

Building Back Better: A Roadmap to Expand Solar Access for All

Federal policy priorities for meeting the Biden–Harris Administration’s climate and equity goals: Building a more equitable, resilient, and clean electricity grid and economy that works for all Americans

Coalition partners: Earthjustice, Coalition for Community Solar Access, GreenLatinos, Solar United Neighbors, WE ACT for Environmental Justice, GRID Alternatives, NAACP, Appalachian Voices, League of United Latin American Citizens, Local Solar for All, Hispanic Federation, Vote Solar, Chispa LCV, TUEILIP

Challenge:

The clean energy revolution remains inaccessible to most Americans and has historically locked out underserved communities such as communities of color, indigenous communities, and rural and low-income communities. Achieving real clean energy equity requires that we address historic policy inequities, prioritize critical investments in the hardest-hit areas, and create opportunities for economic growth that foster justice.

Additionally, hundreds of gigawatts of local solar power will be needed in the coming decade to meet the Biden-Harris Administration’s climate and equity goals of 100% clean electricity by 2035 and ensuring at least 40% of new clean energy benefits go to traditionally underserved communities. However, our aging electric grid cannot currently accommodate the volume of new clean, renewable, local resources required to meet climate goals and relieve energy poverty.

We must rebuild our electricity infrastructure to meet both grid and social goals together.

Solution

To address this challenge comprehensively and facilitate equitable innovation and market creation, we must adopt policies and make investments that unlock the benefits of local clean energy for all. This proposal seeks to ensure we meet and exceed the Administration’s goals to decarbonize the electric grid and ensure that we center the needs of underserved communities including communities of color, low-income households, indigenous communities, and those communities disproportionately impacted by climate and environmental degradation.

The three pillars of targeted policy recommendations below ensure that through expanding solar access for all, at least 40% of the benefits reach underserved communities in line with the Administration’s goals, with our target being 50%.

- 1 Empower **30 million households to go solar, including 15 million with low to moderate incomes;**
- 2 Create an energy economy and workforce that includes everyone — especially those in underserved communities — spurring **hundreds of billions of dollars in private investment in public infrastructure and creating over one million new jobs, while supporting business ownership, entrepreneurship and economic opportunity for communities of color and underserved communities;**
- 3 Build a more **resilient** grid that is ready to **meet our economic, workforce, and climate goals including achieving 100% clean renewable energy by 2035.**

1. Unlock access to local solar for ALL Americans.

Without intentional policy, the grid of the future — regardless of where its electric power comes from — will continue to disempower and lock out underserved communities. Federal policy can open up energy choices for more people, help create sustainable and just economies to ensure equitable access to the benefits of local clean energy, and empower over 30 million households to go solar by 2035.

1A. Expand solar access for all and bill savings to at least 15 million low- to moderate-income (LMI) households.

Extend the federal Investment Tax Credit (ITC) for solar energy for 10 years, allow it to apply to stand-alone storage, make the credit fully and immediately refundable, and ensure access to the credit for underserved communities.

- Allow immediate, 100% credit refundability for individuals (Section 25D) and corporations (Section 48) of the ITC for projects located on the distribution grid, including for projects benefitting underserved communities, and explicitly confirm eligibility for community solar ownership shares.
- Clarify that 501(c) organizations and other non-taxable entities, such as locally recognized tax-exempt entities, local governments, rural electric cooperatives, and tribes, are eligible for a cash grant/direct pay/refundable version of the Solar ITC.
- Ensure the 10 year extension includes parity for individuals (Section 25D) and corporations (Section 48), which would include a permanent 10% ITC for Section 25D. Currently, Section 25D steps down to 0% whereas Section 48 remains at 10% permanently. Parity for Section 25D is critically important for equity reasons, given that it serves residential customers who purchase a project via cash or a loan (and, as a result, have ownership of the project). Approximately 70% of all residential solar projects in the U.S. today are sold via cash with loan.
- Support low-income equitable solar access through federal programming by identifying key barriers to access at Housing and Urban Development (HUD) and DOE, including reviewing fossil fuel transitioning communities
- Guarantee ITC benefits will be available in Puerto Rico and all U.S. territories.
- Create a zero to low interest financing program through the Department of Energy Loan Program Office (LPO) to ensure access to credit for underserved communities and low to moderate income households.

Encourage state development and expansion of robust distributed solar programs:

Support the deployment of 150+ gigawatts of local solar and unlock over \$300 billion in private capital to serve at least 15 million LMI and 30 million+ total households necessary to achieve 100% clean energy by 2035 at lowest cost, and create long-term sustainable markets that work for all Americans.

