

## 30 Million Solar Homes

# Policies for an Equitable Economic Recovery Built on Climate Protection and Energy Democracy

The following federal policy recommendations aim to create an equitable economic recovery by deploying distributed solar energy to serve the equivalent of 30 million homes — or one in four American households — particularly in marginalized communities. A rapid, widespread scale-up in solar energy would save American families of all colors billions in annual energy costs and create millions of good-paying jobs in both urban and rural communities. We welcome feedback and engagement to discuss these goals and mechanisms.

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## Definitions

### *Low- and moderate-income:*

- In general, households with incomes below 80% of Area Median Income (AMI), scaled to the number of people in the household, and communities that include a large proportion of low- and moderate-income households.

### *Marginalized communities:*

- Communities and households that are, but not limited to—
  - ◆ Low- and moderate-income, or are receiving social services such as Medicaid, nutrition, and housing assistance;
  - ◆ Environmental justice communities, as identified through an appropriate environmental justice screening tool(s), such as the Biden administration's proposed Climate and Environmental Justice Screening Tool, that account for factors including high pollution levels, large minority populations, and high energy burdens; and/or
  - ◆ "Solar deserts," where there is no or low deployment of distributed solar energy.

### *Equitable community solar:*

- Community solar programs and projects in which—
  - ◆ Community solar refers to an on- or off-site solar project that interconnects with an electric utility's distribution system, serves multiple energy users within the utility, and provides direct economic benefits to those users, such as through virtual net energy metering (VNEM);
  - ◆ Utility end users and third parties are allowed to own community solar installations, on equal footing with utility-owned installations, whereby projects are compensated for electricity production through VNEM; and
  - ◆ Programs focus on benefitting marginalized communities and prioritizing community governance and ownership.

## Make solar tax incentives more equitable

The Consolidated Appropriations Act, 2021, which was signed into law in December 2020, extended the Solar Investment Tax Credit (ITC) at its current level of 26% through 2022. However, changes must still be made to ensure it can further benefit low- and moderate- income households, people with low tax liability, and nonprofit institutions.

- Restore a cash grant/direct pay option for the residential (Section 25D) and commercial (Section 48) Solar ITC for projects under 2 megawatts, allow immediate credit refundability, and explicitly confirm eligibility for community solar ownership shares.
- Restore the residential (Section 25D) and commercial (Section 48) Solar ITC to 30%, and extend the cash grant/tax credit through the next 10 years, including a gradual sunset period.
- Clarify that 501(c) organizations and other non-taxable entities, such as local governments and rural electric cooperatives, are eligible for a cash grant/direct pay version of the Solar ITC.
- Create three additional tax credits, payable as a cash grant/direct pay option if it meets the conditions above, which can be combined up to a maximum total solar tax credit/cash grant of 45%, for the following types of projects:
  - ◆ An additional 10% tax credit for commercial (Section 48) solar projects installed by entities that provide Davis-Bacon prevailing wages and benefits,
  - ◆ An additional 10% tax credit for residential (Section 25D) and commercial (Section 48) solar projects primarily serving marginalized communities, and
  - ◆ An additional 10% tax credit for residential (Section 25D) and commercial (Section 48) solar projects that reduce community vulnerability to disaster-related power outages through distributed solar plus storage.

## 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. Increasing federal energy assistance funding overall while using funding that isn't dedicated to direct bill assistance for solar innovations would ensure the long term integrity and solvency of energy assistance.

- Fully fund the Department of Health and Human Services's (DHHS's) Low-Income Home Energy Assistance Program (LIHEAP) to serve all eligible households at an approximate cost of \$150 billion total over the next five years, and provide multi-year LIHEAP funding to give grantees consistency.
- Expand income eligibility for LIHEAP to the higher of 200% of the Federal Poverty Level (FPL) or 80% of State Median Income (SMI).

