OCED

Office of Clean Energy Demonstrations

FEDERAL ENERGY FUNDING FOR RURAL AND REMOTE AREAS

A Guide for Communities

Is This Guide for You?

This guide is for members, interested parties, and decision makers of, or partners to, a **rural or remote community** who are looking for federal funding and support for **local energy projects**.

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About This Guide

This document is for people who live or work in rural and remote areas and who are looking to plan or build clean energy projects in their communities. The guide provides an overview of many federal programs that offer funding or advice to support these types of projects.

These programs provide opportunities available through various offices in the U.S. Department of Energy (DOE), including the Office of Clean Energy Demonstrations and many others. This guide also describes other opportunities available across the federal government, including opportunities available through the U.S. Department of Agriculture (USDA), the U.S. Department of Commerce, the U.S. Department of the Interior (DOI), and the U.S. Environmental Protection Agency (EPA). Consult those agencies for a comprehensive list of their respective opportunities.

In addition to other issues specific to low-population areas, rural and remote communities often face high energy costs. Those same communities often lack energy access, energy reliability, and support for diversifying their local economies and reducing their reliance on traditional fossil energy resources.

New federal funding—from the Infrastructure Investment and Jobs Act (2021), commonly referred to as the Bipartisan Infrastructure Law (BIL), and the Inflation Reduction Act (2022)—means that there are many more programs to support you and your communities in addressing these energy challenges.

Section 1: Questions to Ask Before Applying for Federal (or Any) Funding

There are several questions communities should consider before applying for federal funding. These questions can help communities identify the programs that best fit their goals. Applying to the programs that are right for you will likely save you time and make your application and project more competitive.

1. ***What are our main energy-related goals?*** Your community may have several challenges related to energy, for example, cost, reliability, pollution, or the need to increase local jobs. Choosing one or two challenges that matter most to you may be helpful. In some communities, committees or volunteers seek input from a variety of people over months or years to establish goals and identify available resources and opportunities. Many communities have then taken the next step by building their goals and resources into a community energy plan. You can find out more about resources for energy planning in Appendix D.

2. ***What type of support do we need the most right now?*** What about later? Support could include help with planning, deciding which types of projects or locations to choose, designing systems, estimating budgets for projects, connecting with partners who can help make projects successful, learning from similar communities about their experience, and/or funding to build or maintain a project. You can find some programs to help with these questions in the Technical Assistance Programs table within Section 4.

3. ***What sources of funding will we pursue?*** There are several different types of funding options available from various agencies, which include grants, loans, and tax credits. It is okay if you don't already know which type of funding you're looking for. As you learn about federal, state, local, utility, and other funding options, you will get a better sense of what would be a good fit for your community and project. For ideas about federal funding programs, see Section 4 and Appendix C.

4. ***Who is the team that will support this project from start to finish?*** The length of time required to complete an application for federal funding can vary significantly, and you'll need a person or a team to support your project or idea each step of the way. Beyond the application itself, your community may need to develop partnerships (e.g., with the local utility, government, businesses, or community organizations) before applying for funding. The funding programs you identify should have expectations and requirements that match your team's capacity to apply for and manage federal grants. Capacity could include, for example,

a person from the local mayor's office who can devote 10% of their time to the project and will write the grant application, a volunteer energy committee leading the whole application, and/or a paid advisor. Other organizations, such as local or regional nonprofits, universities, or community colleges, may also be good places to look for additional support when putting together a team.

5. ***What skills does the project team have, and what additional training is needed?*** Your project team, or the people or groups you partner with, will likely need a range of skills. These include knowledge in areas of permitting, community engagement, grant writing, project management, and construction. Knowing where you might need more support or training can help you determine which types of assistance or programs are best for you.

Section 2: Tips for Navigating the Federal Funding Process

1. ***Plan ahead:*** Ideally, you will start planning for your application well in advance of the application deadline. Even for a short application, you may need time to identify a project team, build partnerships, and begin to enga ge with the community. Additionally, some programs have pre-application deadlines and/or other documents you must produce in addition to the main application.

2. ***Understand application stages and expectations:*** Increasingly, many DOE funding opportunities ask applicants to submit pre-applications or concept papers (often under 10 pages) that ask for a summary of your project without requiring budget or technical details. The difference between a pre-application and a concept paper is that a pre-application is meant to be easier and less of a burden to complete. If reviewers "encourage" your concept paper, or if you are "invited," it means you are a competitive applicant, and it may be worth the time to submit a full application. Similarly, in some cases, DOE prize competitions (see American-Made Challenges) will have multiple rounds, with earlier rounds asking for less detail. Once you are aware of all application requirements and deadlines, making a list of tasks and deadlines can help you complete and submit a strong application on time.

3. ***Identify key information and requirements:*** You can find most of the key program information by reading the sections on purpose/topic areas, eligibility, and application information. While the application instructions for prizes and technical assistance can be much shorter, it is not uncommon for funding opportunity announcements (FOA) to be 100+ pages. Eventually, you (or any advisors) will want to review all the pages of the announcement you're planning to apply to so you are aware of all the details.

4. ***Look for a webinar:*** Many programs will offer short (usually hour-long) webinars to explain the application process, the timeline, what the program is looking for, and who is eligible to apply. This can be an easy way to learn about a program you may be interested in. Registering for a webinar, even if you can't attend live, can be helpful since recordings are usually available online after the webinar and are emailed to people who register.

5. ***Use technical assistance programs:*** In some cases, advising (often referred to as "technical assistance") is available to support people and organizations as they prepare their applications. In other cases, technical assistance can help you identify and design a project. While federal technical assistance experts cannot complete your application for you, in some cases, they can help you with project planning to put your application on solid footing. Each office has its own rules on what assistance it can provide. For more details, see the Technical Assistance Programs table within Section 4.

6. ***Ask questions:*** If you have any questions about a program, don't hesitate to reach out to the people listed as points of contact. Sometimes programs list a general email rather than a specific person, but one or more federal staff will always be monitoring and responding to emails. Often, to ensure fairness, any questions and answers will be posted publicly for all applicants to see. Sometimes, staff may not be able to speak with you, particularly if they are in the process of accepting applications. In other cases, they'll be happy to help you understand whether you are a good fit for the program. For example, USDA's State Offices and State Energy Coordinators work extensively with potential applicants to identify relevant programs and requirements.

7. ***Seek help:*** Reach out to other communities in your region that have won federal awards and learn from their experience. Local, regional, or national organizations can also offer tips and support to help you prepare your application for federal funding. Local colleges and universities, planning organizations, utilities, community foundations, economic development agencies, and nonprofits may be available to both help with the application and provide project management, grant management, and/or legal assistance. Some communities opt to hire a grant writer to support their federal application. A good place to start is the Rural.gov list of community networks, although these only exist in certain regions.

Section 3: Understanding the Federal Funding Process

Types of Federal Programs

Federal support can take many forms but can be divided into several general categories:

- ***Technical Assistance:*** Technical assistance is guidance, recommendations, and help from federal or federally funded experts. The term *technical assistance* covers a wide range of activities, including phone calls with experts; structured partnerships in which federal or other staff support communities by meeting regularly to discuss common challenges; and intensive, multi-year support from national lab researchers. The topics covered by technical assistance also vary widely.

  For communities beginning to think about renewable energy, technical assistance often supports those communities in energy planning and in identifying potential projects. For communities that already have a plan or have identified specific challenges, technical assistance can help those communities in conducting engineering studies, analyzing policy options that affect how easy or hard it is to make projects happen, and analyzing the impacts of those policies on communities and others.

  In general, applications for technical assistance programs tend to be shorter than direct funding applications, and they often target teams in need of additional technical expertise.

