilience, new financing mechanisms, and/or new community engagement best practices
- Building clean energy knowledge, capacity, and self-reliance in rural America.

Projects funded under this program must meet at least one of the following resilient clean energy objectives:

- Improving overall cost-effectiveness of energy generation, transmission, or distribution systems
- Siting or upgrading transmission and distribution lines
- Reducing greenhouse gas emissions from energy generation in rural or remote areas
- Providing or modernizing electric generation facilities
- Developing microgrids
- Increasing energy efficiency

Quantitative goals that may be used to assess benefit to rural or remote communities include, but are not limited to:

- Improving grid performance, measured through positive changes in metrics such as a reduction in total prolonged outages, reduction in threshold major event days, improvement in system average interruption duration index (SAIDI) and/or system average interruption frequency index (SAIFI), or similar metrics demonstrating improved reliability as a result of the project

- Improving resilience, measured through positive changes in metrics such as restoration time, total number of event days, and/or average number of customers impacted by fewer disruption events, as a result of the project
- Reducing energy burden and poverty, measured through positive changes in metrics such as improvement in energy burden from a baseline established prior to project implementation, reduction in the number or frequency of customer arrearages, and/or the percent of customers receiving shut-off notices as a result of the project
- Increasing economic resilience, measured in ongoing permanent jobs created in the community, wages and benefits, and build-out of the supply chain or other induced economic effects
- Improving environmental performance from energy generation to support public health, measured through positive changes in metrics such as air quality index, total dissolved solids, streamflow, and aquifer hydraulic head as a result of the project
- Reducing greenhouse gas impact of energy system, measured by change in carbon dioxide-equivalent emissions as a result of the project, relative to an established baseline
- Improving energy access by reducing the number of homes currently without access to electricity.

Under this program projects will fall under one of the following two topic areas:

Topic Area 1: Community-Scale Demonstrations: Topic Area 1 solicits proposals to implement clean energy projects using clean energy technologies that advance resilience and provide other benefits to one or more rural or remote communities. Projects must demonstrate solutions to barriers that impede broad-scale adoption of clean energy solutions, such as:

- Limited market size
- Lack of a locally trained workforce
- Higher project costs due to geographic isolation or other location factors
- Gaps in existing infrastructure

Projects proposed under this topic area should be appropriately sized to meet community energy challenges. Eligible projects include microgrid designs and service models that enable cost-competitive deployment to a broad set of rural or remote communities; small hydropower systems providing community benefits; hybrid configurations of distributed energy resources that are operable during extreme weather events; and demonstrating operation of existing technologies to new climates.

Applicants to Topic Area 1 must propose to only use commercially available technologies. Proposals must demonstrate the technology is commercially available and identify a plan to procure the proposed technology.

Topic Area 2: Large-Scale Demonstrations: Topic Area 2 solicits proposals to implement large-scale clean energy demonstration projects that benefit multiple communities, either through a single installation that benefits multiple rural or remote communities, or through a series of installations with similar or complementary characteristics across multiple communities. For multiple site proposals, the applicant must explain metrics to assess direct benefit to multiple communities. There are two Areas of Interest (AOIs) for this Topic Area. Proposals may address only one of the two AOIs, but not both, in the same proposal.

- Area of Interest 1: Aggregation: This AOI supports applications conducting similar projects at multiple locations in a manner that leads to a demonstratable benefit relative to conducting that project at only one location. The project will address one or more of the following:
    - Constraints to expanding clean energy, such as limited workforce and supply chain issues

    - Common barriers to rural or remote community energy investments
    - Achievement of lower capital investment costs, economies of scale in purchased equipment or materials, ability to leverage transportation of materials for multiple projects in very remote areas, or other measurable investment improvements.
    - Example proposals under this AOI include: an aggregation of solar and/or wind farms, with or without energy storage, in multiple locations that share a common administrative and support staff; or grid hardening and resilience efforts to multiple substations. In these scenarios, the applicant must demonstrate benefits to all indicated communities from the energy generation and related economic activity.
- Area of Interest 2: Single-Site Projects: This AOI supports projects that involve a single installation site that can enable replication of a solution and/or benefit multiple rural or remote communities. Replication can be achieved through projects that propose investments that can unlock a previously unavailable capability for multiple rural or remote areas that spur follow-on investment in those areas. Replicability also could be demonstrated by proposing demonstration-ready technologies that are not widely commercially available but leverage unique regional resources. In this latter case, the proposed project might include technology with competitive advantage when deployed in the region, or leverage existing energy assets that have ceased operation, or may soon cease operation, due to the renewable energy transition. Examples of projects proposed under this topic area include:
    - A utility-scale solar, wind farm and/or hydrogen or battery storage facility
    - A bioreactor that uses locally available biomass to replace fossil fuel generation
    - A renewables project that delivers significant additional benefits to a local community
    - A transmission investment that reduces reliance on fossil fuels
    - Clean energy generation in an area having had trouble attracting investment due to geographic isolation

Applicants may submit more than one Concept Paper and Application to this program provided that each Concept Paper and subsequent Application describes a unique, distinct concept and provided that an eligible Concept Paper was submitted for each Application. There are no limits to submissions by topic area by the prime applicant.

Under this program projects will be categorized into nine geographic regions, each with its own set of broad energy challenges that provide applicants the opportunity to propose creative solutions at a variety of sizes and scales to address those challenges. Applicants are required to identify at least one applicable region for the project, along with any regional climate risk(s) the project is proposing to help mitigate. The funding agency seeks projects that leverage a region's natural resources, local industry, stakeholders, climate and/or economic risks, or other factors, as such factors may be critical towards the ultimate replicability of the project in other rural or remote areas within the region. The nine regions and their regional energy challenges are as follows:

- Northeast: This region includes the states of CT, D.C., DE, MA, ME, MD, NH, NJ, NY, PA, RI, WV, VA, VT and common regional challenges are coastal and grid infrastructure resilience, aging infrastructure, and a reliance on fuel oil. Examples of regional technology solutions are utility-scale storage, coal to renewable energy conversion, and district heating.
- Southeast: This region includes the states of AL, FL, GA, KY, MS, NC, SC, TN and common regional challenges are coastal resilience of renewable power and grid infrastructure, aging infrastructure and energy systems integration. Examples of regional technology solutions are utility-scale solar and wind, utility-scale energy storage, and grid modernization.

- Midwest: This region includes the states of IA, IL, IN, MI, MN, MO, OH, WI and common regional challenges are aging infrastructure, wind energy integration, and reliance on coal. Examples of regional technology solutions are utility-scale solar and wind, biorefineries, decarbonizing the industrial and agricultural sectors and grid modernization.
- North Central: This region includes the states of CO, KS, ND, NE, MT, SD, UT, WY and common regional challenges are reliance on coal, grid expansion, integration, and modernization, working with tribal governments to support next-generation clean energy and efficient water use and limited transmission access and capacity. Examples of regional technology solutions are utility-scale solar and wind, biorefineries, grid modernization, and carbon-free agriculture.
- South-Central: This region includes the states of AR, LA, NM, OK, TX and common regional challenges are wind energy integration, climate impacts, and grid expansion, integration, and modernization. Examples of regional technology solutions are utility-scale solar and wind, hydrogen infrastructure and utility-scale energy storage.
- Southwest: This region includes the states of AZ, CA, NV and common regional challenges are • Water constraints increasing energy demand, climate impacts, limited transmission capacity, and utilities Examples of regional technology solutions are energy-water nexus efficiency, geothermal, biomass, and distributed storage and microgrids.
- Northwest: This region includes the states of ID, OR, WA and common regional challenges are climate change impacts on energy reliability and energy demand, balancing multiple resource interests and protecting the environment, and working with tribal governments to support next-generation clean energy and efficient water use. Examples of regional technology solutions are microgrids, hydro and marine hydrokinetic power, and geothermal for generation and district heating.
- Alaska: This region includes the state of AK and common regional challenges are providing affordable, reliable, resilient energy for small, isolated populations, reliance on costly diesel fuel, and opportunities to apply available hydropower and wind resource baseload power in railbelt electric grids. Examples of regional technology solutions are microgrids, small-, large-scale, and long-duration storage.
- Islands and Territories: This region includes the states and territories of AS, GU, HI, PR, USVI, and MP and common regional challenges are reliance on relatively high-cost fuel oil and diesel generation, power quality and reliability, and climate impacts. Examples of regional technology solutions are utility and microgrid solar/wind, long-duration energy storage, and small-scale green hydrogen.

The program is designed to enable citizens in rural or remote communities, to realize material benefits as the result of investment in their energy infrastructure. These benefits can include, but are not limited to lower energy costs, improved energy access, economic resilience, and environmental protection from adverse impacts of historic energy generation. Selected projects will implement cost-effective clean energy technologies that promote the overall resilience of the local energy system against climate impacts, and support more diversified rural economies better able to weather economic shocks.

To ensure that these benefits are spread equitably across affected communities applicants are required to submit a Community Benefits Plan (CBP). This plan outlines how the project will support community and labor engagement, invest in the American workforce, contribute to the President's goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative), and promote diversity, equity, inclusion, and accessibility (DEIA).

The program seeks to build confidence of decision makers to invest in clean energy in rural and remote areas, including financiers, utilities, and tribal, state, and local governments, who can enable project replication.

Proposed projects can demonstrate established, commercial technologies for the first time in a new setting or place, or at a larger scale; an innovative approach to improve siting and permitting timelines; enabling energy access for homes/communities that do not have access to electricity; self-reliance, or reduction in environmental harm from generation; economic development and local job creation leading to more overall economic resilience, and/or an innovative technology application in a rural or remote area.

Projects proposed to be built outside of a rural or remote area may be considered for funding but must clearly define the rural or remote area(s) of less than 10,000 inhabitants receiving the benefits, the types of benefits, and the method through which these benefits will be quantitatively measured and accounted for in the CBP.

Projects will follow a follow a structured, phased management approach. Applicants will describe how the project will be managed in accordance with these phases. The approach includes the following five phases:

- Phase 0 – Application
- Phase 1 – Detailed Project Planning
- Phase 2 – Project Development, Permitting, and Financing
- Phase 3 – Installation, Integration, or Construction
- Phase 4 – Ramp-Up and Sustained Operations

Each phase includes specific activities and associated requirements, which will be tailored during award and phase negotiations to the size and complexity of the proposed project. More details on each phase can be found on the funding agency's website here.

Applicant Eligibility

Eligible applicants include domestic institutions of higher education, nonprofits, for-profit entities, Tribal Nations, state and local governments, incorporated consortia, and unincorporated consortia. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Federal agencies and instrumentalities (other than DOE) are not eligible to participate in projects funded under this program under any capacity. DOE/National Nuclear Security Administration (NNSA) Federally Funded Research and Development Center (FFRDC) and nonDOE/NNSA FFRDC are not eligible to participate as prime or subrecipients.

Funding

In FY 2023, approximately $300 million is available to support between 7 and 28 projects through this program. Award information for each topic area is as follows:

- Topic Area 1 Community-Scale Demonstrations: An estimated $40 million in funding is available to support 4-8 awards ranging from $5 million to $10 million under this topic area.
- Topic Area 2 Large-Scale Demonstrations: An estimated $260 million in funding is available to support 3-20 awards ranging from $10 million to $100 million under this topic area.

In general, a minimum of 50 percent non-federal cost share is required for projects under this program. For projects where the prime recipient is a domestic institution of higher education; domestic nonprofit entity; or

U.S. state, local, or tribal government entity (including Alaska Native Corporations and Alaska Native Village Corporations) the non-federal cost share is 20 percent.

The maximum project period is 7 years, and the scope of the proposed project would determine that specific project period within the maximum project period.

Technical assistance is also available to communities to support the initial development of project concepts. Applicants can access the technical assistance through the program website.

Contact Information

Program Staff
ERAFOA1@hq.doe.gov

https://oced-exchange.energy.gov/Default.aspx#FoaId90cf93a3-9947-4d2e-b1fb-f98d7b30cdab

Application Content

Concept Paper

Section	Page Limit	Description
Cover Page	1 page (Both Topic Areas)	The cover page must include the project title, the specific announcement Topic Area and Region of Interest being addressed, both the technical and business points of contact, names of all team member organizations, the project location(s), the rural or remote area(s) that will be receiving technical or community benefits through the proposed project, and any statements regarding confidentiality

Mission and Objective	1 page (Topic area 1)
	
	2 Pages (Topic Area 2)
		Applicants are required to describe:
		• The proposed project, including the technology and/or systems to be developed, construction activities, and infrastructure development
		• A description of the rural or remote area(s) that will benefit from the project, including:
		  ○ An outline of the current energy challenges facing rural or remote areas of the region and the sources of these challenges, and a description of how the proposed project will help overcome one or more of the outlined current energy challenges
		  ○ To the extent possible, outline any specific energy impacts on the rural or remote communities, and, as applicable, describe how the proposed project will improve resilience
		  ○ A description of how of the project will deliver a benefit to one or more rural or remote areas (If the project is not located in the rural or remote area of benefit)

Demonstration Plan	3 pages (Topic Area 1) 4 pages (Topic Area 2)	Applicants are required to describe: • A preliminary development plan and timeline, including identifying some key risks and challenges to achieve deployment of the proposed project • The impact that DOE funding would have on the proposed project. • Briefly explain the plan to sustain the project after federal funds are expended. Describe how the project team will be prepared to operate and maintain the project once constructed. Provide the projected project revenue stream or other income to ensure cash flow for operations and maintenance for the life of the project. State the long-term vision to sustain and maintain the project after completing construction and achieving full operations

Management and Organization	1 Page (Topic Area 1) 2 Pages (Topic Area 2)	Applicants must describe the qualifications, experience, and capabilities of the proposed Project Team. • Describe the skills and expertise that the Lead Project Manager (LPM) and Project Team have to successfully design, develop, and operate the proposed plan. Specific details substantiating claims of expertise will be required in the application. • Describe any relevant prior experience which demonstrates an ability to perform tasks of similar risk and complexity. If applicable, provide details on the applicant team's prior work together on projects • A summary organization chart of the team must be provided. • Applicants may provide other graphs, charts, or data to supplement their Demonstration plan and Project Team Descriptions
Community Benefits Plan	2 Pages (Topic Area 1) 3 Pages (Topic Area 2)	Applicants are required to clearly illustrate how the proposal benefits a rural or remote community. Briefly explain these four core elements: • Supporting meaningful community and labor engagement • Investing in the American workforce by creating good local jobs and supporting a skilled workforce • Advancing diversity, equity, inclusion, and accessibility • Contributing to the Justice40 Initiative goal that 40% of the overall climate and clean energy investments flow to Disadvantaged Communities

Full Application

Component	Page Limit
SF-424	N/A
Technical Volume (more information below)	20 pages (Topic Area 1) 50 Pages (Topic Area 2)
Community Benefits Plan	N/A
Community Partnership Documentation	N/A
Resume	2 Pages
Letters of Commitment	1 Page Per Letter
Budget and Budget Justification	N/A
Summary Slide	1
Verification of Special Cost Share Waiver Eligibility	N/A
Transparency of Foreign Connections	N/A

Potentially Duplicative Federal Funding	N/A
Disclosure of Lobbying Activities	N/A

Technical Volume Topic Area 1

Cover Page (1 Page): The cover page should include the project title, the specific FOA Topic Area being addressed (if applicable), both the technical and business points of contact, names of all team member organizations, names of the senior/key personnel and their organizations, the project location(s), and any statements regarding confidentiality.

Project Overview (2 Pages) The Project Overview should contain the following information:

- A description of the energy and climate challenges that the rural or remote area(s) being targeted face, and why the proposed solution appropriately addresses these challenges.
- The impact of DOE funding and how the DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.
- An explanation of the technology being proposed, integration with the power distribution network or "grid" including any necessary infrastructure, and selected geographic region(s) and site(s). The project summary may include schematics such as process flow diagrams and a highlevel schedule.
- The ways in which the proposed project location and related infrastructure, skilled workforce, community engagement, etc. will contribute to the overall project viability and long-term success.

Business Development and Management (4 Pages): The Business Development and Management should contain the following information:

- Business Plan, including viability assessment, key contracts, permits and agreements, preliminary site selection and considerations, customer/community impact assessment, and similar.
- Management Plan, including key organizational members and structure, roles and responsibilities, and relevant prior experience.
- Financial Plan, including total project funding requirements, financial relationship between project members, plan and ability to meet cost share, including other sources of project funding or finance.

Engineering, Procurement, Construction, and Operations (4 Pages): The Engineering, Procurement, Construction, and Operations should contain the following:

- A description of the technologies intended to be utilized for the project.
- A description of existing infrastructure, equipment and facilities that will be impacted.
- Any preliminary engineering evaluations and designs and associated cost estimates.
- Plans for completion of engineering, design and procurement activities.
- Plans for operations and maintenance of the system.

Safety and Occupational Health, Cybersecurity, Permitting and Regulatory Requirements (1 Page): The Safety and Occupational Health, Cybersecurity, Permitting and Regulatory Requirements section should contain the following:

- Safety and Occupational Health Plans (SOHPs): Applications should include a brief description of safety culture, including safety and occupational health plan, and available performance history (such as an OSHA 300A form or Experience Modification Rating) of the entities and management involved in the award.

- Cybersecurity: While a detailed plan is not required, applicants should specify any potential threats or vulnerabilities that they have identified.
- Permitting: Applications should include a permitting workflow overview that identifies the anticipated federal, state, and local codes, regulations, and permitting requirements applicable to siting, construction, and operation of the proposed project. If an application is selected for negotiation of award, applicants will be required to complete an Environmental Considerations Summary in support of National Environmental Policy Act (NEPA) compliance.

Risk Analysis and Mitigation (2 Pages): The Risk Analysis an Mitigation section should contain the following:

- Identification of the commercial, technical, construction, schedule, regulatory, permitting, safety, scale-up, infrastructure, financial, management, organizational, and market related risks.
- Assessment of the probability of occurrence of realization and potential impacts.
- Proposed mitigations

Workplan (4 Pages): The workplan should include the following:

- Project Objectives:
    - Buy America Requirement for Infrastructure Projects: Within the first 2 pages of the proposed workplan or project description, include a short statement on whether the project will involve the construction, alteration, maintenance and/or repair of public infrastructure in the United States.
- Technical Scope Summary, divided by performance periods in alignment with the four Project Phases and separated by discrete decision points.
- Work Breakdown Structure (WBS) and Task Description Summary, with a concise description of the specific activities to be conducted over the life of the project (including project construction and operations) for each task/subtask.
- Go/No-Go Decision Points for each project phase.
- A summary of the End of Project Goal.
- Integrated Project Schedule (IPS) for the entire project, including task and subtask durations, milestones, Community Benefits Plan, and Go/No-Go decision.

The Workplan will be utilized as the basis for the cooperative agreement that will be negotiated if selected for award.

Technical Volume Topic Area 2

Cover Page (1 Page): The Cover Page should cover the following:

- The project summary must include the project title, the specific program Topic Area and Region of Interest being addressed, the technical and business points of contact, senior/key personnel and their organizations (including collaborating organizations), the project location(s) by the city, state, and zip code + 4 for each location where project work will be performed by the prime recipient or subrecipient(s), any statements regarding confidentiality

Project Overview (3 Pages): This section is a description of the overall scope and objectives of the project. It must include:

- A description of the energy and climate challenges that the rural or remote area(s) being targeted face, and why the proposed solution appropriately addresses these challenges.
- The impact of DOE funding and how the DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.
- An explanation of the technology being proposed, integration with the power distribution network or "grid" including any necessary infrastructure, and selected geographic region(s) and site(s). The project summary may include schematics such as process flow diagrams and a highlevel schedule.
- The ways in which the proposed project location and related infrastructure, skilled workforce, community engagement, etc. will contribute to overall project viability and long-term success.

Business Development and Management (12 Pages): This section must include a Business Plan, Management Plan, and Financial Plan as necessary elements detailed below. The project's level of development and level of detail within these plans will evolve over the life of the project.

- Business Plan: The plan must include key success metrics and high-level milestones to be completed throughout the project, such as signing key contracts and agreements, securing permits, completing National Environmental Policy Act (NEPA) reviews, executing financial close, commencing site preparation and construction, achieving commercial operations (i.e., near or full design capacity), and evaluating/analyzing potential markets.
- Management Plan: This plan must include the project organizational structure, organization capabilities, and operations plan; the financial strength of the project lead and any major project partners; and the prior experience of the senior/key personnel in similar or related undertakings.
- Financial Plan: The plan must include funding for procurement and construction including medium-term financing for machinery and equipment; longer-term financing for the site and facility including sources and uses; and any required funding beyond internal cash flow, including working capital financing for project long term operation. This should include a detailed plan and schedule for achieving long-term financial viability, beyond DOE and other federal funding; the amount of expected traditional equity investments (identify participants and level of participation, if applicable); the timing of expected equity contributions and/or debt funding; and the timing of repayment of expected debt funding.

Engineering, Procurement, Construction, and Operations (12 Pages): The Application should describe high-level engineering (which includes design), procurement, construction, and operation (EPC&O) data, information, and related documents covering technology; performance projections; engineering, design, and procurement; cost estimates; execution schedules; and operating and disposition plans for the project. It is expected that the initial plans submitted as part of the Application will be further developed as the project move through each phase.

Safety and Occupational Health, Cybersecurity, Permitting and Regulatory Requirements (6 Pages): The Safety and Occupational Health, Cybersecurity, Permitting and Regulatory Requirements document must include these mentioned requirements, NEPA requirements, and other considerations described in detailed below. For guidance and additional information on post-selection safety, security, and regulatory requirements (including NEPA and permitting) refer to the Guidance Document for this FOA available on OCED eXCHANGE under this FOA's posting.

Risk Analysis and Mitigation (6 Pages): The application requires the development of an initial Risk Management Plan (RMP) by the applicant that is accompanied by a corresponding risk register to be used for

ongoing risk management. The RMP provides a narrative that analyzes the commercial, technical, construction, schedule, regulatory, permitting, safety, scale-up, infrastructure, financial, management, organizational, and market related risks. Each identified risk in the RMP should be clearly described, including its probability of realization, potential impacts, and proposed mitigations. As appropriate, identified risks are incorporated into other project documentation, such as execution schedules, cost estimate maturity, and contingency.

Workplan (10 Pages): The Workplan must include the Project Objectives, Technical Scope Summary, Work Breakdown Structure (WBS) and Task Description Summary, Go/No-Go Decision Points, End of Project Goal and Integrated Project Schedule (IPS) as necessary elements. Note on Buy America Requirement for Infrastructure Projects: Within the first 2 pages of the proposed workplan or project description, include a short statement on whether the project will involve the construction, alteration, maintenance and/or repair of public infrastructure in the United States

Community Benefits Plan: Job Quality and Equity

The Community Benefits Plan: Job Quality and Equity (CBP or Plan) must set forth the applicant's framework to ensure that federal investments in the power sector advance the following four priorities: (1) community and labor engagement; (2) investing in the American workforce; (3) advancing diversity, equity, inclusion, and accessibility (DEIA); and (4) the Justice40 Initiative. Applications must include a CBP describing how the project will incorporate these four objectives. CBP milestones and workplan descriptions should be incorporated into the project schedule, workplan, budget, and other key documents. For projects impacting multiple communities, CBPs should address all four objectives across all communities. CBP requirements, described below, are flexible to allow project teams to respond to communities, workers, and impacted groups. In case of incomplete information, applicants should explain the reason and provide plans to address gaps.

The CBP should provide the most details for Phase 1 and offer a high-level summary of proposed goals, deliverables, outcomes, and implementation strategies for Phases 2–4. DOE will provide feedback to awardees and require updates to CBPs during award negotiations. DOE will provide guidance to awardees on updating the CBP across project phases and incorporating outcomes and findings in final reports.

- **Community and Labor Engagement**: This section should describe the applicant's plans to engage with community stakeholders in all impacted communities. Engagement should be responsive to the priorities of impacted groups, ensure community and labor input can affect project decisions, and support transparency and accountability. This section should include the following elements:
    - Background and Experience - Summarize the project team's prior and ongoing efforts to engage community stakeholders, tribes, workforce organizations, and labor unions.
    - Community History, Dynamics, and Stakeholders - Describe the community/communities that will be impacted by the project, including their current and historical social, cultural, economic, labor, and environmental landscape(s), decision-making structures, and other relevant information. Identify key stakeholder groups and describe existing labor and community support for and/or concerns with the project. For projects impacting multiple communities, cover all impacted communities.
    - Strategies, Methods, and Timeline - Describe high-level objectives, approaches, and timelines for engaging stakeholders (including traditionally excluded stakeholders), workforce organizations, labor unions, and other impacted communities, matching engagement methods to project phases and goals. Describe how the project will incorporate

input from community stakeholders impacted by the project and how engagement can impact project decisions, characteristics, or site selection.

- Workforce and Community Agreements Statement - Describe plans to negotiate a Community Benefits Agreement, Good Neighbor Agreement, Project Labor Agreement, Community Workforce Agreement, and/or other collective bargaining agreements. Applicants should consider pursuing multiple agreements. Projects impacting multiple communities should strongly consider developing such agreements with each community.
- Resource Summary - Summarize the resources dedicated to implementing the plan including staff with relevant expertise, facilities, and budget. This could include an indication of how DOE funding would support resources for engagement.

- **Investing in the American Workforce:** This section should describe plans to create and retain high-paying quality jobs and develop a skilled local workforce, which can support project stability, continuity, and success, and help meet program goals. This section should include the following elements:
  - Background and Experience - Summarize previous or ongoing efforts to invest in the local workforce and create quality jobs, invest in workforce development, and protect worker rights.
  - Quality Jobs. Describe plans to attract and retain a skilled, local, and diverse workforce for construction and ongoing operations. Describe the anticipated quality of jobs benchmarking wages and benefits against local prevailing wage or average wages for the industry and occupations.
  - Workforce Development. Describe plans for investing in workforce development, including workforce education and training for local workers and support for workers' skill acquisition and opportunities for advancement.
  - Worker Rights. Describe how you will encourage worker organizing and collective bargaining, so that workers can form and join unions of their choosing, and how they will have the opportunity to organize with the purposes of exercising collective voice in the workplace in both construction and ongoing operations.
  - Milestones and Timelines. List milestones and timelines for the proposed activities.
  - Resource Summary. Describe the resources including staff with relevant expertise, facilities, and budget dedicated to these activities. This could include an indication of how DOE funding would support these resources.
- **Diversity, Equity, Inclusion, and Accessibility (DEIA):** This section should detail how DEIA objectives will be incorporated into the project and describe how the applicant will partner with underrepresented businesses, educational institutions, and training organizations that serve workers facing barriers to quality jobs, and/or other partners to help support DEIA. Elements of the DEIA plan should include the following:
  - Background and Experience - Describe the team's prior and ongoing DEIA efforts.
  - Strategies, Milestones, and Timelines - Describe DEIA outcomes and implementation strategies, aligned with project phases and workplans. This may include plans to provide comprehensive supportive services (to improve representation and access to jobs) and partner with Minority-, Woman-, or Veteran-Owned Businesses and/or organizations serving under-represented communities and those facing barriers to employment.

