



NEW JERSEY
EQUITABLE AND RESILIENT
SOLAR + STORAGE POLICY
ROADMAP



VOTE SOLAR

ACKNOWLEDGEMENTS

Vote Solar would like to thank the New Jersey Environmental Justice Alliance for their thoughts and ideas through various engagements and for sharing previous reports that helped shape this document. In particular, the following two documents provided background and understanding of low-income and environmental justice issues especially around the topic of resiliency and energy justice.

- New Jersey Climate Adaptation Alliance (NJCAA). 2014. Stakeholder Engagement Report: Environmental Justice. Climate Change Preparedness in New Jersey. Authored by Nicky Sheats, Esq., Ph.D., Thomas Edison State College, Trenton, NJ
- Nicky Sheats, Achieving Emissions Reductions for Environmental Justice Communities Through Climate Change Mitigation Policy, 41 Wm. & Mary Env'tl. L. & Pol'y Rev. 377 (2017) <https://scholarship.law.wm.edu/wmelpr/vol41/iss2/3>

ENDORSED BY:



VOTE SOLAR

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ROADMAP TO:



250,000
Low-income¹ solar
households by 2030



400 MW of storage
for low-income and
environmental justice
communities by 2030



\$125 Million per
year dedicated to
low-income and
environmental justice
communities for solar
+ storage deployment,
education and outreach,
and workforce
development

¹ Our definition of low-income encompasses households that are below the federal poverty level or just above the federal poverty level. We also include communities of color and environmentally-burdened communities that are traditionally marginalized from the clean energy economy.

RESILIENT COMMUNITIES:

A Pathway To A Cleaner And More Equitable New Jersey

The Climate Assessment Report and the Intergovernmental Panel on Climate Change have issued dire warnings on the intensity, frequency and duration of climate disasters and the burden they will place on our communities. New Jersey is no stranger to this. Six years after superstorm Sandy, the horrors of the disaster are still fresh in people's mind. Billions of dollars in economic damage and the emotional and physical toll it took on communities should motivate our policymakers to make resilient and sustainable communities a central component of economic growth, state prosperity, and improved well-being for all New Jerseyans. Now is the time to ensure New Jersey's most vulnerable and frontline communities are resilient and sustainable.

The intersection of the growing clean energy economy and the need for resilient communities is more pronounced than ever. Clean energy access not only gives us a path toward a cleaner and more sustainable future, it has the power to do so in a way that builds long-lasting community resilience and wealth. Investments made today will deliver large dividends in the future.



Last year, Governor Murphy signed the New Jersey Clean Energy Act which included a number of important provisions such as a Renewable Portfolio Standard (RPS) of 50% by 2030, creation of a community solar pilot program with at least 75 MW capacity per year and a 40% low and moderate income (LMI) project carve-out, and installed capacity targets for offshore wind and storage. We need to be explicit and deliberate in ensuring that all New Jerseyans benefit in a multitude of ways from this clean energy transformation. Instead of taking a myopic view to our future, we urge New Jersey's leadership to be bold and build a future that is long-lasting.

We call on the state to establish targets to ensure at least 250,000 low-income families are served by distributed solar by 2030, and that at least 400 MW of all new electricity storage is deployed in low-income and environmental justice communities by 2030. As the state transitions to 100% clean energy by 2050, all residents must be beneficiaries of this progress.

In order to meet our 2030 targets, we must establish intermediate goals. New Jersey should increase solar access to 76,000 low-income households by 2026, both through rooftop and community solar, and deploy 200 MW of electricity storage in low-income communities by 2026. These actions will result in millions of dollars of savings on electric bills, improve energy and housing affordability, enable resilient and sustainable communities, and make headway on building an equitable energy economy.

