

Predevelopment Funding for LMI Solar and Storage Projects in New York

Collaborations between a State Energy Agency and Community-Based Organizations







About this Report

The Clean Energy States Alliance (CESA) prepared this case study to describe how New York's state energy office, the New York State Energy Research and Development Authority (NYSERDA), collaborated with community-based organizations (CBOs) while administering the state's PON 3414 Affordable Solar and Storage Predevelopment and Technical Assistance Program. This program has benefitted many low-and-moderate income (LMI) residents in New York by providing equitable access to solar energy and/or energy storage. The program is flexible to the needs of CBOs representing LMI communities, ensures the benefits of the solar and/or storage projects flow to LMI residents, and provides funding for the important work of education and outreach.

This case study was developed by the Clean Energy States Alliance (CESA) as part of the Solar with Justice: Connecting States and Communities project. The Solar with Justice project aims to bring together state energy agencies (SEAs) and CBOs that are developing solar for environmental justice (EJ) communities, to create opportunities for dialogue and collaboration. This case study is one of six case studies that will be published by CESA under the Solar with Justice project, highlighting models of collaboration between CBOs and SEAs to deploy solar technologies for the benefit of environmental justice communities. The case studies can be found at https://www.cesa.org/projects/ solar-with-justice/resources.



This case study was produced by the Clean Energy States Alliance (CESA) and based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Solar Energy Technologies Office (SETO) Award Number DE-EE0009360. Under this project, known as Solar with Justice, CESA is working in conjunction with academic, state, and nonprofit partners to understand and improve how state energy agencies and community-based organizations collaborate on solar. Learn more at: https://www.cesa.org/projects/solar-with-justice.





Acknowledgements

The author interviewed many of the collaborating partners on their experiences with this program. He would like to thank Christopher Rogers of NYSERDA, Kedin Kilgore of FAC Solar LLC, and Emily Ng and Lucia Santacruz of Urban Homesteading Assistance Board (UHAB). Additional assistance was provided by Warren Leon, Abbe Ramanan, Maria Blais Costello, and Kelly O'Connell of CESA.

Cover Image: Courtesy of FAC

Contents

- Introduction
- 6 NYSERDA's Affordable Solar and Storage Predevelopment and **Technical Assistance Program**
- 11 CBO Participation in the Program
- 15 Conclusion

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

Introduction

thorough predevelopment process for a potential solar project is essential to deciding whether the project can and should move forward. The process for a solar project includes site identification, financial modeling, estimating equipment and installer expenses, customer outreach and enrollment, and other details about the scope of the project. This process can become more expensive and time consuming for larger projects. Executing the predevelopment process in a way that ensures a project's success is especially important for solar projects that may be considered risky, such as those being developed in newer markets or that incorporate advanced technologies such as battery storage. Because predevelopment costs can range from tens of thousands to hundreds of thousands of dollars, many for-profit solar developers only invest money into predevelopment when they already believe a project is likely to be able to move forward.

Community-based organizations (CBOs) face several challenges when trying to develop a solar project. Financing for predevelopment costs is usually not available to CBOs working to develop solar to benefit low-and-moderate income (LMI) residents because LMI projects are



United States Environmental Protection Agency, "On-Site Project Development Process," epa.gov, August 24, 2022, https://www.epa.gov/green-power-markets/site-project-development-process (accessed July 5, 2023).

considered risky by many commercial financing institutions. Solar providers may see too many obstacles to a solar or solar and storage project benefiting low-income residents to even consider getting involved. These obstacles include ensuring bill savings for the residents, overcoming potential language barriers, and more.²

Many CBOs are relatively new to solar and may lack the capacity to navigate the technical aspects of the predevelopment process on their own. Without access to financing, it can be difficult for a CBO to secure a trusted engineer or other technical partner during the predevelopment process.

Programs that provide CBOs with technical assistance and predevelopment funding can help these or other organizations take the first step toward solar and storage Programs that provide CBOs with technical assistance and predevelopment funding can help these or other organizations take the first step toward solar and storage development.

development.³ NYSERDA's Affordable Solar and Storage Predevelopment and Technical Assistance program in New York State is successfully addressing the predevelopment challenge for LMI solar and storage projects. It is the subject of this case study and can serve as a model for predevelopment support programs in other states.

