

30 Million Solar Homes: A Vision for an Equitable Economic Recovery Built on Climate Protection and Energy Democracy

Preliminary Policy Ideas

We are exploring the following policies and programs as tools to create equitable economic recovery by deploying distributed solar energy to serve the equivalent of one in four American households, particularly in low-income, BIPOC (Black, Indigenous, and People of Color), and frontline communities. A rapid, widespread scale-up in solar energy would save American families billions in annual energy costs and create millions of good-paying jobs. These initial recommendations are neither exhaustive nor final, and we welcome feedback.

Make solar tax incentives more equitable

There is broad support for extending the Solar Investment Tax Credit (ITC), but changes must be made to ensure it can benefit low-income households, people with low tax liability, and nonprofit institutions.

- Extend the residential and commercial Solar ITC and include provisions to increase accessibility, such as a cash grant option, credit refundability, and explicit eligibility for community solar ownership.
- Require Davis-Bacon prevailing wages and benefits for workers on solar projects that receive the Solar ITC.
- Further target the Solar ITC to low-income households and other underserved groups through income indexing, means-testing, project size limitations, or other requirements. For example, allow a 5% higher credit for projects primarily serving low-income customers, or reserve a cash grant option for projects under 2 MW.

Provide more reliable low-income energy assistance through solar energy

The federal government spends billions of dollars every year to help families pay their energy costs and still only serves less than a fifth of the eligible population. By funding rooftop and community solar access for these households, the government could provide long-term financial relief and reduce the need for annual energy bill assistance.

- Expand eligibility and provide increased, multi-year funding for the Department of Health and Human Services' Low-Income Home Energy Assistance Program (LIHEAP) to serve all eligible households.
- Increase the amount of LIHEAP Transfer and Assurance 16¹ funds that are used for rooftop and community solar, possibly by creating a carveout of funds that LIHEAP grantees must use to provide solar access to eligible households.

¹ LIHEAP Transfer and Assurance 16 funds are subsets of the LIHEAP block grant that can be spent on efforts to increase low-income households' energy self-sufficiency, such as through referral services and weatherization, instead of on direct bill assistance.

- Renew funding for the LIHEAP Residential Energy Assistance Challenge (REACH) competitive grant program for innovative projects that help low-income households increase energy self-sufficiency, through solar energy and other means.
- Enable LIHEAP service providers to develop community solar projects and provide eligible households “bill assistance” via an annually transferable community solar share.

Supplement low-income weatherization assistance with solar energy

Federal weatherization assistance increases low-income households’ energy self-sufficiency, but the program is currently underfunded. Combining efficiency with rooftop solar would further reduce the energy burden on low-income households in the long term.

- Increase funding for the Department of Energy’s (DOE’s) low-income Weatherization Assistance Program (WAP) to serve all eligible households.
- Enable greater use of funds to deploy rooftop solar by providing federal guidance on incorporating solar into WAP grantees’ annual weatherization plans.
- Prioritize households with high energy burdens who are turned down for weatherization improvements (because of structural issues, dangerous heating sources, etc.) for rooftop or community solar provided through WAP, LIHEAP, or other programs.
- Support greater Tribal management of WAP and LIHEAP programs by providing more technical assistance to increase Tribal sovereignty over program funds.

Fund solar for small businesses in rural and Tribal areas

Small businesses and farms in rural areas and on Tribal lands often face difficulties financing solar energy systems. Federal grants and financing are essential to help these business owners access solar.

- Quadruple funding for the US Department of Agriculture’s (USDA’s) Rural Energy for America Program (REAP), which provides grants and loan guarantees to rural business owners.
- Create a REAP Tribal carveout by dedicating 35% percent of program funding and financing to small businesses and farms on Tribal lands.
- Provide additional technical assistance for REAP applicants.

Deploy rooftop and community solar to benefit affordable housing residents

Residents of affordable and public housing stand to benefit greatly from reduced energy costs through solar energy, but they face barriers because they are typically renters and because of how housing subsidies and utility allowances are calculated.