Policies and programs promoting clean energy for underserved communities should achieve more than just expanding access. We should work toward building communities that are climate resilient, health resilient, workforce resilient, and wealth resilient. This roadmap outlines four key policy concepts that address these principles:



Resilient, sustainable, and healthy communities



Accessibility and affordability



Community wealth and economic resilience



Community engagement and inclusive planning

This roadmap provides a strategy to significantly expand clean energy benefits to 250,000 low-income households. However, that is expected to represent only 35% of the state’s low-income families,² indicating the clear need to build off the goals of this 10-year strategy to ultimately serve all of New Jersey’s low-income households.

Fulfilling these ambitious goals will require three key elements:

1. **Targets** that result in bold and measurable outcomes for increasing clean energy access for low-income households.
2. **Innovative funding and financing** that will lower barriers to entry for low income families.
3. **Community-led and community-based education programs** that explain both how to participate in these programs and how to benefit from the financial, health and climate benefits.



² GTM Research (2018). *The Vision for U.S. Community Solar: A Roadmap to 2030*. Available online: www.votesolar.org/csvision.

RESILIENT, SUSTAINABLE, AND HEALTHY COMMUNITIES:

Holistic community energy planning that combines existing energy efficiency efforts with behind-the-meter solar, community solar, and energy storage to transition from fossil fuel energy sources to clean energy sources.



Use energy efficiency with solar + storage as a climate mitigation and adaptation strategy:

Ensuring that low-income and environmental justice communities benefit from the full suite of clean energy technologies, have an opportunity to reduce their household energy burden, and are safeguarded against the impacts of climate change requires solutions that enable quick deployment of energy efficiency with solar + storage.



Build resilience in existing Community Hubs³ in low-income and environmental justice communities:

Data show that low-income and environmental justice communities face disproportionate impacts from climate-related events that range from power loss, damage to property and vehicles, and inability to communicate with first responders, government and elected officials. This was evident during Hurricane Sandy's evacuation and recovery period. We strongly support equity-centered climate resilience by encouraging the development of Community Resilience Hubs that are clean energy powered, community-based and controlled, and prioritize the deployment of services and aid to local residents during disasters.

Community Resilience Hubs should be designed as microgrids that can survive natural disasters and operate as independent grid units. The state of Maryland is currently undertaking efforts to support Community Hub microgrids. In 2018, the Maryland Energy Administration opened the FY19 Resiliency Hub Grant Program to fund solar and microgrid developers to develop and build resiliency hubs in high density and low-to-moderate income communities. Power52⁴, a solar non-profit organization based in Baltimore, enables

³ We define community hub as a built structure that can be a school, a hospital, a community center, or a city building that offers co-located or integrated services related to education, health, community planning and coordination, and other social services. These community hubs are reflective of the communities they serve.

⁴ <https://www.power52.org/>

community growth by providing training to Baltimore City residents and surrounding counties that result in job opportunities, build community resilience, and break the cycle of poverty. Recently, Power52 partnered with Living Classrooms Partners to establish the first solar-powered, community-based resiliency hub serving Baltimore City Public Housing.⁵ These Hubs are intended to provide immediate recovery assistance emerging from natural and manmade disasters as well as other power outages.

Existing spaces such as hospitals, police departments, fire stations, and schools should be reconfigured to serve as Hubs. These Community Resilience Hubs must be directed by community members, but supported, financed, and maintained by local and state governments.

In order to facilitate the reconfiguration of existing facilities as Community Resilience Hubs, we recommend the formation of a state Advisory Council that can advise, direct, and provide oversight of Community Resilience Hubs to ensure best practices and standardized requirements are replicated across the state. Membership in the Advisory Council should skew heavily toward representation from community-based organizations in low-income communities, environmental justice communities, and other underserved communities. The Advisory Council should establish the most transparent and inclusive processes possible, in order to fully integrate the needs and desires of New Jersey's most vulnerable communities.



Incorporate clean energy concepts in Hazard Mitigation Plans:

Empowering local county officials with a set of best practices, standards and guidelines on how to incorporate clean energy concepts in Hazard Mitigation Plans can go a long way in ensuring local officials are deliberate in employing all options to effectively plan for and respond to natural and manmade disasters. This process should also engage local community members to help in the planning process because community members rank at the top in providing immediate community relief during a natural disaster. Their feedback and involvement can result in improved coordination and effective implementation of resources.