² Sanders, R., and Milford, L., "A Resilient Power Capital Scan," cleanegroup.org, February 2017, https://www.cleanegroup.org/wp-content/uploads/Capital-Scan-Feb2017.pdf (accessed July 5, 2023).

Ramanan, A., and Mango, M., "Overcoming Barriers to Solar+Storage in Critical Facilities Serving Low-Income Communities," *cleanegroup.org*, April 2021, https://www.cleanegroup.org/wp-content/uploads/Overcoming-Barriers-to-Solar-Storage.pdf (accessed July 5, 2023).

NYSERDA's Affordable Solar and Storage Predevelopment and Technical Assistance Program

he New York State Energy Research and Development Authority (NYSERDA) administers the Affordable Solar and Storage Predevelopment and Technical Assistance Program (PON 3414) throughout the state of New York.⁴ NYSERDA, the state's energy agency, is a public benefit corporation and has been advancing energy solutions and working to protect the environment since 1975. The PON 3414 program is part of the NY-Sun Program, which provides technical assistance to communities and local governments. NY-Sun provides incentives and programs to achieve the State's goal of 10 gigawatts of distributed solar installed by 2030, while ensuring a coordinated well-supported solar expansion plan and a transition to a sustainable, self-sufficient solar industry.⁵



- 4 New York State, "Affordable Solar and Storage Predevelopment and Technical Assistance," nyserda.ny.gov, 2023, https://www.nyserda.ny.gov/All-Programs/NY-Sun/Communities-and-Local-Governments/Predevelopment-and-Technical-Assistance (accessed July 5, 2023).
- 5 New York State, "NY-Sun," nyserda.ny.gov, 2023, https://www.nyserda.ny.gov/All-Programs/NY-Sun (accessed July 5, 2023).

The first iteration of the PON 3414 program was rolled out in 2016⁶ and was open through August 2018. It was funded at \$3.6 million, had a maximum award of \$200,00 per application, and funded 20 projects. The program was popular and successful, and the passage of the 2019 Climate Leadership and Community Protection Act (CLPCA) directed state agencies to expand support to disadvantaged communities, similar to the focus of PON 3414.⁷ This funding is available through New York's Clean Energy Fund.⁸ New York's Clean Energy Fund was approved by the New York Public Service Commission in 2016 to commit funding for clean energy and energy efficiency in line with achieving the state's Clean Energy Standard.⁹ The Commission's Order Expanding the NY-Sun Program in April 2022 increased commitments to disadvantaged communities through the Solar Energy Equity Framework, which PON 3414 is a key component.¹⁰ To date, 23 projects have been awarded funding thus far in the second iteration of the program.

Overview of Program

NYSERDA's Affordable Solar and Storage Predevelopment and Technical Assistance program aims to address barriers to solar installations serving LMI households living in rental housing, multifamily buildings, or otherwise not served by traditional onsite residential solar. PON 3414 provides funding for the purpose of implementation and operation of solar and/or storage installations for affordable housing, or the implementation and operation of community solar installations that will offer benefits to LMI households and/or affordable housing. The program supports community organizations and affordable housing providers, which are critical partners for implementing locally driven solutions

The program supports community organizations and affordable housing providers, which are critical partners for implementing locally driven solutions that achieve equitable access to the benefits of solar and/or storage for LMI households in New York.

that achieve equitable access to the benefits of solar and/or storage for LMI households in New York. Without the support that PON offers, these entities can have difficulty overcoming the lack the financial resources, market experience, or staff capacity to bring a solar and/or storage project from the concept stage to operation.

- 6 New York State Energy Research and Development Authority (NYSERDA), "Affordable Solar Predevelopment and Technical Assistance: Program Rules and Application," youtube.com, December 20, 2016, https://www.youtube.com/watch?v=wVNUargh8-o (accessed July 5, 2023).
- 7 Dhingra, Remy, "New York state directs more capital to solar power for low-income communities," *greenbiz.com*, September 16, 2020, https://www.greenbiz.com/article/new-york-state-directs-more-capital-solar-power-low-income-communities#:~:text=Through%20PON%203414%2C%20up%20to%20%2410.65%20million%20will,roughly%2020%20 grants%20throughout%20a%20two-year%20solicitation%20period (accessed July 5, 2023).
- 8 New York State Energy Research and Development Authority (NYSERDA), "Affordable Solar and Storage Predevelopment Technical Assistance," portal.nyserda.ny.gov, n.d., https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00Pt000000 WzKXxEAN (accessed July 5, 2023).
- 9 State of New York Public Service Commission, "Order Authorizing The Clean Energy Fund Framework," nyserda.ny.gov, January 21, 2016, https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/About/Clean-Energy-Fund/2016-CEF-Order.pdf (accessed July 5, 2023).
- 10 State of New York Public Service Commission, "Order Expanding the NY-Sun Program," nyserda.ny.gov, May 10, 2022, https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Programs/NY-Sun/2022-05-10-order-overview-expanding-NY-Sun. pdf (accessed August 3, 2023).