- Create a national solar carveout in the LIHEAP Transfer mechanism (EAP-WX)<sup>1</sup> by requiring 50% of LIHEAP Transfer funds be used by grantees and service providers to deploy rooftop solar that will be owned by eligible households and/or purchase community solar subscriptions for eligible households.
- 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, with at least \$5 billion total available over the next five years.
- Clarify that providing rooftop solar and annually-transferable community solar shares/subscriptions is an eligible use of LIHEAP funds by amending (42 U.S.C. 8628) Section 2609 as follows:
  - ◆ “Grants made under this title may not be used by the State, or by any other person with which the State makes arrangements to carry out the purposes of this title, for the purchase or improvement of land (**except for the construction of renewable energy systems**), or the purchase, construction, or permanent improvement (other than ~~low-cost~~ residential weatherization or other energy-related home repairs **or the construction of onsite or offsite renewable energy systems**), of any building or other facility.”
- Direct DHHS to allow LIHEAP service providers to develop community solar projects that provide eligible households “bill assistance” via an annually transferable community solar share that aligns with the household’s annual energy assistance needs. Provide guidance and technical assistance to service providers to implement community solar projects.
- Use Pay for Success financial tools/Social Impact Bonds<sup>2</sup> to fund innovative projects that aim to improve the integration of solar energy into energy bill assistance and ultimately result in lower energy burdens.
  - ◆ Leverage the U.S. Treasury’s Social Impact Partnerships to Pay for Results Act (SIPRA) to finance the deployment of community solar assets owned and operated by Community Action Agencies (CAAs) for the specific purpose of delivering bill assistance to LIHEAP recipients.
- Use demographic data concerning race and homeownership status collected by the Low-Income Home Energy Assistance Program and the Weatherization Assistance Program to conduct an annual equity report that maps disparities in services and recommends tangible strategies for improvement.
  - ◆ For example, the disparities mapping could analyze the percent of eligible customers enrolled in a LIHEAP or WAP benefit program, disaggregated by all customers groups (e.g., income level, frontline community, senior citizens,

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<sup>1</sup> LIHEAP Transfer funds are a subset 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. This would NOT take away money that is used to directly pay energy bills.

<sup>2</sup> [See more.](#)

medically vulnerable, rural/urban, renter/homeowner, race, gender, ability/disability, language spoken, etc.).

- Support greater Tribal management of WAP and LIHEAP programs by providing more technical assistance, and increased funding for Tribes, to increase Tribal sovereignty over program funds and other services as determined by Tribes.
  - ◆ Direct DHHS to inform all recognized tribes that there is a path to managing your own LIHEAP without the state as an intermediary and create a grant program to support those tribes that would like to manage LIHEAP directly with DHHS.

### **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 provide approximately \$50 billion total over the next five years.
- Expand income eligibility for WAP to the higher of 200% FPL or 80% SMI.
- Enable greater use of WAP funds to deploy rooftop solar by providing more federal guidance and assistance on incorporating solar into grantees' annual weatherization plans.
- Eliminate the overall household spending limit for WAP, to ensure all cost effective measures are installed, and eliminate the household spending limit on renewable energy measures.
- Prioritize households with high energy burdens who are turned down for weatherization improvements (i.e., "walkaway" deferral) for rooftop or community solar provided through WAP, LIHEAP, or other programs.
  - ◆ Also, streamline resources for structural improvements of WAP "walkaway" households to provide improved housing quality (and not just bill discounts).

### **Fund solar projects in marginalized communities, rural areas, and Tribal lands**

Low- and moderate-income households and BIPOC communities can struggle to finance solar energy despite frequently standing to gain the most from the bill savings. Rural households and farms face similar issues. Increased federal funding could help deploy solar in these communities that have typically lacked access, bringing much needed economic benefits and creating spillover effects.

- Create a grant program at the Department of Energy for nonprofits; local, state, tribal, and territorial governments; and solar developers to install on-site solar (including any necessary building improvements) and equitable community solar systems to benefit residents of marginalized communities.