We also support Rutgers University Environmental Analysis and Communication Group's (EAC) push for Health in All Policies (HiAP).⁶ The clean energy goals listed in the draft Energy Master Plan will positively impact individuals with respiratory illnesses as well as chronic diseases and mental health issues as a result of zero emissions from the deployment of clean energy and improved social and economic environments from the creation of new jobs.

⁵ <https://www.power52.org/p52-news>

⁶ <http://eac.rutgers.edu/wp-content/uploads/EMP-HIA-1.pdf>

ACCESSIBILITY AND AFFORDABILITY:

Opportunities for meaningful financial benefits through a combination of deep energy cost savings and direct support to overcome financial and other barriers to access.



Enable fair compensation:

Establish fair, simple, and predictable compensation for solar generation and energy storage facilities.

We highly encourage the New Jersey Board of Public Utilities to maintain the net-metering program at the retail rate for both rooftop and community solar. The net-metering program has worked well to make New Jersey a leading solar state. Without this simple, fair, and effective tool, households in New Jersey's most vulnerable communities will find it difficult to participate in the clean energy future.

We also propose fair compensation for energy storage facilities. Storage provides a wide array of benefits to the grid and to customers such as

reduced peak loads, energy bill savings, reduced demand charges, grid stability, and other services. Therefore, utilities should provide a fair value, either through a rebate or bill credit to energy storage system owners. Vermont and New Hampshire are already offering storage credits through a “bring your own device” tariff.

We recommend that at least \$100 million per year be dedicated to support solar and clean energy projects for low-income and environmental justice communities. These funds can come from a multitude of sources such as the Clean Energy Program, Regional Greenhouse Gas Emissions (RGGI) proceeds,



Unlock sufficient funding:

Direct funds and other resources to incent and support mechanisms that facilitate robust participation in energy efficiency, solar, and storage options for low-income households, resulting in energy cost savings.

and the new solar incentive program. Additionally, at least \$25 million should be dedicated to supporting storage deployment in low-income and environmental justice communities.

Specifically, we recommend that 25% of the Clean Energy Program be dedicated to low-income and environmental justice clean energy projects. At least 25% to 50% of RGGI funds should be set-aside for the aforementioned purpose. We also recommend that New Jersey create a special class of incentives under the new solar incentive program that supports low-income and environmental justice projects.



Innovative financing:

Establish a New Jersey Green Bank with affordable financing options for equitable efficiency, solar, and storage access. New Jersey's neighboring states such as New York and Connecticut have formed successful Green Banks that offer a number of financial products and financing for a wide-variety of clean energy projects. The Connecticut Green Bank is a noteworthy example on ways to equitably deploy clean energy solutions to low-income households. The Green Bank should offer credit enhancement mechanisms to mitigate perceived risks associated with low-income projects, and offer other financing support such as low-interest loans. The Green Bank should provide upfront incentives and innovative financing mechanisms for solar, community solar, and storage projects serving low-income households, affordable multifamily buildings, and Community Resilience Hubs.





Dissemination of information:

Creation and dissemination of toolkits on proven financing, participatory and ownership models for community solar projects and Community Resilience Hubs, and information on ways to leverage or layer dollars from other programs alongside state energy incentives (e.g., solar incentives, weatherization funding, housing finance) should be included in the suite of innovative financing offerings.



Ease of access and payment:

The New Jersey Board of Public Utilities and the utilities themselves should facilitate consumer-friendly low-income customer payment methods where such payments are required (e.g. consolidated billing and on-bill payment). Moreover, New Jersey agencies must enable identification and participation of eligible customers from other low-income programs to reduce approval wait periods and streamline the customer experience.