Approved projects are required to execute a Work Plan that may include any of the following predevelopment and technical assistance activities:

- organizing a project business model
- securing financing
- developing cooperative or community ownership models
- procuring services from solar and/or storage developers
- carrying out early-stage project planning, project team organization, and site identification
- conducting preliminary site assessments
- educating and enrolling customers
- developing project models that allocate benefits to residents of affordable housing
- developing project models that allocate benefits to an environmental justice (EJ) community
- carrying out other technical assistance or services that achieve the target outcomes

Eligible applicants to PON 3414 include owners, providers, or managers of regulated multifamily affordable housing; community land trusts, land banks or portfolios of single-family affordable housing; local government agencies; Community Development Corporations (CDC), Community Development Financial Institutions (CDFI), or other community organizations providing services to LMI households and/or demonstrating an LMI constituency; and prior recipients of predevelopment grants seeking to replicate and expand upon the success from a prior completed predevelopment project.

Application Criteria and Process

Applications for funding from the program are evaluated on the following criteria:

- project feasibility and likelihood of success if it receives PON 3414 support
- the project's potential benefits for LMI customers or affordable housing providers
- whether the PON 3414 funding will address market barriers or challenges that would not be able to be addressed without this funding
- the expertise of the project team and the support from project participants
- the benefits to LMI customers relative to the proposed predevelopment cost of the project.

Satisfying these evaluation criteria is essential to garner the approval of NYSERDA and the review committee.

Approved projects have a maximum contract period of 18 months from start to finish, though NYSERDA does have the right to extend contracts as needed. Once an application

is submitted, NYSERDA responds to the applicant within 30 business days of application receipt with initial feedback, a request for more information, or a decision on approval. A review committee process determines whether applications should move forward for further consideration, at which point NYSERDA must approve Final Work Plans from the applicant to enter the contracting period.

Payment schedules for approved projects will be based on the Final Work Plan negotiated with NYSERDA and based on the completion of objectives identified as project milestones in the Final Work Plan. All projects should include at minimum four milestone points. The example milestones (mobilization, midpoint, substantial completion, and project deployment) described below may be used by applicants, or applicants may propose alternative/additional milestones:

- Contract Execution Milestone—Execute NYSERDA agreement with Final Work Plan including full details on project activities, the entity responsible for completing project activities, project milestones, invoice totals for each milestone, and overall project budget.
- Mobilization Milestone

 Establish a detailed project management plan and operating
 procedures for the project; confirm project team members, partners, and stakeholders
 fully committed/contracted and formally assigned roles; access any additional funding
 resources; hold launch meeting including full project team, stakeholders, and partners.
- Midpoint Milestone(s)—Make significant progress towards or reach partial completion of project outcomes. For large or complex projects, more than one Midpoint Milestone should be used to account for different project components or stages. Upon competition of the Midpoint Milestone(s), projects should be able to demonstrate that all remaining project outcomes will be successfully completed.
- **Substantial Completion Milestone**—All major project outcomes have been or are close to completion. At this point, the project should be able to utilize the outcomes and initiate steps, such as the deployment of the business model and/or construction of the solar or storage system.
- **Project Deployment Milestone**—At the close of the contract, the project team should be ready to initiate next steps, such as the deployment of the business model and/or construction of the solar electric and/or storage system installation.

Payments by NYSERDA on approved projects will be made when each milestone is reached. The payment for each milestone shall be based upon the scope of the proposed activities and will be based upon the recommendation of the review committee.¹¹

¹¹ New York State Energy Research and Development Authority (NYSERDA), "Affordable Solar and Storage Predevelopment Technical Assistance," portal.nyserda.ny.gov, n.d., https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00Pt000000 WzKXxEAN (accessed July 5, 2023).