- ◆ Prioritize projects that provide the most financial benefit to households and support community employment or workforce training.
- ◆ Eligible community solar projects must be equitable and include community input in the project design and the distribution of benefits, be under or equal to 2 MW in scale, and dedicate at least 50% of capacity to serving residents of marginalized communities.
- ◆ Make at least \$12.5 billion available in total over the next five years.
- Increase baseline funding for the US Department of Agriculture's (USDA's) Rural Energy for America Program (REAP), which currently provides grants and loan guarantees to rural small businesses and agricultural producers, to at least \$1.25 billion over five years.
  - ◆ Expand program eligibility to nonprofits and residences in rural areas.
  - ◆ Lower the eligibility threshold for agricultural producers to at least 25% (from 50%) of gross income from on-farm operations. Alternatively, tie eligibility to filing farm property taxes without any income requirement.
  - ◆ Prohibit REAP funding eligibility for concentrated animal feeding operation biogas/biomass or incineration projects, or lower the maximum size caps for such operations (e.g., 1k animal units maximum).
  - ◆ Create a REAP Tribal carveout by dedicating 35% percent of program funding and financing to small businesses, farms, nonprofits, and residences on Tribal lands. Reserve 50% of remaining funds for projects in other marginalized communities
  - ◆ Provide additional technical assistance for REAP applicants, to help prepare applications and implement projects.
- Create a \$400 million grant program at the Department of the Interior that provides technical assistance for and deployment of off-grid solar and storage for primary residences, businesses, and community-benefitting buildings in tribal communities and areas with no grid-connectivity options.
  - ◆ Program design and operation should abide by principles of tribal sovereignty and Free, Prior, and Informed consent.

### **Bring the benefits of solar energy to 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.

- Direct the Department of Housing and Urban Development (HUD) to issue national guidance that enables residents of federally subsidized housing to pocket the savings from energy efficiency, rooftop solar, and community solar bill credits.
  - ◆ Similar to HUD's 2019 guidance for California's Solar on Multifamily Affordable Housing (SOMAH) program<sup>3</sup>, the guidance would direct housing providers to

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<sup>3</sup> See [HUD 2019 memo](#) re: Treatment of Solar Virtual Net Energy Metering Credits on Tenant Utility Bills.

- exclude Virtual Net Energy Metering credits from income and utility allowance calculations for residents of federally subsidized housing who receive a bill credit from an on- or off-site community solar project, where the credit is attached to the property/unit and not related to electricity consumption.
- ◆ Similarly, amend the utility allowance credit such that savings from efficiency and rooftop solar improvements to affordable housing can result in monthly savings for residents.
- Relaunch HUD’s Renew300 initiative, which provided technical assistance and training to affordable housing providers to install solar energy.
- ◆ Conduct an assessment on the status of past pledges from providers, and establish a new target for deploying solar energy on federally assisted housing to serve individual households as well as housing common areas and centrally metered utilities.
  - ◆ Coordinate the initiative with the National Community Solar Partnership at the Department of Energy.
- Replace HUD’s 5-year cap on solar Power Purchase Agreements (PPAs) for Public Housing Agencies (PHAs) with a 20-year cap for solar projects that will save money on energy costs.
- ◆ Provide guidance to PHAs on assessing the cost savings potential of solar PPAs.
- Create a competitive grant program at HUD with at least \$2.5 billion available in total over the next five years for public housing authorities to establish local grant programs for building owners who participate in the Section 8 voucher program to install solar energy (including necessary building upgrades and repairs), and require energy savings be passed 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 or requirements to increase the number of units rented to voucher holders.
  - ◆ Public housing authority grantees should prioritize funding projects that are located in marginalized communities, serve higher proportions of voucher holders, and provide the most benefit to voucher holders.
- Require entities that allocate Low-Income Housing Tax Credits to prioritize projects (both new construction and rehabilitation) with on-site solar energy that provides a direct financial benefit to residents, such as through VNEM, in addition to other targeted characteristics and priorities.
- All federal level clean energy initiatives must be tied to protections against green gentrification to ensure solarization does not displace current residents.

### **Fund solar for struggling schools**

Thriving schools make our communities stronger. However, underfunded schools aren’t able to afford the upfront costs of energy-saving solar systems. Federal grants are essential to help these community anchors access solar.

- Create a competitive federal grant program at the DOE with at least \$17.5 billion available in total over the next five years for schools that install on-site solar and reinvest the energy savings into school operations, teacher salaries, and/or classroom materials.
  - ◆ Prioritize K-12 schools, but make higher education facilities that serve under-resourced students eligible for any remaining funds. Further prioritize schools that have high energy burdens, and reserve at least 75% of the grant funds for schools that serve marginalized communities.
  - ◆ Grants start at 40% of the system cost and increase to 80% for schools that serve marginalized communities.