Inclusion of multifamily buildings:

A significant percentage of New Jersey's low-income population live in multifamily buildings. Access to solar in conjunction with efficiency can lower utility bills for owners and tenants in these buildings, which aids in housing affordability. Solar for multifamily buildings can also help offset common-area expenses and/or tenant bills, and community solar can provide an avenue to serve the state's individually-metered and tenant-paid properties. Moreover, adding storage to energy efficiency and solar upgrades can help reduce demand charges. Demand charges are calculated by the utility, based on the building's peak electric demand each month, so by reducing that monthly peak the demand charge can be reduced significantly.⁷

Buildings that are master-metered should be able to access the suite of solar and storage programs New Jersey offers. The resulting benefits should be passed down to the tenants in multiple forms such as reduced rent, efficiency upgrades, fringe benefits etc. The California Multifamily Affordable Housing Solar Roofs Program established by California AB 693 enables tenants to receive benefits from solar energy. The bill requires that energy produced by solar systems be used to offset electricity usage by low-income tenants, and these low-income tenants receive credits on utility bills through tariffs.⁸

Policies designed to remove the barriers that multifamily buildings face will ensure more equitable access to clean energy opportunities.



⁷ <https://www.cesa.org/assets/2017-Files/Solar-Storage-for-LMI-Communities.pdf>

⁸ CA Assembly Bill 693, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB693

COMMUNITY WEALTH AND ECONOMIC RESILIENCE:

While the solar industry continues to push for more diversity in the solar sector, without adequate training and options for solar asset ownership and control, many low-income and environmental justice communities will lag behind. We envision a future where everyone, regardless of income or race, plays a significant role in the entire value chain of the solar industry.



Energy equity through asset ownership and control:

New Jersey should work to create a solar powered future in which communities have decision-making authority and opportunities to build community wealth.

Increased focus should be placed on community-owned and community-controlled solar and resilience projects. The New Jersey Board of Public Utilities should offer technical assistance demonstrating various ownership models as well as dedicate resources to support proof-of-concept pilots for community-owned or operated demonstration projects. Technical assistance should supplement the incentives and financing necessary to support community-owned and community-controlled projects.

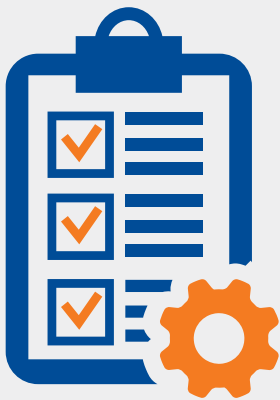


Sustained funding for workforce development and apprenticeship programs:

To ensure low-income New Jersey families are part of the clean energy workforce, dedicated funding and programs to support a diverse and inclusive workforce are needed.

We recommend robust funding and resources that support clean energy apprenticeship programs, apprentices, and apprenticeship sponsors beginning at the high school level and in some cases at the middle school level. Apprenticeship programs should extend beyond training and provide financial support for the first year of employment to minimize risks for employers. Apprentices should also receive cross-training to allow flexibility in job selection and placement within energy subsectors. New programs that provide entrepreneurial training, mentoring, investment capital, and loans to help launch new enterprises by residents of low-income and environmental justice communities should be developed, preferably in partnerships with county colleges, workforce investment boards, local economic development entities, and state government. For low-income and environmental justice communities to be part of the solution, they must be exposed to not only the technologies, but different components of the industry such as people, companies, and career tracks starting in their formative years.

We underscore the need to address the entire value chain of the solar industry in any workforce discourse. The Interstate Renewable Energy Council Solar Career Map explores 40 jobs across four solar industry sectors, demonstrating the spread of solar jobs over hundreds of skill-sets and educational training.⁹ We also underscore workers' rights to organize and ensure development of good, family-sustaining jobs.



Long-term planning for sustainable career tracks in the solar industry:

To ensure longevity of the training programs, consideration should be given to workforce planning that includes soliciting industry feedback to inform workforce needs, create mechanisms to connect job seekers with job providers, and track job trends to assure training programs are in line with future industry needs.

