

Written Testimony of New York Solar Energy Industries Association

Before the Joint Legislative Budget Hearing on Environmental Conservation Regarding the 2024-2025 Executive Budget

February 7, 2024

Dear Senator Krueger, Assemblymember Weinstein, and esteemed committee members,

Thank you for the opportunity to provide testimony as the legislature begins deliberating New York State's FY 2025 budget. My name is Noah Ginsburg, Executive Director of New York Solar Energy Industries Association (NYSEIA). NYSEIA is New York's distributed solar and energy storage trade association. NYSEIA's 225 member companies employ thousands of New Yorkers to develop, finance, construct and operate rooftop and community solar projects throughout New York State. In addition to solar and energy storage companies, NYSEIA's members include academic institutions, labor unions, and nonprofit organizations. Accelerating the deployment of rooftop solar, community solar and community-scale energy storage is not only critical for the environment, but also for New York's economy.

About New York's Distributed Solar Industry

New York's distributed solar industry is responsible for constructing the majority of New York's new clean energy capacity over the last decade. New York is currently ahead of schedule and under budget for achieving Governor Hochul's 10 gigawatts by 2030 distributed solar goal. Distributed solar refers to solar projects up to 5 megawatts in capacity that are connected to the local distribution system, i.e. community-scale projects. Distributed solar projects range in shape and size, but all distributed solar projects provide direct bill savings to New Yorkers.

There are two main types of distributed solar projects; onsite solar, which refers to solar energy systems installed on homes or businesses, and community solar. Community solar is a program that empowers hundreds of households to share in the output of a distributed solar project located anywhere within their utility territory. Community solar expands equitable access to clean energy by allowing renters, low-income New Yorkers and others who are unable to install solar panels on their own roof to participate in and benefit from a local solar project. Community solar projects don't just generate clean energy; they provide guaranteed bill savings to subscribers through net crediting, a new program that allows community solar customers to receive their net solar savings directly on their utility bill. Community solar is a program with baked-in consumer protections, and an increasing share of community solar projects directly serve low-income households. Community solar also provides revenue to rural landowners and municipalities where the projects are located, and can be sited in a manner that minimizes land use impact. New York currently leads the nation in community solar deployment; we have installed more than two gigawatts of community solar to date, and there are gigawatts of additional community solar capacity in advanced stages of development.

Onsite and community solar projects are increasingly paired with energy storage to provide homes and businesses with resilient backup power. Distributed battery energy storage systems are also a critical resource for the electric grid; batteries can be charged overnight and then export power during times of peak demand, when the power is needed most. Energy storage will enable New York to retire its polluting fossil fuel generators, improving public health for environmental justice communities. As New York makes



progress toward decarbonizing the electric grid, energy storage and dynamic load management will be critical for balancing energy supply and demand, supporting a reliable, affordable, clean power system.

Distributed Solar Industry Contributions to New York's Clean Energy Transition

The distributed solar industry is making several important contributions to New York's clean energy transition. In addition to generating zero emissions electricity, distributed solar is strengthening the economy and advancing energy affordability. Distributed solar provides: zero-emission electricity; utility bill savings for New Yorkers; good jobs for New York's growing solar workforce; and much-needed revenue for rural landowners, municipalities and school districts where solar projects are located.

Zero emission electricity: New York is on track to install 10 gigawatts of distributed solar ahead of the 2030 target. NYSEIA estimates that 10 gigawatts of solar power will prevent 145 million metric tons of greenhouse gas emissions (MTCO2e) by displacing grid electricity, which is still generated by burning fossil fuels in much of New York State. In addition to mitigating climate change and supporting CLCPA compliance, distributed solar and energy storage deployment contributes to public health by offsetting harmful air pollutants from fossil fuels, including sulfur dioxide, nitrogen oxides, particulate matter, and carbon monoxide. According to the New York City Department of Health, two common air pollutants, ozone and PM2.5, cause about 2,400 deaths per year in NYC, and thousands more emergency room visits and hospitalizations for asthma, heart and lung problems. Fossil fuel facilities are disproportionately sited in low-income communities of color. Accelerating distributed solar deployment will advance environmental justice by reducing air pollution and improving public health while creating good jobs and delivering utility bill savings for New Yorkers with the greatest need.