- Resource Summary - Describe project resources dedicated to implementing DEIA activities including staff with relevant expertise, facilities, and budget. This could include an indication of how DOE funding would support resources for DEIA activities.

- **Justice40 Initiative:** This section should describe the team's plans to advance energy and environmental justice (EEJ) through the project. It should include an assessment of project impacts and where they flow, and an implementation strategy describing actions to maximize benefits and minimize negative impacts and measure, track, and report impacts. Specifically, the Justice40 Initiative section must include:
  - Assessment of impacted communities and groups -Describe all communities or groups that could experience impacts from the proposed project and characterize the existing burdens they face using EJSCREEN,2 disadvantaged community definition tools, or other analytic tools. Identify which of these are considered disadvantaged communities
  - Assessment of project benefits - Describe all anticipated project benefits, enumerating:
    - Project benefits and metrics that will be used to track each benefit
    - Where/to whom project benefits are expected to flow and the extent to which they flow to disadvantaged communities or overburdened, underserved groups
    - How benefits align with community priorities identified through engagement. •
  - Assessment of project negative impacts - Describe all anticipated project negative impacts (including direct, indirect, and cumulative impacts), enumerating:
    - Project negative impacts and metrics that could be used to track each impact
    - Where/to whom impacts are expected to flow and the extent to which these impacts flow to disadvantaged communities or overburdened, underserved groups.
    - How project negative impacts will interact with existing cumulative burdens. •
  - Implementation Plan, Milestones, and Timelines - Describe strategies, methods, and milestones aligned with project phases to maximize benefit; minimize negative impacts; measure, track, and report impacts; and fill information gaps. Describe accountability, feedback, and transparency mechanisms (e.g., Workforce and Community Agreements and public access to project data).
  - Addressing barriers - Describe potential barriers to realizing benefits and minimizing negative impacts and plans for mitigating those barriers.
  - Resource Summary - Describe resources dedicated to implementing the plan including staff with relevant expertise, facilities, and budget. This could include an indication of how DOE funding would support resources for Justice40 activities.

Evaluation Criteria

Concept Papers and Applications will be evaluated against the technical review criteria shown below.

Concept Papers

Concept Papers are evaluated based on consideration of the following factors. All sub-criteria are of equal weight. To be deemed eligible, the applicant must demonstrate clearly defined activities to improve energy in rural or remote areas of the United States. The applicant must generally identify the types of activities and clearly define the remote or rural area that will benefit from these activities, using U.S. Census Bureau data or other (legal) boundary.

Concept Paper Criterion: Overall FOA Responsiveness and Viability of the Project (100%): This criterion involves consideration of the following factors:

- The applicant clearly describes the significant energy cost, resilience, or reliability challenges facing the rural or remote area(s) targeted by the proposed project, as well as the applicability of this challenge to other similar rural or remote communities in the region.
- The applicant clearly describes the proposed scope of the demonstration project including the key technologies and systems, total cost of the project, and how the proposed project will improve or overcome one or more of the energy challenges identified for the rural or remote area(s) targeted by the proposed project, and how similar solutions could be applicable to other similar communities in the region.
- The applicant clearly describes how the project can help mitigate environmental impacts of existing generation. • The applicant has identified a preliminary project development plan and timeline, including a finance plan, any key risks, challenges, and possible mitigation strategies, and has shown the impact of DOE funding. Applicants should provide measures for improving resilience, safety, reliability, and availability of energy and environmental protection from adverse impacts of energy generation.
- The applicant and proposed team have the qualifications, experience, capabilities, and other resources necessary to design, develop, build, and operate the proposed project.
- A description of strategies to ensure meaningful community and labor engagement; quality jobs and workforce development; EEJ and the Justice40 Initiative; and diversity, equity, inclusion, and accessibility—including methods to ensure accountability.

Full Applications

Impact, Transformation, and Technical Merit (30%) - This criterion involves consideration of the following factors:

- Extent to which the application specifically and convincingly demonstrates how the proposed project will meet the program technical objectives.
- The degree to which the proposed project reduces the emissions of greenhouse gas and criteria pollutants across the full life cycle that result from the generation, transmission, and/or distribution of energy to the targeted rural or remote area(s) as compared to today's baseline.
- Extent to which the proposed technology or technologies are described in sufficient detail to achieve commercial viability if the technology or technologies described are not already commercially available.
- Extent to which the applicant demonstrates understanding of the key technical, construction, regulatory, permitting, safety and occupational health, scale-up and infrastructure integration risks involved in the proposed work, and the quality of the mitigation strategies to address them.

Financial and Market (20%) - This criterion involves consideration of the following factors:

- The degree to which the proposed project reduces energy burden and/or energy costs for consumers in the targeted rural or remote area(s).
- The degree to which the application justifies the proposed project's economic viability, sustainability, and potential growth beyond DOE funding, including the potential for the proposed project type to be replicated in other rural or remote areas with similar needs.

- The degree to which the proposed project meets the required FOA financial and market objectives.
- The adequacy and justification of the proposed budget and spend plan covering both DOE funding and non-federal cost share.
- The availability, credibility, and risk/terms of non-federal cost share sources and funds necessary to meet ongoing cost share needs. This includes the ability to leverage DOE financial assistance funding from this FOA with federal, state, and local incentives as well as private financing, as well as incentives to serve rural or remote communities.
- The degree to which the applicant addresses each key participating organization's financial commitment to the proposed project including overall financial strength and financial capability to implement the proposed plan.

Workplan (15%) - This criterion involves consideration of the following factors:

- The overall reasonableness of the Integrated Project Schedule based on the associated complexity of the proposal.
- The degree to which the proposed Workplan and critical path have been clearly and thoroughly described and thoughtfully considered.
- The degree to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Workplan will succeed in meeting the project goals.
- The strength and level of clarity in the definition of the project phases, metrics, Integrated Project Schedule, and Go/No-Go criteria.
- The strength of the deliverables as defined in the application, such that DOE and independent experts will be able to review key technical, financial, regulatory, permitting, and community benefit milestones at appropriate project Go/No Go Decision Points to mitigate project risk and enable the successful design, procurement, construction, and operation of the proposed project.

Management Team and Project Partners (15%) - This criterion involves consideration of the following factors:

- The capability of the prime recipient, the proposed team, and key personnel to manage and address all aspects of the proposed work with a high probability of success.
- The qualifications and relevant experience, including number of years, demonstrated safety performance history, occupational health history, and specific project experience, of the key project participants in performing similar projects and the allocation of responsibility commensurate with this experience.

Community Benefits Plan (20%) - This criterion involves consideration of the following factors:

- Community and Labor Engagement
    - Extent to which the project demonstrates a clear and appropriately robust plan to meaningfully engage local stakeholders, including labor unions, community-based organizations that support or work with disadvantaged communities and/or underserved and overburdened groups, and tribes, in a manner that can impact project decisions, for example through the use of Workforce and Community Agreements.
    - Extent to which impacted communities and workforce organizations including labor unions are appropriately included as core partners in the project and/or affirm support.
- Job Quality and Workforce Continuity
    - Extent to which the Community Benefits Plan demonstrates that the jobs supported by the proposed project will be quality jobs and provides robust and credible plan to attract, train,

and retain skilled local workers (e.g., through a Workforce and Community Agreements; pledges to remain neutral in the face of an organizing effort; commitments to wages above prevailing wage requirements, benefits, or other worker support) extending beyond the award period of performance.
    - Extent to which the Community Benefits Plan demonstrates plans to invest in workforce education and training for local workers, support workers' skill acquisition and opportunities for advancement, and utilize an appropriately credentialed workforce.
- Diversity, Equity, Inclusion, and Accessibility
    - Extent to which the Community Benefits Plan includes specific and high-quality actions to meet DEIA goals, which may include DEIA recruitment procedures, supplier diversity plans, and other DEIA initiatives.
    - Quality of any partnerships and agreements with apprenticeship readiness programs, or community-based workforce training and support organizations serving workers facing systematic barriers to employment to facilitate participation in the project's construction and operations.
- Justice40 Initiative
    - Extent to which the Community Benefits Plan identifies specific and measurable project benefits, how the benefits will flow, and how negative impacts would be mitigated—and specifically describes these impacts on disadvantaged communities; and
    - Extent to which the project would contribute to meeting the objective that 40% of the overall benefits of climate and clean energy investments flow to disadvantaged communities

In addition to the above criteria, the Selection Official may consider the following program policy factors in determining which Applications to select for award negotiations:

- The degree to which the proposed project exhibits technological diversity when compared to the existing DOE project portfolio and other projects selected from the program.
- The degree to which the proposed project exhibits a diversity of regional solutions when compared to the existing DOE project portfolio and other projects selected from the program.
- The degree to which the proposed project supports disadvantaged communities, communities with a high energy burden, or communities with an urgent energy challenge.
- The degree in which the communities are reasonably determined to be rural or remote.
- The degree to which the proposed project, including proposed cost share, optimizes the use of available DOE funding to achieve programmatic objectives.
- The degree to which the proposed project is likely to lead to increased high-quality employment in rural and remote communities.
- The degree to which the proposed project, or group of projects, represent a desired geographic distribution (considering past awards and current applications).
- The degree to which the proposed project incorporates applicant or team members from Minority Serving Institutions (e.g., Historically Black Colleges and Universities (HBCUs)/Other Minority Serving Institutions); and partnerships with Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, or tribal nations.
- The degree to which the proposed project incorporates some form of community and/or tribal ownership.
- The degree to which the proposed project collectively represents diverse types and sizes of applicant organizations.

- The degree to which the project may produce additional benefits to communities, such as drinking water production or use of waste heat for home heating.

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Bipartisan Infrastructure Law: Long-Duration Energy Storage Demonstrations

Grant Overview

This program aims to 1) accelerate commercialization for energy storage technologies by demonstrating the technologies at scale for long durations and 2) partnering with community and industry stakeholders so they can best adopt and benefit from these technologies. Eligible applicants are domestic entities including state governments, local governments, tribal governments, institutions of higher education, for-profit entities, and nonprofits.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $349 million
Award Range: $9.5 million - $70 million
Match: 50 percent
Solicitation date: November 14, 2022
Proposal due: December 15, 2022 (Letter of Intent)
March 3, 2023 (Full Application)

https://www.energy.gov/oced/long-duration-energy-storage-demonstrations

Tips

- Applicant teams are encouraged to include community-based organizations representing underserved and/or rural and remote communities, Tribal Nations, organizations representing labor, and institutions of higher education, including Historically Black Colleges and Universities, Tribal Colleges and Universities, and Minority Serving Institutions

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Bipartisan Infrastructure Law: Long-Duration Energy Storage Demonstrations

Detailed Summary

The purpose of this program is to 1) accelerate commercialization for energy storage technologies by demonstrating the technologies at scale for long durations and 2) partnering with community and industry stakeholders so they can best adopt and benefit from these technologies. The ultimate goal of this program is to fund a diverse set of long duration energy storage (LDES) demonstration projects that prove deployment feasibility by building demonstrations that can overcome economic, institutional, and market barriers and that can provide a pathway towards the aggressive ESGC goal of $0.05/kWh levelized cost of storage (LCOS) by 2030. As a result, another goal of this program is to demonstrate long-term, high-quality jobs in LDES manufacturing, installation, and maintenance.

This program has two distinct topic areas:

Topic Area 1: Lithium Based Energy Storage Systems: The objective for this topic area is to enable lithium based LDES technologies for energy storage by mitigating technology risk to potential buyers, or offtakers. These LDES demonstrations should have the capacity to discharge energy at a minimum of 100 kW for more than 10 hours at rated power and sufficient third-party testing/ validation to substantiate a pathway towards achieving a levelized cost of storage (LCOS) of $0.05/kWh. This topic area has two areas of interest (AOI):

- Area of Interest 1A: Energy Storage as Second-Life Application for Electric Vehicle Batteries: This AOI seeks projects to validate the financial viability for LDES (i.e., 10+ hour durations) of 2nd life electric vehicle (EV) batteries. Demonstrations must provide ancillary services for grid stability and management and should prioritize projects that are paired with 1 or more facilities that could particularly benefit from increased resiliency and lower energy costs, such as a multi-family affordable housing facility, a senior care facility, and a community health center. Projects are encouraged to incorporate innovative methods of repurposing the expected growing availability of 2nd life batteries. These methods could include but are not limited to:
    - Techniques to minimize the cost of disassembling and repackaging repurposed battery packs and modules
    - Controls that robustly manage batteries with varying States of Health
    - Novel electrical architectures that minimize balance-of-plant costs and efficiency losses
    - Designs that can scale to longer durations at minimal cost
- Area of Interest 1B: Next-Generation Grid-Scale Lithium Battery Deployments: This AOI seeks proposals focused on highly innovative grid-scale lithium-ion batteries that are U.S.-controlled, U.S.-made, and North American sourced and supplied. Projects applying under this AOI are required to

achieve high cycle life beyond current baseline. Projects are encouraged to target an operational lifetime of 15 years, to match the common financial agreement profiles for wind or photovoltaics systems. Proposed projects should move the needle on lithium-ion battery technology, including in one or more of the following areas:

- Use of advanced manufacturing or installation methods to substantially reduce cost.
- Material or chemistry innovations to significantly improve performance or reduce cost
- Use of novel, domestic material and component sourcing
- Designing for enhanced recyclability.
- Unique system architecture or deployment mechanism (e.g., mobile energy storage) to meet use cases
- Systems designed to equitably support remote, rural, or off-grid applications
- Systems with innovations for enhanced safety
- Systems to provide substantially new resilience function to a community or region

Topic Area 2: Non-Lithium Based Energy Storage Systems: The objective of this topic area is to demonstrate operational viability for non-lithium-based energy storage technologies in LDES applications. These LDES demonstrations are required to have an aggregated output of at least 500 kW or 5 MW for a duration of 10-24 hours or for more than 24 hours at rated power and sufficient third-party testing/validation and substantiate a pathway towards achieving a levelized cost of storage of $0.05/kWh. The non-lithium-based energy storage technologies that are considered responsive under this topic area include but are not limited to:

- Electrochemical – Na-Ion
- Electrochemical – Na-Metal
- Electrochemical – Lead Acid
- Electrochemical – Zinc
- Electrochemical – Other Metals (Mg, Al)
- Electrochemical – Redox Flow
- Electrochemical – Reversible Fuel Cells
- Electrochemical – Electro-Chemical Capacitors
- Electromechanical – Modular Pumped Storage Hydro
- Electromechanical – Compressed Air
- Electromechanical – Liquid Air
- Electromechanical – Flywheels
- Electromechanical – Geomechanical
- Electromechanical – Gravitational
- Thermal – High-Temperature Sensible Heat
- Thermal – Phase Change
- Thermal – Low-Temperature Storage
- Thermal – Thermo-Photovoltaic

This topic area has three AOI:

- Area of Interest 2A: Behind-the-Meter LDES Demonstrations (10-24 hours): This AOI is seeking proposals for LDES demonstrations for behind-the-meter (not connected to the Bulk Power System) applications that are able to charge and discharge at full rated power between 10 and 24 hours. These demonstrations are intended to validate technologies that have progressed beyond pilot scale (less than 100 kW output) but are not yet ready to demonstrate at grid-scale. Projects should ensure regional diversity among projects and consider multiple demonstration sites to prove the proposed LDES system's multi-regional capability. Demonstration proposals are required to have an aggregated output of at least 500 kW across all demonstration sites with each individual demonstration site's output being no less than 100 kW.
- Area of Interest 2B: Front-of-Meter LDES Demonstrations (10-24 hours): This AOI is seeking proposals for LDES demonstrations for front-of-meter applications that are able to discharge between 10 and 24 hours. Projects should ensure regional diversity among projects and consider multiple

demonstration sites to prove the proposed LDES system's multi-regional capability. Proposed demonstrations are required to connect directly to the Bulk Power System. Projects Awards will be limited to 5 demonstration sites per project. Demonstration proposals are required to have an aggregated output of at least 5 MW across all demonstration sites with each individual demonstration site's output being no less than 1 MW.

- Area of Interest 2C: Multi-Day LDES Demonstration (24+ hours): This AOI is seeking proposals for a LDES demonstration to prove out a viable technology for applications requiring weekly, monthly, or seasonal durations. The proposed demonstration is required to connect directly to the Bulk Power System. The Multi-Day Demonstration is required to have an output of at least 5 MW and can sustain discharge for more than 24 hours at rated power.

All proposed demonstration projects should feature diverse teams across partners that may include technology vendors; engineering, procurement, construction (EPC) firms; system integrators; and community and labor organizations.

All projects funded under this program are expected to include a Community Benefits Plan to:

- Support meaningful community and labor engagement
- Invest in America's workforce and support good jobs
- Advance diversity, equity, inclusion, and accessibility
- Contribute to the President's goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative).

Applicant Eligibility

Eligible applicants are domestic entities including state governments, local governments, tribal governments, institutions of higher education, for-profit entities, and nonprofits.

To qualify as a domestic entity, the entity must be organized, chartered or incorporated (or otherwise formed) under the laws of a particular state territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Federal agencies, instrumentalities, and corporations, other than the Department of Energy, are eligible to participate as a subrecipient but are not eligible to apply as a prime recipient.

Funding

In FY 2023, approximately $349 million in funding is available to support approximately 11 awards ranging from $9.5 million - $70 million through this program. Funding for each topic area is as follows:

- **Topic Area 1: Lithium Based Energy Storage Systems:** This topic area will provide approximately $39 million in funding to support an estimated 4 awards. Funding for each AOI is as follows:
  - AOI 1A: This AOI will support an estimated 2 awards of up to $10 million with a project period of 5-7 years.
  - AOI 2A: This AOI will support an estimated 2 awards of up to $9.5 million with a project period of 5-7 years.
- **Topic Are 2: Non-Lithium Based Energy Storage Systems:** This topic area will provide approximately $310 million in funding to support an estimated 7 awards. Funding for each AOI is as follows:

- AOI 2A: This AOI will support an estimated 3 awards of up to $30 million with a project period of 5-7 years.
- AOI 2B: This AOI will support an estimated 3 awards of up to $50 million with a project period of 6-10 years.
- AOI 2C: This AOI will support an estimated 1 award of up to $70 million with a project period of 6-10 years.

Projects may propose a shorter period of performance based on their level of readiness to proceed into each phase. Applicants must provide a non-federal cost share of at least 50 percent of the total project costs for demonstration projects or a commercial application activity. Each phase of projects must meet the 50 percent cost share requirement unless a different basis is sufficiently justified and negotiated.

DOE may establish more than one budget period for each award and fund only the initial budget period(s).

Contact Information

Program Staff
LDESFOA@hq.doe.gov

https://www.energy.gov/oced/long-duration-energy-storage-demonstrations

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Fossil Energy and Carbon Management

FY 2023 Bipartisan Infrastructure Law: Regional Direct Air Capture Hubs

Grant Overview

The purpose of this program is to develop and commercially demonstrate Regional Direct Air Capture (DAC) Hubs in the United States. This program will support projects that contribute to the development and demonstration of four (4) domestic Regional DAC Hubs to accelerate the commercialization of CO2 removal via integrated capture from the atmosphere, processing, transport, and secure geologic storage and/or conversion. Eligible applicants include domestic institutions of higher education, for-profits, nonprofits, state and local governmental entities, and Tribal Nations.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $1,236,000,000
Award Range: Varies
Match: Varies
Solicitation date: December 13, 2022
Proposal due: January 24, 2023 (Letter of Intent), March 13, 2023 (Full Application)

https://www.energy.gov/oced/four-regional-clean-direct-air-capture-hubs

Tips

- Participation by underrepresented partners and suppliers and labor unions is encouraged
- Teams that include representation from diverse entities such as, but not limited to: Minority Serving Institutions, including Historically Black Colleges and Universities/Other Minority Institutions , or through linkages with Opportunity Zones, are encouraged

Department: U.S. Department of Energy
Agency: Office of Fossil Energy and Carbon Management

FY 2023 Bipartisan Infrastructure Law: Regional Direct Air Capture Hubs

Detailed Summary

The purpose of this program is to develop and commercially demonstrate Regional Direct Air Capture (DAC) Hubs in the United States. The program will support projects that contribute to the development and demonstration of four (4) domestic Regional DAC Hubs to accelerate the commercialization of CO2 removal via integrated capture from the atmosphere, processing, transport, and secure geologic storage and/or conversion. The goal of this program is to responsibly catalyze a commercial DAC industry in the United States and establish the United States as the global leader in developing and demonstrating the commercial viability of this critical climate technology. To do so, the program will contribute to the following sub-goals:

- Commercial scale-up: validate commercial scale demonstrations for a diversity of DAC technologies and Hub concepts that builds confidence to catalyze private sector capital formation. This includes assessing technology scale-up risks, cost, performance, business models, host site, infrastructure, offtakers, markets and financing structures for the most promising technologies and Hub approaches.
- Infrastructure: build out the related infrastructure to sustainably scale up DAC technologies and Hub concepts, including clean power generation, heat integration, transport, and secure geologic storage and/or CO2 conversion pathways.
- Climate impact: prove at commercial scale that DAC technologies and different Hub concepts can maximize net-emissions goals as well as address other potential environmental impacts (e.g., water availability for at-scale projects).
- Responsible demonstrations: develop the business models and CBPs that provide the greatest positive Justice40 benefits to communities while minimizing negative impacts, invest in the American workforce, advance Diversity, Equity, Inclusion, and Accessibility (DEIA), and promote strong stakeholder and labor engagement. The DAC Hubs will make progress toward DOE's Carbon Negative Shot, 10 which is a pathway-neutral "Energy Earthshot" that aims to develop less than $100/net metric ton (tonne) CO2-equivalent (CO2e) removal by 2032, with costs including ongoing monitoring, reporting, and verification (MRV).

This program will support projects under several topic areas:

- Topic Area 1 (TA-1) – Feasibility (Phase 0): The main objective of a project awarded under TA-1 is to complete feasibility studies for Regional DAC Hub concepts meeting technical specifications and encompassing initial community benefits plan (CBP) activities and analysis. TA-1 is tailored to enable projects that are still formulating their Regional DAC Hub concept and require time for pre-feasibility and feasibility studies. At a minimum, by the conclusion of the project TA-1 Recipients should have completed or accomplished the following:
    - DAC Hub Concept
    - DAC Technology Description(s) and Data Tables (i.e., Initial DAC Hub Capacity)

  - CO2 Conversion Technology Description(s) and Data Tables (if applicable, Initial DAC Hub Capacity)
  - DAC Hub Data Table
  - Technology Maturation Plan(s)
  - Preliminary Life Cycle Analysis (LCA) (i.e., Both Initial and Final DAC Hub Capacity)
  - Integrated DAC and/or Conversion System Pre- Front-end Engineering Design (FEED) Study (i.e., Initial DAC Hub Capacity)
  - DAC Hub Balance-of-Plant (BOP) Conceptual Design (i.e., Final DAC Hub Capacity)
  - Status of Storage Field Development Plan (i.e., storage capacity for at least 12 years of DAC Hub operations), if needed, or status of the offtake agreement
  - Environmental Health and Safety (EH&S) Risk Analysis
  - Safety, Security, and Regulatory Requirements
  - Business Plan
  - Financial Plan
  - Full Community Benefits Plan.

- Topic Area 2 (TA-2) – Design (Phase 1): TA-2 aims to support Regional DAC Hub projects that have already formulated their Hub concept and have performed a pre-FEED study for the initial DAC Hub anchoring technology. The main objectives of a project awarded under TA-2 are 1) to execute planning activities for a DAC Hub that meets technical specifications, 2) execute and complete FEED studies for the initial anchoring DAC system, and 3) execute and complete the Storage Field Development Plan for the proposed carbon storage facility to support at least 12 years of DAC Hub operation, if needed. To apply for TA-2, the proposed anchoring DAC technology must have already achieved a minimum technology readiness level (TRL) 5 and have been validated in an integrated bench scale project removing at least 1 tonne of CO2 removed from the atmosphere annually. At a minimum, by the conclusion of the project TA-2 Recipients should have completed or accomplished the following:
  - Initial DAC Hub Capacity Defined
  - DAC Technology Description(s) and Data Tables (i.e., Initial DAC Hub Capacity)
  - CO2 Conversion Technology Description(s) and Data Tables (if applicable, Initial DAC Hub Capacity)
  - DAC Hub Data Table
  - Technology Maturation Plan(s)
  - Life Cycle Analysis (LCA) (i.e., both Initial and Final DAC Hub Capacity)
  - Integrated DAC and/or Conversion System FEED Study (i.e., Initial DAC Hub capacity)
  - DAC Hub Balance-of-Plant (BOP) pre-FEED Study (i.e., Final DAC Hub Capacity)
  - Storage Field Development Plan (i.e., storage capacity for at least 12 years of DAC Hub operations), if needed, or status of the offtake agreement
  - UIC Class VI Permit Application Materials, if needed (i.e., storage capacity for at least 12 years of DAC Hub operations)
  - Environmental Health and Safety (EH&S) Risk Analysis
  - Safety, Security, and Regulatory Requirements
  - Business Plan
  - Financial Plan
  - Environmental Information Volume
  - Implement Community Benefits Plan (Phase 1 scope)

- Topic Area 3 (TA-3) – Build (Phases 2-4): TA-3 is intended for applicants who have already completed all Phase 1 activities. The main objectives of a project awarded under TA-3 are to: 1) finalize planning and permitting activities for a DAC Hub that meets technical specifications, 2) execute and complete Phases 2-4 for the initial DAC Hub capacity (i.e., minimum 50 KTA CO2), and 3) execute and complete Phases 2-4 for the proposed carbon storage and/or conversion facility to support at least 12 years of DAC Hub operation, if needed. While only detailed Phase 2 applications will be solicited under the current TA-3, information relating to initial plans to carry out Phases 3-4 will be required to assess the potential viability of the overall DAC Hub project. TA-3 Phase 2 encompasses advanced planning activities for a Regional DAC Hub, the initial DAC capacity, and the carbon storage and/or conversion facility to support at least 12 years of DAC Hub operation, if needed. DAC Hub projects should finalize their project development plans, commercial agreements, TEA and LCA assessments, offtake agreement's financial structure, and complete the necessary permitting and approval activities required to begin construction for the initial DAC Hub capacity and the carbon storage facility to support at least 12 years of DAC Hub operation, if needed. To apply to TA-3, the proposed anchoring DAC technology and CO2 conversion system (if applicable) must have already achieved a minimum TRL 6 and have been validated in an integrated, continuous, engineering-scale system test at a scale of a minimum 1000 tonne of CO2 per year (1 KPA), or the final commercial form factor. At a minimum, by the conclusion of the project, TA-3 Recipients should have completed or accomplished the following:
    - DAC Hub Description
    - DAC Technology Description(s) and Data Tables. (i.e., Initial DAC Hub Capacity)
    - CO2 Conversion Technology Description(s) and Data Tables (if applicable, Initial DAC Hub Capacity)
    - DAC Hub Data Table
    - Technology Maturation Plan(s)
    - Refined Life Cycle Analysis (LCA). (i.e., both Initial and Final DAC Hub Capacity)
    - Integrated DAC and/or Conversion System Detailed Design (i.e., Initial DAC Hub Capacity)
    - DAC Hub Balance-of-Plant (BOP) pre-FEED Study (i.e., Final DAC Hub Capacity)
    - All Permits Secured, including UIC Class VI permits to construct, if needed (i.e., storage capacity for at least 12 years of DAC Hub operations)
    - Environmental Health and Safety (EH&S) Risk Analysis
    - Pollution Impact Assessment
    - Safety, Security, and Regulatory Requirements
    - Business Plan
    - Financial Plan
    - National Environmental Policy Act (NEPA) Compliance
    - Implement Community Benefits Plan (Phase 2 scope)

Under this program projects are expected to:

- Support meaningful community and labor engagement;
- Invest in America’s workforce;
- Advance diversity, equity, inclusion, and accessibility; and
- Contribute to the President’s goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities

The following types of applications will be deemed nonresponsive and will not be reviewed or considered:

- Applications that fall outside the technical parameters specified in the program
- Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the laws of thermodynamics)
- DAC Hub(s) not located entirely in the United States
- Research and development (R&D) to advance the maturation of point source post-combustion and precombustion carbon capture technologies
- R&D on CO2 storage technologies, apart from engineering analysis to support the required design of the DAC Hub
- R&D on DAC technologies, apart from engineering analysis to support the required design of the DAC Hub
- R&D on CO2 conversion/utilization technologies, apart from engineering analysis to support the required design of the DAC Hub
- Applications to perform detailed site and subsurface characterization for the proposed carbon storage site
- Applications proposing bench- and engineering-scale testing
- Applications that do not submit a complete DAC Hub Data Table, and DAC and CO2 conversion (if applicable)
- R&D on advanced power cycles (e.g., supercritical CO2 cycle, oxy-combustion, and chemical looping configurations)
- R&D on CO2 compression technologies, apart from engineering analysis to support the required design of the DAC Hub
- Applications proposing non-DAC CDR approaches, such as biochar, biomass burial, direct ocean cap

Applicant Eligibility

Eligible applicants include domestic institutions of higher education, for-profits, nonprofits, state and local governmental entities, and Tribal Nations. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Federal agencies and instrumentalities (other than DOE) are eligible to participates a subrecipient but are not eligible to apply as a prime recipient.