- Ensure that residents of federally-subsidized housing pocket the savings generated by community solar shares by changing how the utility allowance is calculated.
- Scale up the Department of Housing and Urban Development’s (HUD’s) Renew300 initiative to encourage deployment of solar on public housing.

- Remove HUD's 5-year cap on Power Purchase Agreements for Public Housing Agencies.
- Incentivize private building owners in the Section 8 voucher program to install solar energy, possibly using CDBG funds or tax credits, and pass energy savings to residents. Participating landlords would be prohibited from passing the cost of installation to tenants, and building owners who receive a fully subsidized solar system could be subject to a rent freeze.

Provide block grants to local and state governments for solar and efficiency

Local, state, tribal, and territorial governments can leverage block grants to provide larger scale financing for solar energy projects

- Raise awareness of the use of Community Development Block Grant (CDBG) funds to establish loan loss reserves to support financing for solar energy and provide relevant guidance to CDBG recipients.
- Promote use of CDBG Section 108 loan guarantees to deploy larger-scale community solar projects and support residential solar financing.
- Reestablish the DOE's Energy Efficiency and Conservation Block Grant program at \$2.5 billion annually for 5 years, and prioritize the use of funds to provide rooftop solar, community solar, and energy efficiency efficiency to households, small businesses, and community institutions in low-income communities, energy justice communities, and other over-burdened populations.

Promote the use of inclusive financing for solar and energy efficiency

Conventional loans for home solar and energy efficiency improvements are often inaccessible to renters, low-income households, and people without high credit scores, who are burdened with high energy costs. Inclusive financing programs that are structured to source repayment from energy savings and tie it to the property instead of the person can break through these barriers.

- Expand and improve USDA programs, such as the Rural Energy Savings Program and Energy Efficiency and Conservation Loan Program, that provide capital for solar and efficiency inclusive financing projects.

Support workforce development for underrepresented communities to enable rapid, large-scale solar deployment

Solar energy is a growing part of the American economy, but Black and female workers remain underrepresented in the industry² — investment in workforce training for these and other groups is necessary to ensure both greater equity and massive growth of distributed solar energy.

- Provide funding to the DOE for workforce development efforts that help underrepresented groups, including People of Color, women, transitioning energy workers, formerly incarcerated people, and energy justice communities, gain

² See the [2020 U.S. Energy and Employment Report](#) and the [U.S. Solar Industry Diversity Study 2019](#)

employment and start businesses in solar energy installation and supply chain manufacturing.

Other possible policy avenues

- Direct HUD to issue regulations prohibiting homeowners associations from restricting the ability of homeowners to deploy solar energy on their property.
- Enable use of disaster recovery funds, such as the Federal Emergency Management Agency's Hazard Mitigation and Building Resilient Infrastructure and Communities programs, for solar energy plus storage.
- Leverage Community Development Financial Institution Fund programs, such as the New Market Tax Credit, to further incentivize investment in solar energy in low-income communities.
- Issue Clean Energy Victory Bonds, as recommended by Green America³ and modeled on World War II victory bonds, for solar energy investment.
- Create a federal solar marketplace, like [EnergySage](#), for individual rooftop solar and storage systems that allows residents and small businesses to compare quotes from solar installers.
- Mandate or incentivize communities to use the National Renewable Energy Laboratory's SolarAPP (Automated Permit Processing)⁴ to streamline permitting for on-site solar systems and reduce wait time.
- Provide grants for cities to study the economic impact and logistics of solar or all-electric home requirements for new construction.
- Provide pre-development funds and loan guarantees for community-owned community solar projects.
- Amend FERC Order 1000 to require independent analysis of regional transmission non-wires alternatives to account for 30 million solar rooftop expansion.
- Create a Covid-19 stimulus block grant program that provides funds to states, cities, tribes, and territories to issue direct grants to low-income households and community organizations for rooftop solar.
- Create a federal grant program for schools that install rooftop solar and reinvest the energy savings into school operations, teacher salaries, and/or classroom materials. Grants could start at 40% of the system cost and increase to 80% for schools that serve low-income households.

³ See [Green America](#) for more information.

⁴ See [NREL SolarAPP](#) for more information.