- ***Grants and Cooperative Agreements:*** Grants and cooperative agreements are a type of financial assistance that gives federal money for a public or community purpose. Most funding is administered through competitive applications that begin with a funding opportunity announcement (FOA) for DOE programs or a notice of funding opportunity (NOFO) for other federal agencies. The announcement or notice outlines the application requirements, how the application will be evaluated, and how the funds can be used. The level of federal oversight differs significantly between programs. Cooperative agreements, which DOE uses extensively, have a lot of federal involvement in project design, management, and the defining of project objectives and goals. Because of this involvement, you will coordinate with federal staff after being selected. Coordination with DOE staff also includes receiving information about how to be reimbursed throughout the life of the grant or cooperative agreement for the costs of doing the project and the types of expenses you can be reimbursed for. In many cases, a cost share will be required, meaning that the federal funds will only cover a portion of the total project costs. See Appendix C for more information on cost shares.
- ***Prizes:*** Prizes are competitively awarded funds based on team achievements against a defined "challenge," with no obligation to repay. Depending on their structure, prizes can either award a large amount of funding to a single "winner" or smaller amounts to several teams, individual people, or organizations. A primary difference between prizes and DOE grants is that winners of a prize receive a check shortly after each competition round without entering into an agreement with DOE.
- ***Loans:*** The federal government can provide loans and loan guarantees. Federal loans can often involve larger amounts of funding than grants, cooperative agreements, or prizes, and thus can involve an extensive application and review process. Depending on the complexity of the project, the review process can take many months. The federal government provides direct loans from the U.S. Treasury's Federal Financing Bank

and loan guarantees. A loan guarantee guarantees that money borrowed for a project is repaid if borrowers can't repay on their own. Many federal loan programs also require that the borrower contribute equity to the project, meaning that the federal loan will not cover the entire cost of the project. In some cases, the loan program may require the borrower to pay certain costs and fees to cover the cost of underwriting or administering the loan.

- ***Incentives:*** Incentives can be in the form of tax credits and other payments for taking specific actions, such as implementing energy efficiency upgrades or deploying renewable energy projects. Some incentives or tax credits may be specifically for, or provide a bonus to, projects implemented by or benefiting a type of organization or community, such as "energy communities." (See further details on "energy communities" under "ITC and PTC Adders" in Appendix C. Additionally, some tax credits are now available to tax-exempt entities such as nonprofits, houses of worship, municipalities, or nonprofit utilities via "direct pay," which gives these tax-exempt entities the cash value of the credit. Federal clean energy tax credits are discussed below. To learn more, see Tax Credit Basics in Appendix C.

Process and Timeline

If you are applying for a federal grant or other funding award, the application is likely to require:

- Project description.
- Details on the project team.
- Proposed budget.
- Community benefits plan (see below) detailing how the project will benefit the local community.
- For some applications, especially for larger awards, detailed appendices that might include technical specifications, environmental reviews, and letters of support from partners.

A community benefits plan is a description of how your project or proposal will help local communities, such as by reducing energy costs; investing in the workforce; advancing diversity, equity, inclusion, and accessibility; and investing in historically disadvantaged communities. You can find out more about the key components and categories to include in your community benefits plan, as well as resources on how to put this plan together, see About Community Benefits Plans on the DOE website.

Most federal awards and some technical assistance programs set a deadline for submissions. Once the application window closes, program staff, often with help from external experts, will evaluate applications based on specific criteria. Those criteria are usually found in the funding opportunity, prize, or technical assistance application and/or guidance documents.

In contrast, most federal loan programs operate on a rolling basis, and your application will generally not have to compete directly with other projects for funding. Loan officers will work with you to understand whether a federal loan is a good choice for your project and to help prepare the application. The underwriting process for loans can take six months to a year or longer.

We recognize that the schedules of federal programs may not align well with rural communities' project timelines. With significant funding laws approved in the past couple of years (the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), see Appendix A), many offices and agencies are looking at opportunities to improve coordination. The Rural Partners Network and other federal organizations and offices are working to align federal programs better with community needs.

Section 4: Finding Federal Funding Relevant for Your Rural or Remote Community

The tables included in this section profile over 60 programs that are relevant for rural and remote communities. Please note that the information in these tables is current as of July 25, 2023. Program availability, requirements, award sizes, or eligibility may change over time.

This is a partial list of all federal energy programs. See Resources for Funding in Appendix D for additional resources.

Funding Program Tables

The funding programs below are divided into four categories:

1. Technical Assistance Programs
2. Renewable Energy and Energy Efficiency Programs
3. Transmission and Distribution Programs
4. Funding Programs that Target Specific Communities (tribal programs, communities near energy infrastructure, and low-income/pollution-impacted communities).

Key terms used in these tables include:

- **Ideal for:** An unofficial summary of the kinds of projects or applications likely to be a good fit for the program.
- **Program and summary:** The full name of the program and a short summary of the intended purpose.
- **Support type:** Technical assistance (services), grant (funding you don't need to repay), loan (funding you do need to repay), etc.
- **Technologies:** The program could include any technology ("wide range") or be focused on support for a specific technology (e.g., just solar).
- **Cost share:** The percentage of funding required to come from a non-federal source. See Appendix C for more information.
- **Award amount:** The range of funding awarded under the program, based on current or recent funding opportunities. This range could change in future rounds.
- **Eligible applications:** The kinds of organizations eligible to apply for the funding. In some cases, the applicant might partner with other types of stakeholders. For example, a nonprofit might coordinate local government and energy cooperative stakeholders around a clean energy project. The utility could apply to USDA's Assistance for Rural Electric Cooperatives Program, which is open to co-ops but not local governments or non-governmental organizations (NGOs).
- **Time to apply:** Programs are categorized as *low, medium*, or *high* based on their complexity and the amount of time required to apply:
  - **Low:** Likely to take ~1 day or less to complete and <10 pages to apply; this is likely in addition to time spent coordinating with other interested parties.
  - **Medium:** Programs that fall between the low- and high-intensiveness categories.
  - **High:** Requires more background research, technical studies, and >40 pages to apply, and/or awards are >$100M and take many weeks or months to complete.

Technical Assistance Programs

Federal technical assistance provides experts or services to advise and support communities, usually at no cost. Technical assistance is often customized to meet the needs of each community. It can take many forms: a phone call with an expert to talk through options, a planning workshop with local stakeholders run by an expert facilitator, detailed feasibility studies performed by federally funded engineers, and many others.

Technical assistance may be especially relevant if your community:

1. Has not yet created an energy plan or identified a specific energy project.
2. Has specific questions about technology options, financing, or community engagement and wants expert help.
3. Would benefit from external support to facilitate conversations, potential partnerships, and build consensus between stakeholders.
4. Wants to connect with or learn from similar communities.
5. Does not have the staff capacity to figure out the details involved in making a project happen.

Note that additional potentially relevant programs are included in the lists of programs targeted toward specific communities.

Technical assistance programs

Ideal For	Program and Summary	Support Type	Technologies	Value of Offering, $	Cost Share for Communities	Eligible Applicants	Time to Apply
Short-term expert support to identify options or inform decisions	**Clean Energy to Communities – Expert Match.** Connects communities with national lab experts to receive customized support. Expert Match is most suitable for communities that could benefit from assistance to inform time-sensitive decisions and identify and understand the range of options for achieving clean energy goals. National Renewable Energy Laboratory (NREL) website	Technical assistance	Wide range	N/A	None	Local governments, tribes, NGOs, regional organizations, utilities, universities	Low
Peer learning alongside other communities with similar energy goals	**Clean Energy to Communities – Peer Learning Cohorts.** Groups of communities that meet regularly for approximately 6 months to share experiences and best practices, learn together, and work on ideas together to overcome clean energy challenges. Eligible applicants vary depending on the topic. National Renewable Energy Laboratory (NREL) website	Technical assistance	Wide range	N/A	None	Local governments, tribes, NGOs, regional organizations, utilities, universities	Low
Intensive, long-term expert support	**Clean Energy to Communities – In-Depth Partnerships**. Provides 3 years of technical assistance and team funding to support clean energy transitions at the community scale. National Renewable Energy Laboratory (NREL) website	Technical assistance, grant	Wide range	$500K–$3M	None	Teams of different types of organizations	Med
Remote and/or island communities	**Energy Transitions Initiative Partnership Project.** Supports remote and island communities in advancing their own resilience through reliable, affordable, locally generated clean energy technologies. Communities work with national labs and regional supporting partners to develop and review options over a 12- to 18-month period. DOE website	Technical assistance	Wide range	…	None	Various types of organizations (e.g., committees, nonprofits, utilities) in remote or island communities	Low
Multi-stakeholder community groups looking to develop and test new solutions in the solar arena	**Solar Energy Innovation Network (SEIN).** Supports and brings together teams of stakeholders to research solutions to real-world challenges associated with solar energy adoption. Teams work with national lab staff and partners for over 15 months and receive direct funding to support their participation. SEIN also supports communities that want to implement solutions previously developed under the program. Check the SEIN website to explore which topics are currently being supported and to learn more about past topics. DOE website	Technical assistance and direct funding to teams	Solar	…	None	Community teams	Low