Funding

In FY 2023, approximately $1,236,000,000 in funding is available to support up to 22 awards through this program. Funding for each topic area is as follows:

- Topic Area 1 (TA-1) – Feasibility (Phase 0): This topic area will provide an estimated $36 million in funding and will support between 0-12 awards. The required cost-share is 20 percent of a project's total costs. The project period is 24 months.
- Topic Area 2 (TA-2) – Design (Phase 1): This topic area will provide an estimated $200 million in funding and will support between 0-8 awards. The required cost-share is 50 percent of a project's total costs. The project period is 24 months.
- Topic Area 3 (TA-3) – Build (Phase 2): This topic area will provide an estimated $200 million in funding and will support between 0-2 awards. The required cost-share is 50 percent of a project's total costs. The project period is 102 months.

- Topic Area 3 (TA-3) – Build (Phase 3+4): This topic area will provide an estimated $1 billion in funding and will support between 0-2 awards. The required cost-share is 50 percent of a project's total costs. The project period is 102 months.

Applications are not currently being accepted under TA-3 Phase 3+4. Funding amounts represent later phases for the potential TA-3 projects selected to continue to Phase 3+4 under the competitive (down)-selection process.

Contact Information

Questions regarding the content of this program must be submitted through the FedConnect portal.

https://www.energy.gov/oced/four-regional-clean-direct-air-capture-hubs

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs

FY 2023 Bipartisan Infrastructure Law: Renew America's Nonprofits

Grant Overview

The purpose of this program is to fund projects that reduce energy use and emissions and lower utility costs in nonprofit facilities so they can redirect savings into their mission-critical work, build organizational capacity, and further serve their communities. Eligible applicants are nonprofit organizations with 501(c)(3) status.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $45 million
Award Range: $3 million - $9 million
Match: 20 percent
Solicitation date: May 24, 2023
Proposal due: August 3, 2023

More information can be found here.

Tips

- Letters of intent are not required however, applicants are encouraged to submit a Letter of Intent by June 29, 2023.
- This program seeks to encourage meaningful engagement and participation of workforce organizations, including labor unions, as well as underserved communities and underrepresented groups, including consultation with Tribal Nations.
- All applications must include a Community Benefits Plan
- Applicants are encouraged to submit Community and Labor Partnership Documentation

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs

FY 2023 Bipartisan Infrastructure Law: Renew America's Nonprofits

Detailed Summary

The purpose of this program is to fund projects that reduce energy use and emissions and lower utility costs in nonprofit facilities so they can redirect savings into their mission-critical work, build organizational capacity, and further serve their communities. This program seeks applications that address energy efficiency upgrades, which enable scalable impacts, create innovative partnerships, and leverage funding and economies of scale. Projects will fall under the following topic area: High Impact Energy Efficiency Improvement Portfolios.

Proposals will be submitted by nonprofit 501(c)(3) applicants interested in serving as "Prime recipients" to assemble, post-award, a portfolio of nonprofit buildings owned and operated by 501(c)(3) organizations in need of energy efficiency upgrades. Prioritization will be given to applicants proposing to assemble portfolios that will achieve significant energy and cost savings; will reduce emissions; have an effective plan for evaluation, measurement, and verification of energy savings; demonstrate a plan for prioritizing the financial need of subrecipients; and align with the Justice40initiative goals. Applicants are encouraged to articulate a plan for recruiting building energy efficiency projects that meet or exceed the above priorities on a portfolio basis.

Energy efficient improvements include the installation of materials (product, equipment, or system) which results in a reduction in use of energy or fuel by a nonprofit organization. Examples include lighting upgrades, roof replacements with insulation, HVAC upgrades, and door or window replacements. Energy efficiency projects that include fuel switching may also be eligible if they result in energy savings.

Prime recipients should consider project approaches that enable scalable impacts, create innovative and sustaining partnerships, leverage funding and economies of scale, and focus on expanding benefits in disadvantaged communities.

To support the goal of building a clean and equitable energy economy, projects are expected to:

- Support meaningful community and labor engagement
- Invest in America's workforce
- Advance diversity, equity, inclusion, and accessibility
- Contribute to the President's goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative)

Applicant Eligibility

Eligible applicants are nonprofit organizations with 501(c)(3) status.

Eligible applicants may have project partners and subrecipients critical to the implementation of the proposed project that are not 501(c)(3) nonprofits.

Project partners may include but are not limited to governmental entities such as states and local governments; for-profit entities such as utilities and companies that provide energy services or manufacture energy systems; and non-governmental organizations such as community-based organizations, national associations, labor unions, workforce training providers, and energy focused groups.

For-profit entities and educational institutions that are organized, chartered or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States and have a physical location for business operations in the United States are eligible to apply for funding as a subrecipient.

Domestic incorporated consortia are eligible to be considered for funding as a subrecipient.

Unincorporated Consortia must designate one member of the consortium to serve as the consortium representative. The consortium representative must be incorporated (or otherwise formed) under the laws of a state or territory of the United States. The eligibility of the consortium will be determined by the eligibility of the consortium representative.

Funding

In FY 2023, approximately $45 million is available to support an anticipated 5 to 15 awards ranging from $3 million to $9 million each through this program.

The anticipated period of performance is 36 to 48 months.

Matching and Cost Sharing

Applicants are required to provide a non-federal cost share of at least 20% of the total allowable costs for commercial application projects.

Contact Information

Funding Agency personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the program except through the established question and answer process. Questions regarding this program must be submitted to: NonprofitsFOA@hq.doe.gov.

https://www.energy.gov/scep/renew-americas-nonprofits#:~:text=The%20Renew%20America's%20Nonprofits%20program,allowing%20critical%20funds%20to%20be

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Water Power Technologies Office

FY 2023 Bipartisan Infrastructure Law Section 40334: Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative

Grant Overview

This program supports the project design, transmission studies, power market assessments, and permitting for pumped storage hydropower projects to facilitate the long-duration storage of intermittent renewable electricity. Eligible applicants are domestic entities including electric utilities, including municipally owned electric utilities, electric cooperatives, and investor-owned utilities; Indian Tribes or Tribal organizations; state energy offices; institutions of higher education; and consortium.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $10 million
Award Range: $2 million - $10 million
Match: one-to-one
Solicitation date: October 19, 2022
Proposal due: November 17, 2022 (Letter of Intent)
December 15, 2022 (Full Application)

https://eere-exchange.energy.gov/Default.aspx#Foaldb17d3d22-7004-4f33-8e0f-66a2d43e7c0d

Tips

- Preference will be given to applicants proposing studies for new PSH projects, but upgrades to existing projects may also be considered for funding.
- The funding agency encourages meaningful engagement and participation of workforce organizations, including labor unions, as well as underserved communities and underrepresented groups, including consultation with Tribal Nations.

Department: U.S. Department of Energy
Agency: Water Power Technologies Office

FY 2023 Bipartisan Infrastructure Law Section 40334: Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative

Detailed Summary

The purpose of this program is to support the project design, transmission studies, power market assessments, and permitting for pumped storage hydropower (PSH) projects to facilitate the long-duration storage of intermittent renewable electricity. The funding agency seeks applications to support studies that facilitate the licensing and eventual construction and commissioning of new PSH facilities. Proposed PSH plants eligible for support will enable long-duration storage of intermittent renewable electricity located on Tribal lands and support broader power system decarbonization. Eligible projects must meet the following qualifications:

- Be designed to provide not less than 1,000 megawatts of capacity;
- Be able to provide energy and capacity for use in more than one organized electricity market;
- Be able to store electricity generated by intermittent renewable electricity projects located on Tribal land; and
- Have received a preliminary permit from the Federal Energy Regulatory Commission

Technical aspects of the project will be evaluated along with nontechnical aspects such as impacts on surrounding communities (both positive and negative) and stakeholder acceptance. Projects partnering with and/or improving ability to develop variable renewable energy on Tribal lands, disadvantaged or underserved communities, and which have appropriate federal, state, local, and non-government organization support are encouraged.

Projects through this program will enable increased integration of clean energy resources such as wind and solar, and support power system decarbonization while improving grid reliability. Projects will also support the broader government-wide approach to create jobs for communities in the U.S. if the proposed PSH projects, supported by this funding, progress toward construction and commissioning.

This program is designed to help meet the goal that 40 percent of the overall benefits of certain federal investments in clean energy and climate solutions flow to disadvantaged communities. Projects should also drive the creation of good-paying jobs with the free and fair chance for workers to join a union.

Applicant Eligibility

Eligible applicants are domestic entities including electric utilities, including municipally owned electric utilities, electric cooperatives, and investor-owned utilities; Indian Tribes or Tribal organizations; state energy offices; institutions of higher education; and consortium.

To qualify as a domestic entity, the entity must be organized, chartered or incorporated (or otherwise formed) under the laws of a particular state territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Federal agencies, instrumentalities, and corporations, other than the Department of Energy, are eligible to participate as a subrecipient but are not eligible to apply as a prime recipient.

The funding agency is compiling a "Teaming Partner List" to facilitate the formation of new project teams for this program. The Teaming Partner List allows organizations who may wish to participate on an application to express their interest to other applicants and to explore potential partnerships. Any organization that would like to be included on this list should email background information to WPTOPSH@ee.doe.gov with the subject line "Teaming Partner Information".

Funding

In FY 2023, approximately $10 million in funding is available to support approximately 1 award ranging from $2 million - $10 million through this program. DOE may issue one, multiple, or no awards.

Eligible entities must provide a cost-share of one-to-one of the total projects costs.

The project period will be between 12 and 60 months in length and be comprised of one or more budget periods.

Contact Information

Program Staff
WPTOPSH@ee.doe.gov

https://eere-exchange.energy.gov/Default.aspx#FoaIdb17d3d22-7004-4f33-8e0f-66a2d43e7c0d

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency and Renewable Energy

FY 2023 Bipartisan Infrastructure Law Section 41006. Water Power Projects Innovative Technologies to Enable Low Impact Hydropower and Pumped Storage Hydropower Growth

Grant Overview

This program seeks applications to address innovative solutions to retrofit non-powered dams with environmentally sustainable hydropower at a reasonable cost; applications to address development and testing technologies that mitigate challenges to pumped storage power deployment. Eligible entities are domestic for-profit entities, educational institutions, nonprofits, state and local governments, and tribal nations.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $14.5 million
Award Range: Varies
Match: Varies
Solicitation date: October 19, 2022
Proposal due: December 1, 2022 (Concept Papers)
March 5, 2023 (Full Application)

https://eere-exchange.energy.gov/Default.aspx#FoaId9b761a62-5f04-4b67-a9d6-b7b74c9e86c6

Tips

- Applicants are encouraged to validate the need and value of the innovation by considering the likelihood of success based on past projects as well as the remaining resource potential
- Applicants are required to include a Community Benefits Plan
- Applicants may submit more than one application for separate projects

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency and Renewable Energy

FY 2023 Bipartisan Infrastructure Law Section 41006. Water Power Projects Innovative Technologies to Enable Low Impact Hydropower and Pumped Storage Hydropower Growth

Detailed Summary

This program seeks application to address innovative solutions to retrofit non-powered dams (NPDs) with environmentally sustainable hydropower at a reasonable cost; applications to address development and testing technologies that mitigate challenges to pumped storage power (PSH) deployment, including market and revenue uncertainty, development costs and financing, long development timelines, permitting challenges, construction risks, and environmental impacts; and applications to address and encourage emerging organizations to support hydropower development. The program supports projects through the following topic areas:

Topic Area 1: Hydropower Retrofits for Non-Powered Dams: This topic area seeks applications to support studies and designs that facilitate the licensing, construction, and commissioning for retrofits to NPDs. NPDs are defined as dams that do not have any electricity generation equipment installed. Proposed retrofits should advance the state of the industry through providing novel and advanced methods of power production, construction, intake design, and interconnections to the larger power grid. The overall goal of this effort will support the broad decarbonization of the larger power system. This topic area focuses on projects that propose technologies and/or methodologies to advance the state of the industry for development of hydropower at NPDs. Work should improve feasibility assessments, project design, interconnection, power market assessment, or combination of other necessary topics for the technology to advance towards the prototype or pilot-scale testing stage. A partnership with a hydropower owner or operator is preferred.

Projects under this topic area will be performed in two separate budget periods:

- Budget Period One: Conceptual Verification (BP1) – In this budget period applicants will test innovations through desktop analysis and modeling, computer-based simulations, laboratory scale tests, or a combination of both. This phase will also serve to further develop the business case for further testing and industry adoption.
- Budget Period Two: Final Design, Fabrication, and Testing (BP2) - In this budget period applicants will propose the necessary items to validate the viability of the innovation and project. Based on the proposed site(s), technology(s), and progress that has occurred to date, applicants will propose the necessary steps to fully validate the long-term viability. This should occur through a detailed scope, timeline, and sequence of proposed work products, identifying the critical path and dependencies.

Projects should aim for prototype or pilot-scaling testing of the innovation to improve feasibility assessments, project design, interconnection, power market assessment, or combination of other necessary topics for the technology.

Topic Area 2: Innovative Pumped Storage Hydropower Technologies: This topic area seeks applications to advance development and testing for innovative technologies that could accelerate the deployment of PSH. Innovations developed under this topic area will be supported by the funding agency's HydroWIRES Initiative, which seeks to understand, enable, and improve hydropower and PSH's contributions to reliability, resilience, and integration in the rapidly evolving U.S. electricity system. Broadly, this funding opportunity will support work that de-risks PSH components, construction processes, and/or alternative PSH configurations that could reduce costs and/or improve value. Ideally, an awardee would have the necessary analysis to finance and permit a demonstration of their technology following the completion of this award.

Topic Area 3: Hydropower R&D by Emerging Organizations: This topic seeks to support hydropower related research and development (R&D) that is not covered in other topic areas under this program and helps to meet one or more of the outcomes described in the funding agency's Multi-Year Program Plan related to the Hydropower Program. The Hydropower Program comprises five R&D activity areas, which represent the program's strategic approach to addressing the challenges faced by U.S. hydropower stakeholders. These five activity areas are:

- Innovations for Low-Impact Hydropower Growth
- Grid Reliability, Resilience, and Integration
- Fleet Modernization, Maintenance, and Cybersecurity
- Environmental and Hydrologic Systems Science
- Data Access, Analytics, and Workforce Development

This topic area seeks R&D projects from institutions that have not engaged with the funding agency through significant research projects and have limited familiarity with funding agency programs and research support mechanisms.

The funding agency encourages applications from organizations and institutions that are located in and/or serve disadvantaged communities, or have a history of training and mentoring students from populations that are under-represented in water power technologies, such as those served by Historically Black Colleges and Universities and minority-serving institutions.

This program follows the current administration's Justice40 initiative that aims for 40 percent of the overall benefits of climate and clean energy investments through this program to flow to disadvantaged communities.

Applicant Eligibility

Eligible applicants are for-profit entities, educational institutions, and nonprofit entities that are organized, chartered or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States and have a physical location for business operations in the United States are eligible to apply for funding as a prime recipient or subrecipient.

State and local governmental entities, and tribal nations are eligible to apply for funding as a prime recipient or subrecipient. Federal agencies, instrumentalities, and corporations, other than the Department of Energy, are eligible to participate as a subrecipient but are not eligible to apply as a prime recipient. Domestic incorporated consortia are eligible to apply for funding as a prime recipient or subrecipient. Unincorporated

Consortia must designate one member of the consortium to serve as the prime recipient/consortium representative.

The funding agency is compiling a "Teaming Partner List" to facilitate the formation of new project teams for this program. The Teaming Partner List allows organizations who may wish to participate on an application to express their interest to other applicants and to explore potential partnerships. Any organization that would like to be included on this list should email background information to HydropowerFOA@ee.doe.gov with the subject line "Teaming Partner."

Funding

In FY 2023, approximately $14.5 million in funding is available to support approximately 13 awards through this program. Funding for each topic area is as follows:

- Topic Area 1: Hydropower Retrofits for NonPowered Dams: this topic area will provide an estimated $8 million in total funding. In BP1, the funding agency will make up to 6 awards of $300,000-$350,000. Awards will have a project period of 12 months. In BP2, the funding agency will make up to 3 awards of $1.3 million-$2 million. Awards will have a period of 24 months.
- Topic Area 2: Innovative Pumped Storage Hydropower Technologies: this topic area will provide an estimated $6 million in total funding to support 2-3 awards ranging from $2 million-$4 million. The project period will be between 24-36 months.
- Topic Area 3: Hydropower R&D by Emerging Organizations: this topic area will provide an estimated $500,000 in total funding to support 3-4 awards ranging from $125,000-$200,000. The project period will be 12-24 months.

Institutions of higher education and non-profit organizations will not be required to provide a cost-share. All other entities must provide at least 20 percent of the total project costs for research and development projects.

Contact Information

Program Staff
HydropowerFOA@ee.doe.gov

https://eere-exchange.energy.gov/Default.aspx#FoaId9b761a62-5f04-4b67-a9d6-b7b74c9e86c6

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Carbon Capture Large-Scale Pilot Programs

Grant Overview

This program provides funding for projects designed to further the development of transformational technologies that capture carbon emissions from existing coal or natural gas electric generation facilities and existing industrial facilities not purposed for electric generation. Eligible applicants are Institutions of higher education, non-profit entities, for-profit entities, Tribal Nations, state and local governments, incorporated consortia and unincorporated consortia.

Program History

This is a new program.

Key Information

Total Funding: $820,000,000
Match: 30 percent
Solicitation date: February 23, 2023
Due Dates: April 5, 2023 (Concept Paper), June 21, 2023 (Application)

https://www.energy.gov/oced/carbon-capture-large-scale-pilot-programs

Tips

- Carbon capture large-scale pilot projects must be integrated with commercial plant operations and conducted in the United States.
- Applicants are required to include a Community Benefits Plan (CBP) tailored to the scope of this FOA, discussing community and labor engagement; investing in the American workforce; Diversity, Equity, Inclusion and Accessibility (DEIA), and the Justice40 Initiative.
- Applicants are strongly encouraged to look for opportunities to securely geologically store or utilize or monetize the captured carbon.

Department: U.S. Department of Energy
Agency: National Renewable Energy Laboratory

FY 2023 Carbon Capture Large-Scale Pilot Programs

Detailed Summary

The purpose of this program is to provide funding for projects designed to further the development of transformational technologies that capture carbon emissions from existing coal or natural gas electric generation facilities and existing industrial facilities not purposed for electric generation. Carbon capture large-scale pilot projects will provide the support needed to test transformational technologies (i.e., novel technologies or applications) at intermediate scale and under relevant conditions in both the power and industrial sector to:

1. De-risk transformational carbon capture technologies8 and through meaningful engagement and robust analysis of impacts, risks and benefits such as emissions, water usage, and jobs
2. Catalyze significant follow-on investments from the private sector for first-of-a-kind (FOAK) commercial-scale demonstrations on carbon emission sources across the power and industrial sectors

These carbon capture large-scale pilot projects must be integrated with commercial plant operations and conducted in the United States.

Pursuant to section 962(a)(1) of the Energy Policy Act of 2005 as amended (42 U.S.C. § 16292(a)(1)), the term "large-scale pilot project" means a pilot project that:

A. represents the scale of technology development beyond laboratory development and bench scale testing, but not yet advanced to the point of being tested under real operational conditions at commercial scale
B. represents the scale of technology necessary to gain the operational data needed to understand the technical and performance risks of the technology before the application of that technology at commercial scale or in commercial-scale demonstration
C. is large enough-
    a. to validate scaling factors
    b. to demonstrate the interaction between major components so that control philosophies for a new process can be developed and enable the technology to advance from large-scale pilot project application to commercial-scale demonstration or application

Funded projects will generate operational data for verification and validation of the commercial potential of innovative technologies, including data on technology performance, non-CO2 air emissions, process models, life cycle impacts, costs, scaling factors, and community benefits or negative impacts of carbon capture technologies. These pilots will help mitigate risks and aid in commercial adoption as learnings obtained from these pilots are expected to inform subsequent large-scale demonstration or commercial deployment plans.

Applicants must demonstrate their ability to achieve at least 90% carbon capture efficiency and CO2 product purity of at least 95% by end of the project period. The funding under this solicitation is focused on developing carbon capture technologies towards market liftoff. However, the applicants are strongly encouraged to look for opportunities to securely geologically store or utilize or monetize the captured carbon.

There are two Topic Areas (TAs) available for funding:

- Carbon Capture Large-Scale Pilot Projects at Industrial Facilities Not Purposed for Electric Generation (TA-1)
- Carbon Capture Large-Scale Pilot Projects at Coal or Natural Gas Electric Generation Facilities (TA-2)

The overall objective of a project under TA-1 is to test a transformational carbon capture technology that:

- Separates carbon emissions from a stream at an industrial facility
- Has the ability to validate at least 90% carbon capture efficiency and 95% CO2 purity under real exhaust conditions. DOE will preference applications that propose transformational technologies with documented potential to achieve greater than 90% carbon capture efficiency during the proposed large-scale pilot project.

The overall objective of a project under TA-2 is to test a transformational carbon capture technology that:

- Separates carbon emissions from a flue gas stream at an electric generation facility
- Has the ability to validate at least 90% carbon capture efficiency and 95% CO2 purity under real flue gas conditions. Large-scale pilot projects under TA-2 are pilot projects with the documented potential to achieve a 90% carbon capture efficiency from a recommended minimum 25 MWe slipstream at an existing domestic coal electric generation or natural gas (NG) electric generation facility. NG electric generation facilities include both simple cycle and combined cycle (NGCC) plants, combined heat and power plants, and steam methane reformers that produce hydrogen from natural gas for use in the production of electric energy.

Carbon capture technologies proposed for both TA-1 and TA-2 under this FOA are expected to:

- Have achieved TRL 5, preferably 6, for the proposed process
- Have completed a successful validation of an integrated small-pilot scale prototype capturing a minimum of 1,000 tonnes CO2/yr for the proposed process or a process having a similar composition, impurities/contaminant profile, temperature, and pressure.

Preference will be given to applications that propose carbon capture technologies that have already achieved TRL 6. It is expected that the projects, if awarded, will achieve TRL 7 at the completion of the project performance period. TRL definitions are provided in Appendix C of the FOA.

For both TA-1 and TA-2, projects are expected to:

- Have a design life of around 5 years, with plans to decommission or operate after the award period is completed
- Achieve at least 90% capture efficiency
- Achieve at least 95% purity in the product oxides stream, iv. Complete at least one (1) year of large-scale pilot testing of a carbon capture technology under actual exhaust conditions (e.g., normal steady-state and flexible operations) covering the full spectrum of performance conditions, parametric variable studies, meeting key technical performance targets, and collect required data to quantify other project benefits or negative impacts
- Achieve at least 2,000 hours of continuous operation under stable conditions at performance targets that can enable validation of commercial scale process using Technoeconomic Analysis (TEA), Life Cycle Analysis (LCA) models that are informed with data from the testing
- Collect and report the inlet and outlet criteria pollutants (e.g., NOx, SOx, PMs) and technology related emissions (e.g., solvent/sorbent losses and their degradation byproducts such as potential formation

of nitrosamines) during the large-scale pilot testing to assess the co-benefit emissions reduction of installing carbon capture technology
- Develop and utilize first-principles based, multi-scale process and scale-up models to guide pilot scale experiments and parametric variable studies to reduce the technical risks in scale-up and further deployment
- Collect data sufficient to validate scaling factors, process models and demonstrate major component interactions to support future technology scale up and application in a variety of potential commercial environments
- Demonstrate significant progress towards commercial applications via final TEA and LCA analyses that incorporate large-scale pilot data and can support scaling to commercial scale demonstration or commercial applications
- Collect data to demonstrate sufficient understanding of surrounding community and workforce impacts of the pilot project construction, operations, and decommissioning.

Applicant Eligibility

The following types of entities are eligible to participate as an applicant or subrecipient: institutions of higher education; non-profit entities; for-profit entities; tribal nations; state and local governmental entities; incorporated Consortia; and unincorporated consortia.

Funding

In FY 2023, a total of $820 million is available to fund up to 10 projects through this program. Funding will be broken down as follows:

- For TA-1, awards of up to $4 million are available for an anticipated 6 projects in phase 1

For TA-2, awards of up to $6 million are available for an anticipated 4 projects in phase 1. The maximum project period is a total of 78 months, and the scope of the proposed project would determine the specific project period within the maximum project period. Phase 1 projects, including Detailed planning and FEEDs, have a project period of 18 months.