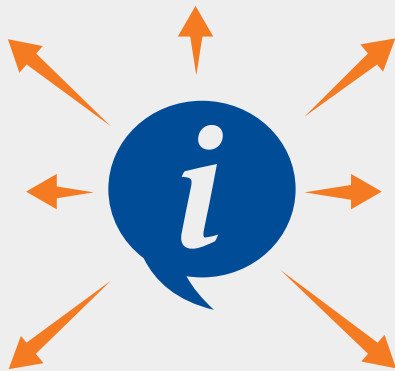
⁹ <https://www.irecsolarcareermap.org/about-this-map>

COMMUNITY ENGAGEMENT AND INCLUSIVE PLANNING:

Low-income and environmental justice communities should be an integral part of New Jersey's clean energy economy and the planning process. Policymakers should ensure these communities are active voices in the clean energy discourse.

Support coordinated energy literacy and outreach campaigns:

To assist low-income and environmental justice communities to actively participate in the clean energy program offerings, inter-agency outreach campaigns with feedback from low-income and environmental justice community leaders should be designed. Input and a continuous feedback structure are key for productive collaboration. New Jersey state agencies must build trust with local community-based organizations and treat them as a primary asset for community education and engagement. As noted By Rutgers University's comments on the Energy Master Plan, authentic community-based energy planning has clear implications for improving health and health equity.



Increase low-income outreach programs and establish a central information repository:

We recommend increasing programs and engagement opportunities for customer education, enrollment, and management. This can be achieved through ongoing interactions with low-income and environmental justice communities. We also recommend a single, comprehensive website with up-to-date program and service information for low-income and environmental justice communities, and a dedicated hotline where families can get their questions answered and gather information.



Address existing infrastructure barriers:

We recognize that to serve low-income and environmental justice communities, existing barriers such as poor rooftop and housing stock, inadequate infrastructure, and social and economic inertia must be addressed simultaneously. We encourage state agencies with diverse missions and objectives to collaborate on addressing these barriers to ensure a smooth and successful transition to a clean energy future. Specifically, we ask that New Jersey make a deliberate effort to remove these barriers that prevent low-income and environmental justice communities from benefiting from energy efficiency and clean energy programs.

The New Jersey Board of Public Utilities should explore partnerships and programs with the New Jersey Housing and Mortgage Finance Agency (NJHMFA) to create affordable and easy-to-use financing options to repair housing stock and make homes clean energy retrofit ready.

INVESTMENT TODAY ON LOW-INCOME AND ENVIRONMENTAL JUSTICE COMMUNITIES WILL GENERATE DIVIDENDS IN THE FUTURE

Low-income families and environmental justice communities continue to pay into the Societal Benefits Charge (SBC), but seldom benefit from the clean energy programs it funds. For too long, the clean energy incentives program has failed to serve this population. We can only achieve the bold and aggressive goal of 100% clean energy by 2050 if it is matched with significant resources to serve our most vulnerable and underserved communities.

This will require pairing bold clean energy targets with equally bold funding and programs. We recommend New Jersey allocate at least \$125 million per year to serve low-income and environmental justice communities. This is on par with the funding dedicated by other states with similar low-income populations and demographic composition, such as Illinois and Washington, DC. Potential sources of funding include new budget allocation from the General Fund, the existing Clean Energy Program, RGGI funds, and the Solar Incentive Program.

This funding should be utilized to increase solar and storage access for low-income and environmental justice communities, education and outreach programs and workforce development to bring our traditionally underserved communities into the clean energy revolution.



We envision a clean energy future for New Jersey that is resilient, equitable, inclusive, and community-centric. As we work to tackle the impacts of climate change and transition from fossil-fuels to clean energy, we must be bold and visionary to assure our most vulnerable and underserved community members benefit and thrive in this new economy. This dedicated focus will result in resilient and prosperous communities, and in turn, a prosperous, green Garden State for all. This roadmap is the first step toward that future.

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