Technical assistance programs

Ideal For	Program and Summary	Support Type	Technologies	Value of Offering, $	Cost Share for Communities	Eligible Applicants	Time to Apply
Building owners or operators interested in energy efficiency, including governments and utilities	**Better Buildings Challenge.** Network, resource database, training hub, and challenge program working with partners that are committed to reducing building energy use and operational greenhouse gas emissions. Offers technical assistance and recognition to participants, which can include businesses, cities, states, universities, and others. DOE website	Technical assistance	Energy efficiency	…	None	Any organization: public, private, or NGO	Low
Communities looking for private and nonprofit partners to deploy shared solar	**Community Power Accelerator.** Helps connect solar developers and communities to lenders and philanthropic organizations to support more equitable access to financing for community solar development. The Accelerator offers a Learning Lab, technical assistance, and an online platform to program participants. DOE website	Technical assistance	Solar	…	None	NGOs, developers, investors	Low
Communities and others interested in community solar	**National Community Solar Partnership.** A national network of community solar stakeholders that helps to share information and expertise, provides technical assistance on unique local challenges, helps to connect partners, and provides a range of useful resources, publications, and tools. DOE website	Technical assistance	Solar	…	None	Any	Low
Local governments exploring waste-to-energy	**Waste-to-Energy Technical Assistance for Local Governments.** Provides up to 40 hours of support to local governments and regional organizations exploring waste-to-energy (WTE) technologies. National Renewable Energy Laboratory (NREL) website	Technical assistance	Waste-to-energy	…	None	Local governments	Low
Underserved communities, including rural and remote communities	**Energy Justice Thriving Communities Technical Assistance Centers.** Program to create centers across the country that will provide technical assistance, training, and capacity building on writing grant proposals, navigating federal systems such as Grants.gov and SAM.gov, and effectively managing grant funding. These centers will also provide guidance on community engagement, meeting facilitation, and translation and interpretation services for limited English-speaking participants. They will also support communities with environmental justice concerns. As of July 25, 2023, many are offering services, and requests can be directed to each center. EPA website	Grant, technical assistance	N/A	…	None	NGOs, universities, intertribal consortium (eligible to become technical assistance centers)	N/A

Technical assistance programs

Ideal For	Program and Summary	Support Type	Technologies	Value of Offering, $	Cost Share for Communities	Eligible Applicants	Time to Apply
Rural co-ops in need of additional capacity	**Clean Energy Innovator Fellowship.** Funds recent college graduates and energy professionals for up to 2 years to support energy organizations (including rural cooperative utilities) in advancing clean energy solutions. Potential hosts apply to the program with a proposed project scope and participate in the candidate selection process. DOE website	Fellowship	N/A	Fellow stipend amount varies	None	Utilities (including co-ops and municipal utilities (munis)), public utility commissions, grid operators, tribal organizations	N/A
Communities seeking support for projects related to clean energy technologies	**Direct Non-financial Support from the Office of Energy Efficiency and Renewable Energy (EERE).** This DOE office supports programs you can use to access a wide network of experts and receive targeted support to solve local energy challenges. Opportunities include direct technical assistance, capacity building, training, peer exchange, and fellowship and visiting faculty programs. Several examples are listed in detail above (e.g., Energy Transitions Initiative Partnership Program, Clean Energy to Communities, Solar Energy Innovation Network, Clean Cities Coalition Network). DOE website This office also funds a wide range of informational resources, including publicly available tools, models, and data that anyone can use on their own for their local community. Some examples include the Renewable Energy Integration and Optimization (REopt) Web Tool, ResStock Analysis Tool, Annual Technology Baseline (cost and performance data), Resilience Roadmap, and more.	Technical assistance, training, fellows, and more	Wide range	...	Varies	Varies	Varies
Communities and other entities seeking help with siting and permitting of clean energy	**Clean Energy Demonstration Project Siting/Permitting Support.** State and local governments, tribes, and other entities can apply to receive help building expertise about siting and permitting for clean energy projects. Applicants can be matched with pre-approved experts. The program is run by a nonprofit called EnergyWerx. EnergyWerx website	Technical assistance	Any clean energy technology	Value of service up to $100K; no direct payment	None	State and local governments, tribes, and other entities	Low
State and local governments seeking help with planning, siting, and permitting of clean energy projects	**Renewable Energy Siting through Technical Engagement and Planning.** Program to help state and local governments build expertise with planning, siting, and permitting of large-scale renewable energy projects. The deadline to apply is November 3, 2023. DOE website	Technical assistance and funding	Large-scale renewable energy	Up to $2M	None	State and local governments	Medium

Note: Several other programs and tools are available to support local organizations navigating energy projects and outreach, including:

- SolSmart[1] is for local governments and regional organizations, particularly in disadvantaged communities.
- Innovation e-Xchange[2] is for interconnection challenges.
- SolarAPP+[3] is for automating residential solar permitting.
- Building Energy Codes Program Help Desk.[4]
- SLOPE is a tool to help with scenario planning.
- LEAD is a tool to identify which communities have a high energy burden (cost of energy for households relative to income).
- SWIFt Accelerator is a program for technical assistance with wastewater facilities.
- Sustainable Corrections Infrastructure Partnership (SCIP) Accelerator.
- Overview of Electric Vehicle (EV) Infrastructure Funding and Financing for Rural Areas.
- General opportunities for technical assistance to state, local, and tribal governments from the National Renewable Energy Laboratory; contact era@nrel.gov for inquiries on the program for energy improvements in rural or remote areas.

Renewable Energy and Energy Efficiency Programs

Renewable energy or energy efficiency programs may be especially relevant if your community:

- Needs backup power and is curious about setting up a local microgrid with energy storage.
- Wants to reduce carbon and other forms of pollution.
- Wants to reduce energy costs and improve building health and safety for local residents and organizations.

Renewable energy includes solar, wind, hydroelectric, biomass, geothermal, and marine energy resources. Energy efficiency includes insulation, LED lighting, high-efficiency heating and cooling systems, efficient pumps, and more. Energy storage (e.g., batteries) can work with either renewable energy or energy efficiency projects.

Note that additional potentially relevant programs are included in the lists of programs targeted toward specific communities.

1 https://solsmart.org
2 https://www.energy.gov/eere/i2x/interconnection-innovation-e-xchange
3 https://www.energy.gov/eere/solar/streamlining-solar-permitting-solarapp
4 https://www.energycodes.gov/technical-assistance/help-desk

Grants

Ideal For	Program and Summary	Support Type	Technologies	Award Amount, $	Cost Share for Communities	Eligible Applicants	Time to Apply
Communities seeking support for projects related to clean energy technologies	**DOE Office of Energy Efficiency and Renewable Energy (EERE) funding opportunities.** This office supports applied clean energy technology research development and demonstration through 10 technology-specific program offices. Funding programs are aimed at promoting innovation within the fields of geothermal, solar, wind, and water power; energy efficiency and advanced materials for buildings and industry; and sustainable transportation and fuels, such as electric vehicles, bioenergy, and hydrogen and fuel cells. This office hosts hundreds of support offerings, including grants, prizes, informational resources, and technical assistance in the form of data and expertise for real-world projects. The list below highlights just some of these opportunities. New opportunities are announced frequently. To stay up to date, sign up for email updates on the DOE website. This office provides technology-specific and topic opportunities related to: ▪ Buildings and Industry (including Advanced Materials & Manufacturing, Buildings, Industrial Efficiency & Decarbonization) ▪ Renewable Energy (including Geothermal, Solar, Water, Wind) ▪ Sustainable Transportation (including Bioenergy, Hydrogen & Fuel Cells, and Vehicles) ▪ Clean Energy Jobs & Workforce Development, STEM & Education, energy and resilience planning, clean energy siting, and more. Funding Support: This office provides various funding opportunities in the form of prizes, competitions, research, development, and demonstration funding, formula grants, small business awards, and other mechanisms. For more information, see Funding Opportunities and sign up for the Funding Listserv (you can also see funding by topic and technology areas). ▪ For example, Buildings Upgrade Prize (BuildingsUP)	Grants, prizes, technical assistance	Renewable energy, energy efficiency, and sustainable transportation	$1M–100M+	20%–50% (typically)	Varies	Varies