Awards are expected to be announced in Fall 2023.

A non-federal cost share of at least 30% of the total project costs is required. Cost share may be provided in the form of cash or cash equivalents, or in-kind contributions.

Contact Information

General Contact
CCpilotsprogram@hq.doe.gov.

All questions and answers related to this FOA will be posted on OCED eXCHANGE at: https://OCED-exchange.energy.gov.

More information can be found here.

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Clean Energy Demonstration Program on Current and Former Mine Land

Grant Overview

This program will provide financial investment, technical assistance, and other resources to advance replicable clean energy projects on current and former mine land across the nation. Eligible applicants are domestic institutions of higher education, nonprofits, for-profit entities, Indian Nations, state and local governmental entities, incorporated consortia, and unincorporated consortia.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $450 million
Award Range: $10 million - $150 million
Match: 50 percent
Solicitation Date: April 4, 2023
Proposal due: May 11, 2023 (Concept Papers), August 31, 2023 (Full Application)

https://oced-exchange.energy.gov/Default.aspx#FoaId2461a5fb-be76-4b89-90c1-8673e138f290

Tips

- The funding agency will prioritize projects that directly flow benefits to former mining and manufacturing communities, especially where there are displaced local workers from the fossil fuel and manufacturing industry, as well as other economically distressed areas.
- The funding agency encourages projects where community members are partners and/or equity co-owners in the project and have played a key role in determining how the benefits of the project are distributed throughout the community.

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Clean Energy Demonstration Program on Current and Former Mine Land

Detailed Summary

The purpose of this program is to demonstrate replicable clean energy projects on current and former mine land that help resolve key barriers to commercial adoption of these energy systems. This program will advance place-based energy solutions that address specific community needs. The funding agency seeks projects that can inspire the next generation of clean energy on mine land projects. This program will demonstrate:

- Pathways to deploy clean energy projects across the 1.5 million acres of mine land across the nation
- Preservation of natural and agricultural land through the development of clean energy projects on existing or reclaimed mine land
- Pathways for mining companies to achieve near net-zero operations
- Economic benefits of integrating clean energy into mining operations
- Community ownership, and equity inclusion models that provide new economic development, including job opportunities, for communities
- Repurposing of land, including existing facilities commonly found on mine land, including fossil fuel infrastructure that has been retired early

Eligible projects will demonstrate one or more of the following clean energy technologies:

- Solar
- Micro-grids
- Geothermal
- Direct air capture
- Fossil-fueled electricity generation with carbon capture, utilization, and sequestration
- Energy storage, including pumped storage hydropower and compressed air storage
- Advanced nuclear technologies.

In order to be eligible, a clean energy project will need to be substantially on mine land. Under this program “mine land” is defined as:

- Land subject to titles IV and V of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1231 et seq.; 30 U.S.C. 1251 et seq.); or
- Land that has been claimed or patented subject to sections 2319 through 2344 of the Revised Statutes (commonly known as the "Mining Law of 1872") (30 U.S.C. 22 et seq.)

Applicants must be able to demonstrate proof of land control and that the proposed site is conducive for clean energy projects, including geotechnical considerations and availability of critical project infrastructure.

Funding will be available through the following areas of interest (AOI):

- AOI A: PV Solar with/without battery energy storage on current mine land: Projects proposed under this AOI should demonstrate the potential to generate clean energy on reclaimed land, tailing ponds, surface water reservoirs, and/or disturbed flat areas from solar with/without energy storage, for current mining operations. The funding agency is particularly interested in projects that reduce greenhouse gas (GHG) emissions at active mines which support other aspects of the clean energy transition, including the production of lithium, cobalt, and/or copper. The funding agency also encourages projects that deploy innovative solutions that make mine operations more sustainable and economically viable (i.e. demand shaving, load shifting, etc.).
- AOI B: All technologies on current mine land: This AOI includes one or more of the following technologies on current mine land: solar; microgrids; geothermal; direct air capture; fossil-fueled electricity generation with carbon capture, utilization, and sequestration; energy storage; advanced nuclear technologies. This includes a combination of solar and another technology listed above. Projects under this AOI should demonstrate the potential for the use of current mine land for clean energy generation and storage. The funding agency encourages projects that support all aspects of the clean energy transition.
- AOI C: PV Solar with/without battery energy storage on former mine land: Projects under this AOI should demonstrate the potential to utilize former mine land to generate clean energy from solar with or without storage to revitalize local communities by creating jobs and revenue streams to economically distressed areas and former mining communities. The funding agency is particularly interested in projects that incorporate a community ownership or equity business model, where community members can participate in and share the economic benefits of a solar energy system. The program encourages clean energy projects that are aggregations of multiple solar projects/sites. Aggregation refers to conducting more than one project at multiple locations in a manner that leads to a demonstrable benefit relative to conducting that project at only one location.
- AOI D: All technologies on former mine land: This AOI includes one or more of the following technologies on former mine land: solar; microgrids; geothermal; direct air capture; fossil-fueled electricity generation with carbon capture, utilization, and sequestration (CCUS); energy storage; advanced nuclear technologies. Projects under this AOI should utilize former mine land for clean energy generation and storage projects that create new jobs and community-focused revenue streams for economically distressed areas and former mining communities

Although the funding agency will fund site preparation activities including some reclamation activities as necessary to successfully deploy the clean energy project being proposed, the department will not consider projects that are primarily about reclamation of sites.

The funding agency will prioritize projects that directly flow benefits to former mining and manufacturing communities, especially where there are displaced local workers from the fossil fuel and manufacturing industry, as well as other economically distressed areas.

Applicant Eligibility

Eligible applicants are domestic institutions of higher education, nonprofits, for-profit entities, Indian Nations, state and local governmental entities, incorporated consortia, and unincorporated consortia. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Funding

In FY 2023, approximately $450 million in funding is available to support an estimated five awards between $10 million and $150 million. Applicants are required to provide 50 percent cost-share of the total project's cost. The anticipated maximum project period is seven years, and the scope of the proposed project would determine that specific project period within the maximum project period.

Contact Information

Program Staff
community@hq.doe.gov

https://oced-exchange.energy.gov/Default.aspx#FoaId2461a5fb-be76-4b89-90c1-8673e138f290

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy

Agency: Office of Clean Energy Demonstrations

FY 2023 Distributed Energy Systems Demonstrations Program

Grant Overview

The purpose of this program is to help the U.S. develop more reliable, resilient, and cost-effective energy systems to better support our rapidly changing electric grid and the growth of electric vehicles (EV), energy storage, and the electrification of buildings and industry. Eligible prime recipients include utilities, including municipal, cooperative, and investor-owned utilities; and for-profit entities currently engaged in grid service provision via an established portfolio of aggregated distributed energy resources.

Program History

This is a *new* program established through the 2023 Consolidated Appropriations Act.

Key Information

Total Funding: Approximately $50 million
Award Range: $10 million to $25 million
Match: 50 percent
Proposal due: November 16, 2023 (Concept Papers), February 29, 2024 (Full Applications).

https://www.energy.gov/oced/distributed-energy-systems-demonstrations-program

Tips

- All distributed energy resources and technologies included in a project should be TRL 7-9.
- The funding agency is compiling a "Teaming Partner List" to facilitate the formation of new project teams for this program. The Teaming Partner List allows organizations who may wish to participate on an application to express their interest to other applicants and to explore potential partnerships.

Department: U.S. Department of Energy

Agency: Office of Clean Energy Demonstrations

FY 2023 Distributed Energy Systems Demonstrations Program

Detailed Summary

The purpose of this program is to support transformative at-scale projects within distribution systems that demonstrate approaches to integrate grid-edge renewable and distributed energy systems into broader energy networks. These projects will seek to demonstrate reliable operations and system-wide value in the context of distribution grids with high levels of variable as well as non-dispatchable renewable generation and flexible load assets. The program goal is to build confidence that the design, control, and compensation approaches developed can be readily applied to other portions of the distribution grid and extended to other mixes of distributed energy resources (DERs), potentially extending the value of this approach to a more diverse set of communities, individuals, and entities as the distribution system continues to change.

Projects should accomplish the maximum practicable number of the following objectives:

- Demonstrate reliable operations and financial value of distribution grids that leverage high levels of variable renewable generation and flexible load assets to the distribution grid operators and end-users
- Demonstrate interoperability and coordinated control of generation, grid, storage, transportation, industrial and/or building energy systems.
- Demonstrate reliable grid service provision from diverse DER mixes and grid configurations.
- Support the development of best practices for planning, execution, and operation of similar projects.
- Ensure sharing of best practices and key learnings on grid reliability at high levels of penetration utilizing diverse asset mixes with system operators to ensure replicability and extensibility of control approaches.
- Share electricity usage and system performance data with relevant communities (geographic communities and communities of practice) to accelerate adoption and replication of successful solutions.
- Integrate with and expand grid operator training programs.
- Accelerate the incorporation of these solutions into utility planning processes.
- Reduce the cost of capital for implementation of similar, subsequent projects.
- Reduce barriers to participation and access to grid service financial value for a diverse group of energy asset owners and disadvantaged communities (DAC).
- Engage in providing grid services to Independent System Operators/Regional Transmission Organizations (ISO/RTO) through FERC Order 2222.

The funding agency anticipates that funds will support primarily system planning, enhancements to sensing, communications and control infrastructure, control software, and sustained operational demonstrations, with a limited portion of funds supporting direct deployment or implementation of distributed energy assets.

Eligible projects must meet the following grid system requirements and cost considerations:

- All projects must utilize a distribution grid with at least 20MW peak load for the demonstration.
- All projects must utilize distributed energy resources (excluding distributed generation) with an aggregated capacity of at least 25% of the grid system peak load.
- All projects must have at least 50% of distributed energy resources in place and/or enrolled at the application stage.
- Every project team must include a distribution grid operator, either as prime recipient or as a subrecipient

Projects are encouraged to utilize a variety of DERs including but not limited to:

- Distributed generation
- Stationary energy storage
- Electric vehicles
- Flexible Building loads
- Industrial facility loads
- Sensing, communication, and control systems assets
- Advanced grid electronics

Applicants may utilize some or all of the DERs and associated technologies and systems listed above, may utilize existing aggregation programs, and may target a range of services and value propositions depending on grid conditions and community needs. All DERs and technologies included in the project should be TRL 7-9.

In general, the program is seeking proposals that demonstrate service provision from the aggregated system, rather than from a single asset within the system. Example metrics and services include:

- Capacity services
- Demand reduction
- Energy shifting
- Reliability services, including volt/VAR and frequency support
- Congestions and curtailment reductions
- Emissions reductions
- Electricity cost reductions
- Curtailment reduction
- Blackstart capability
- Outage ride-through
- Outage frequency and duration reduction
- Voltage/VAR support

Projects under this program will be funded through four distinct phases:

- Phase 1 - Detailed Planning: Phase 1 activities will focus on completing specific details about the overall project plan and analysis to refine projections submitted as part of the proposal. These activities must provide assurance to DOE that the overall project plan is technologically, financially, and legally viable, with buy-in from relevant local and community stakeholders. This could include any plans to develop a skilled labor pool and provide community benefits through Workforce and Community Agreements. Teams will complete preliminary engineering, construction, and commercial-scale designs.

- Phase 2 – Project Development, Permitting, and Financing: Phase 2 encompasses advanced planning activities. Recipients will finalize their project development plans, commercial agreements, financial structure, and complete the necessary permitting and approval activities required to begin construction. Long-lead procurement activities may be started in Phase 2 with prior DOE approval. All distributed energy asset recruitment and enrollment activities should be completed. By the completion of Phase 2, safety and security plans should be finalized and execution ready. All necessary permits and approvals should be in place to prepare for construction, including completion of required NEPA reviews and regulatory approvals.
- Phase 3 – Installation, Integration, and Construction: During Phase 3, recipients will continue to implement their community benefits plans and provide ongoing mechanisms for community and labor input that will support the realization of meaningful benefits and minimization of any project negative impacts.
- Phase 4 – Ramp-Up and Sustained Operations: Phase 4 activities will focus on integrated system performance and ramp-up. By the end of Phase 4, each award will have demonstrated fully functional operations over an extended period. For this program, it is anticipated that Phase 4 will have a minimum duration of 3 years and may extend as long as 5 years.

Applicant Eligibility

Eligible prime recipients include utilities, including municipal, cooperative, and investor-owned utilities; and for-profit entities currently engaged in grid service provision via an established portfolio of aggregated distributed energy resources.

Eligible subrecipients include institutions of higher education; national laboratories/FFRDCs, non-profit entities; for-profit entities; Tribal Nations; state and local governmental entities; community choice aggregators; incorporated and unincorporated consortia; individual contributors; and partnerships or consortia of two or more of these entities.

Funding

In FY 2023, approximately $50 million in federal funding is available for an estimated two to four new awards through this program. Awards are estimated to be between $10 million and $25 million.

The maximum expected project period for all four phases is 8 years.

In general, the following activities may only compose a limited portion of funding expenditures:

- Capital expenditures for purchase and installation of generation, storage, and load assets may not exceed 15% of total project costs;
- Recruitment and enrollment activities for consumer and commercially owned DERs may not exceed 10% of total project costs; and
- Direct payment of participation incentives to asset owners may not exceed 15% of total project costs excluding program income.

Matching and Cost Share

A cost share of at least 50 percent of the total project cost is required. The cost-share must come from non-federal sources unless otherwise allowed by law, such as project participants, state or local governments, or

third-party financing. Cost share may be provided in the form of cash or cash equivalents, or in-kind contributions.

Contact Information

Questions regarding this program must be submitted to: oced.des.foa@hq.doe.gov.

https://www.energy.gov/oced/distributed-energy-systems-demonstrations-program

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency & Renewable Energy

FY 2023 BIL Section 41006(a)(2): U.S. Tidal Energy Advancement

Grant Overview

The purpose of this program is to fund the first large-scale investment for the development of a pilot tidal and/or current Research, Development and Demonstration (RD&D) site in the U.S., with the aim to position tidal and/or current energy generation as a key clean energy contributor ready for net-zero emissions power sector while creating good jobs. Eligible applicants are institutions of higher education; For-profit entities; Non-profit entities; and State and local governmental entities, and Indian Tribes.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $45 million
Award Range: $500,000 to $35 million
Match: 20%
Solicitation date: May 8, 2023
Due Date:
Topic Area 1: June 5, 2023 (Concept Paper) July 25, 2023; (Full Application)
Topic Area 2: July 13, 2023 (Concept Paper); October 19, 2023 (Full Application)
https://www.energy.gov/eere/water/funding-notice-45-million-funding-opportunity-will-advance-tidal-and-current-energy

Tips

Addressing underinvestment in sustainable infrastructure, developing participatory processes of community inclusion in local economic and energy development, and better serving the shared purposes of communities and technology developers in accelerating energy technologies are central motivations to this program. The funding agency encourages meaningful engagement and participation of workforce organizations, including labor unions, as well as underserved communities and underrepresented groups, including consultation with Tribal Nations.

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency & Renewable Energy

FY 2023 BIL Section 41006(a)(2): U.S. Tidal Energy Advancement

Detailed Summary

The purpose of this program is to fund the first large-scale investment for the development of a pilot tidal and/or current Research, Development and Demonstration (RD&D) site in the U.S., with the aim to position tidal and/or current energy generation as a key clean energy contributor ready for net-zero emissions power sector while creating good jobs. The U.S. Department of Energy's Water Power Technologies Office (WPTO) envisions doing so by funding the development of a pilot tidal and/or current RD&D site to improve access to pre-permitted tidal and/or current in-water validation and verification testing for a wide-variety of tidal and current devices; and by funding a community-led tidal and/or current energy planning and demonstration project to advance community tidal and current projects from energy resilience design to technology validation. Accordingly, this program will fund projects that will develop a pilot tidal and/or current energy site, focus on technology and supply chain development, system verification and validation, and work with state, local, Tribal, and community partners to solve engineering, regulatory, and innovation challenges associated with advancement of tidal and/or current technologies in the U.S.

This program will support projects across two (2) Topic Areas (TA) focused on advancing the tidal and/or current industry towards commercialization for utility- and community-size applications:

Topic Area 1 (TA1): Tidal and/or Current Site Development
Approximately $35M has been made available to support the development of a pilot tidal and/or current technology demonstration site in state waters. Topic Area (TA) 1 projects will develop plans for a tidal and/or current demonstration site, engage with Tribal, local, state, labor, and regulatory partners, build local commercial and supply chain relationships, develop needed infrastructure at the site, and install 1-5 MW of tidal and/or current turbine capacity at the site. WPTO anticipates making two awards under TA1, with a down-select to one project at the end of the first Budget Period (BP).

TA1 projects must develop a pilot demonstration site and install 1-5MW of tidal and/or current capacity that meets current local, state, and federal regulatory requirements. TA1 is separated into five (5) development phases:

- PHASE 1: Preliminary Tidal and/or Current Site Research & Development
- PHASE 2: Detailed Site Characterization
- PHASE 3: Site Mobilization
- PHASE 4: Site Commissioning and Technology Fabrication
- PHASE 5: Testing and Operations

Key Goals of TA1 include:

• Develop a pilot tidal and/or current demonstration site in state waters.

• Engage with Tribal, local, state, labor, regulatory, and university research partners and build on local and state clean energy strategies.

• Consider multiple tidal and/or current technologies and systematically select the best technology for deployment at the site attracting competitive tidal and/or current developers for technology integration.

• Build site infrastructure and supply chains, with a focus on local and state industry and union partnerships.

• Develop R&D relationships needed to quantify system performance and advance technologies. Improve tidal and/or current Research and Development (R&D) activities from resource characterization, environmental monitoring through device performance testing.

• Install 1-5MW of tidal and/or current turbine capacity at the proposed site.

• Operate the turbines and generate power for the grid or an off-grid energy system.

• Increase the number of quality-clean energy jobs in and surrounding the project site.

• Establish a working financial business model for tidal and/or current energy that allows for the site to continue operation after completion of the TA1 project and for how the site can be expanded after the project is complete. WPTO's longer term vision for the site is to have this site serve as a test bed for more devices. WPTO does not want to see the site decommissioned at the end of 5 years and would like to see a plan to have continuous in-water testing for tidal or/and current technologies for years (6-10) after the project's end.

Topic Area 2 (TA2): Community-led Tidal and/or Current Energy Planning and Project Execution

Approximately $10M has been made available to support a community-led tidal and/or current energy planning and development project in the U.S., preferably led by a community-based organization, a Tribe and/or Tribal government / organization / corporation / union, or local/municipal government entity. WPTO anticipates making two awards under TA2, with a down-select to one project at the end of the first Budget Period (BP).

TA2 projects must formulate a community-led tidal and/or current energy plan for in-water testing and validation, installing up to 500 kW of capacity that meets current local, state, and federal regulatory requirements. TA2 is separated into four (4) development phases:

• PHASE 1: Team formation and desktop analysis for R&D site.

• PHASE 2: Detailed Tidal and/or Current Site R&D.

• PHASE 3: Technology Fabrication, Infrastructure Development, and Site Mobilization.

• PHASE 4: Technology Installation and Operation and Community Energy Transition.

Key Goals of TA2 include:

• Understand the design constraints and opportunities to be considered with smaller, community-led tidal and/or river current demonstrations up to 500 kW.

• Identify and design a tidal and/or river current project to minimize the cost drivers of tidal and/or river current demonstrations up to 500kW, including supply chain, capacity to operate and maintain a tidal and/or river current system, and integration with other renewables, storage, or a local grid.

• Optimize the partnership and engagement model for community-driven tidal and/or current demonstration projects, which encompasses community representatives, project developers, technology developers, utility representatives, state, local, or Tribal government, and permitting bodies, among others.

• Design and develop one community-scale tidal and/or current project in the US, which creates a template or replicable guide for other communities across the US and territories.

• Advance and optimize community-scale tidal and/or current energy devices up to 500kW.

Applicant Eligibility

Eligible applicants are institutions of higher education; For-profit entities; Non-profit entities; and State and local governmental entities, and Indian Tribes.

Funding

In FY 2023, approximately $45 million is available to support awards of up four (4) awards ranging from $500,000 to $35 million.

Topic Area 1, Tidal and/or Current Site Development will provide up to $35 million to support the development of a pilot tidal and/or current energy technology demonstration site in state waters.

Topic Area 2, Community-led Tidal and/or Current Energy Planning and Project Execution will provide up to $10 million to support a community-led tidal and/or current energy planning and development project.

Matching and Cost Sharing

There is a 20% non-federal cost share requirement for both topic areas.

Contact Information

Program Staff

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https://www.energy.gov/eere/water/funding-notice-45-million-funding-opportunity-will-advance-tidal-and-current-energy

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations (OCED)

FY 2023 Energizing Rural Communities Prize

Grant Overview

This program incentivizes the development of clean energy projects in rural or remote areas of the country by offering a cash prize pool to kickstart development of clean energy projects. Funding will be provided under two categories. 1: Partner Track, to facilitate new or existing partnerships that enable development of clean energy projects in rural or remote communities and 2: Finance Track, to connect communities to capital for current or future clean energy projects by developing innovative and functional business models. Eligible applicants are private for-profit and nonprofit entities; nonfederal government entities, such as states, counties, tribes, and municipalities; and academic institutions.

Program History

This new program is part of OCED's $1 billion Energy Improvements in Rural or Remote Areas (ERA) program, which was created by the Bipartisan Infrastructure Law.

Key Information

Total Funding: $15 million
Match: None
Solicitation date: January 17, 2023
Proposal due: May 24, 2023

https://www.herox.com/rural-energy

OCED
Office of Clean Energy Demonstrations

Tips

- Projects must benefit a rural or remote area, which for the purposes of this program is defined as a city, town, or unincorporated area that has a population of no more than 10,000 inhabitants.
- Applications submitted by organizations and communities that historically have not received awards from the funding agency are encouraged.

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Energizing Rural Communities Prize

Detailed Summary

The purpose of this program is to incentivize the development of clean energy projects in rural or remote areas of the country by offering a cash prize pool to kickstart development of clean energy projects. The prize is intended to encourage applicants to take the first steps necessary to develop a clean energy project, and applicants should have an idea for a future project; however, construction is not required as part of the prize.

The program is intended to:

- Demonstrate innovative and replicable partnership and financial mechanisms that act as initial steps toward clean energy projects
- Better prepare rural or remote communities to secure funding for clean energy projects
- Identify, understand, and further develop activities that prepare communities to complete clean energy projects
- Build trust and strengthen the networks between and within rural and remote communities in support of energy improvements aligned with the funding agency's Justice40 priorities

Successful projects will demonstrate strong ties to rural or remote communities and show how they will serve as bridges between the funding agency and rural or remote communities with which the agency may not have previously engaged.

The program includes two individual award tracks, each with two phases. In phase one, applicants should develop a plan to accomplish the program goals, which should include proposed activities, milestones, and metrics measuring the impact and demonstrating the success of proposed activities by leading to targeted outcomes. In phase two, award recipients will receive additional funding to leverage the award to implement their plan developed during phase one.

Funding will be provided for the following program components:

Partner Track: The purpose of the Partner Track component is to facilitate new or existing partnerships that enable development of clean energy projects in rural or remote communities. Award recipients will create connections that lead to collaborative efforts for the development of clean energy projects in rural or remote communities.

This track encourages applicants to form new or leverage existing partnerships to facilitate clean energy projects in rural or remote areas. Formal partnership formation should advance the development of clean energy projects focusing on improving the resilience, safety, reliability, and availability of energy, and reducing the adverse environmental impacts from energy generation by rural or remote communities.

Maturity of the partnerships proposed through this track will be considered in the evaluation, with preference given to established, formal relationships with organizations capable of supporting clean energy projects. Collaborative efforts may include providing engineering services to advance project concepts, encouraging multiple communities to aggregate similar energy projects to unlock economies of scale, or facilitating equipment acquisition.

Applicants must have a vision for a clean energy project they intend to pursue in a rural or remote community that is supported by their proposed activity. Partnership activities pursued under this track should advance completion of this project, and applicants are encouraged to think creatively about what partnership activities would most directly benefit the clean energy project. Examples of supported activities include:

- Building relationships among multiple rural or remote communities that intend to improve resilience of their electricity systems through upgrading transmission and distribution lines, or to achieve economies of scale by aggregation of equipment procurement or engineering services
- Creating a project development team within an organization to facilitate the development of a clean energy project
- Identifying regional impacts of climate change that reduce the resilience and reliability of local energy systems
- Developing a contract between a local government and a clean energy training organization to build a local workforce to support a specific clean energy project

Finance Track: The purpose of the Finance Track component is to connect communities to capital for current or future clean energy projects by developing innovative and functional business models, new approaches to financing clean energy projects, the expansion of existing business models to new rural and remote areas, and innovative ways to leverage other fiscal incentives, such as tax credits. Goals of this component include:

- Enabling rural or remote communities to access conventional financing for energy projects
- Creating pathways for communities to pursue unconventional capital
- Connecting finance partners that want to expand businesses to support clean energy projects for the benefit of rural or remotes areas
- Other creative ideas for improving access to capital for clean energy projects in rural or remote communities

Applicants must identify one or more barriers that rural or remote communities face in financing clean energy projects, and financing activities pursued under this track should result in targeted outcomes that help overcome this barrier, either for a specific clean energy project or a type of clean energy project that is supported by the activity proposed. Applicants are encouraged to think creatively about what financing activities would most effectively enable access to capital for rural communities.

Examples of supported activities include:

- Conducting a market assessment to determine potential demand for and guide design of a clean energy loan program tailored to rural or remote communities
- Determining interest by utility customers or credit union members in a community solar project through community outreach
- Identifying sources of additional funding and developing a capital-raising strategy
- Issuing a request for information (RFI) to gather data from project developers
- Training staff that will be evaluating loan applications for clean energy projects
- Conducting community outreach to identify local partners

- Identifying tax credits and incentives that are available for projects in a specific rural or remote community
- Partnering with an organization with expertise in rural or remote communities to assist in design of financial products

Applicant Eligibility

Eligible applicants are private for-profit and nonprofit entities; nonfederal government entities, such as states, counties, tribes, and municipalities; and academic institutions.

For the Partner Track component eligible applicants may include energy project developers; nonfederal governments; utilities; community-based organizations with expertise in clean energy deployment, infrastructure, or resilience; and other organizations with creative ideas to help rural or remote communities connect with partners that enable improving the resilience, safety, reliability, and availability of energy, as well as environmental protection from adverse impacts of energy generation.

For the Finance Track component eligible applicants may include energy project developers; nonfederal governments; utilities; community development financial institutions, as defined on page 11 of the NOFA file, and credit unions; green banks and related loan funds that can adapt their current business models to rural or remote communities; and other organizations with creative ideas to help rural or remote communities fill funding gaps for clean energy projects.

Applicants must propose projects that benefit a rural or remote area, which for the purposes of this program is defined as a city, town, or unincorporated area that has a population of no more than 10,000 inhabitants. Applications are accepted from all U.S. states, territories, and tribal areas.