- Provide \$30 billion to state, local, territorial, and tribal governments to fund existing and new distributed and community solar programs and incentives that expand access to solar focusing on creation of long-term sustainable and just economies based on best practices established by the Department of Energy (DOE), with criteria to ensure that at least 50% of incentives support underserved communities, communities of color, indigenous communities, rural, and low to moderate income households. Supporting state deployment of distributed energy resources (DERs) and ensuring compensation for the value they provide the grid and society, while ensuring equity in the access and benefits of the resources, will unlock hundreds of billions of dollars in private capital in public infrastructure — \$30 billion over 10 years supports a minimum of \$300 billion and 150 gigawatts of local solar drive market innovation and competition, and achieve a 100% clean electric grid at the lowest cost for all customers. Potential legislation includes the [Affordable Solar Energy for Our Communities Act](#) (Rep. Cárdenas).

Increase assistance for community groups and low-income households to participate directly in clean energy opportunities and energy-saving measures.

- Support low-income equitable solar access through federal programming by identifying key barriers to access at Housing and Urban Development (HUD) and DOE, including reviewing rules on utility allowances, ensuring sufficient financing programs mechanisms for LMI households, and expanding solar access for all HUD, U.S. Department of Agriculture (USDA), rural and tribal housing programs.
- Increase Low Income Home Energy Assistance Program funding to \$30 billion annually.
- Increase Weatherization Assistance Program (solar is now an eligible technology) funding to \$2 billion annually and modernize arcane program restrictions.
- Incorporate Sections 618 and 248 of the [CLEAN Future Act](#) (Reps. Pallone, Tonko, Rush).
- Provide \$5 billion to non-governmental organizations, including community organizations and nonprofits, to develop local clean energy projects.

1B. Give states, tribes, and territories the choice to establish community solar programs and expand access to solar for all.

Community solar refers to a shared solar power facility, typically located on the distribution system, that provides electricity benefits to more than one customer. This proposal aims to include all forms of community solar, as energy systems and ownership structures will continue to evolve.

- Pass the Community Solar Choice Act (Rep. Castor, Sen. Bennet, Sen. Lujan) to bring transformative benefits to a diverse array of communities, particularly low-wealth communities that have been most impacted by pollution from traditional power plants and rural communities where economies have been hit hard in recent years.

1C. Provide farmers and underserved rural communities with more opportunities to capitalize on community solar.

- Expand existing USDA programs to allow for increased eligibility and funding for community solar projects, including the Rural Utilities Service (RUS) program.
- Expand the USDA Rural Energy for America Program to tax-exempt entities including nonprofits and government entities and increase program funding to \$100 million per year to support tribal energy and energy efficiency projects.
- Provide funding and incentives, in consultation with underserved communities and local leaders, to revitalize brownfields and encourage use of marginal farmland so they can host community solar energy facilities.
- Develop a USDA education program to educate farmers about community solar.
- Create a loan guarantee program to support rural co-ops in adopting community solar, including collaborative partnerships with developers, support on site selection, and funding for interconnection.

2. Reduce energy poverty and create jobs.

Over 14 million Americans face energy poverty and energy insecurity as a result of unaffordable energy bills. With a concerted effort to target the benefits of clean energy at and for the homes with the highest energy burdens - particularly those in environmental justice communities, communities of color, and low income communities, we can reduce energy poverty in America, meet our climate goals, and create family sustaining jobs.

2A. Target significant investments in solar

to benefit the households and communities with the highest energy burdens.

- Provide \$100 million per year to the Solar Energy Technologies Office (SETO) to support expanding solar access to low income communities.
- Increase DOE Office of Indian Energy appropriation by at least \$100 million annually.
- Develop community solar projects on and for Federal properties, including Veterans Affairs, Department of Defense, and General Services Administration facilities, making at least 40% of the energy available to low income households.

2B. Support clean and renewable energy business and workforce development

in underserved communities and communities transitioning away from the fossil fuel industry, as well as areas in most need of economic revitalization.

Provide incentives for clean and renewable energy companies to retrain and hire people from underserved communities.

- Incorporate sections 821-826 of the CLEAN Future Act creating the DOE Office of Economic Impact, Diversity, and Employment reauthorized at \$100 million annually. The office should create a \$70 million/year grant program to provide full wage stipends to energy job trainees and cover wrap-around services including childcare, transportation, and other costs to eliminate barriers to participation.
- Pass the [Low Income Solar Energy Act](#) (Sen. Duckworth) and require DOE to expand solar workforce programming to groups underrepresented in the solar industry including women, veterans, tribes, unemployed energy workers, and formerly incarcerated individuals.

Provide programs, funding, and technical assistance to support solar and clean and renewable energy businesses with focus on tribes, territories, and minority- and women-owned business enterprises (MWBEs).