Before the launch of the second iteration of the PON 3414 predevelopment and technical assistance program, NYSERDA sought input from past program awardees on changes that could be made to improve the program. Awardees reported that the program was effective in creating new projects that addressed the barriers mentioned above. The input from past awardees led to several changes to the program.

The first iteration of the program worked with each applicant on a 12-month timeline, whereas the second iteration extends the timeline to 18 months. This allows for more flexibility on the part of the applicant and the higher likelihood a project will have enough time to move forward to completion.

The second iteration of the program added solar-plusstorage and storage-only projects, in addition to solaronly projects. These new types of projects still must comply with the guidelines of the program and prove viability in each step of the process.

The second iteration of the program added solarplus-storage and storage-only projects, in addition to solar-only projects. These new types of projects still must comply with the guidelines of the program and prove viability in each step of the process.

The first iteration of the program held one kickoff webinar in December of 2016 that explained the program and had an open application process through the end of the program, which was August of 2018. In the second iteration, the schedule for providing updated program information was changed to holding quarterly webinars and having quarterly application periods. Providing quarterly webinars keeps prospective applicants up to date on the program, and the quarterly application periods allow applications to be spread out over the duration of the program, reducing the potential of many applications being submitted at one time.

One of the activities now eligible for funding in the program's second iteration is LMI customer outreach and enrollment. The program can support the time-consuming activities done by CBOs to educate LMI residents about the program and the potential benefits of projects. CBOs can also hold events at completed projects to share the details and benefits of the projects that are a result of the POM 3414 program. These events can help spur the interest of potential additional applicants for the program.

CBO Participation in the Program

everal CBOs have been awarded funding through NYSERDA's Affordable Solar and Storage Predevelopment and Technical Assistance program. Funding through the program is also available to certain non-CBOs, such as local government agencies. And not all PON 3414 funding recipients have installed projects. One important criterion required to receive funding is to show the potential benefits of the project to LMI households or affordable housing providers relative to the amount of funding requested.¹² Because CBOs can often make the case that they are well placed to provide benefits to LMI households, some of them have received funding through PON 3414. Below are two examples of entities that have successfully applied for and received funding through the PON 3414 program.



¹² New York State, "Frequently Asked Questions – Affordable Solar Predevelopment and Technical Assistance," nyserda.ny.gov, 2023, https://www.nyserda.ny.gov/All-Programs/NY-Sun/Communities-and-Local-Governments/Predevelopment-and-Technical-Assistance/FAQ-predevelopment-and-technical-assistance (accessed July 5, 2023).

Fifth Avenue Committee

Fifth Avenue Committee (FAC) is a 50-year-old affordable housing owner/operator based in Brooklyn, NY;¹³ only one of FAC's 48 properties is not located in southern Brooklyn. All of these properties are affordable and income-restricted housing. FAC's mission is to "advance economic, social, and racial justice in New York City through integrated, community-centered affordable housing, grassroots organizing, policy advocacy, and transformative education, training, and services that build the power to shape our community's future."

FAC Solar LLC was founded by FAC and co-developed with Gowanus Grid & Electric. The organization seeks to build, own, and operate community solar projects for the benefit of FAC affordable housing. 14 FAC Solar has developed community solar projects with the support of the PON 3414 program at seven FAC properties that benefit 291 residents. The installation of 255 kilowatts (kW) of solar provides energy and bill savings for these residents. Residents who subscribe to these projects see an average monthly savings on their energy bill of roughly \$25.

FAC is the landlord for its properties and has a building manager for each property. The building manager engages with tenants and gauges interest in new initiatives, such as developing solar and/or battery storage to benefit the residents. The building manager is also involved in signing up residents and making sure they are enrolled and receiving bill credits for the solar or solar-plus-storage systems after they are installed and operational.

FAC Solar was able to complete the projects in about 18 to 20 months. There was an open channel of communication between FAC Solar and the NYSERDA staff administering the program. NYSERDA staff explained what the funding could and couldn't be used for, as well as requested information from FAC Solar on the specific benefits residents will see as a result of the projects.

Without PON 3414 funding, these projects would not have been able to begin because of the lack of funds for the predevelopment process in FAC's or FAC Solar's budget. NYSERDA staffs' support throughout the process, and the PON 3414 program's commitment to ensuring LMI residents directly benefit from it, were major factors in the success of these projects. FAC and FAC Solar continue to explore solar and/or storage projects for their other 40 properties and will seek additional funding through the PON 3414 program.