Applicants must identify at least one area in the county, including U.S. territories, with a population of no more than 10,000, using 2020 Census Bureau figures, that benefits from the project; however, the proposed project does not necessarily need to be located in a rural or remote area, as long as the area benefits from the project

Applicants are encouraged to form diverse teams while preparing their phase one submission. Applications submitted by organizations and communities that historically have not received awards from the funding agency are encouraged.

Applicants may submit multiple applications to both program tracks; however, only one submission per track per community served will be accepted and reviewed. If an applicant is unsure of which track to apply to, they may apply for consideration in both tracks. If an applicant submits the same submission under both tracks, that submission can only win a cash prize in one track. Applicants with separate, distinct submissions to each track may win a cash prize in both tracks if the funding agency determines that the submissions are sufficiently distinct and meritorious.

Additionally, phase two awards are only open to recipients selected through phase one. Recipients awarded during phase one through either track must stay within that track if they apply for a phase two award.

Funding

In FY 2023, a total of $15 million is available through this program overall, with a total of $10 million available to support awards through the Partner Track component and a total of $5 million available to support awards

through the Finance Track component. Funding will be dispersed through the two individual award tracks, each with two phases.

Partner Track: With a total of $10 million available to support awards through this component. Funding will be provided in two separate phases, as follows:

- Phase one: up to 60 winners will receive a cash prize of $100,000, mentorship, and be eligible to compete in phase two
- Phase two: up to 20 winners will receive an additional cash prize of $200,000 based on achievement of milestones and metrics demonstrating success, as proposed during phase one

Finance Track: With a total of $5 million available to support awards through this component. Funding will be provided in two separate phases, as follows:

- Phase one: up to 30 winners will receive a cash prize of $100,000, mentorship, and be eligible to compete in phase two
- Phase two: up to 10 winners will receive an additional cash prize of $200,000 based on achievement of milestones and metrics demonstrating success, as proposed during phase one

For both components, awards will be provided as prizes, rather than as grants or cooperative agreements.

Phase one awards will be announced and provided in July 2023. Phase two awards will be announced and provided in August 2024.

Matching funds are not required for either component; however, the applicant's description of staff resources they can use to execute the proposed activity will be considered during the evaluation, as will their description of any other resources and strategies they plan to utilize to execute the proposed activity, which may include technical resources and facilities.

Contact Information

Program Staff
ruralenergyprize@nrel.gov

More information can be found here.

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs

FY 2023 Energy Efficiency and Conservation Block Grant (EECBG) Competitive Program

Grant Overview

This program will support the creation and implementation of programs and projects that increase the rate of adoption of clean energy at the local level. The program will enable communities to reduce barriers to clean energy deployment in their local areas and make significant progress towards clean energy goals. Eligible applicants are local governments and Indian Tribes that are ineligible for the EECBG Formula Grant program.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $8.8 million
Award Range: $200,000 - $2 million
Match: Not Required
Solicitation Date: April 5, 2023
Proposal due: June 5, 2023 (Concept Papers), August 7, 2023 (Full Application)

https://www.energy.gov/scep/energy-efficiency-and-conservation-block-grant-program-competitive-funding-announcement

Tips

- Groups of eligible entities are encouraged to team up and submit a single application
- Priority will be given to communities in states and territories with populations less than $2 million

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs

FY 2023 Energy Efficiency and Conservation Block Grant (EECBG) Competitive Program

Detailed Summary

The purpose of this program is to support the creation and implementation of programs and projects that increase the rate of adoption of clean energy at the local level. The program will enable communities to reduce barriers to clean energy deployment in their local areas and make significant progress towards clean energy goals. The program encourages communities to team up with other eligible communities and important stakeholders to expand the reach and impact of the effort.

The objectives of this program are to fund applications that:

- Address barriers to clean energy deployment in communities, such that communities will make significant progress towards energy efficiency or electrification as a result of implementing the project
- Demonstrate the ability to achieve measurable and ambitious clean energy goals
- Leverage the participation and support of multiple local jurisdictions, Tribes, regional planning agencies, community-based organizations, community foundations, and relevant state offices
- Clearly articulate and demonstrate the ability to deliver on the goals of the Justice40 Initiative
- Create momentum to continue clean energy efforts beyond the grant period and/or have the ability to be replicated in other areas of the country
- Spur the creation or retention of jobs and economic development opportunities.

Projects can be funded under one of two tracks:

- Track 1- Planning, analysis, and strategy development
- Track 2 - Implementation and scaling.

Eligible activities include:

- Development and implementation of an Energy Efficiency and Conservation Strategy
- Retaining technical consultant services to assist the eligible entity in the development of such a strategy
- Conducting residential and commercial building energy audits
- Establishment of financial incentive programs for energy efficiency improvements
- The provision of grants to nonprofit organizations and governmental agencies for the purpose of performing energy efficiency retrofits
- Development and implementation of energy efficiency and conservation programs for buildings and facilities within the jurisdiction of the eligible entity
- Development and implementation of programs to conserve energy used in transportation
- Development and implementation of building codes and inspection services to promote building energy efficiency

- Application and implementation of energy distribution technologies that significantly increase energy efficiency
- Activities to increase participation and efficiency rates for material conservation programs, including source reduction, recycling, and recycled content procurement programs that lead to increases in energy efficiency
- The purchase and implementation of technologies to reduce, capture, and, to the maximum extent practicable, use methane and other greenhouse gases generated by landfills or similar sources
- Replacement of traffic signals and street lighting with energy efficient lighting technologies
- Development, implementation, and installation on or in any government building of the eligible entity of onsite renewable energy technology that generates electricity from renewable resources, including
    - Solar energy
    - Wind energy
    - Fuel cells; and
    - Biomass.
- Programs for financing energy efficiency, renewable energy, and zero-emission transportation (and associated infrastructure), capital investments, projects, and programs, which may include loan programs and performance contracting programs, for leveraging of additional public and private sector funds, and programs that allow rebates, grants, or other incentives for the purchase and installation of energy efficiency, renewable energy, and zero-emission transportation (and associated infrastructure) measures.

Priority will be given to communities in states and territories with populations less than 2 million residents, namely Alaska, American Samoa, Delaware, Guam, Hawaii, Idaho, Maine, Montana, Nebraska, New Hampshire, North Dakota, Northern Mariana Islands, Rhode Island, South Dakota, U.S. Virgin Islands, Vermont, West Virginia, and Wyoming. Additional priority will be given to projects that result in significant energy efficiency improvement or electrification.

The funding agency encourages applicants to pursue projects that directly benefit community members, especially members of disadvantaged communities. Community benefits may include creation of new jobs or economic opportunities for local companies or workers, lowered energy burdens, increased access to renewable energy, improved air quality, and increased public participation in energy decision-making processes.

Applicant Eligibility

Eligible applicants are local governments and Indian Tribes that are ineligible to receive funds through the EECBG Formula Grant program. Local governments that are ***not*** listed here are eligible for this program. Groups of eligible entities are encouraged to team up and submit a single application.

Eligible subrecipients under this program include institutions of higher education, for-profit entities; nonprofit entities including community-based organizations; state and local governmental entities, and Tribal nations. Nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to receive funding.

Funding

In FY 2023, approximately $8.8 million in funding is available to support between 10 and 20 awards ranging from $200,000 to $2 million. Cost sharing is not required for this program.

Track 1 proposals and smaller awards should anticipate a 24-month period of performance. Track 2 proposals and larger awards may have a 24-36-month period of performance.

Contact Information

Program Staff
community@hq.doe.gov

https://www.energy.gov/scep/energy-efficiency-and-conservation-block-grant-program-competitive-funding-announcement

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Energy Efficiency and Conservation Block Grant (EECBG) Formula Funds

Grant Overview

This program will assist states, units of local government, and Indian Tribes in implementing strategies to reduce fossil fuel emissions, reduce total energy use, and to improve energy efficiency. Eligible applicants include states, local governments, and Indian tribes.

Program History

This program was last funded in 2008 and received additional funding through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $431.2 million
Award Range: Formula Program - varies
Match: Not required
Solicitation date: January 18, 2023
Proposal due: April 15, 2023 (Pre-award Sheet), July 31, 2023 (States and Territories), January 31, 2024 (Local Governments and Tribes)

https://www.energy.gov/clean-energy-infrastructure/energy-efficiency-and-conservation-block-grant-program-formula-grant

Tips

- All applicants are required to submit an Energy Efficiency and Conservation Strategy (EECS) in order to receive funding. DOE has provided streamlined **EECS Templates** that state, local, and Tribal governments may use when submitting their EECS, but the template is not required.
- EECBG Webinar for Local Government will be held on January 26, 2023.
- Each State is also required to distribute at least 60% of their formula allocation funds to local governments that are ineligible for formula funding

Department: U.S. Department of Energy
Agency: Office of Clean Energy Demonstrations

FY 2023 Energy Efficiency and Conservation Block Grant (EECBG) Formula Funds

Detailed Summary

The purpose of this program is to assist states, units of local government, and Indian Tribes in implementing strategies to reduce fossil fuel emissions, reduce total energy use, and to improve energy efficiency. Eligible uses of funds include:

- Development and implementation of an Energy Efficiency and Conservation Strategy;
- Retaining technical consultant services to assist the eligible entity in the development of such a strategy, including—
    - Formulation of energy efficiency, energy conservation, and energy usage goals;
    - Identification of strategies to achieve those goals—
        - Through efforts to increase energy efficiency and reduce energy consumption; and
        - By encouraging behavioral changes among the population served by the eligible entity;
    - Development of methods to measure progress in achieving the goals;
    - Development and publication of annual reports to the population served by the eligible entity describing—
        - the strategies and goals; and
        - the progress made in achieving the strategies and goals during the preceding calendar year; and
    - Other services to assist in the implementation of the energy efficiency and conservation strategy;
- Conducting residential and commercial building energy audits;
- Establishment of financial incentive programs for energy efficiency improvements;
- The provision of grants to nonprofit organizations and governmental agencies for the purpose of performing energy efficiency retrofits;
- Development and implementation of energy efficiency and conservation programs for buildings and facilities within the jurisdiction of the eligible entity, including—
    - Design and operation of the programs;
    - Identifying the most effective methods for achieving maximum participation and efficiency rates;
    - Public education;
    - Measurement and verification protocols; and
    - Identification of energy efficient technologies;
- Development and implementation of programs to conserve energy used in transportation, including—
    - Use of flex time by employers;
    - Satellite work centers;

    - Development and promotion of zoning guidelines or requirements that promote energy efficient development;
    - Development of infrastructure, such as bike lanes and pathways and pedestrian walkways;
    - Synchronization of traffic signals; and
    - Other measures that increase energy efficiency and decrease energy consumption;
- Development and implementation of building codes and inspection services to promote building energy efficiency;
- Application and implementation of energy distribution technologies that significantly increase energy efficiency, including—
    - Distributed resources; and
    - District heating and cooling systems;
- Activities to increase participation and efficiency rates for material conservation programs, including source reduction, recycling, and recycled content procurement programs that lead to increases in energy efficiency;
- The purchase and implementation of technologies to reduce, capture, and, to the maximum extent practicable, use methane and other greenhouse gases generated by landfills or similar sources;
- Replacement of traffic signals and street lighting with energy efficient lighting technologies, including—
    - Light emitting diodes; and
    - Any other technology of equal or greater energy efficiency;
- Development, implementation, and installation on or in any government building of the eligible entity of onsite renewable energy technology that generates electricity from renewable resources, including solar energy; wind energy; fuel cells; and biomass;
- Programs for financing energy efficiency, renewable energy, and zero-emission transportation (and associated infrastructure), capital investments, projects, and programs, which may include loan programs and performance contracting programs, for leveraging of additional public and private sector funds, and programs that allow rebates, grants, or other incentives for the purchase and installation of energy efficiency, renewable energy, and zero emission transportation (and associated infrastructure) measures; and
- Any other appropriate activity, as determined by the Secretary, in consultation with— the Administrator of the Environmental Protection Agency; the Secretary of Transportation; and the Secretary of Housing and Urban Development.

DOE will prioritize its review of applications based on the order in which complete applications are received and as follows:

- States
- Entities following blueprints
- Teams
- Entities with activities benefitting disadvantaged communities
- Entities with activities limited to Energy Efficiency and Conservation Strategy Development, Technical Consultant Services (or other activities strictly limited to planning, analysis, and stakeholder engagement)
- All other applicants

All applicants are required to submit an Energy Efficiency and Conservation Strategy (EECS) in order to receive funding. DOE has provided streamlined EECS Templates that state, local, and Tribal governments may use when submitting their EECS, but the template is not required.

Local and Tribal entities will have the choice between a grant OR a voucher. The financial value of the voucher is expected to be equivalent to the formula award allocated to the eligible entity. Vouchers are subject to the same legislation and guidance that applies to EECBG Program formula grants, including Voucher Terms and Conditions. Vouchers will be available to formula-eligible local governments and Indian tribes for technical assistance or equipment rebates.

DOE has sought to simplify and streamline the process for local governments and Tribes that choose a voucher in lieu of a grant. Entities that opt into a voucher are not required to apply for and administer a direct federal grant. Entities choosing vouchers will instead submit a separate application using a streamlined process with reduced documentation, monitoring, and reporting requirements compared to the process of applying for and administering a federal grant. For example, if an entity opts in for a voucher, entities that have never managed a federal grant before will not be required to establish the necessary financial management systems, including accounting for federal funds, invoicing, and internal audits typically needed to comply with federal grant management requirements as described in the regulations.

Vouchers for technical assistance will be used to access support from experts, across a wide array of high-value opportunities in energy efficiency, renewable energy, transportation, and related areas.

Vouchers for equipment purchase and installation rebates will be used to reimburse entities for the purchase of energy-related equipment used to meet the program goals. Equipment eligible for rebates will span a wide range of technologies that are deployed to lower fossil fuel use or increase energy efficiency.

DOE has made Blueprints available which are step-by-step roadmaps of energy projects and programs that guide EECBG Program entities to success. See Appendix 2 of the EECBG **Application Instructions**.

Applicant Eligibility

Eligible entities include states, local governments, and Indian tribes. A list of all eligible entities can be found here.

Funding

In FY 2023, approximately $431.2 million will be available to support awards through this program. Of the total funding available, 69 percent will be allocated to local governments through formula grants, 29 percent will be allocated to states through formula grants, and two percent will be allocated to Indian tribes through formula grants. A list of all eligible entities and their allocation of funding can be found here. The allocations for each entity are broken down as follows:

- Local Government Allocation-Alternative 1: 34 percent of the total funding ($149.6 million) will be distributed to cities with a population of at least 35,000 or are 1 of the 10 highest populated cities in the state which the city is located in and to counties with a population of at least 200,000 or are 1 of the 10 highest populated counties in the state which the county is located. These cities and counties will receive a minimum of $75,000 in funding.
- Local Government Allocation-Alternative 2: 34 percent of the total funding ($149.6 million) will be distributed to cities with a population of at least 50,000 or to counties with a population of at least

200,000. There is no minimum level of funding for these awards. These entities are also eligible for funding under the Local Government-Alternative 1 funding category.

- State Allocation: 28 percent of total funding ($123.2 million) will be distributed to the states. Each state will receive a minimum of 1.25 percent of the total program funding with the remaining funding being distributed to states based on population size and energy consumption levels. Each state is required to pass through at least 60% of its allocated funding to cities and counties within the state that are ineligible for direct formula grants from DOE within 180 days of DOE approving their proposed energy efficiency and conservation strategy.
- Tribal Allocation: 2 percent of the total funding ($8.8 million) will be distributed to Indian Tribes with minimum awards of $10,000.

There is no matching cost requirement for this program. Grants will consist of a three-year project period for States, and a two-year project period for local governments and Indian tribes. Vouchers to local governments and Indian tribes will be for a two-year project period.

Contact Information

Program Staff
eecbg@hq.doe.gov

https://www.energy.gov/clean-energy-infrastructure/energy-efficiency-and-conservation-block-grant-program-formula-grant

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs (SCEP)

FY 2023 Energy Future Grants (EFG) Creating a Community-Led Energy Future

Grant Overview

The purpose of this program is to provide financial assistance to support local, state, and tribal government-led partnership efforts that will advance clean energy program innovation. EFG seeks to enhance energy affordability and access for communities, ensuring the broad benefits of a clean energy economy—including health, economic development and jobs and emissions reductions—flow to disadvantaged communities. Eligible applicants are state governments, county governments, city, or township governments, and federally recognized Native American tribal governments.

Program History

This is a *new* program established through the 2023 Consolidated Appropriations Act.

Key Information

Total Funding: $37 million
Award Range: $500,000- $1 million
Match: Not required
Solicitation Date: July 24, 2023
Proposal due: September 30, 2023

More information here.

Tips

- The Department of Energy (DOE) encourages innovative partnership models that bring together at least 3-4 jurisdictions per team. Applications should identify existing expertise of partners and clearly define how the program innovation will benefit disadvantaged communities.
- Accordingly, in cases where the "public" nature of the infrastructure is unclear, DOE strongly recommends that applicants complete their full application with the assumption that Buy America requirements will apply to the proposed project.

Department: U.S. Department of Energy
Agency: Office of State and Community Energy Programs (SCEP)

FY 2023 Energy Future Grants (EFG) Creating a Community-Led Energy Future

Detailed Summary

The purpose of this program is to provide financial assistance to support local, state, and tribal government-led partnership efforts that will advance clean energy program innovation. The Energy Future Grant (EFG) program seeks to enhance energy affordability and access for communities, ensuring the broad benefits of a clean energy economy—including health, economic development and jobs and emissions reductions—flow to disadvantaged communities.

EFG provides $37 million total in financial assistance in two phases to advance:

- **Partnerships:** Create multijurisdictional partnerships between local, tribal, and/or state governments, with a goal of at least 3-4 partners per team.
- **Communities:** Develop deployment-focused clean energy plans in the transportation, building, and/or power sectors to meet community needs.
- **Innovation:** Prioritize innovative (novel or early action) approaches that maximize access to affordable clean energy across sectors, markets, and geographies.

The EFG program will encourage innovation by competitively awarding funds in two phases. This funding opportunity will support **Phase 1 – Planning Grants** to provide planning and outreach and design support in three topic areas: 1) transportation; 2) power sector; and 3) buildings. Awardees are encouraged to think across these sectoral silos and propose multi-sectoral or integrated ideas to improve energy affordability and access and support good jobs and other economic benefits.

i. **Topic Area 1 – Transportation**
Proposals in this area should include planning approaches for reducing the energy intensity or greenhouse gas emissions from the transportation sector, with a focus on efforts to advance projects that benefit infrastructure, mobility, and net zero fuels. Innovative actions may include efforts to support on-and-off-road technology adoption and fuel use, including freight and aviation fleets. Teams should consider including US DOE Clean Cities Coalitions as partners.

ii. **Topic Area 2 – Power Sector**
Scalable innovations in the power sector including distributed energy delivery models that emphasize affordability and demand flexibility (e.g., pricing, rates, or tariffs). Other ideas include fuel switching to net zero carbon fuels, electrification, microgrids, supply chain and/or procurement strategies, that support economic, health, and job benefits in disadvantaged communities. Teams should consider utilities or regulatory agencies as partners.

iii. **Topic Area 3 – Buildings**
Innovative strategies for creating net zero commercial and residential buildings, including opportunities in the multi-family sector or at community facilities. Approaches include the adoption of building engineering, construction, and retrofit programs that account for occupant behavior,

technology integration, and procurement of energy efficient material or the wider use of performance standards to drive outcomes (electrification, decarbonization, resilience). Teams should consider experts in affordable housing or building performance as partners.

iv. **Strategic or Cross-Cutting Projects**
Applicants are not bound to a single area above. Any team should feel free to propose innovative ideas across the topics above (e.g., deployment of virtual power plants, distribution system needs to accommodate heavy duty electric vehicles).

Following the completion of Phase I, a competitive solicitation for Phase 2 activities is anticipated. Phase 2 will fund work needed to make plans generated during Phase 1 ready for deployment. The Phase 2 solicitation will be released in another budget period.

Applicant Eligibility

Eligible applicants are local governments, states, territories, and tribes. Applicants are encouraged to partner as multijurisdictional teams and with community-based organizations (CBOs), academia, utilities, and/or non-profit entities.

Potential subrecipient(s) must be domestic entities. The following types of domestic entities are eligible to participate as a subrecipient:

1. State and local governmental entities, and tribal nations. It is suggested that applicants include at least 3-4 governmental partners or more.
2. Non-profit entities including community-based organizations.
3. Institutions of higher education, including Historically Black Colleges and Universities, Minority Serving Institutions, Hispanic Serving Institutions, tribal colleges, community colleges and think tanks.
4. Underserved businesses, including small and disadvantaged businesses, women-owned small businesses, service-disabled and veteran owned small businesses.
5. Local or regional planning organizations.
6. Utilities include investor-owned, cooperative/public power, and municipal as well as third-party or independent power providers.
7. For-profit entities.
8. Domestic incorporated consortia
9. Unincorporated consortia

Funding

In FY 2023, approximately $37 million in funding is available in total, and will be distributed in two phases.

- **Phase 1:** $27 million over 12-18 months. Around 50 awards of up to $500,000 will be made in Phase 1, including 10 state/territory awards, 25 local government awards, and 5 tribal awards.
- **Phase 2:** $10 million over 2 years in a future funding opportunity. Successful Phase 1 awardees will compete for awards of up to $1 million.

The period of performance for state/territory, local, and tribal governmental jurisdictions is 12-18 months during Phase 1.

Approximately 10 awards of $1,000,000 will be made during Phase 2. The period of performance for state/territory, local, and tribal governmental jurisdictions is 12-24 months during Phase 2.

Matching and Cost Share

There are no matching and cost share requirements for this program. However, cost share is encouraged to maximize the impact of the projects. Inclusion (or not) of cost share will not have an impact on review scores. Applicants that wish to submit cost share information should note this in their application.

Contact Information

Clean Energy Infrastructure Funding Opportunity Exchange Helpdesk

S3Exchangehelp@hq.doe.gov

More information here.

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy

Agency: Office of Clean Energy Demonstrations

FY 2023 Energy Improvement in Rural or Remote Areas Fixed Award Grant Program

Grant Overview

This program will provide financial investment, technical assistance, and other resources to advance clean energy demonstrations and energy solutions that benefit rural and remote communities. Eligible applicants are state and local governments, Indian Nations, non- and for-profit entities, institutions of higher education, and consortia.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $50 million
Award Range: $500,000 - $5 million
Match: There is no match requirement
Solicitation Date: May 11, 2023
Proposal due: July 13, 2023 (Pre-Applications), October 12, 2023 (Full Applications; invite only)

https://oced-exchange.energy.gov/Default.aspx#FoaId25339769-c6de-4818-9cb2-63c31cc79623

Tips

- The funding agency may prioritize projects that benefit communities most impacted by high energy burden, poor energy reliability and resilience, or environmental harm from energy generation.
- Applications must include a Community Benefits Plan that describes how the project will support meaningful community and labor engagement, invest in America's workforce, advance diversity, equity, inclusion, and accessibility, and contribute to the Justice40 Initiative.

Department: U.S. Department of Energy

Agency: Office of Clean Energy Demonstrations

FY 2023 Energy Improvement in Rural or Remote Areas Fixed Award Grant Program

Detailed Summary

The purpose of this program is to improve energy in rural or remote areas and advance clean energy demonstrations and energy solutions that benefit rural and remote communities. Under this program a rural or remote area is defined as "city, town, or unincorporated area that has a population of not more than 10,000 inhabitants." The identified area must be either a city, town, or other unincorporated municipality, or a Census Designated Place (CDP) or similarly discreet and identifiable community that is not located within an incorporated municipality. Projects ideally should be sited within the rural or remote community or communities they are designed to benefit. Projects proposed to be built outside of a rural or remote area may be considered for funding but must clearly define the rural or remote area(s) of less than 10,000 inhabitants receiving the benefits. The funding agency aims to fund clean energy projects with three specific goals:

- Deliver measurable benefits to energy customers in rural or remote areas by funding replicable energy projects that lower energy costs, improve energy access and resilience, and/or reduce environmental harm
- Support new rural or remote energy system models using climate-resilient technologies, business structures that promote economic resilience, new financing mechanisms, and/or new community engagement practices
- Build clean energy knowledge, capacity, and self-reliance in rural America

Clean energy projects must satisfy at least one of the following "resilient clean energy" objectives:

- Improving overall cost-effectiveness of energy generation, transmission, or distribution systems
- Siting or upgrading transmission and distribution lines
- Reducing greenhouse gas emissions from energy generation in rural or remote areas
- Providing or modernizing electric generation facilities
- Developing microgrids
- Increasing energy efficiency

Additional benefits may include:

- Decreasing energy burden in disadvantaged communities (DACs)
- Decreasing environmental exposure and burdens for DACs
- Increasing parity in clean energy technology (e.g., solar, storage) access and adoption in DACs
- Increasing access to low-cost capital in DACs
- Increasing clean energy enterprise creation and contracting (MBE/DBE) in DACs
- Increasing clean energy jobs, job pipeline, and job training for individuals from DACs

- Increasing energy resiliency in DACs
- Increasing energy democracy in DACs.

Applicants must show that the technology is commercially available. For the purposes of this funding opportunity, commercially available technology is defined as a product that has been offered for sale, lease, or license to the public.

Applicants should also demonstrate that projects are supported by the community. This could be done by including participation by community-based organizations; local environmental justice organizations; community leadership groups; building owners and developers; local labor groups including unions; local planning, zoning, and code officials; or state, local, or Tribal governments.

Example projects include:

- Installation of standalone microgrids in critical facilities or resilience centers to ensure continuation of services during natural disasters
- Installation of a community-owned solar and battery project to reduce electricity cost and increase energy resilience
- Siting or upgrading of transmission and distribution lines, grid stability and resilience with substation improvements, or other electrical infrastructure improvements (hardware or software)
- Replacement of fossil fuel-powered heating with heat pumps in community buildings or in a residential neighborhood
- Deployment of small hydropower in existing conduits to generate recurring revenue that enables reinvestment in other community infrastructure
- Innovative siting of solar panels, such as over canals or on agricultural land, to reduce local siting constraints and enable new ownership structures
- Energy efficiency improvements for community-owned buildings (e.g., city hall, police or fire station, schools) that reduce electric loads and energy costs
- Installation of a distributed wind microgrid to reduce electricity cost and increase energy resilience through reducing demand upon diesel in a remote community
- Installation of geothermal heating or ground loops for heat pumps
- Installation of small-scale energy storage to provide power regulation or backup electricity to the grid
- Replacement of a diesel generator with combined heat and power (CHP) fed by Renewable Natural Gas (RNG) at a food waste or wastewater treatment facility
- Use of biogas from agricultural waste, either from biogas capturing or biogas generation through anaerobic digestion, to fuel onsite equipment and/or for pipeline injection
- Replacement of a non-clean backup energy generation system, such as a diesel generator, with a clean energy generation backup system and/or energy storage system, at a water treatment plant or pump station

To support the goal of building a clean and equitable energy economy, the BIL-funded projects are expected to support meaningful community and labor engagement; invest in America's workforce; advance diversity, equity, inclusion, and accessibility; and contribute to the President's goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities. To ensure these goals are met, applications must include a Community Benefits Plan that describes how the proposed project would incorporate the four objectives stated above.