Ideal For	Program and Summary	Support Type	Technologies	Award Amount, $	Cost Share for Communities	Eligible Applicants	Time to Apply
Communities <10,000 people **(A community can be a city, town, or unincorporated area)**	**Energy Improvements in Rural or Remote Areas.** The only U.S. government energy program focused specifically on communities under 10,000 people. With $1 billion of funding, this program strives to modernize electric generation facilities, address disproportionately high electricity costs, and support new economic opportunities in America's rural and remote communities. DOE website	Grants, prizes, technical assistance	Any	$100K–$100M	20%–50%	Higher education, NGOs, for-profits, tribes, state/local government, other	Medium–High
Local governments	**Local Government Energy Program.** Funded by Congress in 2022 and 2023 but not yet open to applicants as of July 25, 2023. This program is expected to offer grants and technical assistance to local governments, with a focus on small-/medium-sized and/or disadvantaged areas. Follow DOE's State and Community Energy Programs webpage to stay informed.	Grants and technical assistance	Wide range	…	None	Local governments	TBD
Rural electric co-ops	**Empowering Rural America New ERA Program.** A new $9.7 billion program that provides grants, loans, loan modifications, and other financial assistance exclusively to rural electric co-ops for commercially available zero emission and grid technologies. The program will prioritize projects that maximize greenhouse gas reduction. The program opened on July 31, 2023. USDA website	Grants, loans, other	Any	Up to $970M	75% but can be fully covered with loans	Rural electric co-ops	High
Small rural businesses and agricultural producers	**Rural Energy for America Program (REAP) loans and grants.** Provides guaranteed loans and grants to small rural businesses (including utilities) and agricultural producers for renewable energy and energy efficiency investments. USDA website	Grant, loan guarantee	Renewable energy, energy efficiency	Up to $1M (renewable energy grant), $500K (energy efficiency grant), or $25M (loan guarantee)	25% (loan guarantees) 50% (grants)	Small rural businesses, agricultural producers	Medium
Electricity generators	**Powering Affordable Clean Energy Program (PACE).** New $1 billion program for partially forgivable loans for renewable energy and storage projects. Applications open July 10, 2023; letters of intent are due by September 29, 2023. USDA website	Loan forgiveness	Renewable energy, energy storage	Up to 60% loan forgiveness	Remainder of loan payments not forgiven	Entities that generate electricity for resale	Medium
Public schools	**Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities.** Grants for energy improvements at public school facilities, including EVs. Also, a program to train school staff as energy managers. DOE website	Grants	Renewable energy, energy efficiency, electric vehicles	$500K–$15M	5%	Education agencies and partners	Medium
NGOs trying to reduce their energy costs	**Energy Efficiency Materials Pilot Program.** Grants to supply nonprofit buildings with energy-efficiency materials to lower costs and reduce emissions. DOE website	Grants	Energy efficiency	Up to $200K	TBD	NGOs	Medium

Ideal For	Program and Summary	Support Type	Technologies	Award Amount, $	Cost Share for Communities	Eligible Applicants	Time to Apply
Communities exploring a wide range of clean energy efforts	**Energy Efficiency and Conservation Block Grant Program.** Funding for energy efficiency, renewable energy, waste, transportation, and more is allocated to states and tribes in set amounts based on population. The program includes a competitive application for small communities that do not qualify to receive a portion of their state's grant. The program also sponsors technical assistance to help communities prepare to apply to this program by developing an Energy Efficiency and Conservation Strategy. DOE website	Grants	Wide range	$300K–$2M	None	State, local, and tribal governments	Medium
Energy burdened areas	**High Energy Cost Grant Program.** Grants to reduce energy costs in communities with extremely high energy costs (275%+ of the national average). USDA website	Grants	Any	~$1M–$3M	None	Tribes, local governments, private sector	High
Green banks (direct recipients) Communities and consumers (indirect recipients)	**Greenhouse Gas Reduction Fund.** This $27 billion program, of which $15 billion is targeted toward low-income and disadvantaged communities, aims to create a national network of green banks to finance and assist projects that will further the energy transition. Nonprofits, tribes, and local governments can apply directly to EPA to create a financing program. Other applicants apply to these intermediaries for funding. EPA plans to open these programs by summer 2023. EPA website	Grants, technical assistance, loans	Any	TBD	TBD	Local governments, tribes, NGOs	N/A
Communities with brownfields, superfund sites, landfills, or mine lands	**Brownfields Programs.** EPA has a variety of grant programs that support site reuse planning, assessment, and cleanup of brownfield sites, as well as brownfields job training. EPA website **EPA RE-Powering America's Land Initiative.** Encourages renewable energy development on current and formerly contaminated lands, landfills, and mine sites. Provides web-based resources such as online training, mapping tools, and best practices. Provides technical assistance to sites through EPA Regional contacts. EPA website	Grants	Wide range	Up to $2M	0%–20%	Local governments, educational institutions, NGOs, redevelopment or workforce agencies	Varies
Insular communities	**Energizing Insular Communities.** Provides grant funding in support of energy strategies that decrease the cost of electricity and reduce dependence on energy imports in insular areas (American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands). DOI website	Grant	Any	N/A	None	Local governments, utilities, educational institutions	Medium
Energy storage demonstrations	**Energy Storage Demonstration and Pilot Grant Program.** Support for three energy storage system demonstration projects. As of July 25, 2023, only limited information about this program is available. DOE website	Grant	Storage	TBD	TBD	Private sector, NGOs, local government, tribes, research institutions	High

Loans

Ideal For	Program and Summary	Support Type	Technologies	Award Amount, $	Cost Share for Communities	Eligible Applicants	Time to Apply
Building or improving distribution and transmission infrastructure	**Rural Utilities Service (RUS) electric infrastructure loan and loan guarantee program.** Longstanding program with more than $6 billion in annual loan authority that supports commercially available electric generation, transmission and distribution, and infrastructure technologies. Generally, requires borrowers to have collateral and offtake agreements in place. Rural Utilities Service staff work closely with applicants to prepare their applications. USDA website	Loan	Transmission and distribution, renewable energy	No min or max	0% (system loans) 25% (project finance)	Local governments, tribes, NGOs, private sector, co-ops	High
Energy efficiency and conservation projects by utilities	**Energy Efficiency and Conservation Loan Program.** Loans to finance energy efficiency and conservation projects for commercial, industrial, and residential consumers. USDA website	Loan	Energy efficiency or reducing the use of fossil fuels	Not specified	N/A	Utilities serving rural areas of <20,000 people	High
Renewable energy and storage projects	**Rural Utilities Service Section 22001 loans.** Partially forgivable loans for commercially available renewable energy and energy storage projects. Service areas can include rural and non-rural consumers. USDA website	Loan	Renewable energy, including storage	TBD	None	Electric utilities and renewable energy developers	TBD
Small rural businesses and agricultural producers	**Rural Energy for America Program (REAP) loans and grants**. Provides guaranteed loans and grants to small, rural businesses (including utilities) and agricultural producers for renewable energy and energy efficiency investments. USDA website	Grant, loan guarantee	Renewable energy, energy efficiency	Up to $1M (renewable energy grant), $500K (energy efficiency grant), or $25M (loan guarantee)	25% (loan guarantees) 50% (grants)	Small rural businesses, agricultural producers	Medium
Utilities and other organizations interested in making energy efficiency loans	**Rural Energy Savings Program.** Provides zero-interest loans to rural utilities and other entities that will use the funding to make loans for energy efficiency investments to rural families and small businesses. USDA website	Loan	Energy efficiency	Up to ~$30M	None	Utilities and other entities	High
Major projects using innovative technology	**Title 17 Clean Energy Loan Guarantees.** Provides financing for large projects that deploy commercially viable innovative energy technology or employ innovation in energy supply chains. DOE website	Loan guarantee	Wide range	~$100M+	Projects cannot receive other federal funding	Private sector	High
Major projects supported by state green banks	**Title 17 Clean Energy Loan Guarantees – State Clean Energy Financing Institutions.** Provides financing to projects supported by state energy financing institutions, such as state green banks. Unlike other projects funded by the Clean Energy Loan Guarantees Program, there is no requirement for projects to use innovative technologies. DOE website	Loan guarantee	Wide range	~$100M+	Projects cannot receive other federal funding	Private sector	High

Transmission and Distribution Programs

Transmission and distribution technologies, including microgrids, are the electric infrastructure that delivers power from generation to end users. Transmission and distribution investments may be especially relevant if your community:

1. Has frequent power outages and/or long wait times before power is restored.
2. Faces high energy costs due to insufficient transmission or distribution line capacity.
3. Aims to invest in large generation projects to produce and sell power but does not have sufficient grid connections with major markets.
4. Is served by a rural electric cooperative that can access USDA's new co-op focused program (see Loans table).
5. Has completed an energy planning process that recommended investment in transmission and distribution.
6. Note that additional potentially relevant programs are included in the lists of programs targeted toward specific communities.