NYSERDA staffs' support throughout the process, and the PON 3414 program's commitment to ensuring LMI residents directly benefit from it, were major factors in the success of these projects.

¹³ Fifth Avenue Committee, "Homepage," fifthave.org, 2019, https://fifthave.org (accessed July 5, 2023).

¹⁴ FAC Solar, LLC, "Solar for All," facsolar.org, 2020, https://facsolar.org (accessed July 5, 2023).

Urban Homesteading Assistance Board

Urban Homesteading Assistance Board (UHAB) is a New York City-based CBO founded in 1973. UHAB's mission is to "empower low-and-moderate income residents to take control of their housing and enhance communities by creating strong tenant associations and lasting affordable co-ops."15 A Housing Development Fund Corporation (HDFC) is an affordable housing co-op legally designated in New York City to provide housing to low-income people.¹⁶ There are 1,200 HDFC co-ops in New York City providing housing to 25,000 low-income households. UHAB primarily works with HDFC co-ops, but also provides services to other types of housing co-ops in the city.

Co-ops Go Solar, a program of UHAB, offers free technical assistance and support for HDFC co-ops considering developing solar. The Co-ops Go Solar program is a collaboration between UHAB and Solar One. Solar One is a 501(c)(3) nonprofit organization based in Long Island, NY whose programs focus on environmental education, green workforce development, urban ecology, and clean energy development. 17 As part of Co-ops Go Solar, UHAB and Solar One have partnered to help 22 co-op buildings install solar in both iterations of the program to date. UHAB focuses on the outreach and engagement to co-op residents and Solar One provides the technical support to develop the projects.

Outreach and education to LMI residents is another important aspect of solar predevelopment. UHAB and Solar One provide one-hour workshops to educate co-op residents interested in going solar. The work that UHAB does to educate and recruit more HDFC co-ops to develop solar is considered part of the predevelopment process. NYSERDA's Affordable Solar and Storage Predevelopment and Technical Assistance program funds the Co-ops

Outreach and education to LMI residents is another important aspect of solar predevelopment.

Go Solar program and allows UHAB to provide these services at no cost to co-op residents. 18 The funding from the PON 3414 program also pays for Solar One to create cost estimates, contact solar installers, and address other aspects of the solar project design.

The savings actualized by the co-ops that install solar can be used to benefit the tenants in many ways. Co-op tenants may choose to use the savings for improvements for the whole building, such as investments for retrofits, electrification, or various other improvements. UHAB also hosts educational events at co-op buildings that have gone solar and invites people from co-ops that are interested in developing solar. These solar tours are also funded by PON 3414 and help to continue to build support for solar among LMI co-op residents. At first

¹⁵ Urban Homesteading Assistance Board (UHAB), "Mission," uhab.org, 2023, https://www.uhab.org/about-us/mission (accessed July 5, 2023).

¹⁶ Urban Homesteading Assistance Board (UHAB), "What is an HDFC co-op?" uhab.org, 2023, https://www.uhab.org/our-work/ coop-support/whats-an-hdfc (accessed July 5, 2023).

¹⁷ Solar One, "About," solar1.org, 2023, https://solar1.org/about (accessed July 5, 2023).

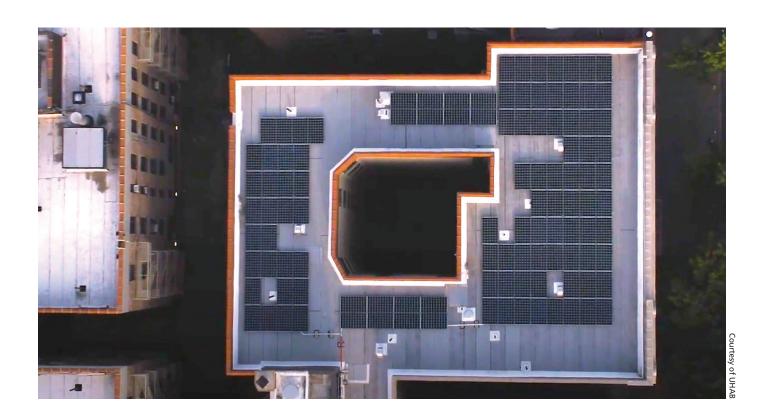
¹⁸ Urban Homesteading Assistance Board (UHAB), "Climate and Resiliency," uhab.org, 2023, https://www.uhab.org/our-work/ coop-support/services/energy/solar (accessed July 5, 2023).

glance, education may not seem to be part of the predevelopment process, but education and outreach to recruit new solar subscribers are essential. Fortunately, NYSERDA redesigned the PON 3414 program in its second iteration to include funding for education and outreach.