Applicant Eligibility

Eligible applicants must be domestic entities and include state and local governments, Indian Nations, non- and for-profit entities, institutions of higher education, and consortia. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

An applicant may submit more than one pre-application and application provided that each pre-application and subsequent application describes a unique, distinct concept and provided that an eligible pre-application was submitted for each application. There are no limits to submissions by prime applicants.

Funding

In FY 2023, approximately $50 million in funding is available to support between 10 and 100 awards of $500,000 to $5 million. The maximum project period is five years. Funding will be provide through fixed amount grants. Fixed amount grants may include, but are not limited to:

- Partial payments, based on milestones or “triggering events”, agreed to in advance by the parties;
- Payments based on unit prices agreed to in advance; or
- One payment for the full amount upon project completion.

Matching and Cost Sharing

There are no cost sharing requirements for this funding opportunity.

Contact Information

Program Staff
ERAGrant@hq.doe.gov

https://oced-exchange.energy.gov/Default.aspx#FoaId25339769-c6de-4818-9cb2-63c31cc79623

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency and Renewable Energy

FY 2023 Industrial Efficiency and Decarbonization Office Multi-Topic FOA

Grant Overview

The purpose of this program is to fund high-impact, applied research, development, and pilot-scale technology validation and demonstration projects to advance the transformational technologies and innovations necessary to reduce energy use and greenhouse gas (GHG) emissions in the industrial sector. Eligible prime and subrecipients are institutions of higher education; for-profit entities and non-profit entities; state, local, and tribal governments; Department of Energy (DOE)/National Nuclear Security Agency (NNSA) Federally Funded Research and Development Centers (FFRDCs) and non-DOE/NNSA FFRDCs; federal agencies and instrumentalities; domestic incorporated and unincorporated consortia.

Program History

There is no available history for this program.

Key Information

Total Funding: $155.7 million
Award Range: Varies
Solicitation date: March 15, 2023
Proposal due: April 17, 2023 (Concept Paper), June 23, 2023 (Full Applications)

More information can be found here.

Tips

- All applications in Topics/Subtopics 1, 2, 3a, 4, 5, 6, 7, and 8 (i.e., all except Subtopic 3b) are strongly encouraged to include an industry partner on the project team.
- Applicants must identify key technical and market barriers to successful achievement of topic/subtopic goals.
- Applicants must identify key metrics and targets to address those barriers, consistent with technical and market analysis of their application space, and clearly indicate how the proposed innovations will satisfy those metrics.

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency and Renewable Energy

FY 2023 Industrial Efficiency and Decarbonization Office Multi-Topic FOA

Detailed Summary

The purpose of this program is to fund high-impact, applied research, development, and pilot-scale technology validation and demonstration projects to advance the transformational technologies and innovations necessary to reduce energy use and GHG emissions in the industrial sector.

In general, efforts should primarily include work scopes between technology readiness less (TRL) 4 and TRL 7 to develop and validate technology advancements to facilitate industrial decarbonization.

Awards will be made at one of two funding levels, with maximum award amount by tier and topic indicated as follows:

- Tier 1 projects: Primarily focused on TRL 4 and TRL 5 research and development (R&D) activities to validate technology components in a laboratory or relevant environment. For select areas of interest (AOIs) (Topic 1 AOIs 1 and 2, Topic 2 AOIs 1 and 2, Subtopic 3a AOI 1, Subtopic 3b, and Topic 4), efforts can begin in TRL 3.
- Tier 2 projects: Can include activities in TRL 4 and 5 but must also include scope to include TRL 6 and/or TRL 7 to conduct system/subsystem prototype or pilot-scale technology validation in a relevant or operational environment. Tier 2 projects should be organized into distinct phases and should include Phase 2 and/or Phase 3, below:
    - Phase 1: Research and development (optional)
    - Phase 2: Design and testing
    - Phase 3: Installation and demonstration

Eligible topic areas are as follows:

Topic Area 1: Decarbonizing Industrial Heat:

- Topic 1 Technology Focus: This topic is focused on cross-sectoral impact and seeks applications pursuing advancements that will contribute to decarbonization of thermal processes across multiple industries. Applicants are encouraged to assemble project teams that include advisers from multiple relevant industries. Topic 1 seeks both Tier 1 and Tier 2 applications.
    - Area of Interest (AOI) 1 – Electrification of Industrial Heat: This AOI seeks applications for the development, optimization, and/or integration of electrified thermal processing equipment that can utilize clean electricity to reduce the emissions intensity of existing processes.

- Area of Interest 2 – Innovative Low- and No-Heat Processes: This AOI seeks applications to enable transformative low-thermal-budget processes, which achieve similar end products to current processes while utilizing significantly less thermal energy.
- Area of Interest 3 – Industrial Heat Pumps: This AOI seeks applications on innovations in the design and integration of industrial heat pumps (IHPs). Innovative solutions to simplify system design and integration are of high interest. Technologies of interest include, but are not limited to, standardized or modular designs for common applications, standardized components, and approaches for system design and optimization (e.g., advancement of pinch analysis methods; novel machine learning/artificial intelligence-based methods for system design, heat integration, and/or operational strategies). Innovative approaches for system design and integration beyond the specific examples listed here are also encouraged.

Topic Area 2: Low-Carbon Fuels Utilization R&D:

- Topic 2 Technology Focus: Topic 2 will focus on research, development, validation, and demonstration needed to accelerate the commercial readiness of hydrogen-fueled process heating technology and low-carbon-input, flexible combined heat and power (CHP).
    - Area of Interest 1 – Mitigating H2 Combustion Impacts on Material and Product Quality: This AOI seeks applications for innovative technologies that identify and mitigate potentially negative impacts of H2 combustion on product and process quality.
    - Area of Interest 2 – Developing H2-Based Combustion Systems: This AOI seeks applications for innovative hydrogen combustion systems to enable safe and effective hydrogen-blended combustion for process heating.
    - Area of Interest 3 – Low-Carbon-Input, Flexible CHP: This AOI seeks applications for R&D to enable industrial implementations of flexible CHP that utilize clean fuel sources such as H2, biofuels, or renewable resources (e.g., solar thermal, geothermal, or thermal energy storage).

Topic Area 3: Exploratory Cross-Sector R&D

This topic encompasses two subtopics: (a) Enabling Flexible Industrial Energy Use and (b) Enhanced Thermal Conductivity Materials.

Subtopic Area 3a: Enabling Flexible Industrial Energy Use

- Subtopic 3a Technology Focus: Topic 3a focuses on developing and demonstrating technologies that will enhance industrial resilience and increase the flexibility of industrial energy usage.
    - Area of Interest 1 – Industrial Load Flexibility: This AOI seeks applications for innovative technologies that would allow core unit operations that typically have fixed energy input levels to operate flexibly.
    - Area of Interest 2 – Thermal Energy Storage Systems: This AOI seeks applications to develop and integrate thermal energy storage systems for providing industrial process heat.

Subtopic Area 3b: Enhanced Thermal Conductivity Materials

- Subtopic 3b Technology Focus: This subtopic will accelerate manufacturing R&D on innovative materials and systems to reduce energy use of electrified equipment and processes. It seeks new, cost-effective materials with thermal conductivity (and hence system efficiency) enhanced above that of today's commercially available conductors (by at least 10 watts per meter-Kelvin (W/mK)).

- Area of Interest 1 – Thermal Conductors with Moderate to High Electrical Conductivity: This AOI focuses on increasing the thermal conductivity of conductors that also have moderate to high electrical conductivity (e.g., metals, graphene, carbon nanotubes). This subtopic solicits innovative R&D proposals that also include some characterization or theory, modeling, and simulation to improve the fabrication of enhanced-thermal-conductivity metals and non-metals.

Topic Area 4: Decarbonizing Chemicals:

- Topic 4 Technology Focus: Topic 4 will focus on the development, validation, and demonstration needed to accelerate the commercial readiness of emerging low-carbon unit operations to decarbonize the full supply chain of the chemicals sector.
    - Areas of Interest: This topic seeks applications for innovative unit operations with preference for technologies addressing challenges specific to the chemicals sector.

Topic Area 5: Decarbonizing Iron and Steel

- Topic 5 Technology Focus: Applicants under this topic should develop and achieve advances in technologies leading to commercial readiness of low-carbon or net-zero-carbon process technologies for the iron and steel industry. All AOIs for Topic 5 seek both Tier 1 and Tier 2 applications.
    - Area of Interest 1 – Innovative Manufacturing Technologies to Enable Decarbonization: This AOI seeks applications for innovative technologies that enable decarbonization in ore-based or scrap-based iron and steelmaking operations.
    - Area of Interest 2 – Electrification of Existing Manufacturing Processes: This AOI seeks applications for technologies that convert existing iron and steelmaking thermal processes to utilize electricity.
    - Area of Interest 3 – Overcoming Challenges Associated with Utilizing Hydrogen in Steelmaking: This AOI seeks applications for innovative technologies that overcome the challenges (operational and product quality) associated with the use of hydrogen in steelmaking operations.
    - Area of Interest 4 – Addressing Scrap Contaminants in Recycling: This AOI seeks applications for technologies that minimize or eliminate tramp elements from entering the steelmaking process.

Topic Area 6: Decarbonizing Food and Beverage Products

- Topic 6 Technology Focus: Within this topic, DOE seeks the development and demonstration of high-impact decarbonization solutions for a wide variety of food and beverage manufacturing operations. Topic 6 seeks both Tier 1 and Tier 2 applications.
    - Area of Interest 1 – Low- and Zero-Carbon Solutions for Process Heating, Cooling and Refrigeration: This AOI seeks applications for innovative technologies that decarbonize existing operations within the food and beverage sector.

Topic Area 7: Decarbonizing Cement and Concrete

- Topic 7 Technology Focus: Applicants under this topic should develop and demonstrate advances to accelerate the commercial readiness of emerging low-carbon or net-zero-carbon technologies for the cement and concrete industry, to provide energy savings, carbon emissions reduction, and other benefits such as reduced complexity and improved process efficiency/optimization in the cement/concrete production sector. This topic seeks both Tier 1 and Tier 2 applications. For Tier 2,

applications should validate concepts in a relevant environment or operational environment at TRL 5–7 at an appropriate scale to advance the technology toward commercialization.

- Area of Interest 1 – Sustainably Sourced SCMs: Clinker Substitutions (Blended Cements): This AOI seeks proposals for Tier 1 or Tier 2 projects for optimizing processing parameters, blended cement formulations, and concrete constituent proportioning to achieve scalable, cost-competitive concrete with good levels of performance (high compressive strength, acceptable setting time, low permeability, high rate of hydration, workability, etc.) while significantly lowering the carbon footprint.
- Area of Interest 2 – Novel Decarbonized Production Processes for Portland Cement or Lime: This AOI seeks Tier 2 projects to address scale-up challenges with novel, net-low-carbon, carbon-neutral, zero-carbon, or carbon-negative production routes for (1) lime (CaO, a feedstock for OPC) that can be combined with other phases and water to directly produce calcium silicate hydrate (concrete), (2) modern OPC, or (3) a cement product that approximates the alite/belite ratio in OPC.
- Area of Interest 3 – Novel, Low-Carbon Non-OPC Formulations: This AOI seeks applications for Tier 1 or Tier 2 projects on low-carbon technologies that have the potential to produce scalable quantities of cost-competitive calcium silicate-based or non-silicate-based binder phases other than modern OPC, which can be used to produce concrete with early and late strength gain characteristics, hardening, durability, and other performance properties comparable to OPC.
- Area of Interest 4 – CO2 Mineralization: This AOI seeks proposals for Tier 1 or Tier 2 projects for optimizing products and processing parameters of ex situ CO2 mineralization in concrete to achieve scalable, cost-competitive products with good levels of performance (high compressive strength, acceptable setting time, low permeability, high rate of hydration, workability, etc.) while significantly lowering the overall product/process embodied carbon.

Topic Area 8: Decarbonizing Paper and Forest Products

- Topic 8 Technology Focus: Applicants under this topic should develop and demonstrate new advances in processes and associated equipment to accelerate the commercial readiness of emerging low-carbon or net-zero-carbon process technologies for the energy-intensive paper and forest products manufacturing applications. All AOIs for Topic 8 seek both Tier 1 and Tier 2 applications.
  - Area of Interest 1 – Innovative Paper-Forming and Novel Dewatering Technologies: This AOI seeks applications for innovative technologies that decarbonize existing thermal and non-thermal drying and dewatering processes within paper manufacturing, as a considerable portion of energy use in the paper industry is consumed in drying operations. T
  - Area of Interest 2 – Innovative Fiber Preparation, Pulping, and Chemical Recovery Processes: This AOI seeks applications for innovative pulping and chemical recovery technologies to improve energy efficiency and decarbonize operations associated with the preparation of pulp fibers.

Applicant Eligibility

Eligible prime applicants are institutions of higher education, for-profit entities, and non-profit entities.

State, local, and tribal government entities are eligible to participate as a subrecipient.

Department of Energy (DOE)/National Nuclear Security Agency (NNSA) Federally Funded Research and Development Center (FFRDCs) are eligible to apply for funding as a prime recipient or subrecipient. Non-DOE/NNSA FFRDCs are eligible to apply for funding as a prime recipient or subrecipient.

Federal agencies and instrumentalities (other than DOE and Non-DOE/NNSA FFRDCs) are eligible to participate as a subrecipient but are not eligible to apply as a prime recipient.

Domestic incorporated consortia are eligible to apply as a prime recipient or subrecipient.

To be eligible unincorporated consortia must designate one member of the consortium to serve as the prime recipient/consortium representative. The prime recipient/consortium representative must qualify as a domestic entity.

All applications in Topics/Subtopics 1, 2, 3a, 4, 5, 6, 7, and 8 (i.e., all except Subtopic 3b) are strongly encouraged to include an industry partner on the project team. The term “Industry Partner” includes non-profit and for-profit entities engaged in production, processing, or equipment manufacturing in an industry relevant to the topic.

Funding

In FY 2023, approximately $155.7 million is available to support an anticipated 37-62 awards through this program. Awards may vary between up to $750,000 and up to $10,000,000. Funding is anticipated to be allocated as follows:

Topic Area Number	Topic Area Title	Anticipated Number of Awards	Anticipated Minimum Award Size for Any One Individual Award (Fed Share)	Anticipated Maximum Award Size for Any One Individual Award (Fed Share)	Approximate Total Federal Funding Available for All Awards	Anticipated Period of Performance (months)
1	Decarbonizing Industrial Heat	6-10	$1 M	$6 M	$19.4 M	24-36
2	Low-Carbon Fuels Utilization R&D	3-6	$1 M	$5 M	$13.2 M	24-36
3a	Enabling Flexible Industrial Energy Use	3-5	$1 M	$5 M	$9.8 M	24-36
3b	Enhanced Thermal Conductivity Materials	3-4	$0.75 M	$1.5 M	$4 M	24-36
4	Decarbonizing Chemicals	5-9	$1 M	$10 M	$27.9 M	24-36
5	Decarbonizing Iron and Steel	7-10	$1 M	$10 M	$34.7 M	24-36
6	Decarbonizing Food and Beverage Products	3-5	$1 M	$8 M	$13.2 M	24-36
7	Decarbonizing Cement and Concrete	4-8	$1 M	$10 M	$21.5 M	24-36
8	Decarbonizing Forest Products	3-5	$1 M	$8 M	$12 M	24-36

Matching and Cost Sharing

For Tier 1 project applications, the cost share must be at least 20% of the total allowable costs (i.e., the sum of the government share, including FFRDC costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) for research and development projects.

Tier 2 project applications should be organized into at least one of the three distinct phases and must include activities in Phase 2 or Phase 3: research and development (Phase 1); design and testing (Phase 2); and installation and demonstration (Phase 3). The cost share for Phase 1 and Phase 2 must be at least 20% of the total allowable costs. For Phase 3, the cost share must be at least 50% of total allowable costs. Applications must clearly identify what work and which costs are associated with each phase.

The cost share must come from non-federal sources.

Contact Information

EERE personnel are prohibited from communicating (in writing or otherwise) with applicants except through the established question and answer process. Specifically, questions regarding the content of this FOA must be submitted to: IEDOMultiTopicFOA@ee.doe.gov

https://eere-exchange.energy.gov/Default.aspx#FoaId91b42212-f3d5-46d5-b5ce-203ed0d64971

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: National Energy Technology Laboratory

FY 2023 NETL Energy Storage and Validation Program

Grant Overview

This program supports innovative long duration energy storage system (ESS) demonstration projects that advance a technology towards commercialization and validate its cost and performance in the field to the energy stakeholder community. Eligible applicants are domestic entities including state governments, local governments, tribal governments, institutions of higher education, for-profit entities, and nonprofits, and federally funded research and development centers and national laboratories.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $15 million
Award Range: up to $5 million
Match: 50 percent
Solicitation date: July 25, 2023
Proposal due: September 15, 2023 (Concept Papers); December 4, 2023 (Full Applications)

https://netl.doe.gov/grid-resilience/FOA3036

Tips

- Applicant teams are encouraged to include community-based organizations representing underserved and/or rural and remote communities, Tribal Nations, organizations representing labor, and institutions of higher education, including Historically Black Colleges and Universities, Tribal Colleges and Universities, and Minority Serving Institutions

Department: U.S. Department of Energy
Agency: National Energy Technology Laboratory

FY 2023 NETL Energy Storage and Validation Program

Detailed Summary

This program supports innovative long duration energy storage system (ESS) demonstration projects that advance technology towards commercialization and validate its cost and performance in the field to the energy stakeholder community. These demonstrations will contribute data to the National Lab led Rapid Operational Validation Initiative (ROVI) in order to unlock insights about the performance of these systems that will accelerate the testing and validation process for emerging technologies. The FOA contains three areas of interest based on eligible technology will each be eligible for up to $5 million in federal funding available with 50% cost share provided by the applicant organization(s).

Area of Interest 1 -Lithium Battery Energy Storage System Demonstration
The technology used for this demonstration must be considered a Lithium Ion or Lithium Metal Battery, such as the technologies described in the U.S DOE Energy Storage Handbook. Systems must be a bi-directional electricity-in electricity out system with quality performance metrics justified by the applicant based on their intended storage application. Example performance metrics include:

- High Round Trip Efficiency (> 80% AC-AC Efficiency if AC Grid Connected)
- Long Cycle Life (> 3000 cycles at 100% Depth of Discharge before end of life)
- Long Calendar Life (> 10 years of operation before end of life)
- Low Cost (Pathway to < $.05/kWh Levelized Cost of Storage (LCOS))

Area of Interest 2 – Flow Battery Energy Storage System Demonstration
The technology used for this demonstration must be considered a Redox Flow Battery, such as the technologies described in the U.S DOE Energy Storage Handbook. Systems must be a bi-directional electricity-in electricity out system with quality performance metrics justified by the applicant based on their intended storage application. Example performance metrics include:

- High Round Trip Efficiency (> 65% AC-AC Efficiency if AC Grid Connected)
- Long Calendar Life (> 10 years of operation before end of life)
- Low Cost (Pathway to < $.05/kWh Levelized Cost of Storage (LCOS))

Area of Interest 3 – Innovative Technology Energy Storage System Demonstration
Demonstration of other bi-directional electricity-in electricity out system with quality performance metrics justified by the applicant based on their intended storage application. Storage technology may not be a lithium battery or flow battery as described in the other two areas of interest.

All projects funded under this program are expected to include a Community Benefits Plan to:

- Support meaningful community and labor engagement
- Invest in America's workforce and support good jobs
- Advance diversity, equity, inclusion, and accessibility
- Contribute to the President's goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative).

Applicant Eligibility

Eligible applicants are domestic entities including state governments, local governments, tribal governments, institutions of higher education, for-profit entities, and nonprofit, and federally funded research and development centers and national laboratories.

To qualify as a domestic entity, the entity must be organized, chartered or incorporated (or otherwise formed) under the laws of a particular state territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Federal agencies, instrumentalities, and corporations, other than the Department of Energy, are eligible to participate as a subrecipient but are not eligible to apply as a prime recipient.

Funding

In FY 2023, approximately $15 million in funding is available to support approximately 3 awards through this program. The Funding agency intends to award one grant of $5 million for each area of interest.

Matching and Cost Share

The cost share must be at least 50% of the total allowable costs for demonstration and commercial application projects.

Contact Information

Sommer Starr
sommer.starr@netl.doe.gov

https://netl.doe.gov/grid-resilience/FOA3036

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Energy Efficiency and Renewable Energy (EERE)

FY 2023 Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

Grant Overview

This program will support the government-wide approach to the climate crisis by driving the innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. Specifically, this program is seeking innovative solutions for on-road and off-road vehicles to develop and accelerate the charging infrastructure and drastically-reduced greenhouse gas (GHG) emissions in support of Administration goals. Eligible applicants are for-profit entities, nonprofit entities, individuals, state governments, local governments, and tribal governments.

Program History

	Total Funding	# of Awards
2022	$85,793,110	43

Key Information

Total Funding: $99.5 million
Award Range: $500,000- $15 million
Match: Varies
Solicitation Date: September 12, 2023
Proposal due: November 3, 2023

https://www.energy.gov/eere/renewable-energy-siting-through-technical-engagement-and-planning

Awardee Profile

City of Arlington
Texas

AMOUNT: $780,182
YEAR: 2022

The City of Arlington received funding for a Multimodal/Drone Delivery Demonstration project focused on Disadvantaged Communities and Mobility Challenged Populations.

Department: U.S. Department of Energy
Agency: Energy Efficiency and Renewable Energy (EERE)

FY 2023 Vehicle Technologies Office (VTO) Program Wide Funding Opportunity Announcement

Detailed Summary

The purpose of this program is to support the government-wide approach to the climate crisis by driving the innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. Specifically, this program is seeking innovative solutions for on-road and off-road vehicles to develop and accelerate the charging infrastructure and drastically-reduced greenhouse gas (GHG) emissions in support of Administration goals. Under this program, the Department of Energy is seeking projects that address one of the following priority areas:

- Topic Area 1A: High-Capacity, Long Cycle Life Lithium-Sulfur (Li-S) Batteries: The objective of this topic area is to improve S utilization, control polysulfide shuttle and other loss mechanisms. The expected final deliverable includes five 2 Ah or greater Li-S cells delivered for independent testing and demonstrating at least 250 Wh/kg and over 1,000 cycles at C/3 charge/discharge rate, 80% depth of discharge, with 80% capacity retention. It is strongly encouraged that a battery manufacturer or original equipment manufacturer (OEM) be the prime applicant.
- Topic Area 1B: Mechanistic Modeling of Li-S Batteries: The objective of this topic area is to seek more accurate and in-depth understanding of sulfur cathode electrochemistry through closely coupled experimental and computational investigation of all relevant phenomena. The goal of this understanding is to indicate materials and electrode design approaches that will improve practical sulfur cathode energy density and cycle life.
- Topic Area 2: Improved 12-volt Lead Acid Batteries for Safety-critical Electric Vehicle Applications: The objective of this topic area is to improve the service life and performance requirements while reducing the cost of the enhanced flooded battery (EFB) and absorbed glass mat (AGM) lead acid battery. Improvements in 12V lead battery performance and cost can be achieved through development of more robust product designs and manufacturing processes. Projects will be required to produce three, 12V lead acid batteries for an independent evaluation including technical reports and research papers that document battery life and cost improvement.
- Topic Area 3: Advanced Integrated On-board Charging System: The objective of this topic area is to research, develop, and demonstrate innovative, functionally integrated systems co-optimizing both on-board charging and electric traction drive power electronics to reduce cost and improve charging capability, including bi-directional vehicle-to-home (V2H) and vehicle-to-building (V2B). The projects should focus on integration and optimization of the on-board charger and inverter to provide increased functionality with an improved efficiency and reduced overall cost. Teams are highly encouraged to include vehicle manufacturers, power electronics and charging equipment manufacturers/suppliers.

- Topic Area 4: Advanced Wireless Charging Concepts for Heavy-Duty Vehicles: The objective of this topic area is to research, develop, and demonstrate advanced wireless charging concepts for electrified heavy-duty commercial vehicles in static and/or opportunity charging applications capable of charging at rates required to meet the vehicle's daily energy and operational requirements. Applications in depots and warehouses used by short-haul/regional HD trucks are of particularly strong interest given the vast number of these depots and the potential replicability of projects that focus on depots.
- Topic Area 5: Development and Demonstration of Dimethyl Ether Engine for Off-Road Applications: The objective of this topic area is to develop and demonstrate a near-commercial, direct-injection engine prototype suitable for use in off-road vehicles or equipment that demonstrates a substantial reduction in GHG emissions when operated with a renewable source of DME. Engine demonstration may be conducted via engine dynamometer testing or vehicle platform integration and chassis dynamometer testing.
- Topic Area 6: Hydrogen Combustion Engines: The objective of the area of interest is to research, develop, and validate an internal combustion (IC) engine for on-road and non-road (off-road, rail, and shipping) applications that can fully operate on hydrogen while achieving near or equivalent efficiency of conventional diesel engines and meeting prevailing EPA emission standards. While 4-stroke IC engines are predominant in commercial vehicle application, we also encourage proposals for hydrogen combustion by two-stroke opposed piston engines. Applicant teams should include an Original Equipment Manufacturer (OEM). Teams are also encouraged to include research partners from universities and/or National Laboratories.
- Topic Area 7: Circularity and Sustainability of Polymer Composites for Vehicle Lightweighting and Decarbonization: The objective of this area of interest is to reduce the embodied energy and lifecycle greenhouse gas emissions of polymer composites. This could be accomplished through novel recycling methods for existing polymer composites, development of new polymer composite materials to enable recyclability, or improvements to manufacturing processes to reduce CO2 emissions. Proposed materials should be applicable for structural automotive components considering strength, stiffness, durability, manufacturing cycle time, end of life, and cost. Applicant teams are encouraged to include members from all parts of the materials development, manufacturing, scale-up production, and/or recycling aspects of the supply chain.
- Topic Area 8: Domestic Magnesium Production Research: The objective of this area of interest is to develop low cost, low carbon footprint methods of domestic magnesium production for lightweight vehicle components. VTO is targeting expanding the current domestic landscape to include additional primary and secondary methods to produce magnesium including reducing cost and greenhouse gas emissions of electrolysis and Pidgeon methods. Proposals will identify the targeted domestic source of magnesium as either primary or secondary, as well as the proposed production methods being developed for extraction/recovery/concentration, refining, and alloying to structural automotive grades. Applicant teams are encouraged, to include members from all parts of the materials development, manufacturing, scale-up production, and/or recycling aspects of the supply chain.
- Topic Area 9: Novel Lightweight Materials: The objective of this area of interest is to explore promising new lightweight materials beyond current industry use or Program focus (e.g. advanced high-strength steel, aluminum, magnesium, and polymer composites reinforced with carbon fiber or conventional fillers) and assess applicability to automotive structural components. Proposed materials should strive to match incumbent properties such as strength, ductility, corrosion

resistance, fatigue life, appearance, and manufacturability, and significantly improve upon incumbent properties such as density, cost, and carbon footprint.