- Create a \$100 million grant program to provide access to capital for individuals with low or no credit to start clean energy companies and invest in clean energy projects.
- Establish standards to promote supplier diversity and procurement of contracts from minority-owned businesses, and clearinghouses for the sharing of verified eligible contractors. Examples from states include [SB-255](#) from CA and [General Order 156](#) from the California Public Utilities Commission.
- Create an Energy Ready Vets Program by expanding the Solar Ready Vets Program within DOE to prepare eligible veterans for careers in the energy industry, as proposed in [S. 876](#).
- Develop R&D and workforce training partnerships with Hispanic-Serving Institutions (HSIs), tribal colleges, Historically Black Colleges and Universities (HBCUs), and other Minority-Serving Institutions.
- Provide funding and technical assistance to increase access to quality of career technical education programs in high schools and prisons. Support the update of curriculum to address skills in line with regional clean and renewable energy workforce needs.
- Adopt industry-wide “ban the box” policies to promote fair hiring and give formerly incarcerated people an opportunity to enter the industry without facing barriers.
- Provide \$100 million per year to SETO Technology to Market programs to support the creation of new clean energy businesses.

3. Build a modern grid for an equitable transition to renewables.

To transition to a cleaner electric grid in the most efficient, equitable and cost-effective manner, hundreds of gigawatts of local and storage will need to be installed. But today's grid requires significant infrastructure upgrades, planning improvements, and state regulatory capacity to deploy these local solar and storage resources.

3A. Expand access to grid modeling

to achieve clean, equitable, safe, resilient, and most cost-effective electricity systems.

Authorize \$20 million annually for five years to support advanced grid modeling for states, tribes, and territories.

With DOE guidance, the modeling efforts should overlay other policy goals including job creation, equity, and economic development to achieve the most cost-effective buildout of a clean energy grid. New modeling tools can integrate complicated and siloed grid resource planning into single comprehensive models to evaluate optimal resource selection for the entire system, including integrating DERs, local solar, and storage. DOE should encourage state, territory, and other local government programs and regulations that ensure more democratic long-term sustainability of access to modeling, including utility funded models for non-utility stakeholders.

3B. Modernize the grid so it is prepared to deploy more local solar and storage.

Extend the cost for interconnection of local solar and storage into the cost basis for the ITC.

The cost of connecting energy projects to the electric grid is an enormous source of risk and uncertainty across the solar industry, and addressing this cost is critical to scaling equitable solar deployment in underserved areas. Allow privately funded grid upgrades to be factored into the cost basis for the ITC. This will make increasingly expensive and unpredictable interconnection upgrade costs more accessible to a wider range of DER systems.

Create innovative policy and technical roadmaps for a Renewable-Ready Grid. Enable strategic investments in grid upgrades in a “living lab” for market learning across the country.

State regulatory commissions are understaffed and under-resourced to drive the necessary regulatory reforms needed to facilitate a clean grid. We recommend developing a \$10 billion request for proposal program designed for states, tribes, and territories to improve their regulatory framework for integrating DERs and create innovative pathways and investments to create a local renewable-ready grid. The program would be divided into two phases:

Phase 1: Allocate \$200 million to allow states, tribes, and territories to receive funding support for regulatory, policy, process development, and staffing needs. These include:

- Requiring commission-led community stakeholder processes on DER facilitation, and regulatory work on DER integration
- Reforming the utility planning process to incorporate more accurate, granular modeling
- Incentive-based rate-making to realign utility incentives around renewable energy
- Adoption of [IEEE 1547-2018](#) or other best practice technical standards.

Phase 2: Allocate up to \$10 billion to allow states, tribes, and territories, such as Puerto Rico, to apply for innovative grid modernization project awards that demonstrate transformative ability to maximize integration of DERs in a replicable way.

Fill key federal policy gaps for effective DER deployment and adoption.

- Promulgate model codes for new homes and buildings to include solar, in line with California's best in the nation Title 24 codes which require energy efficiency, solar and energy storage to be deployed with new single family and multi-family homes in addition to new commercial buildings.
- Ensure that federal investments in energy efficient affordable housing, public housing and public facilities (state, local and federal) include solar and energy storage in the definition of energy efficiency to ensure distributed solar and energy storage is included among eligible retrofits.
- Ensure sufficient and sustainable funding for expanded development and deployment of SolarAPP+, an online instant permitting platform for local governments, which will reduce the costs to deploy distributed solar and energy storage.
- Dedicate \$25 million annually for five years through DOE to provide to states, tribes, and territories to support updated and improved interconnection policies and processes.
- Provide \$10 million over five years to the Federal Energy Regulatory Commission (FERC) to create a process for state, tribal, territory, and federal coordination of DER deployment. Funding would support FERC in hiring staff and consultants to coordinate DER policy at all levels and reduce implementation costs.
- Prioritize federal funding for disaster recovery through the Community Development Block Grant Disaster Recovery (CDBG-DR) program and FEMA Building Resilient Infrastructure and Communities (BRIC) for local solar, renewable energy, and energy storage to ensure that territories like Puerto Rico, vulnerable areas and other flood-prone communities may increase climate resilience and achieve renewable energy goals.
- Establish a joint DOE and HUD study on home repair and structural barriers to solar installation by 2022, and deploy over 3 gigawatts of local solar on HUD-assisted housing by 2025.
- Establish a joint DOE and HUD study on best practices for the recycling and disposal of solar equipment and development of a grant to deploy recycling and disposal hubs in consultation with community stakeholders.