"I think the biggest impact of the PON 3414 program is folks not having to pay for consultations and having some of the research work lifted from their shoulders. Most HDFC shareholders have full time jobs in addition to their position in the building, so getting support with contractor outreach as well as technical assistance made projects more feasible," said Lucia Santacruz, Project Associate with UHAB.

"I think the biggest impact of the PON 3414 program is folks not having to pay for consultations and having some of the research work lifted from their shoulders. Most HDFC shareholders have full time jobs in addition to their position in the building, so getting support with contractor outreach as well as technical assistance made projects more feasible."

— Lucia Santacruz, Project Associate with UHAB



Conclusion

YSERDA's Affordable Solar and Storage Predevelopment and Technical Assistance program provides predevelopment and technical assistance funding to LMI solar and/or storage projects that would not otherwise be pursued. Over the first and second iterations of the PON 3414 program, NYSERDA and its program partners and participants have improved the program in several ways. The following are major takeaways from the success of this program.

Being flexible to the needs of CBOs

The CBOs interviewed for this case study expressed how the application and review process for this program was flexible to their needs. The review process allows NYSERSA to ask applicants for additional information if that would help in approving an application. Rather than having a rigid application in which an applicant is only able to submit information once, NYSERDA can ask for additional information or provide additional feedback before a decision is made to approve or deny an application. This flexibility allows applicants the opportunity to have their application approved so long as they adequately meet the criteria and successfully negotiate a Final Work Plan with NYSERDA.





As part of the application and review process, an important criterion that must be met is showing the likely benefits to LMI residents relative to the amount of funding requested. Applicants provide financial information showing LMI residents who participate in a solar and/or storage project funded through the PON 3414 program will see direct economic benefits. This is important to ensure the funding is not going to projects or solar developers that cannot show the benefits to LMI residents. The evaluation process vets which projects adequately benefit LMI households and which projects would not be pursued without this funding.

Funding for education and outreach

One of the changes made to the PON 3414 program in its second iteration incorporated funding for customer education and enrollment in community solar projects. This change was largely made because of the feedback received from program participants in the first iteration. Funding for education, enrollment, and outreach is leading to more interest in solar and/or

storage projects from LMI residents. CBOs such as UHAB can provide free educational meetings to affordable housing co-op owners to build support for more projects. This education and outreach lead to more projects benefitting more LMI households.

Solar and/or storage predevelopment and technical assistance funding is essential for LMI households who are not served by traditional onsite residential solar. NYSERDA's PON 3414 program is a successful model for ensuring the benefits of such projects are going to this underserved community. The funding provided by PON 3414 is serving an

The funding provided by PON 3414 is serving an unmet need, and program participants benefit from the transition to solar and/ or storage when they otherwise would not be able to develop these projects.

unmet need, and program participants benefit from the transition to solar and/or storage when they otherwise would not be able to develop these projects. NYSERDA's Affordable Solar and Storage Predevelopment and Technical Assistance program can serve as a model for other states looking to ensure all their residents benefit from the transition to clean energy and no one is left out.

The Clean Energy States Alliance (CESA) is a national, nonprofit coalition of public agencies and organizations working together to advance clean energy. CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country.



CESA works with state leaders, federal agencies, and other stakeholders to develop and promote clean energy programs and markets, with an emphasis on renewable energy, energy equity, financing strategies, and economic development. CESA facilitates information sharing, provides technical assistance, coordinates multi-state collaborative projects, and communicates the views and achievements of its members.

Ørsted US Offshore Wind/Block Island Wind Farm



50 State Street, Suite 1, Montpelier, VT 05602 802.223.2554 | cesa@cleanegroup.org | www.cesa.org













Clockwise from upper left: Shutterstock/Soonthorn Wongsaita; Tom Piorkowski; Resonant Energy; Portland General Electric; RE-volv; Bigstockphoto.com/Davidm199 and Compared to the Compared Compared to the Compared Compa