### Increase access to community solar nationwide

Many Americans live in homes that aren't suitable for rooftop solar, including rental apartments and manufactured housing. Community solar can help all families access the benefits of solar energy, but legal and financial barriers remain, especially for locally-owned community solar projects and projects that serve low- and moderate-income communities.

- Ensure all households can access the benefits of community solar, including in states currently lacking enabling legislation, by amending the Public Utilities Regulatory Policies Act (PURPA) to require all state utility regulators and non-regulated utilities to develop rules for establishing equitable community solar programs at all electric utilities.
  - ◆ Rules must include provisions for making data on project characteristics — possibly including information on participant demographics (residential, commercial, or community organization; income class; race; EJ designation), owners and ownership structure, compensation rate, bill savings, availability of on-bill financing, developer, utility, and siting — publicly available, to assess program success and inform improved equitable policy and project design.
- Create a new DOE financing program to provide loans and loan guarantees to community-owned, equitable community solar projects up to 2 MW. Provide at least \$200 million total over the next five years in forgivable loans for pre-development activities, including site screening and capital stack formation (with loans worth 20% of total project cost available for projects up to 100 kW, and loans worth 10% of total project cost available for projects over 100 kW and up to 2 MW). Provide at least \$1 billion total over the next five years to DOE for loan guarantees for installation costs to lower the cost of capital. Eligible projects must:
  - ◆ Be an equitable community solar project,
  - ◆ Be under or equal to 2 MW in scale,
  - ◆ And dedicate at least 75% of capacity to serving low- and moderate-income households and households in marginalized communities.

### Catalyze private investment in equitable solar energy

Financing programs and other efforts to expand solar energy and other clean energy technologies in marginalized communities often struggle with insufficient or expensive capital.



Federal actions can increase access to private capital for these projects and allow all Americans to invest in our nation's equitable climate and economic recovery.

- Authorize at least \$50 billion in Clean Energy Victory Bonds<sup>4</sup>, modeled on World War II victory bonds, to finance clean energy investments and programs at the federal, state, tribal, territorial, and local level.
  - ◆ Reserve a portion of the revenue from Clean Energy Victory Bonds for financing distributed rooftop solar and community solar projects up to 5 MW. Reserve at least 75% of that carveout for distributed solar projects that are owned by, reduce the energy bills of, or otherwise benefit members of marginalized communities. Prioritize remaining funds for investments that further benefit members of marginalized communities.
- Create a National Loan Loss Reserve at the Department of the Treasury with at least \$1 billion to de-risk Community Development Financial Institution (CDFI) investments in an equitable clean energy transition, including on-bill financing programs for clean energy and energy efficiency improvements.
  - ◆ Create a set of conditions for CDFIs that want to tap into the National Loan Loss Reserve fund, including due diligence standards for lending activity, eligible CDFI programs, level of risk tolerated in lending portfolios, and administrative costs at the CDFI and national level.
  - ◆ Consult with the DOE for guidance and best practices in establishing loan loss reserves.
- Create a competitive grant program at the Department of Treasury with at least \$500 million available in total over the next five years to provide seed funding to CDFIs to establish their own local loan loss reserves to support solar financing programs, including on-bill financing programs, in marginalized communities.
  - ◆ Provide grants worth up to 50% of initial costs.
  - ◆ Consult with the DOE for guidance and best practices in establishing loan loss reserves and establishing grant programs.
- Establish a national green bank as described by S.283 with the following modifications:
  - ◆ Expand SEC. 5245E. START-UP DIVISION to include initial capitalization for newly established green banks at the state and local level through grant funding, loan guarantees, fund matching.
  - ◆ Remove SEC. 5245G. CASH FOR CARBON PROGRAM.
  - ◆ Modify SEC. 52451. BOARD OF DIRECTORS to reserve at least one seat for a member with expertise regarding investment and program implementation that promotes equity and remediates past and current harms. Further modify provisions under (j) ADVISORY COMMITTEE to establish that there be no fewer than two representatives from indigenous and First Nation communities.
  - ◆ Increase the percentage of funding that should benefit marginalized communities to 75%.

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<sup>4</sup> See [Green America](#) or [HR 4041](#) for more information.

- ◆ Add provisions for on-bill Pay As You Save (PAYS) financing to expand access to community-owned installations for marginalized communities.