Grants

Ideal For	Program and Summary	Support Type	Technologies	Award Amount, $	Cost Share	Eligible Applicants	Time to Apply
Innovative grid projects	**Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency.** Supports demonstrations of innovative approaches to transmission, storage, and distribution infrastructure to enhance resilience and reliability. Part of the Grid Resilience and Innovation Partnerships (GRIP) program. DOE website	Grant	Transmission and distribution	Up to $250M (or $1B for interstate projects)	50% (Demos or commercial projects)	States (or multiple states), tribes, local governments	Medium
Improving resiliency, including in territories served by small utilities	**Preventing Outages and Enhancing the Resilience of the Electric Grid/ Hazard Hardening.** Supports projects that will reduce the impacts of extreme weather and natural disasters through investment in transmission and distribution. Thirty percent of funding is set aside for small utilities, defined as entities that sell less than 4 GWh of electricity per year. Part of the Grid Resilience and Innovation Partnerships (GRIP) program. DOE website	Grant	Transmission and distribution	Up to $100M	33% (Small utilities) 50% (Other entities)	Electric grid, storage or transmission owner/operator, distribution providers	Medium
Microgrid projects that will improve grid flexibility, reliability, or efficiency	**Smart Grid Investment Matching Grant Program.** Aims to increase the flexibility, reliability, and efficiency of the energy system, with a focus on 1) increasing transmission capacity, 2) preventing faults, 3) integrating renewable energy, and 4) facilitating integration of electrified vehicles, buildings, and other devices. Funds the expansion or installation of microgrids that have the potential for wider market adoption. Part of the Grid Resilience and Innovation Partnerships (GRIP) program. DOE website	Grant	Microgrid	Up to $30M	50%	Tribes, local/ state governments, public utilities, private sector, NGOs, higher education	Medium

Loans

Ideal For	Summary	Support Type	Technologies	Award Amount, $	Cost Share	Eligible Applicants	Time to Apply
Transmission developers	**Transmission Facility Financing.** Loans to support construction or modification of transmission lines designated by the Secretary to be in the national interest. As of July 25, 2023, limited information is available about this program. DOE website	Loan	Transmission	TBD	TBD	Any non-federal entity building a transmission line	High
Transmission developers with nearly "shovel-ready" projects	**Transmission Facilitation Program.** Offers capacity contracts, loans, and public-private partnerships to support the development of new transmission. Under the capacity contracts model, DOE acts as an anchor customer, buying up to 50% of capacity for later resale. DOE website	Loan	Transmission	TBD	None	Developers of lines above 500 MW	High
Co-ops building or improving distribution and transmission infrastructure	**Rural Utilities Service (RUS) Electric Infrastructure Loan and Loan Guarantee Program.** Longstanding program with more than $6 billion in annual loan authority that supports commercially available electric generation, transmission and distribution, and infrastructure technologies. Generally, requires borrowers to have collateral and offtake agreements in place. Rural Utilities Service staff work closely with applicants to prepare their applications. USDA website	Loan	Transmission and distribution, renewable energy	No min or max	0% (system loans) 25% (project finance)	Local governments, tribes, NGOs, private sector, co-ops	High

Funding Programs That Target Specific Communities

Tribes

While tribes are eligible for many of the programs listed throughout this guide, the funding options below are either exclusively for tribes or have specific tribal carveouts. Tribes should also be aware that there are several other tribal-focused programs in the Inflation Reduction Act of 2022 (IRA) that are beyond the scope of this guide, including the Tribal Climate Resilience program and Electric Home Rebate program. See Resources for Tribes in Appendix D for more information.

Ideal For	Program and Summary	Support Type	Technologies	Award Amount, $	Cost Share	Eligible Applicants	Time to Apply
All tribes	**Office of Indian Energy Technical Assistance.** Flexible technical assistance to support tribal energy development. Can provide advice on basic energy planning for lower-capacity tribes or more advanced support as needed. DOE website	Technical assistance	Any	N/A	None (no restrictions)	Tribes	Low
All tribes	**Office of Indian Energy Grant Programs**. A variety of grant programs are aimed at federally recognized tribes. Includes programs aimed at general tribal energy development, tribal electrification, and specific topics like clean energy for tribal colleges. DOE website	Grant	Any	$1M–$100M+	20%	Tribes	Medium

Ideal For	Program and Summary	Support Type	Technologies	Award Amount, $	Cost Share	Eligible Applicants	Time to Apply
Tribal energy policy development	**Tribal Energy Development Capacity Grant Program.** Funding to support the development or enhancement of tribal energy policies, codes, regulations, or ordinances related to energy resources. DOI website	Grant	Any	~$50K–$300K	None (no restrictions)	Tribes	Low
All tribes	**Tribal Electrification Program.** A $150 million grant program to support electrification and transition to clean energy in tribal homes, with a focus on providing electricity to unelectrified homes. It can also support home repairs and retrofitting needed to install zero-emissions energy systems. Limited information about the program is currently available. As of July 25, 2023, limited information on the portfolio was available. Track program updates on the Energy Communities website or the DOI website.	Grant	Any	TBD	None (no restrictions)	Tribes	TBD
Major projects led by tribes	**Tribal Energy Loan Guarantee Program.** Supports tribal investment in energy-related projects by providing loans and loan guarantees to federally recognized tribes. Authorized to provide up to $20 billion in loans. DOE website	Loan, loan guarantee	Any	~$50M+	Projects cannot receive other federal funding	Tribes	High
Tribes exploring grid improvements	**Grid Resilience State/Tribal Formula Grant Program.** Formula grant program that provides funding to states and tribes for grid improvements. Allocations are based on population, land area, and likelihood of disruptive events, among other factors. Although funding is pre-allocated, an application is required. DOE website	Grant	Any	N/A	15%	Tribes	Low
Tribe-run energy efficiency projects	**Energy Efficiency and Conservation Block Grant Program.** Funding for energy efficiency, renewable energy, waste, transportation, and more is allocated to states and tribes in set amounts based on population. The program also sponsors technical assistance to help communities prepare to apply for and use Energy Efficiency and Conservation Block Grant Program funding by developing an Energy Efficiency and Conservation Strategy. DOE website	Grant	Wide range	$300K–$2M	None	State, local, and tribal governments	Medium

Communities Near Energy Infrastructure

Communities with existing energy infrastructure can have advantages, such as existing transmission lines and a skilled workforce, as well as challenges, especially if existing generator plants are in decline or facing the threat of closure. These programs are likely to be especially relevant to communities that:

1. Have energy infrastructure of any kind that is in decline or has ceased operations or that faces the threat of decline or closure.
2. Need financing to reduce emissions from existing infrastructure.
3. Are dealing with or are facing the threat of declining employment in the fossil fuel industry.
4. Are exploring options for how to address brownfields.

5. Are near a mine or former mine and want to explore renewable energy options.

Communities with ties to fossil fuels or developing projects on brownfields should also explore the energy communities tax credit bonus explained in Tax Credit Basics within Appendix C.

Ideal For	Summary	Support Type	Technologies	Award Amount, $	Cost Share	Eligible Applicants	Time to Apply
Communities exploring economic development options, especially those with per capita income below—or unemployment above—the national average	**Local Technical Assistance.** Technical assistance program that supports communities in exploring economic development options. The Economic Development Administration (EDA) also has several grant programs focused on economic development, with a special focus on coal communities. Required cost share is lower in certain areas, based in part on per capita income and the 24-month unemployment rate. Tribes may also be able to receive a lower cost share requirement. EDA website	Technical assistance	Any	N/A	0%–50%	Research institutions, local governments, tribes, NGOs, private sector	Low
Major projects in communities with existing energy infrastructure	**Energy Infrastructure Reinvestment Financing.** Able to provide up to $250 billion in loan guarantees to projects that retool, repurpose, or replace energy infrastructure that has ceased operations or that enables operating energy infrastructure to reduce emissions. DOE website	Loan guarantees	Any	~$100M+	Projects cannot receive other federal funding	Educational institutions, local governments, tribes, NGOs, private sector	High
Small- to medium-sized manufacturers near a closed coal mine or coal power plant	**Advanced Energy Manufacturing and Recycling Grants.** Provides grants to small- and medium-sized manufacturers in or adjacent to communities where a coal mine or coal power plant has closed. Grants are for building or retrofitting existing manufacturing and industrial facilities to produce or recycle advanced energy products. DOE website	Grant	Energy efficiency	$5M–$100M	50%	Small- or medium-sized manufacturers	Medium
Clean energy projects on current or former mine sites	**Clean Energy Demonstration Program on Current and Former Mine Land.** Funding to demonstrate the technical and economic viability of deploying clean energy on current (operating) and former (abandoned or inactive) mine land. Up to five clean energy projects will be carried out in geographically diverse regions, at least two of which must be solar projects. DOE website	Grant, technical assistance	Wide range	$10M–$150M	50%	Private sector, NGOs, tribes, local/state governments, higher education institutions	Medium

Low-Income or Pollution-Impacted Communities (including disadvantaged and Justice 40 communities)

Several programs exist to support low-income communities[5] and communities that have been disproportionately impacted by environmental damage.