Utility bill savings: NYSEIA estimates that deploying ten gigawatts of distributed solar, New York's current goal, will provide \$50 billion in lifetime utility bill savings to participating households and businesses. New York households and businesses face a myriad of economic challenges, and affordable energy is paramount. Energy affordability will be increasingly important as New York electrifies its buildings, transitioning from relatively low-cost fossil fuels to more expensive electricity as a primary method of heating. Solar utility bill savings can provide much needed relief to New Yorkers, and new federal and state programs are ensuring that solar bill savings accrue to disadvantaged communities, affordable housing, and low- to moderate-income households who are most burdened with high utility bills.

in addition to providing direct savings to participating customers, distributed solar and energy storage also provide systemwide savings to non-participating ratepayers. Distributed solar increases local energy supply, suppressing wholesale energy prices in a manner that translates to lower retail electricity rates for all customers. A 2021 study of Climate Leadership and Community Protection Act (CLCPA) compliance pathways found that scenarios with more distributed solar and storage deployment would save New Yorkers \$28 billion relative to other decarbonization pathways, and lower the average household's annual energy costs by 20% and lower the average industrial energy consumer's annual electricity bills by $10\%^{12}$. Scaling up distributed solar and storage supports New York's economy by providing lower-cost, affordable power to New York's residents and businesses.

¹ Estimation based on NYSERDA and DPS' 10 Gigawatt Distributed Solar Roadmap Proposal, December 2021.

² Vibrant Clean Energy, LLC. Decarbonizing New York through Optimized Distributed Resources. October 2021.



Workforce: New York's solar industry currently employs more than 13,400 workers and our workforce continues to grow. From 2020 to 2021, the solar industry added 1,086 jobs, making it the largest and fastest growing segment in New York's clean power generation sector³. Importantly, the distributed solar industry supports both blue-collar and white-collar jobs, ranging from entry-level installer to journeyman electrician, junior drafter to senior solar PV designer, data entry specialist to finance analyst. As New York's solar workforce continues to grow, advancing diversity and career pathways in the industry will be critical. New York solar companies are increasingly partnering with academic institutions, workforce development agencies and labor unions to achieve these important outcomes. In 2022, New York and the federal government expanded prevailing wage requirements to apply to all projects above one megawatt, and NYSERDA allocated funding to support the community solar industry's transition to prevailing wages. These new labor requirements mean that the majority of new distributed solar capacity supports high paying construction jobs, and there is increasing union participation in the community solar sector. The solar industry is an important employer, and policies that support sustainable growth to the industry will benefit and grow New York's solar workforce.

Lease revenue for rural landowners and tax revenue for municipalities: community solar projects are commonly located in rural parts of the state near existing electrical infrastructure. These solar projects typically enter into long-term lease agreements with the landowner, and either pay property taxes or enter into payment-in-lieu-of-taxes (PILOT) agreements with local governments. NYSEIA estimates that the community solar needed to achieve New York's 10 gigawatt by 2030 goal will provide \$3-4 billion in direct revenue to host rural landowners and host communities.

NYSEIA Testimony on the FY25 Executive Budget

The Executive Budget does not include any specific policies or programs that support distributed solar and storage deployment in New York. While they are not directly related to the distributed solar industry, NYSEIA is broadly supportive of several elements of the Executive Budget, including the Governor's proposals to address siting barriers for transmission projects (Part O, ""renewable action through project interconnection and deployment (RAPID) act") and to accelerate the phaseout of fossil fuel infrastructure (Part P, "affordable gas transition act"). Building out New York's electric transmission and distribution system and phasing out fossil fuel infrastructure investment will both be critical for achieving New York's ambitious CLCPA goals.