### Expand inclusive financing for solar and energy efficiency

Conventional loans for home solar and energy efficiency improvements are often inaccessible to renters, low- and moderate-income households, and people without high credit scores, who are frequently 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.

- Improve participation in USDA programs, such as the Rural Energy Savings Program (RESP) and Energy Efficiency and Conservation Loan Program (EECLP), that provide capital for solar and efficiency inclusive financing projects by increasing promotion, outreach, and assistance to potential borrowers.
  - ◆ Require USDA to thoroughly reform the program and eliminate barriers to participation.
  - ◆ Extend the maximum loan repayment term from 10 years to at least 15 years for households and small businesses that receive financing for renewable energy and energy efficiency improvements through RESP-funded programs. (Financed improvements must have a positive return on investment.)
  - ◆ Increase funding for RESP to at least \$150 million annually.
- Issue federal guidelines encouraging clean energy financing programs to offer inclusive financing alternatives to interest-bearing loans to accommodate religious practices that forbid collecting interest.

### Use block grants to local and state governments for solar and efficiency

Local, state, tribal, and territorial governments can leverage block grants to provide community financing for solar energy projects. Greater technical assistance and direction from the federal government can help grantees overcome knowledge and experience barriers in the use of funds to deploy solar in marginalized communities.

- Reauthorize the DOE's Energy Efficiency and Conservation Block Grant program with at least \$12.5 billion available over the next five years.
  - ◆ Expand the eligible use of funds to include deploying rooftop and community solar for households, small businesses, and community institutions in marginalized communities, in addition to funding solar financing programs.
  - ◆ Provide technical assistance and capacity building for block grant recipients using funds for solar programs.
- Provide technical assistance and guidance to HUD Community Development Block Grant (CDBG) and CDBG Disaster Recovery recipients to help establish local loan loss reserves (possibly in partnership with a local Community Development Financial

Institution) to support financing programs for solar energy that are accessible to members of marginalized communities.

- Develop a Section 108 Renewable Energy Loan Guarantee program to promote the use of CDBG Section 108 loan guarantees to finance solar energy development in marginalized communities, including community solar installations and local solar financing programs. As part of the initiative, create an accelerator program for local economic development offices and officials to incorporate solar energy into economic development and technical assistance on the Section 108 Renewable Energy Loan Guarantee program.

### **Streamline solar deployment and reduce unnecessary barriers**

Families and small business owners can face unclear costs, long permitting times, and discriminatory rules when adopting solar energy, but federal actions can streamline the adoption process and make it fairer for more Americans.

- Allocate at least \$10 million per year to the Department of Energy to provide technical assistance and coordination to independent businesses and nonprofits to provide a national solar marketplace for individual rooftop solar and storage systems. The marketplace should allow residents and small businesses to compare multiple quotes from solar installers, in order to reduce information asymmetry and make solar pricing more competitive.
- Direct DOE to provide technical assistance to local governments for adoption of the National Renewable Energy Laboratory's (NREL's) SolarAPP (Automated Permit Processing)<sup>5</sup> to streamline permitting for on-site solar systems and reduce wait time.
- Direct HUD to issue regulations prohibiting homeowners associations from restricting the ability of homeowners to deploy solar energy on their property.
- Require all utilities with distributed solar capacity exceeding 2 percent of peak demand and seeking market-based rate authority — regulated by the Federal Energy Regulatory Commission (FERC) — to:
  - ◆ Develop and implement a “Integration Capacity Analyses” with a published map at least as detailed and accessible as the Southern California Edison version, as required for California investor-owned utilities (but updated monthly). The map should, at a minimum, include the following elements:
    - No login to view the map
    - Filter view by available capacity
    - Open API
    - Show substation location
    - Includes analysis of new generation and new load (e.g. electric vehicles, building electrification)
  - ◆ Use the new analysis and map to replace at least a portion of the utility's existing distributed solar interconnection process within 18 months, as required in

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<sup>5</sup> See [NREL SolarAPP](#) for more information.

California's recently updated Rule 21<sup>6</sup>. It should also allow project developers to amend their operating schedules to meet grid constraints.