In 2021, the federal government released guidance on the Justice 40 Initiative. The target of the Justice 40 Initiative is for 40% of the benefits of certain federal funding programs to flow to communities that qualify as "disadvantaged." If your community fits this definition, it may be particularly worthwhile to apply for federal funding.

The specific eligibility criteria vary between programs but commonly include the share of the population that is low-income and exposed to environmental hazards. You can explore how your community is impacted by pollution and other challenges using EPA's Climate and Environmental Justice Screening Tool[6] or the DOE's Energy Justice Mapping Tool.[7] Note that these tools are not directly used to determine program eligibility.

Ideal For	Summary	Support Type	Technologies	Award Amount, $	Cost Share	Eligible Applicants	Time to Apply
Communities with unreliable /expensive energy and an interest in storage **Eligibility tied to community need**	**Energy Storage for Social Equity.** Energy-focused technical assistance program focused on supporting communities affected by unreliable and expensive energy systems. Although the program has a special focus on storage, it helps communities to consider all available energy options. A subset of communities that participate in the program will also receive ongoing engineering support as they install their projects. To be eligible, communities must demonstrate need based on at least one metric, including income/poverty, unemployment, segregation, climate impacts, or high transportation and/or housing costs. DOE website	Technical assistance	Storage (and others)	N/A	None	Anyone with the capacity and credibility to support an eligible community	Low
30%+ low-income and median household spending on energy bills >6%	**Communities LEAP.** Provides 12–18 months of technical assistance support to low-income, energy-burdened communities that are also experiencing either direct environmental justice impacts or direct economic impacts from a shift away from reliance on fossil fuels. Data on which communities meet these requirements is available on the Energy Data eXchange website. DOE website	Technical assistance	Any	N/A	None	Multi-stakeholder teams, including local government and an NGO	Medium

5 Programs use a variety of definitions of low-income (e.g., a community where 30% or more of the population has an income below 200% of the federal poverty level)

6 https://screeningtool.geoplatform.gov/en

7 https://energyjustice.egs.anl.gov

Ideal For	Summary	Support Type	Technologies	Award Amount, $	Cost Share	Eligible Applicants	Time to Apply
Green banks (direct recipients) **Communities and consumers (indirect recipients)**	**Greenhouse Gas Reduction Fund.** A $27 billion program, of which $15 billion is targeted toward low-income and disadvantaged communities, aims to create a national network of green banks to finance and assist projects that will further the energy transition. Nonprofits, tribes, and local governments can apply directly to EPA to create a financing program. Other applicants apply to these intermediaries for funding. As of July 25, 2023, only limited information on program details was available. EPA website	Grants, technical assistance, loans	Any	TBD	TBD	Local government, tribes, NGOs	N/A

Appendix A: Why Did We Make This Guide?

Recent legislation has created a potentially once-in-a-generation opportunity to access federal funding for rural and remote community clean energy projects. The Inflation Reduction Act of 2022 and the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law of 2021, together include roughly $900 billion in clean energy grants, tax credits, loans, and other funding.

As part of its commitment to a just and equitable transition, the Department of Energy (DOE) is committed to ensuring that rural and remote areas receive economic and environmental benefits from the energy transition and historic federal energy investments.

$480 Billion

Approximate total value of energy funding—for **renewable energy**, **energy efficiency**, and **transmission and distribution** projects—that is profiled in this guide.

We recognize that many communities have not previously been able to access federal programs due to the high burden involved with finding, applying to, and managing funding. We hope that this document and related efforts help ensure that funding and support go to the people and communities who need it the most.

This guide aims to help rural and remote communities join the energy transition while using federal funding to create jobs, promote local economic growth, decrease the frequency and duration of electric outages, increase resilience to storms and other disruptions, lower utility bills, and cut carbon emissions.

This guide is published as part of the Energy Improvements in Rural and Remote Areas (ERA)[8] program at the DOE.

The ERA program aims to improve the resilience, reliability, and affordability of energy systems in communities with 10,000 or fewer people across the country. As of July 25, 2023, DOE has announced three ERA funding programs: the $300 million ERA Funding Opportunity Announcement,[9] the $15 million Energizing Rural Communities Prize,[10] and the $50 million ERA Grant.[11] DOE anticipates future opportunities to support energy improvements in rural and remote areas.

8 https://www.energy.gov/oced/energy-improvements-rural-or-remote-areas-0
9 https://www.energy.gov/oced/funding-notice-energy-improvement-rural-or-remote-areas
10 https://www.herox.com/rural-energy
11 https://www.energy.gov/oced/grant-funding-notice-energy-improvements-rural-or-remote-areas

Appendix B: Why Details on Certain Programs Are Not Available and How to Stay Informed About Funding Opportunities

Several programs still need to publish information about the application process or are currently closed to applications. In general, there are several strategies for staying informed about program developments and new funding opportunities:

- Individual programs often have a website where you can check for updates. Some programs have email lists for interested parties.
- The Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization maintains a regularly updated clearinghouse of funding opportunities[12] with application deadlines. Although focused on "energy communities," other communities will likely find this to be a helpful resource as well.
- The DOE has a page that lists open funding opportunities and application deadlines.[13] The programs under the Office of Energy Efficiency and Renewable Energy[14] and the Office of the Under Secretary for Infrastructure[15]—as well as many other DOE offices—also keep regularly updated lists of open and soon-to-open funding opportunities.
- You can also sign up to join listservs, where available, that provide updates on agency funding opportunities or on specific programs. These include the email newsletters managed by the Office of State and Community Energy Programs,[16] the Office of Energy Efficiency and Renewable Energy,[17] and the Office of Clean Energy Demonstrations.[18]

Appendix C: Overview of Other Funding Options, Combining Funding, and Tax Incentives

In addition to federal funding described in this document's tables, communities can look to state, philanthropic, or private sector funding to help support local energy investment.

State Funding

State energy offices are a major provider of energy grants and incentives. Many communities would benefit from building relationships with their state energy offices, which can work with communities to identify relevant state funding opportunities or shape the design of upcoming state programs. Most relevant state programs fall into one of three categories:

- **State incentives**, in the form of tax credits or rebates, that promote clean energy technologies. Especially when combined with federal incentives, these programs can help to reduce project costs significantly.
- **State-funded grants**, which are paid for through the state budget. State programs can sometimes be less well publicized than federal funding opportunities, making it particularly important to build relationships with state agencies.
- **State-managed grants**, which are federally funded programs that award funding to states for management or sub-granting. Some programs explicitly require states to sub-grant a portion of funding received. Even when not required, state energy offices often sub-grant federal funding, including to local governments, for implementation.

12 *https://energycommunities.gov/funding-opportunities/all-funding*
13 *https://www.energy.gov/osdbu/funding-opportunity-announcements-and-grants*
14 *https://www.energy.gov/eere/funding/eere-funding-opportunities*
15 *https://www.energy.gov/clean-energy-infrastructure/clean-energy-infrastructure-program-and-funding-announcements*
16 *https://www.energy.gov/scep/office-state-and-community-energy-programs*
17 *https://www.energy.gov/eere/subscribe-eere-news-updates*
18 *https://public.govdelivery.com/accounts/USDOEOCED/subscriber/new*

Many of these programs are block grants, meaning that funding is allocated according to a formula based on factors like total population or land area (e.g., most block grants provide more funding to larger and more populous states). Even so, many block grants require states or tribes to submit an application before funding is released.

Large state and tribal grant programs in the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act of 2022 (IRA) include:

- State Energy Program ($500 million from BIL).
- Energy Efficiency and Conservation Block Grants ($550 million from BIL).
- Environmental and Climate Justice Block Grants ($3 billion from IRA).
- Climate Pollution Reduction Grants ($5 billion from IRA).
- Weatherization Assistance Program ($3.5 billion from BIL).
- Low-Income Home Energy Assistance Program (LIHEAP) ($4.5 billion from IRA).