- Topic Area 10: Mobility System Approaches Supporting Public Transportation: The objective of this area of interest is to develop and demonstrate mobility-system level approaches to improve the efficiency and convenience of public transportation, acknowledging its critical role in both low-carbon people movement and ensuring equitable mobility access. Proposed projects should take an innovative mobility system-level approach to enhance and integrate public transportation, influence traveler behaviors, and harness connections between housing hubs and destinations (jobs, grocery stores, health care, etc.). Applicant teams must include a public transportation entity.
- Topic Area 11: Reducing Soft Costs of Electric Vehicle Infrastructure to Enable Widespread Deployment: The objective of this topic area is to develop innovative and coordinated strategies, processes, or programs to significantly reduce the soft costs of new EV charging installations implemented across the national charging infrastructure. These programs should be applicable to residential and/or public locations such as workplaces, multi-unit dwellings, retail establishments or corridor locations, to include the soft costs for both AC level 2 charging and DC fast charging. Applications should also assess the impacts of the proposed approach to reducing the total cost, and timeline of new installations. Applications should target only one of the following strategies for soft cost reduction:
    - A comprehensive nationwide recognition and technical assistance program for authorities having jurisdiction (AHJs) or municipalities aimed at streamlining the installation of electric vehicle supply equipment by reducing permitting, compliance processes or other soft cost barriers and thereby increasing deployment. The program should be compelling, enduring, simple and straightforward, accessible and expandable, robust and reliable, and highlight visible
    - A comprehensive national program focused on streamlining utility interconnection process related to EVs
    - Other innovative approaches
- Topic Area 12: Consumer Education Campaign for Electric Vehicles and Charging: The objective of this area of interest is to implement a high-impact, brand neutral, nationwide consumer education campaign targeting consumers in the process of shopping for a vehicle. This campaign should address core questions consumers have about EVs resulting in increased levels of consumer confidence and comfort in choosing to purchase an electric vehicle. DOE is interested in projects that have the greatest opportunity to increase the rate of consumer EV adoption due to increased familiarity with EVs and EV charging. Projects that include the purchase or lease of vehicles, EV charging implementation, or construction are not eligible through this topic area.
- Topic Area 13: Demonstration and Deployment (Open topic): The objective of this area of interest is to draw on this portfolio and explore novel solutions to transportation and related clean energy challenges through demonstration or deployment projects not otherwise addressed under this program. This area could include projects to address challenges unique to their geographic areas and solutions with potential for replication in other areas across the country, or other ways to accelerate clean transportation deployment. The project team must include at least one active and DOE designated Clean Cities coalition with a significant role (at least 25% of project budget). Active Coalitions can be found here. Projects of interest include but are not limited to:
    - Projects with innovative approaches to decarbonize transportation;
    - Projects that address mobility needs of local underserved regions or populations;

    - Implement transportation fuels, vehicles, systems, and technologies that have positive impact on greenhouse gas emissions, such as those that implement renewable fuels and renewable energy sources (ex: solar/wind power) into transportation systems;
    - Those which implement advanced technologies or alternative fuels in off-road, marine, rail, and other non-road applications. For example, ships and rail projects can have very high GGE reduction per vehicle by adopting alternative fuels, renewable blends and/or advanced technologies those which develop roadmaps for decarbonization in local Clean Cities regions;
    - Projects that focus on transitioning high-impact heavy-duty fleets to new fuels and technologies that reduce petroleum consumption and greenhouse gas and criteria emissions;
    - Projects which improve transportation affordability and reduce emissions by accelerating or enabling widespread access to affordable alternative and renewable fuels; and
    - Projects that holistically drive adoption of clean energy technologies across jurisdictions
- Topic Area 14: Clean Cities Coalition Network Outreach, Education and Training: The objective of this area of interest is to fund projects that foster broader adoption of clean vehicles and installation of supporting infrastructure and contribute the reductions in lifecycle greenhouse gases and other harmful air pollutants through outreach, education and training activities. The project budget cannot be used for technology demonstration or deployment. Project teams must include at least one DOE-designated Clean Cities coalition.

To support the goal of building a clean and equitable energy economy, projects funded under this program are expected to:

- Advance diversity, equity, inclusion, and accessibility (DEIA);
- Contribute to energy equity; and
- Invest in America's workforce

Applicant Eligibility

Eligible applicants are for-profit entities, nonprofit entities, individuals, state governments, local governments, and tribal governments. Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995 are not eligible to apply for funding.

Funding

In FY 2023, approximately $99.5 million is available to support between 37 and 63 awards ranging from $500,000-$7 million. Specific funding amounts for each topic area is as follows:

- Topic Area 1A: High-Capacity, Long Cycle Life Lithium-Sulfur (Li-S) Batteries: an estimated $12 million to support 3-4 awards ranging from $3 million to $4 million under this topic area. The project period is 36 months.
- Topic Area 1B: Mechanistic Modeling of Li-S Batteries: an estimated $3 million to support 1-2 awards ranging from $1.5 million to $3 million under this topic area. The project period is 36 months.
- Topic Area 2: Improved 12-volt Lead Acid Batteries for Safety-critical Electric Vehicle Applications: an estimated $5 million to support 2-3 awards ranging from $1 million to $2 million under this topic area. The project period is 36 months.

- Topic Area 3: Advanced Integrated On-board Charging System: an estimated $10 million to support 2-3 awards ranging from $3,333,333 million to $5 million under this topic area. The project period is 36 months.
- Topic Area 4: Advanced Wireless Charging Concepts for Heavy-Duty Vehicles: an estimated $5 million to support 1-2 awards ranging from $2.5 million to $5 million under this topic area. The project period is 36 months.
- Topic Area 5: Development and Demonstration of Dimethyl Ether Engine for Off-Road Applications: an estimated $5 million to support 1 award ranging of up to $2.5 million under this topic area. The project period is 36 months.
- Topic Area 6: Hydrogen Combustion Engines: an estimated $7 million to support 2-4 awards ranging from $1.5 million to $3.5 million under this topic area. The project period is 36 months.
- Topic Area 7: Circularity and Sustainability of Polymer Composites for Vehicle Lightweighting and Decarbonization: an estimated $8 million to support 4-5 awards ranging from $1.5 million to $2 million under this topic area. The project period is 36 months.
- Topic Area 8: Domestic Magnesium Production Research: an estimated $4 million to support 2-4 awards ranging from $1 million to $2 million under this topic area. The project period is 36 months.
- Topic Area 9: Novel Lightweight Materials: an estimated $3 million to support 3-4 awards ranging from $750,000 million to $1 million under this topic area. The project period is 36 months.
- Topic Area 10: Mobility System Approaches Supporting Public Transportation: an estimated $10 million to support 3-5 awards ranging from $2 million to $3,333,333 under this topic area. The project period is 36 months.
- Topic Area 11: Reducing Soft Costs of Electric Vehicle Infrastructure to Enable Widespread Deployment: an estimated $15 million to support 2-4 awards ranging from $3.75 million to $7 million under this topic area. The project period is 36 months.
- Topic Area 12: Consumer Education Campaign for Electric Vehicles and Charging: an estimated $5 million to support 1-2 awards ranging from $2 million to $5 million under this topic area. The project period is 24-36 months.
- Topic Area 13: Demonstration and Deployment (Open topic): an estimated $5 million to support 5-10 awards ranging from $500,000 to $1 million under this topic area. The project period is 24-36 months.
- Topic Area 14: Clean Cities Coalition Network Outreach, Education and Training: an estimated $5 million to support 5-10 awards ranging from $500,000 to $1 million under this topic area. The project period is 24-36 months.

Matching and Cost Share

Cost share requirements for each topic areas are as follows:

- Topic Area 1A: 20 percent
- Topic Area 1B: 20 percent
- Topic Area 2: 50 percent
- Topic Area 3: 20 percent
- Topic Area 4: 20 percent (R&D), 50 percent (demonstration)
- Topic Area 5: 20 percent (R&D), 50 percent (demonstration)
- Topic Area 6: 20 percent
- Topic Area 7: 20 percent
- Topic Area 8: 20 percent

- Topic Area 9: 20 percent
- Topic Area 10: 20 percent
- Topic Area 11: Match not required
- Topic Area 12: Match not required
- Topic Area 13: 50 percent
- Topic Area 14: Match not required

Contact Information

Program Staff
DE-FOA-0002893@netl.doe.gov

https://www.energy.gov/eere/renewable-energy-siting-through-technical-engagement-and-planning

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Section 242: Hydroelectric Production Incentive Program

Grant Overview

This program will provide incentive payments to qualified hydroelectric facilities for electricity generated and sold. Eligible applicants include any owner or authorized operator of a qualified hydroelectric generation facility.

Program History

	Total Funding	# of Awards
2020	$13.5 million	55

Key Information and Tips

Total Funding: $125 million
Award Range: Varies
Match: Not required
Solicitation date: March 22, 2023
Due Date: May 8, 2023

https://www.energy.gov/gdo/section-242-hydroelectric-production-incentive-program

Awardee Profile

Inside Passage Electric Cooperative, AK

AMOUNT: $119,512

YEAR: 2020

The Gunnuk Creek Hydro facility received funding as a result of increased energy production.

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Section 242: Hydroelectric Production Incentive Program

Detailed Summary

The purpose of this program is to provide incentive payments to qualified hydroelectric facilities for electricity generated and sold. To qualify for an incentive payment, an eligible applicant must demonstrate that its hydroelectric facility meets all of the following criteria of a qualified hydroelectric facility:

- Is located in a State or in U.S. jurisdictional waters
- Has a water-powered turbine or other generating device (including conventional or new and innovative technologies capable of continuous operation)
- Is owned by a non-Federal entity and operated by a non-Federal entity. The owner or authorized operator must be applying on behalf of:
    - A Federal Energy Regulatory Commission (FERC)-jurisdictional hydroelectric facility, as the holder of a license or exemption issued by FERC for the operation of such hydroelectric facility; or
    - A non-FERC-jurisdictional hydroelectric facility, as the holder of the exclusive rights to the beneficial use of the hydroelectric facility, including legal title
- Began producing hydroelectric energy for sale on or after October 1, 2005, either through added generation capability, or at a facility where operations began prior to October 1, 2005, so long as the facility had been offline because of disrepair or dismantling for at least five consecutive years prior and underwent significant changes
- Has either:
    - Added generation capability to an existing dam or conduit (as defined above), and began operation between October 1, 2005 and September 30, 2027 or;
    - A generating capacity of not more than 20 megawatts, must be a non-Federal entity which received a construction authorization from FERC, if applicable, and is constructed in an area in which there is inadequate electric service. To be considered an area in which there is inadequate electric service, the facility must demonstrate one of the following:
        - A lack of access to the electric grid, as demonstrated by a lack of connection to a regional or national interconnected transmission system, such as the Eastern Interconnect, the Western Interconnect, or the Texas Interconnect;
        - A significantly high frequency of electric outages, as demonstrated by a reported annual common reliability metric, including but not limited to SAIFI without MED, that is in the highest 10% of total annual reported outages;
        - A significantly high cost of electricity, as demonstrated by a reported annual average price of retail residential electricity that is in the highest 10% of total annual reported average retail residential electricity price.

To be eligible for funding a project must have produced electrical power produced from a hydroelectric generation facility placed in operation on or after October 1, 2005, and on or before September 30, 2027.

Applicant Eligibility

Eligible applicants include any owner or authorized operator of a hydroelectric generation facility may apply for incentive payments for net electric energy generated by and sold from its operation during the eligibility window.

Funding

In FY 2023, approximately $125 million is available to support awards through this program. Specific award amounts will be calculated as follows:

- The amount of eligible kWhs produced by the hydroelectric generation facility is multiplied by the statutory incentive rate of $0.018/kWh, which is adjusted as required by 42 U.S.C. § 15881(e)(2).
- A payment to a qualified hydroelectric facility shall not exceed the statutory limit established in 42 U.S.C. 15881(e)(1) per applicant per calendar year

Subject to the availability of appropriated funds, a hydroelectric generation facility may receive payments for a period of 10 consecutive fiscal years. Such period shall begin with the first fiscal year in which the facility began producing hydroelectric energy for sale. For example, a hydroelectric generation facility that began producing hydroelectric energy for sale on June 1, 2020, and continued to produce and sell hydroelectric energy for 10 consecutive years would be eligible to apply for incentive payments through the end of fiscal year 2029 but not beyond that time period.

The period for payment under this program ends with fiscal year 2036.

Contact Information

Program Staff
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https://www.energy.gov/gdo/section-242-hydroelectric-production-incentive-program

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Section 243: Hydroelectric Efficiency Improvement Incentives Program

Grant Overview

This program will make incentive payments to the owners or authorized operators of a hydroelectric facility at an existing dam for capital improvements directly related to improving facility efficiency by at least three percent.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $75 million
Award Range: Varies
Match: Not required
Solicitation date: March 22, 2023
Due Date: June 20, 2023

https://www.energy.gov/gdo/section-243-hydroelectric-efficiency-improvement-incentives-program

Tips

- An applicant must demonstrate an increase of at least three percent in the efficiency improvement percentage for the hydroelectric facility where the capital improvement(s) were made or are to be made.

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Section 243: Hydroelectric Efficiency Improvement Incentives Program

Detailed Summary

The purpose of this program is to make incentive payments to the owner or authorized operator of a hydroelectric facility at an existing dam, for capital improvements directly related to improving facility efficiency by at least three percent.

In order to be eligible for a hydroelectric efficiency improvement incentive payment under this program, the following qualifications must be met:

- The hydroelectric facility at the dam must have been placed in service before November 15, 2021
- The hydroelectric facility must be operable at the time an application is submitted
- The capital improvement(s) are made:
    - On the hydroelectric facility side of the point of interconnection or common coupling with the electric utility, or
    - In a facility that remotely controls hydroelectric facility operations
- The capital improvement(s) must increase the efficiency of the hydroelectric facility by at least 3 percent.

To be eligible to apply for a hydroelectric efficiency improvement incentive payment, a capital improvement project at an eligible hydroelectric facility must have applied for or already received all Federal, State, and/or Tribal authorizations and have initiated, requested, or completed any required federal environmental review processes under the National Environmental Policy Act of 1969 (NEPA).

The funding agency seeks eligible projects that not only contribute to the country's energy technology and climate goals, but also promote the following goals:

- Create good paying, high quality, local jobs
- Advance diversity, equity, inclusion, and accessibility for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality
- Support meaningful community and labor engagement
- Contribute to the goal that 40 percent of the overall benefits from certain federal investments flow to disadvantaged communities

Applicant Eligibility

Eligible applicants include any owner or authorized operator of a hydroelectric facility at an eligible existing dam that meets the eligibility criteria mentioned above.

Funding

In FY 2023, approximately $75 million is available to support awards of up to $5 million per facility through this program. Under this program incentive payments shall not exceed 30 percent of the costs of the applicable capital improvement.

The funding agency may set aside up to 25 percent of the funding under this program for small projects, defined as hydropower projects that have a nameplate capacity of less than 10 MW and owned by small businesses, municipal entities, nonprofit organizations, electric cooperatives, and/or Indian Tribes.

Contact Information

Program Staff
hydroelectricincentives@hq.doe.gov

https://www.energy.gov/gdo/section-243-hydroelectric-efficiency-improvement-incentives-program

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Section 247: Maintaining and Enhancing Hydroelectricity Incentives

Grant Overview

This program will make incentive payments to the owner or authorized operator of a qualified hydroelectric facility for capital improvements directly related to improving grid resilience (including the addition of energy storage such as reservoir capacity, pumped storage hydropower, and batteries) and dam safety and related to environmental improvements. Eligible applicants include any owner or authorized operator of an existing facility that is licensed or has received an exemption from licensing from FERC pursuant to the Federal Power Act (16 U.S.C. 791a et seq.) or is a hydroelectric project constructed, operated, or maintained pursuant to a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to the Federal Power Act prior to November 15, 2021.

Program History

This is a new program created through the Infrastructure Investment and Jobs Act.

Key Information

Total Funding: $553.6 million
Award Range: Up to $5 million
Match: Not required
Solicitation date: May 8, 2023
Due Date: June 22, 2023 (Letter of Intent) October 6, 2023 (Full Application)

https://www.energy.gov/gdo/section-247-maintaining-and-enhancing-hydroelectricity-incentives

Tips

- A public webinar will be held on May 24th to provide an overview of the application guidance document. Click here to register.
- A letter of Intent must be submitted to be eligible to apply under the full application
- Only materials procured or other costs incurred after November 15, 2021, are eligible for incentive payments.

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Section 247: Maintaining and Enhancing Hydroelectricity Incentives

Detailed Summary

The purpose of this program is to make incentive payments to the owner or authorized operator of a qualified hydroelectric facility for capital improvements directly related to improving grid resilience (including the addition of energy storage such as reservoir capacity, pumped storage hydropower, and batteries) and dam safety and related to environmental improvements. Under this program all developments within an individual Federal Energy Regulatory Commission (FERC)-licensed hydroelectric project will be treated as a single hydroelectric facility and may receive one incentive payment subject to the above limitations per fiscal year.

A qualified hydroelectric facility:

- Is licensed by FERC or is a hydroelectric project constructed, operated, or maintained pursuant to a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to the Federal Power Act (16 U.S.C. 791a et seq.), or has a FERC-issued exemption;
- Was placed into service before November 15, 2021; and
- Is in compliance with all applicable Federal, State, and Tribal requirements, or would be brought into compliance with all applicable Federal, State, and Tribal requirements as a result of the capital improvements carried out using an incentive payment

Funding will be available through the following categories:

Category 1: Improving grid resiliency: eligible capital improvement projects will directly relate to improving grid resiliency and include:

- Adapting more quickly to changing grid conditions
- Providing ancillary services (including black-start capabilities, voltage support, and spinning reserves).
- Integrating other variable sources of electricity generation
- Managing accumulated reservoir sediments.

Category 2: Improving dam safety: eligible capital improvement projects will improve dam safety to ensure acceptable performance under all loading conditions (including static, hydrologic, and seismic conditions) and include:

- The maintenance or upgrade of spillways or other appurtenant structures
- Dam stability improvements, including erosion repair and enhanced seepage controls
- Upgrades or replacements of floodgates or natural infrastructure restoration or protection to improve flood risk reduction

Category 3: Environmental improvements: eligible capital improvement projects will directly relate to environmental improvements and include:

- Adding or improving safe and effective fish passage, including new or upgraded turbine technology, fish ladders, fishways, and all other associated technology, equipment, or other fish passage technology to a qualified hydroelectric facility
- Improving the quality of the water retained or released by a qualified hydroelectric facility
- Promoting downstream sediment transport processes and habitat maintenance
- Improving recreational access to the project vicinity including roads, trails, boat ingress and egress, flows to improve recreation, and infrastructure that improves river recreation opportunities.

The funding agency seeks eligible projects that not only contribute to the country's energy technology and climate goals but also promote the following goals:

- Create good paying, high-quality, local jobs
- Advance diversity, equity, inclusion, and accessibility for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality
- Support meaningful community and labor engagement
- Contribute to the goal that 40 percent of the overall benefits from certain federal investments flow to disadvantaged communities

Applicant Eligibility

Eligible applicants include any owner or authorized operator of an existing facility that is licensed or has received an exemption from licensing from FERC pursuant to the Federal Power Act (16 U.S.C. 791a et seq.) or is a hydroelectric project constructed, operated, or maintained pursuant to a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to the Federal Power Act prior to November 15, 2021.

There is no limit to the number of facilities for which applications can be filed by a single owner. Applications for capital improvements across different categories (i.e., grid resiliency, dam safety, and environmental improvements) must be filed in separate applications. However, developments within an individual FERC-licensed hydroelectric project will be treated as a single hydroelectric facility and only one incentive payment may be made to each hydroelectric facility per fiscal year.

Funding

In FY 2023, approximately $553.6 million is available to support awards up to $5 million. An estimated 25 percent of this total funding will be reserved for small projects defined as hydropower projects that have a nameplate capacity of less than 10 MW and are owned by small businesses, municipal entities (including electric cooperatives), and nonprofit organizations or Indian Tribes. Incentive payments shall not exceed 30 percent of the costs of the applicable capital improvement.

Matching and Cost Share

There is no matching requirement for this program.

Contact Information

Program Staff

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https://www.energy.gov/gdo/section-247-maintaining-and-enhancing-hydroelectricity-incentives

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy

Agency: Solar Energy Technologies Office

FY 2023 Sunny Awards for Equitable Community Solar

Grant Overview

This program provides prizes for community solar projects and programs that employ or develop best practices to increase equitable access to the meaningful benefits of community solar for subscribers and their communities. Eligible applicants are individual entities or project teams.

Program History

	Total Funding	# of Awards
2021	$212,500	53

Key Information and Tips

Total Funding: $200,000
Award Amounts: $2,500 - $10,000
Match: Not required
Solicitation Date: April 19, 2023
Proposal Due: July 14, 2023

- Priority will be given to community solar projects or programs that show evidence of enabling equitable access to the meaningful benefits of community solar; and to projects that demonstrate scalable and replicable best practices that can support the community solar industry in reaching its targets.

https://www.energy.gov/communitysolar/2023-sunny-awards-equitable-community-solar

Awardee Profile

Solar One
Brooklyn, NY

AMOUNT: $10,000
YEAR: 2022

Solar One received funding to help deliver energy savings to the 500 households it se ves.

Department: U.S. Department of Energy

Agency: Solar Energy Technologies Office

FY 2023 Sunny Awards for Equitable Community Solar

Detailed Summary

The purpose of this program is to support and recognize community solar projects and programs that employ or develop best practices to increase equitable access to the meaningful benefits of community solar for subscribers and their communities. For this program, community solar is defined as any solar project or purchasing program in which the benefits of a solar project flow to multiple customers such as individuals, businesses, nonprofit organizations, and other groups, within a certain geographic area.

Awards are available for community solar project portfolios, state programs, and utility programs. Portfolios are collections of at least one and up to five individual community solar projects of at least 8.5 kW and any installation type. State and utility programs are run by states, tribes, territories, municipalities, or utilities, which enable, incentivize, or otherwise support the development of multiple community solar projects within a specific jurisdiction.

To be eligible, all projects must provide at least two of the following meaningful benefits:

- Low- to moderate-income (LMI) household access: include at least 40 percent subscribers from LMI households
- Greater household savings: provide at least a 20 percent reduction in annual electricity bills and/or provide equivalent financial benefits for all residential subscribers
- Resilience and grid benefits: include or support the capability to deliver power to households and/or critical facilities during a grid outage and/or strengthen grid operations through strategic siting, demand response, and other actions
- Community ownership: include or support community ownership of, or equity in, project and/or portfolio assets, which may include other wealth-building strategies, such as community benefits agreements
- Equitable workforce development and entrepreneurship: support community workforce development by advancing high-wage opportunities, reducing income disparities across demographic groups, ensuring a trained and available workforce that is reflective of the community, and creating a safe working environment and pathways to union membership

Large grand prize awards, smaller finalist awards, and meaningful benefit/engagement awards are available through this program. Meaningful benefit/engagement awards will also receive recognition of the attributes and best practices that set them apart.

Applicant Eligibility

Eligible applicants are individual entities or project teams. Applicants that have worked together on the development of solar project portfolios are encouraged to participate as teams and coordinate the submission of a package.

All team applicants must designate a single entity to be the team lead. Team leads must be a member of the National Community Solar Partnership (NCSP). Information on NCSP membership registration can be found online at ncsp.solarinyourcommunity.org.

Community solar program-focused team leads must be an electric utility; an electric cooperative; a municipal power company; or a state, local, or tribal government entity.

Community solar project-focused teams are encouraged to include and prioritize funds for the project's community partner.

For a portfolio to be eligible, all projects within the portfolio must have been placed in service after January 1, 2020. Community solar state and utility programs must have been launched or have had significant updates after January 1, 2020. The nominated project portfolio must only contain projects that have been energized for at least six months prior to submission. State or utility programs must support at least one project that has been energized for at least six months prior to submission.

State and utility programs are only eligible to submit one package for a community solar program. Individual entities or portfolio teams may submit only one submission package, which may include at least one and up to five individual community solar projects.

Projects and entities that have received a finalist award in prior program rounds are eligible to apply for all awards in the current round. Projects and entities that have received a meaningful benefit special recognition award in prior program rounds are only eligible to apply for finalist or grand prize awards and are not eligible to apply for meaningful benefit or engagement awards. Projects or entities that have received a grand prize award in prior program rounds are not eligible to apply for additional prizes of any kind.

Funding

In FY 2023, up to $200,000 is available to support awards through this program, as follows:

- Grand prize awards: up to 5 awards of $10,000
- Finalist awards: up to 30 awards of $2,500
- Meaningful benefit/engagement awards: up to 15 awards of $5,000

There are no stated matching requirements for this program.

Meaningful benefit/engagement awards will also receive recognition of the attributes and best practices that set them apart.

Finalist awards are expected to be announced on September 11, 2023. Grand prize and meaningful benefit/engagement awards are expected to be announced on January 15, 2024. Funding for all awards will be distributed in late 2023 or early 2024.

Contact Information

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https://www.energy.gov/communitysolar/2023-sunny-awards-equitable-community-solar

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Transmission Siting and Economic Development Program

Grant Overview

This program aims to ensure the timely siting and construction of new or upgraded interstate or offshore electric transmission facilities while providing economic benefits to impacted communities. The program will provide funding in two Areas of Interest: 1) Siting and Permitting Activities, and 2) Economic Development Activities. Eligible applicants must be a state, local, or Tribal governmental entity. For Area of Interest 1, eligible applicants must have authority to make a final determination regarding the siting, permitting, or regulatory status of a covered transmission project that is proposed to be located in an area under the jurisdiction of the entity.

Program History

This is a new program created through the Inflation Reduction Act

Key Information

Total Funding: $300 million
Award Range: Varies by topic area
Match: Varies by topic area
Solicitation date: November 14, 2022
Proposal due: October 31, 2023 (Concept Paper)
April 5, 2024 (Full Application)

https://www.grants.gov/web/grants/view-opportunity.html?oppId=350022

Tips

- Applicants are strongly encouraged to seek funding for economic development activities prior to a siting decision (if the grantee is a siting authority) or prior to construction commencing on the applicable project
- Achieving environmental and energy justice objectives is a priority for Area of Interest 1 funding.
- Projects are expected to (1) support meaningful community and labor engagement; (2) invest in America's workforce; (3) advance diversity, equity, inclusion, and accessibility (DEIA); and (4) contribute to the President's goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities.