- ◆ Develop and publicly publish a value of solar calculation using the required elements and modified methodology from the state of Minnesota<sup>7</sup> (and including additional factors, as merited<sup>8</sup>) within 18 months.
- Amend FERC Order 1000 to require utilities to issue a competitive solicitation of non-wires alternatives for each regional transmission project, detailing the energy, capacity, and other necessary project characteristics.
  - ◆ Benefits of this policy include:<sup>9</sup>
    - Competitive pressure to reduce transmission costs, thus reducing wholesale power costs
    - Prioritization and quantification of consumer benefits
    - Market maturity for non-transmission alternatives (NTAs) that reduces their cost (and making their competitive pressure even stronger); alignment with 30 million solar homes development
    - Improve transmission planning process to routinely include technology-blind solutions
    - Improve system reliability
    - Lower transmission congestion and locational marginal prices
    - More jobs from distributed energy resources
  - ◆ Define NTAs that are used to supplant regional transmission projects as transmission for the purposes of the Federal Power Act, so that regional transmission organizations can regionally allocate costs.
- To preserve the right of customers to self-generate electricity, all utilities seeking or approved for market-based rate authority (and with distributed solar capacity of less than 15 percent of peak demand) must allow customers to receive credit for their onsite power generation with the following provisions:
  - ◆ All generation less than or equal to a customer's monthly consumption must be credited at no less than the retail electricity rate.
  - ◆ Generation credits in excess of consumption are rolled over month-to-month for at least one year.
  - ◆ Net excess generation produced in excess of 120% of annual consumption receives compensation no less than the wholesale energy rate.
  - ◆ *Nothing in these provisions preempts policies with higher compensation, longer credit rollover, or retail rate compensation for higher percentages of onsite consumption.*
- Prohibit the Tennessee Valley Authority and federal Power Marketing Administrations from creating rate structures that hinder net energy metering or allow solar specific fees.

<sup>6</sup> See [Solar Builder](#) for more information.

<sup>7</sup> See [MN statute 216B.164](#) and [MN Department of Commerce Value of Solar Methodology](#).

<sup>8</sup> See [Environment America](#) for more information.

<sup>9</sup> See [Scott Hempling Law](#) for more information.

- Direct NREL to provide leadership and support to utilities to create interconnection methods suitable for solar-paired storage on multimeter, multifamily housing with the flexibility to connect on either the utility side of the meter, to provide grid services, or the customer side of the meter, for back-up and resiliency, or both.
  - ◆ Include allowances for larger sizing of solar systems to provide grid services while maintaining adequate back-up power for on-site use, as well as mechanisms to ensure the systems are not unfairly used to store and resell energy from the utility grid.

### **Improve disaster resiliency by deploying solar energy and energy storage**

Coordinating federal disaster recovery and mitigation aid with other federal efforts to deploy solar energy and energy storage can make communities more resilient to disaster-related power disruptions.

- Direct the Federal Emergency Management Agency (FEMA) to coordinate with other federal agencies when providing Individual Assistance, to make building owners aware of federal opportunities to fund and finance solar installations and energy storage.
- Direct FEMA to provide increased guidance to states on including solar and energy storage in hazard mitigation plans.
- Create national resilience grant competition through DOE for projects that reduce community vulnerability to disaster-related power outages through distributed solar plus storage in marginalized communities, with at least \$15.5 billion available over five years.
  - ◆ Model the program after the one proposed by H.R. 448 Energy Resilient Communities Act<sup>10</sup>, with all funds reserved for use in marginalized communities.
  - ◆ Funds can be used to install solar and storage technologies on community anchor institutions, essential businesses, and residential buildings.
  - ◆ Consult with HUD for guidance and best practices on running a national disaster resilience competition.

### **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 industry<sup>11</sup> — investment in workforce training for these and other groups is necessary to ensure both greater equity and massive growth of distributed solar energy.

- Provide at least \$100 million annually for the next five years to the Department of Energy's Office of Solar Energy Technology (SETO) for workforce development programs that help underrepresented groups gain employment and start businesses in the solar energy industry.