Cost Sharing and Combining Federal Awards

Many federal programs require what is known as cost share—a requirement that a portion of project costs come from a non-federal source.19 Cost share is usually expressed as a percentage. If a program has a 25% non-federal cost share, it means that federal government funding can only cover 75% of eligible costs. See Section 4 for information on the cost share requirements of specific programs.

Key Things to Know About Cost Share and Combining Federal Awards

1. Many federal grant programs have cost share requirements, **making it difficult to combine multiple federal grants**. However, if you can meet the cost share requirements of a grant and have additional funding needs, it's usually permissible to apply for additional federal funding (although you will likely need to inform your grant manager).
2. You can meet cost share requirements **fully or partially with in-kind contributions**, such as staff time, volunteer hours, or materials donated. In some cases, contractors will agree to discount the cost of materials to help meet cost share requirements.[20]
3. Certain federal programs, including most prizes, loans, and technical assistance programs, as well as some grants, **do not require cost share.** In other cases, applicants can apply for a cost share waiver.
4. The easiest and most common way to **benefit from multiple federal programs** is when a project receives technical assistance from one program and grant or prize funding from another.
5. There are generally no federal restrictions on **combining federal funding with non-federal funding**, including state programs, philanthropic donations, or private capital.

Cost share example

Imagine a local government receives $250K, with 50% cost share. They could meet the requirement to provide $250K in non-federal funding by:

50K	**Staff time:** 2 staff members * 100K employee cost * 25% of time dedicated to the project
100K	**Materials**: The town is able to use materials left over from a larger construction project
30K	**Volunteers**: 20 local volunteers * 50 hours (to help with construction) * $30/hour
70K	**Local funding**: Only 25% of the cost share requirement is met with a direct financial contribution to the project

19 Note that federal funding provided to another entity, such as a state government, and then re-granted to a project still counts as federal funding for the purposes of cost share.

20 Cost share rules can be quite complicated. As a starting point, review the cost share section of the relevant funding opportunity announcement. Most regulations around what can be included as cost share come from statute 2 CFR § 200.306.

6. A project is generally eligible for the **full value of federal clean energy tax credits**, such as the investment tax credit (see below), regardless of whether it has received federal funding, as long as any federal grants received are taxable. Untaxed grants must be subtracted from total project costs before calculating the value of the investment tax credit. In addition, for eligible tax-exempt entities using direct pay, to receive the full value of the tax credit, the sum of the grant and the tax credit value cannot exceed the total cost of the eligible property. See the IRS Elective Pay FAQ for more details.

7. **Cost share restrictions apply** to indirect federal funding sources—funding provided by another entity, such as a state government, that originally came from the federal government.

Tax Credit Basics

The Inflation Reduction Act establishes or extends tax credits for clean electricity, energy storage, carbon capture and sequestration, advanced manufacturing, clean fuels, electric vehicles, energy-efficient construction, and clean hydrogen, among other activities. Many of these credits will be available at full value for projects through 2032 and possibly longer for clean electricity and energy storage projects. Please check the specifics for any technology you are considering. **For most communities, the investment tax credit and production tax credit are likely to be the most useful.** See Tax Credits and Other Incentives in Appendix D for links to additional information on using federal tax credits.

Extended tax credits at least through 2033	IRA extended the ITC and PTC—which as of 2022 had either expired or been significantly reduced—**at full value at least through 2033** and creates several new kinds of credits.
Created a technology-neutral credit	Beginning in 2025, the IRA replaces the current system of technology-specific tax credits with technology-neutral PTCs and ITCs that are made available for any zero-emissions technology
Adds direct pay and transferability options	Direct pay allows tax exempt entities, State and local gov'ts, and certain other entities to claim tax credits even if they do not owe federal income tax. Transferability allows a taxpayer to sell all or part of their tax credits.
Establishes new labor requirements	Projects that meet "prevailing wage and apprenticeship requirements" (PWA) can allow the taxpayer to receive 5 times the base credit. Exemptions include projects under 1 MW.

Investment Tax Credit (ITC)

- Reduces federal tax liability by a percentage of the cost of the qualifying energy project, including installation costs and—for electricity-generating property 5 MW and under—interconnection costs. Applies to clean energy technologies, including renewable energy, energy storage, biogas production facilities, geothermal heat pumps, and microgrid controllers. After 2024, it transitions to a technology-neutral tax credit, and any energy storage or electricity generating technology with zero or less lifecycle greenhouse gas emissions may qualify.
- Base rate: 6% of tax basis if not meeting prevailing wage and apprenticeship (PWA) criteria.
- Enhanced rate: 30% if meeting prevailing wage and apprenticeship criteria (see information on requirements below).
- Bonuses available: As discussed below, the investment tax credit can be enhanced by certain bonuses: up to a 10 percentage point addition for the domestic content bonus; up to a 10 percentage point addition for the energy communities bonus; up to 10 or 20 percentage point addition for the Low-Income Communities Bonus. Taxpayers can claim more than one of these bonuses if they meet the relevant requirements.

Production Tax Credit (PTC)

- Inflation-adjusted tax credit based on the quantity of electricity generated by a qualifying facility for the first 10 years of operation. Includes renewable technologies; after 2024, transitions to a technology-neutral approach, and any electricity-generating technology with zero or less lifecycle greenhouse gas emissions may qualify.

- Base rate: 0.55¢/kWh (in 2023) if not meeting prevailing wage and apprenticeship criteria.
- Enhanced rate: 2.75¢/kWh (in 2023) if meeting prevailing wage and apprenticeship criteria (see information on labor requirements below).
- Maximum rate: 3.35¢/kWh (in 2023), including the bonus credits described below.

ITC and PTC Adders

- +10% domestic content bonus.[21] To receive this bonus, all iron and steel products and a certain percentage of manufactured products must be sourced in the United States. The minimum percentage of manufactured products required to be domestically produced for all qualifying technologies except for offshore wind, which has lower initial thresholds, is 40% for projects beginning construction before 2025, rising 5% annually until it caps at 55% for projects beginning construction in or beyond 2027. See initial IRS guidance on domestic content[22] for more information.
- +10% energy community bonus. A project can claim this bonus if it is located 1) on a brownfield site (as described in 42 U.S.C. § 9601(39)(A), (B), and (D)(ii)(III)); 2) in an area with, since 2009, 0.17%+ direct employment or 25 tax revenues attributable to the coal, oil, or natural gas industry and which has unemployment at or above the national average for the prior year; or 3) in a census tract (or adjoining census tract) in which a coal mine closed after 1999, or a coal-fired electric-generating unit retired after 2009. See a map of eligible energy communities[23] to evaluate if your community may qualify.
- +10 percentage point bonus (for the ITC only) for wind and solar projects 5 MW and under that are located in low-income communities or on tribal lands. The bonus increases to 20 percentage points for projects that are part of a low-income residential building or directly benefit low-income households. Projects need to apply to the Department of the Energy to receive this credit; up to 1.8 GW of project capacity can be allocated annually. See the DOE Low-Income Communities Bonus Credit Program[24] page and Additional Guidance on Low-Income Communities Bonus Credit Program from the IRS[25] for more information on application details and procedures.

New Ways to Benefit from Tax Credits

The Inflation Reduction Act of 2022 (IRA) adds direct pay and transferability options for many clean energy tax credits, making these tax benefits available to a larger range of entities. **Direct pay** (or "elective pay") allows tax-exempt organizations, state, local, and tribal governments, as well as other entities, including rural electric co-ops and other public power entities,[26] to receive a refund payment from the Internal Revenue Service (IRS) even if they do not owe Federal income tax. Transferability allows a taxpayer not eligible for direct pay to sell all or a portion of its tax credits to another taxpayer in exchange for cash.

For further guidance on direct pay (aka elective pay) and transferability from the Department of the Treasury, see details on the IRS website.[27] Entities seeking to use direct pay should review those guidelines and consider consulting with a tax advisor.

21 ITC bonuses provide a percentage point increase (e.g., with a 10% bonus, a 30% credit becomes 40%), while PTC bonuses provide a percentage increase (e.g., with a 10% bonus, 3.0¢ becomes 3.3¢). For projects that don't meet prevailing wage and apprenticeship requirements (PWA), there is a 2 percentage point bonus; for projects that do meet the PWA, there is a 10 percentage point bonus.

22 https://www.irs.gov/newsroom/irs-provides-initial-guidance-for-the-domestic-content-bonus-credit

23 https://energycommunities.gov/energy-community-tax-credit-bonus

24 https://www.energy.gov/diversity/low-income-communities-bonus-credit-program

25 https://public-inspection.federalregister.gov/2023-17078.pdf

26 A wider range of entities can use direct pay for three of IRA's tax credits: section 45Q (carbon oxide sequestration); 45V (clean hydrogen production); and 45X (advanced manufacturing production).