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Transmission Siting and Economic Development Program

Detailed Summary

The purpose of this program is to ensure the timely siting and construction of new or upgraded interstate or offshore electric transmission facilities while providing economic benefits to impacted communities. This program invites applications for two areas of interest:

Area of Interest 1 - Siting and Permitting Activities: Applicants may propose one or more of the activities:

- Studies and analyses of the impacts of the covered transmission project.
- Examination of up to alternate siting corridors within which the covered transmission project feasibly could be sited.
- Participation by the siting authority in regulatory proceedings or negotiations in another jurisdiction, or under the auspices of a Transmission Organization (as defined in section 796 of title 161) that is also considering the siting or permitting of the covered transmission project.
- Participation by the siting authority in regulatory proceedings at the Federal Energy Regulatory Commission or a State regulatory commission, or relevant authority within an Indian Tribe, for determining applicable rates and cost allocation for the covered transmission project.
- Other measures and actions that may improve the chances of, and shorten the time required for, approval by the siting authority of the application relating to the siting or permitting of the covered transmission project, as the Secretary determines appropriate.

Area of Interest 2 – Economic Development Activities: This Topic Area supports economic development activities that benefit communities impacted by a covered transmission project. Applicants will need to show that the activities proposed will benefit communities expected to be impacted by the construction or operation of a covered transmission project, i.e., an interstate transmission line proposed to operate at no less than 275 kV on land or an offshore transmission line expected to operate at no less than 200 kV. Examples of possible economic development activities include:

- Sub-grant programs offered by eligible applicants to impacted communities and community-based organizations, soliciting community proposed activities that will positively impact the local economy.
- Local energy democratization and resilience projects, including but not limited to the development of microgrids, distributed generation, energy storage, or electric vehicle charging infrastructure.
- Affordable and sustainable housing opportunities.
- Co-location of broadband that will serve a local community or communities in the transmission corridor.
- Development of community facilities including but not limited to facilities for the following uses: public safety services such as fire departments or police stations; healthcare services; utility services; education facilities; public facilities such as town halls, courthouses, community centers, airport hangars or street improvements.

- Development or improvement of environmental resources, such as the establishment of green spaces, restoration of disturbed lands, or expansion of endangered species habitat.
- Job training and apprenticeship programs.
- Establishment of a Low-income energy fund, e.g., to provide bill relief or support energy optimization initiatives for income-eligible populations.
- Other activities proposed by the applicant that will provide benefit to impacted communities.

Applicant Eligibility

Eligible applicants are as follows:

- Area of Interest 1 - Siting and Permitting Activities: Eligible applicants must be a state, local, or Tribal governmental entity with the authority to make a final determination regarding the siting, permitting, or regulatory status of a covered transmission project that is proposed to be located in an area under the jurisdiction of the entity. Applicants for funds for siting and permitting activities are not limited to one per state.
- Area of Interest 2 – Economic Development: Eligible applicants must be a state, local, or Tribal governmental entity. Applicants eligible to receive economic development funds under this program include any non-federal siting authority, any state government entity including but not limited to state energy offices and state transmission authorities, or any local or Tribal government entity.

Matching and Cost Share

Area of Interest 1 projects require a cost share of 5%-50% dependent on activity. Area of Interest 2 projects require a 5% cost share.

Funding

In FY 2023, approximately $300 million is available to support the following awards:

- Area of Interest 1 - Siting and Permitting Activities: Under Topic Area 1, $100 million is available to support 14-40 awards of $100,000 - $10 million. The anticipated period of performance is 24 months.
- Area of Interest 2 – Economic Development Activities: Under Topic Area 2, $200 million is available to support 4-40 awards of $100,000 - $50 million. The period of performance is 24-48 months.

Contact Information

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https://www.grants.gov/web/grants/view-opportunity.html?oppId=350022

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Electricity

FY 2023 Underserved and Indigenous Community Microgrids

Grant Overview

This program will support multi-year research, development and demonstration (RD&D) of tools and technologies to enhance the reliability and resilience of the nation's energy infrastructure. The research will focus on development and deployment/demonstration of advanced microgrid-enabling technologies, including renewable generation and storage systems, multi-nodal small-scale high-voltage direct current, advanced demand-side management strategies, and microgrid control systems. Eligible applicants are domestic institutions of higher education; for-profit entities; non-profit entities; state and local governmental entities; and tribal nations.

Program History

This is a *new* program established through the Energy Act of 2020.

Key Information

Total Funding: $14.7 million
Award Range: $800,000- $2 million
Match: Varies
Solicitation Date: July 18, 2023
Proposal due: September 15, 2023

More information here.

Tips

- The Department of Energy strongly encourages applicants to consider partnerships as means of promoting diversity, equity, inclusion, accessibility, justice, and workforce participation
- The program encourages the development and deployment of microgrids that are lower in cost, have shorter implementation times, and support an equitable energy transition through prioritized provision of at least 40 percent of microgrid benefits going to disadvantaged communities

Department: U.S. Department of Energy
Agency: Office of Electricity

FY 2023 Underserved and Indigenous Community Microgrids

Detailed Summary

The purpose of this program is to support multi-year research, development and demonstration (RD&D) of tools and technologies to enhance the reliability and resilience of the nation's energy infrastructure. The research will focus on development and deployment/demonstration of advanced microgrid-enabling technologies, including renewable generation and storage systems, multi-nodal small-scale high-voltage direct current, advanced demand-side management strategies, and microgrid control systems. The program will aim to develop and implement replicable microgrid solutions for underserved and Indigenous communities in remote, rural and islanded regions throughout the U.S.

The term "microgrid" is defined, under this program, as a group of interconnected loads and distributed energy resources (DERs) within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid.

The overall goals of the program include:

- Promoting microgrids as a core solution for increasing the resilience and reliability of the EDS, supporting critical infrastructure and reducing social burdens during "blue-" and "black-sky" events
- Ensuring that microgrids serve as a driver of decarbonization for the U.S. EDS by acting as a point of aggregation for a larger number of distributed energy resources (DERs), with 50 percent of new installed DER capacity within microgrids coming from carbon free energy sources by 2030
- Decreasing microgrid capital costs by 15 percent by 2031, while reducing project development, construction and commissioning times by 20 percent.

Under this program, the Department of Energy is seeking projects that address one of the following areas of interest:

Area of Interest 1: Modular Microgrid Systems with Standardized Control/Communication Functionalities for a Range of System Sizes and Renewable Contributions: This Area of Interest supports development of modular microgrid systems with standardized functionalities, which have broad replicability for remote and islanded communities and will significantly reduce microgrid costs and project times. Eligible activities include:

- Assessing and categorizing microgrid system configurations for replicable applications in remote and electrically islanded regions—each configuration characterized with a defined percentage range of renewable contributions AND the types and size ranges of renewables, energy storage, and non-renewables
- A stakeholder engagement component that considers the needs of the community in designs. This should include plans for how the field demonstration and associated equipment will benefit the specific community where it will be deployed over the lifetime of the assets.

- Utilizing and including technical expertise from the local communities in the proposed team. The application should ensure that the technical expertise (for use and maintenance of the technology) is developed in the community.
- Developing modular microgrid technology solutions with standardized control/communication and plug-and-play functionalities for one or more system configurations, based on current engineering, deployment, and operational procedures. These designs should consider that communities can have different peak load conditions, and different energy resource availability.
- Conducting hardware-in-the-loop (HIL) validation testing of modular microgrid solutions with standardized control/communication functionalities for the system configuration(s). Each application must describe how system protection and performance metrics such as reliability, resilience, and sustainability, will be achieved via validation testing.
- Conducting field demonstration of modular microgrid technology solutions at a remote and electrically islanded site where underserved and Indigenous communities reside
- Identifying other sites for replicating the demonstrated, modular microgrid technology solutions with details that clearly support the replication potential

Area of Interest 2: Multi-port Medium Voltage DC (MVDC) Converter R&D for Integration of Microgrids and Clean Energy: This area of Interest aims to deploy novel, multi-port medium voltage direct current converters (MVDC) to seamlessly connect DERs and microgrids for applications in remote, rural and islanded regions. This includes the development of use cases, reference systems, and scenarios considering peculiarities of remote and islanded system conditions, as well as a cost comparison of MVDC versus typical AC technologies for connecting remote communities/microgrids. R&D proposed for Area of Interest 2 should build on previous work relating to MVDC networks.

Area of Interest 3: Regional Initiatives to Support Microgrid Deployments within Underserved and Indigenous Communities: This Area of Interest supports projects that will establish regional, two-year pilot initiatives that focus on new technical assistance services and resources to help underserved and Indigenous communities in remote, rural and islanded regions build local expertise on adoption of microgrid energy systems as an effective pathway for energy transitions. Each initiative will involve at least five communities that are co-located in a geographic, remote and/or rural region and are electrically islanded. Each community involved must commit to considering microgrid energy systems as a pathway to energy transition efforts.

Each initiative should focus on developing/enhancing human and technical capacity in the local communities involved, through activities including awareness, education, training, energy advocacy training, workshops, apprentice programs, entrepreneurship development, etc. The regional initiatives should leverage and build on existing federal, state, and local programs in technical assistance and workforce development for energy transition efforts.

To support the goal of building a clean and equitable energy economy, projects funded under this program are expected to advance diversity, equity, inclusion, and accessibility (DEIA); contribute to energy equality; and invest in America's workforce. To ensure these objectives are met, applications must include an R&D Community Benefits Plan that addresses the three objectives stated above.

Applicant Eligibility

Eligible applicants are domestic institutions of higher education; for-profit entities; non-profit entities; state and local governmental entities; and tribal nations.

For purposes of this program "underserved communities" refers to low-income, energy-burdened communities that, at a minimum, meet the criteria below:

- 30 percent of the community population is classified as low income. The "low income" criteria will be based on information/data developed for the DOE Communities LEAP (Local Energy Action Program) Pilot and can be found here.
- High or severe energy burden (median spending of household income on energy bills ≥6%). Energy burden is defined as the percentage of gross household income spent on energy costs. Additional Information about community energy burden can be found here.

Indigenous communities include, but are not limited to, communities of Tribal Nations, Native Americans, Alaska Natives, and Native Hawaiians.

The Department of Energy encourages community multi-stakeholder project teams organized to participate together under this program. Applicant teams should include:

1. At least one community-based organization with a demonstrated track record of working with community stakeholders
2. A local, tribal, territorial, regional, or state government entity serving the community.
3. A local electric utility serving the community.
4. At least one microgrid technology product provider
5. At least one microgrid technology developer

Applications that involve two or more communities must include the respective entities listed in items 1-3 above for all involved communities. These community entities must have substantive participation in the project.

Funding

In FY 2023, approximately $14.7 million is available to support between 10 and 12 awards ranging from $800,000 - $2 million. Specific funding amounts for each area is as follows:

- Area of Interest 1: approximately $8.7 million is available to support an estimated 5-6 awards of up to $1,450,000 under this Area of Interest.
- Area of Interest 2: approximately $2 million is available to support an estimated one award under this Area of Interest.
- Area of Interest 3: approximately $4 million is available to support an estimated 4-5 awards of up to $800,000 under this Area of Interest.

The project period for all areas of interest is 24 months.

Matching and Cost Share

Applicants must provide a non-federal match of 20 percent of the total allowable costs for research and development projects and 50 percent of the total allowable costs for demonstration and commercial application projects.

Contact Information

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More information here.

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Technical Assistance for Local Governments

Grant Overview

This program enables organic waste energy and/or resource recovery at the municipal level by leveraging technical expertise and relevant data to address specific and unique issues each municipality encounters with its waste streams. Eligible applicants are local governments, tribal governments, airport authorities, and municipal utilities authorities.

Program History

	Total Funding	# of Awards
2022	N/A	17
2021	N/A	17

Key Information & Tips

Total Funding: Rather than provide monetary awards this program provides technical assistance
Cost-Share: Not Required
Solicitation date: March 2, 2023
Proposal due: April 14, 2023

https://www.energy.gov/eere/bioenergy/articles/2023-waste-energy-technical-assistance-local-governments-announced

Tips

- Communities in the strategic planning phase are eligible and encouraged to apply
- Information about project-level finance and financial policies, such as feed-in tariffs, clean renewable energy bonds, and power purchase agreements, will be provided

Department: U.S. Department of Energy
Agency: Grid Deployment Office

FY 2023 Technical Assistance for Local Governments

Detailed Summary

The purpose of this program is to enable organic waste energy and/or resource recovery at the municipal level by leveraging technical expertise and relevant data to address specific and unique issues each municipality encounters with its waste streams. This program will provide technical assistance to advance waste-to-energy (WTE) technologies that will address knowledge gaps, specific challenges, decision-making considerations, planning, and project implementation strategies related to WTE.

The WTE resources considered include organic waste such as food waste; wastewater sludge; animal manure; and fats, oils, and greases. Ultimately, this program aims to mobilize data and information compiled about organic waste streams to provide this data to local decision makers, deploy the analyses that have been developed for a variety of energy/resource recovery strategies, and foster local public-private partnerships.

Types of technical assistance available through this program include:

- Providing resource, technology, market, and policy data and information
- Analysis assistance
- Targeted discussions with stakeholders
- Assistance in strategic energy planning
- Education through webinars
- Consultations with technical experts
- Program review and evaluation
- Request for proposal (RFP) development support and review

The technical assistance process is expected to be collaborative, and award recipients are expected to demonstrate active engagement.

Applicant Eligibility

Eligible applicants are local governments, tribal governments, airport authorities, and municipal utilities authorities. Entities representing multiple municipalities are eligible to apply. Individual municipalities represented by these entities may also apply separately.

Funding

Rather than providing monetary awards, this program provides technical assistance to advance WTE technologies. Award recipients may receive up to 40 hours of technical assistance per municipality.

Technical assistance can begin shortly after the initial phone call between applicants and the funding agency following the submission of applications, based on staff availability and the urgency of requests.

There are no stated matching requirements for this program.

Contact Information

Program Staff
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https://www.energy.gov/eere/bioenergy/articles/2023-waste-energy-technical-assistance-local-governments-announced

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency and Renewable Energy

FY 2024 Communities Local Energy Action Program (LEAP) Cohort 2 Competitive Technical Assistance Opportunity

Grant Overview

The purpose of this program is to help communities access the economic and environmental benefits of clean energy and clean energy manufacturing. This program will provide technical and financial assistance to eligible disadvantaged and/or energy communities to develop and advance their own community-driven clean energy transition approach Eligible applicants are multistakeholder teams consisting of community-based organizations; local, tribal or territorial government entities; nonprofits; faith-based organizations; private organizations; and academic organizations.

Program History

	Total Awards
2022	24

Key Information

Total Funding: Rather than providing monetary awards, this program will provide technical assistance services
Match: Not required
Solicitation date: September 27, 2023
Proposal due: December 14, 2023
https://www.energy.gov/communitiesLEAP/communities-leap

Tips

- Multistakeholder Teams must represent communities in which at least 30 percent of the population is low-income, and who experience a high energy burden
- Communities must be either have a historical economic dependence on the fossil fuel industry, or be an environmental justice community

Department: U.S. Department of Energy
Agency: Office of Energy Efficiency and Renewable Energy

FY 2024 Communities Local Energy Action Program (LEAP) Cohort 2 Competitive Technical Assistance Opportunity

Detailed Summary

The purpose of this program is to help communities access the economic and environmental benefits of clean energy and clean energy manufacturing. This program will provide technical and financial assistance to eligible disadvantaged and/or energy communities to develop and advance their own community-driven clean energy transition approach. This program is intended to facilitate sustained community-wide economic empowerment through clean energy, improved local environmental conditions, and opening the way for other benefits, primarily through the funding agency's clean energy deployment work. This program has been designed with the aim of:

- Recognizing each community's specific energy-related challenges and opportunities
- Supporting community member and stakeholder leadership in designing and implementing actions to address those challenges and opportunities
- Building toward long-term community economic and environmental change and a more sustainable, resilient, and equitable energy future

Participating communities may pursue one or more of the following approaches toward clean energy-related economic development:

- Clean energy planning and development
- Energy efficient buildings and beneficial electrification
- Clean energy transportation
- Carbon capture and storage
- Critical minerals resource potential from energy wastes and by-products
- Community resilience microgrids
- New or enhanced manufacturing
- Advanced nuclear technology and support for existing reactors
- Puerto Rico community resilience

Participating communities are encouraged to integrate multiple approaches to increase community benefits. Each approach may also include an emphasis on developing energy jobs and workforce skills, as well as promoting minority-owned businesses and small- to mid-size businesses. Participating communities may explore opportunities beyond the specific approaches listed above, provided that the proposed approach is in line with program objectives.

Participating communities must commit to work with the funding agency and its technical assistance provider network. Technical assistance provided through this program will focus on the development of community-driven clean energy planning and implementation with economic, environmental, and other benefits based on each community's unique combination of:

- Energy-related resources, assets, or potential
- Social, institutional, and economic strengths and opportunities
- The specific clean energy approach the community hopes to pursue

In particular, participating communities will receive the following technical assistance:

- A dedicated point of contact within the national laboratory system to coordinate all program-related activities
- Extensive technical support from the U.S. Department of Energy (DOE) national laboratory complex as well as other experts based on individualized needs
- Facilitation and community engagement support, as needed, to bring together community stakeholders to identify local clean energy objectives, core community assets, and data and resource requirements

Community team partners in participating communities may also have the opportunity to serve as a subcontractor within the funding agency's technical assistance network and receive financial compensation for services rendered. At the end of the technical assistance period, each participating community will have an action plan or other deliverables that will prepare the community to take further steps toward realizing its goals, including leveraging federal, state, and local funding or financing opportunities; participating in programs offered by philanthropic organizations; and/or partnering with private-sector investment. The funding agency intends to assist participating communities in identifying specific resource opportunities to take such further steps.

Applicant Eligibility

Eligible applicants are multistakeholder teams consisting of community-based organizations; local, tribal or territorial government entities; nonprofits; faith-based organizations; private organizations; and academic organizations. Eligible multistakeholder teams must:

- Include a community-based organization with a demonstrated track record of working with community stakeholders, which may be the same entity as the lead organization
- Include at least one local, tribal, or territorial government entity, which may be the same entity as the lead organization
- Include entities and organizations that together have sufficient authority and influence to ensure overall success in applying the awarded technical assistance within the community

Multistakeholder teams must represent communities that meet the following criteria

- Thirty percent of the community population is classified as low-income
- High or severe energy burden, meaning a median spending of household income on energy bills of at least 6 percent

In addition, communities must also meet one of the following criteria:

- Historical economic dependence on fossil fuel industrial facilities including extraction, processing, or refining
- Environmental justice communities, as indicated by high exposure to energy-related environmental hazards, pollution, and toxicity from the siting of large-scale energy or industrial facilities

A map of eligible census tracts that meet the above criteria can be found online at arcgis.netl.doe.gov.

Applicants may apply in support of more than one community as long as the applications are separate and the applicant organization can demonstrate a meaningful role with each community. Applicant organizations may not serve as a team lead for more than one multistakeholder team.

Funding

Rather than providing monetary awards, this program will provide technical assistance services valued at up to $17.5 million to support 24 to 32 communities through this program. Technical assistance provided through this program will include:

- A dedicated point of contact within the national laboratory system to coordinate all program-related activities
- Extensive technical support from the U.S. Department of Energy (DOE) national laboratory complex as well as other experts based on individualized needs
- Facilitation and community engagement support, as needed, to bring together community stakeholders to identify local clean energy objectives, core community assets, and data and resource requirements

In addition, up to $1.5 million is available through this program to support awards of up to $50,000 for community team partners serving as a subcontractor within the DOE's technical assistance network and requesting financial compensation for services rendered.

Award selections will be made in March 2024.

The technical assistance period will last approximately 12 to 18 months.

Matching and Cost Sharing

No match is required for this program.

Contact Information

Program Staff
CommunitiesLEAPInfo@hq.doe.gov

https://www.energy.gov/communitiesLEAP/communities-leap

FEDERAL
GRANT PROFILE

Department: U.S. Department of Energy

Agency: National Renewable Energy Laboratory (NREL)

FY 2023 Clean Energy to Communities Program: Peer-Learning Cohorts

Grant Overview

The purpose of this program is to create a platform for peer-learning cohorts to address cross-cutting energy challenges with a community-oriented approach. Participants in the cohorts will meet regularly to share strategies and best practices, learn collaboratively, and work on policy or program proposals, action plans, or strategies to tackle energy-related issues. Eligible applicants include local governments, tribal governments, metropolitan planning organizations, utilities, community-based organizations, regional planning organizations, and other public entities such as transit agencies, school districts, and housing authorities.

Program History

For the first round of FY2023 funding, 14-15 participants per cohort were selected to participate in one of the three peer-learning cohorts.

Key Information

Total Funding: Unspecified
Award Range: Unspecified
Match: None
Solicitation date: March 30, 2023
Proposal due: May 8, 2023

https://www.nrel.gov/state-local-tribal/c2c-peer-learning-cohorts.html?utm_medium=print&utm_source=state-local-tribal&utm_campaign=cohorts

Tips

- Applicants currently receiving support from other U.S. Department of Energy programs are eligible to apply; however, priority may be given to applicants that have not received, or are not currently receiving, support from the U.S. Department of Energy.
- Applicants may apply for up to two cohorts in a single cohort cycle.
- Applicants that have already been selected to participate in a cohort under this program are eligible to apply.

Department: U.S. Department of Energy

Agency: National Renewable Energy Laboratory (NREL)

FY 2023 Clean Energy to Communities Program: Peer-Learning Cohorts

Detailed Summary

The purpose of this program is to provide an opportunity for participation in peer-learning cohorts that will address cross-cutting energy challenges with a community-centered focus. Each peer-learning cohort will convene regularly to exchange strategies and best practices, learn in a collaborative environment, and workshop policy or program proposals, action plans, or strategies to overcome challenges around a common clean energy transition topic. Rather than providing monetary awards, this program will provide technical assistance provided by lab experts to cohorts, including education, case studies, analysis and modeling tools, templates, trainings, and facilitated collaboration to enable accelerated clean energy progress. This program is intended to bring together communities with similar clean energy goals, opportunities, or challenges to:

- Gain insights that will help them access upcoming funding or programmatic opportunities
- Learn from subject matter experts, who will provide education, best practices, analysis tools, templates, and other resources as needed
- Exchange case studies, experiences, and insights with other communities that can inform their own activities
- Develop proposals, action plans, and strategies to overcome common challenges and enable accelerated clean energy progress

For this solicitation, the program consists of three peer-learning cohorts that address the following topics:

1. Planning and funding for electric vehicle (EV) charging infrastructure deployment: This cohort will support participants to proactively plan equitable EV infrastructure, prioritize strategies, and prepare to pursue available federal funding for implementation. Key topics may include:
    a. Identifying the role of communities in meeting current and future demand for EV charging infrastructure
    b. Planning, permitting, and zoning best practices for EV charging infrastructure
    c. Funding and financing opportunities to support deployment of EV charging infrastructure
    d. Understanding best practices for identifying community partners, conducting engagement, and ensuring equitable outcomes
    e. Contracting with an EV charging provider
    f. Developing fee structures for operations and maintenance of EV charging stations
2. Implementing a municipal clean energy procurement strategy: This cohort will guide participants that have prioritized potential sites for clean energy development through the process of developing a request for proposal (RFP), incorporating equity criteria and community benefits into procurement, soliciting bids, negotiating contracts, and implementing the project. Key topics may include:
    a. Understanding clean energy procurement processes, best practices, ownership models, and financing structures

   b. Utilizing available tools and resources to ensure optimal project scale and performance
   c. Incorporating equity criteria and community benefits into procurement processes
   d. Developing an RFP and soliciting bids from consultants and developers
   e. Identifying federal incentives and awards that will lower the cost of a clean energy project
3. Incorporating community voices in clean energy planning and deployment: This cohort will support participants to adopt stakeholder and community engagement best practices and strategies to authentically include community voices in planning processes. Key topics may include:
   a. Understanding what authentic, inclusive, and equitable engagement looks like for clean energy planning
   b. Identifying community engagement methods and keys for success
   c. Developing facilitation and communication strategies to help a group constructively respond to conflict or disagreement
   d. Promoting transparency and accountability in the planning process and beyond
   e. Refining and implementing engagement plans

Applicant Eligibility

Eligible primary applicants are entities that have decision-making power or influence in their community but need access to additional clean energy expertise to inform upcoming opportunities. In general, eligible primary applicants include tribal governments; local governments, including city, town, or county governments; metropolitan planning organizations; regional planning organizations; utilities; community-based organizations; and other public entities, such as transit agencies, school districts, and housing authorities. Each cohort is estimated to consist of 8 to 15 communities; however, in some cases, cohorts may be larger or smaller.

Specifically, eligible primary applicants for each peer-learning cohort are as follows:

- Planning and funding for electric vehicle (EV) charging infrastructure deployment: eligible primary applicants are city, town, or county governments; tribal governments; municipal utilities; and metropolitan and regional planning organizations
- Implementing a municipal clean energy procurement strategy: eligible primary applicants are city, town, or county governments; tribal governments; and other public entities, including transit agencies, school districts, and housing authorities.
- Incorporating community voices in clean energy planning and deployment: eligible primary applicants are city, town, or county governments; tribal governments; utilities; metropolitan and regional planning organizations; and community-based organizations currently partnering with governmental entities to support clean energy planning.

Depending on the cohort topic focus, primary applicants may benefit from including secondary partners, such as electric utilities, community-based organizations, Clean Cities coalitions, and other public agencies, on their application, especially partners that may play a significant role in planning, decision-making processes, and implementation efforts.

For the peer-learning cohort regarding planning and funding for EV charging infrastructure deployment, applicants are encouraged to apply in partnership with their local or regional Clean Cities coalition. A database of Clean Cities coalitions can be found online at cleancities.energy.gov.

All applicants must indicate a primary community representative, which must be a member of the applicant organization.

Funding

Rather than providing monetary awards, this program will provide an opportunity for participation in three peer-learning cohorts regarding clean energy. Each peer-learning cohort will convene regularly to exchange strategies and best practices, learn in a collaborative environment, and workshop policy or program proposals, action plans, or strategies to overcome challenges around a common clean energy transition topic. This program will provide technical assistance provided by lab experts to cohorts, including education, case studies, analysis and modeling tools, templates, trainings, and facilitated collaboration to enable accelerated clean energy progress.

Participant communities will be selected and notified on approximately June 1, 2023. Cohorts will launch in July 2023. Each cohort is anticipated to last approximately six months on average; however, cohorts may be shorter or longer depending on the content and time needed to effectively meet participant needs. Each community representative is anticipated to commit approximately four hours per month for each cohort, including participation in sessions, limited one-on-one technical assistance, and individual work between sessions.

Contact Information

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https://www.nrel.gov/state-local-tribal/c2c-peer-learning-cohorts.html?utm_medium=print&utm_source=state-local-tribal&utm_campaign=cohorts