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<sup>10</sup> See [H.R. 8628](#)

<sup>11</sup> See the [2020 U.S. Energy and Employment Report](#) and the [U.S. Solar Industry Diversity Study 2019](#)

- ◆ Underrepresented groups include, but are not limited to, BIPOC, women, transitioning energy workers, formerly incarcerated people, LGBTQ+ individuals, and members of environmental justice communities.
  - ◆ Workforce development should be targeted to a variety of careers in the solar energy industry, including, but not limited to, in installation, supply chain manufacturing, research and development, engineering, business administration, marketing, and other related fields
  - ◆ Workforce programs should include job-training (including on-the-job training), mid-career professional development, and support for the establishment of new small businesses and worker cooperatives, among other services.
  - ◆ Provide compensation to program participants to ensure accessibility.
  - ◆ Partner with trade and community colleges, nonprofit solar developers, and solar businesses to design and implement programs.
  - ◆ Build off of lessons learned and partnerships developed in prior successful programs, such as the Solar Training and Education for Professionals (STEP) program and the Solar Training Network.
- Require that recipients of federal funding prioritize hiring businesses owned by BIPOC, women, and gender minorities; businesses located in marginalized communities; and/or businesses that employ local residents for any solar projects funded wholly or in part through the 30 Million Solar Homes initiative.

### **Make 30 Million Solar Homes federal programs accountable to communities**

The United States has too often engaged in discriminatory policies and practices that harm BIPOC and low- and moderate-income communities. To ensure the 30 Million Solar Homes initiative prioritizes the marginalized communities that will benefit most, the federal government must provide consistent transparency so advocates can hold it accountable to its goals.

- Set an official goal of powering the equivalent of 30 million new solar homes across all federal agencies, with at least 75% of total federal investments benefiting members of marginalized communities.
- Create a federal interagency partnership called the 30 Million Solar Homes initiative<sup>12</sup>, to coordinate efforts across various agencies to rapidly increase distributed solar deployment, especially in marginalized communities, and to maintain high standards of accountability and transparency.
- Require that all federal programs included in the 30 Million Solar Homes initiative track and publicly report the demographic data and other related metrics of funded projects, including impacts on local economic development and gentrification, to ensure marginalized communities are being equitably served.
- Evaluate performance of programs funded under the 30 Million Solar Homes proposal, adjusting programs and reallocating funding as necessary.

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<sup>12</sup> See the [Clean Energy Savings for All Initiative](#) as an example.

- ◆ Create a periodic evaluation process that includes robust input from marginalized communities.
  - ◆ Adjust program rules and practices as recommended to increase participation and effectiveness in marginalized communities.
  - ◆ Reallocate funds from programs that are underutilized or not adequately serving marginalized communities to programs that have greater demand and unmet need and are more successfully serving target populations.
- Provide \$100 million over five years to the Department of Energy to support education and outreach on the benefits of solar energy, federal funding opportunities for solar, and the importance of an equitable transition to clean energy.
- ◆ Materials and engagement should be available in multiple languages, including English and Spanish.
  - ◆ A portion of the funds should be reserved for a competitive grant program to support local governments and community organizations conducting relevant education and outreach activities for marginalized communities.

### Aligned policies for further development

The policies above focus on ways the federal government can use distributed solar to quickly respond to the economic, racial, and environmental crises exacerbated by the pandemic, and they prioritize direct deployment of solar energy in impacted communities. However, these policies alone will not address all of the disparities and inadequacies in our current energy system. The 30 Million Solar Homes coalition broadly supports a wide range of policies that advance environmental justice principles, modernize the electric grid, ensure appropriate siting of solar installations, support a just transition, and otherwise make our energy system cleaner and more equitable. The following policy recommendations are a selection of other opportunities to build greater energy justice in our communities beyond this initiative.

- Create and adequately fund a new office, agency, or administration responsible for increasing energy equity and access to distributed solar energy; coordinating efforts across federal, state, tribal, territorial, and local agencies and governments; partnering with community organizations for implementation and feedback; leading education and outreach efforts; and developing transformative energy justice policies.
- ◆ This new entity could conduct an analysis of the Solar ITC and explore the potential for more equitable mechanisms to replace it over the long term.
- Expand funding for deployment and workforce development at the Department of Energy related to clean energy technologies, including energy efficiency, storage, and precious metals recycling.
- Mandate that utilities baseline, track, and improve disparities in participation for marginalized communities in utility-run clean energy and energy efficiency programs.
- Allocate \$2 million to the Department of Energy to do a joint study with the HUD on strategies to coordinate federal, state, tribal, territorial, and local programs to address structural and home repair barriers to on-site solar installations, due by July 1, 2022.