27 https://www.irs.gov/credits-deductions/elective-pay-and-transferability

New Labor Requirements

For many clean energy tax incentives, the IRA also establishes new labor standards to receive increased credit amounts. Projects beginning construction on or after January 29, 2023, must meet "prevailing wage and apprenticeship requirements" (PWA)[28] to earn the larger credit value. There are exemptions for projects under 1 MW. To meet these requirements:

- All laborers and mechanics involved in the construction, alteration, or repair of a facility must be paid at the "prevailing wage rate," set in accordance with Department of Labor standards.
- A set percentage of all hours worked on the project must be performed by a qualified apprentice. This percentage is 12.5% in 2023, and 15% in 2024 and beyond. Other apprenticeship-related requirements also apply. There are exceptions to this requirement if the project has made a good-faith effort to hire apprentices but was unsuccessful.

See the Department of Labor website[29] and IRS factsheet[30] for more details on labor requirements.

Accelerated and Bonus Depreciation

In addition to new IRA tax credits, many renewable projects continue to be eligible for accelerated or bonus depreciation deductions that can significantly reduce project costs. See the tax resources in Appendix D for more information.

28 See Resources on Tax Credits in Appendix C for more information on prevailing wage and apprenticeship requirements, as well as the following: https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses.

29 https://www.dol.gov/agencies/whd/IRA

30 https://www.irs.gov/pub/irs-pdf/p5855.pdf

Appendix D: Additional Resources

Below is a curated collection of guides, tools, and other resources likely to be helpful to communities. The resources are divided into categories: planning, regulation, funding, and tribal. The last category, resource databases, will direct you to databases with hundreds of additional clean energy resources.

Resources for Energy Planning

1. International District Energy Association | Community Energy Development Guide[31]
2. U.S. Department of Energy | Guide to Community Energy Strategic Planning[32]
3. U.S. Department of Energy | Local Government Guide for Solar Deployment[33]
4. National Renewable Energy Laboratory | City and County Solar Photovoltaics Training Program[34]
5. National Rural Electric Cooperative Association (NRECA)[35]

Resources for Regulation (Permitting, Interconnection, Policy)

1. U.S. Department of Energy | Building Energy Codes Program[36]
2. Interstate Renewable Energy Council | Connecting to the Grid[37]
3. U.S. Environmental Protection Agency | State Energy and Environment Guide to Action: Interconnection and Net Metering[38]

Resources for Funding

Additional information on applying for federal funding

1. Grants.gov | How to Apply for Grants[39]
2. U.S. Department of Energy | Apply for EERE Funding Opportunities—Application Process[40]

Tax credits and other incentives

1. Internal Revenue Service | Inflation Reduction Act of 2022[41]
2. U.S. Department of Energy | Federal Solar Tax Credits for Businesses[42]
3. U.S. Department of Energy | Homeowner's Guide to the Federal Tax Credit for Solar Photovoltaics | Department of Energy[43]
4. Treasury and IRS issue proposed regulations on prevailing wage and apprenticeship requirements for increased energy credit or deduction amounts | Internal Revenue Service[44]

31 https://www.districtenergy.org/resources/publications/community-energy-development-guide
32 https://www.energy.gov/scep/slsc/guide-community-energy-strategic-planning
33 https://www.energy.gov/eere/solar/local-government-guide-solar-deployment
34 https://www.nrel.gov/solar/market-research-analysis/solar-decision-support.html
35 https://www.electric.coop
36 https://www.energycodes.gov
37 https://irecusa.org/our-work/connecting-to-the-grid
38 https://www.epa.gov/system/files/documents/2022-08/Interconnection and Net Metering_508.pdf
39 https://www.grants.gov/applicants/apply-for-grants.html
40 https://www.energy.gov/eere/funding/apply-eere-funding-opportunities
41 https://www.irs.gov/inflation-reduction-act-of-2022
42 https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses
43 https://www.energy.gov/eere/solar/homeowners-guide-federal-tax-credit-solar-photovoltaics
44 https://www.irs.gov/newsroom/treasury-and-irs-issue-proposed-regulations-on-prevailing-wage-and-apprenticeship-requirements-for-increased-energy-credit-or-deduction-amounts

Non-federal funding

1. Better Buildings Solution Center | Financing Navigator[45]
2. Clean Energy States Alliance | Directory of State Low- and Moderate-Income Clean Energy Programs[46]
3. NC Clean Energy Technology Center | Database of State Incentives for Renewables and Efficiency[47]

IRA funding and other programs for home energy improvements and consumer purchases

1. U.S. Department of Energy | Energy Savings Hub[48]

Federal funding for manufacturing and electric vehicle infrastructure

1. U.S. Department of Energy | Office of Manufacturing and Energy Supply Chains Homepage[49]
2. U.S. Department of Transportation | EV Infrastructure Funding and Financing for Rural Areas[50]
3. Joint Office of Energy and Transportation | DriveElectric.gov[51]

Federal funding for rural communities (beyond energy)

1. Interagency Working Group on Coal & Power Plan Communities & Economic Revitalization | Funding Clearinghouse[52]
2. Rural.gov | Help for Rural Communities[53]
3. The White House | Bipartisan Infrastructure Law Rural Playbook[54]
4. The White House | How the Inflation Reduction Act Helps Rural Communities[55]
5. U.S. Department of Agriculture | Inflation Reduction Act Funding for Rural Development[56]

Bond financing for clean energy

1. U.S. Department of Energy | Bonding Tools[57]
2. U.S. Department of Energy | Leveraging Bond Financing to Support Energy Efficiency and Renewable Energy Goals: A Resource Summary for State and Local Governments[58]
3. U.S. Environmental Protection Agency | Municipal Bonds and Green Bonds[59]

45 *https://betterbuildingssolutioncenter.energy.gov/financing-navigator/primer/state-and-local-government-energy-financing-primer*
46 *https://www.cesa.org/resource-library/resource/directory-of-state-low-and-moderate-clean-energy-programs*
47 *https://www.dsireusa.org*
48 *https://www.energy.gov/save*
49 *https://www.energy.gov/mesc/office-manufacturing-and-energy-supply-chains*
50 *https://www.transportation.gov/rural/ev/toolkit/ev-infrastructure-funding-and-financing*
51 *https://driveelectric.gov*
52 *https://energycommunities.gov/funding-opportunities/all-funding*
53 *https://www.rural.gov/help-for-rural-communities*
54 *https://www.whitehouse.gov/build/resources/rural*
55 *https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/17/fact-sheet-how-the-inflation-reduction-act-helps-rural-communities*
56 *https://www.rd.usda.gov/inflation-reduction-act*
57 *https://www.energy.gov/scep/slsc/bonding-tools*
58 *https://www.energy.gov/scep/slsc/articles/leveraging-bond-financing-support-energy-efficiency-and-renewable-energy-goals-1*
59 *https://www.epa.gov/statelocalenergy/municipal-bonds-and-green-bonds*

Resources for Tribes

1. The White House | Bipartisan Infrastructure Law Tribal Playbook[60]
2. The White House | Funding for Tribes in the Inflation Reduction Act[61]
3. The White House | Guide to the Inflation Reduction Act's Clean Energy and Climate Investments in Indian Country[62]
4. U.S. Department of Energy | Additional Resources for Tribes[63]

Resource Databases

1. U.S. Environmental Protection Agency | Energy Resources for State, Local, and Tribal Governments[64]
2. U.S. Department of Energy | Additional Resources for Tribes[65]
3. U.S. Department of Energy | All State & Local Solution Center Resources[66]
4. U.S. Department of Energy | States and Local Communities[67]

60 *https://www.whitehouse.gov/wp-content/uploads/2022/05/Bipartisan-Infrastructure-Law-Tribal-Playbook-053122-.pdf*
61 *https://www.whitehouse.gov/cleanenergy/tribes*
62 *https://www.whitehouse.gov/wp-content/uploads/2023/04/Inflation-Reduction-Act-Tribal-Guidebook.pdf*
63 *https://www.energy.gov/indianenergy/additional-resources-tribes*
64 *https://www.epa.gov/statelocalenergy*
65 *https://www.energy.gov/indianenergy/additional-resources-tribes*
66 *https://www.energy.gov/scep/slsc/all-state-local-solution-center-resources*
67 *https://www.energy.gov/eere/states-and-local-communities*

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