There are two priority legislative proposals that were not included in the Executive Budget that would accelerate distributed solar and storage deployment, and provide significant environmental and economic benefits to New York State. I strongly encourage you and your colleagues in the legislature to include the following items in the Senate and Assembly One House Budget proposals, and to advocate for their inclusion in the New York's final FY 2025 budget.

³ NYSERDA. New York Clean Energy Industry Report 2022.



Modernize the Residential Solar Tax Credit

New York's Solar Energy System Equipment Tax Credit is New York's only statewide solar incentive to encourage homeowners to install solar panels. This tax credit is vital for ensuring that New Yorkers can afford electrification and rooftop solar. However, the tax credit has not been adjusted for inflation since 2006, does not support energy storage, and is inaccessible to low-income families and retirees. Modernizing the residential solar tax credit is critical for making clean energy more affordable for all New Yorkers, particularly low-income families and seniors. This important policy proposal was included in Part HH of the Senate's one-house Revenue Article VII Bill in the 2023-2024 legislative session, and legislation to strengthen the residential solar tax credit has been introduced in the Senate (Harckham S.3596-C) and Assembly (Walker A.6739-A). NYSEIA and a coalition of our allies in the environmental justice and housing community are advocating for New York to include this important proposal in the FY 2025 budget. This proposal would advance equity, resilience and affordability by:

- Making the solar tax credit refundable for low-to-moderate income households and those who live in Disadvantaged Communities;
- Removing an arbitrary system size cap for residents living in co-ops and condominiums;
- Including energy storage as eligible equipment; and
- Increasing the maximum tax credit amount from \$5,000 to \$10,000 to adjust for inflation (first cap increase since 2006) and energy storage costs while maintaining the 25% system cost limit.

NYSEIA estimates that these changes will provide >\$300M in annual benefits to New Yorkers, with an annual fiscal impact of \$31M and a year one impact of less than \$8M. This proposal advances energy affordability, a key priority of the Hochul administration. The Climate Action Council's Final Scoping Plan notes that up to 2 million homes must be electrified with heat pumps by 2030⁴. NYSEIA strongly supports building electrification, but notes that electricity is a more expensive fuel than natural gas, the most common heating fuel in New York today. Rooftop solar can offset the additional cost of electrification, ensuring that New York homeowners are able to afford these critical upgrades. Rooftop solar will also lower the overall cost of electrification by reducing the scale of investment needed to expand the electric transmission and distribution system to serve growing electric demand. Expanding the tax credit to support storage will also provide broad benefits to ratepayers by increasing the deployment of distributed solar + storage; resources that can be aggregated into virtual power plants that generate power when and where it is needed, mitigating the need for expensive transmission and distribution upgrades.

Finally, I'll note that the Climate Affordability Study published by NYSERDA and the DEC in December 2023 specifically recommends that New York consider refundable tax credits as a tool to ensure equitable access to clean energy benefits among low-income New Yorkers. The report summarizes the agencies' evaluation of methods to provide Cap-and-Invest proceeds to New Yorkers, and highlights refundable tax credits as a key recommendation to ensure equitable access⁵. Modernizing New York's residential solar tax credit and making it refundable for low-income New Yorkers are straightforward ways to act upon NYSERDA and the DEC's Climate Affordability Study without delay.

⁴ New York State Climate Action Council. 2022. "New York State Climate Action Council Scoping Plan." climate.ny.gov/ScopingPlan.

⁵ NYSERDA and DEC. Climate Affordability Study. https://capandinvest.ny.gov/-/media/Project/CapInvest/Files/Climate-Affordability-Study.pdf. December 2023.



Community Solar Permitting Reform

Restrictive local laws and NIMBYism are a major barrier to distributed solar deployment in New York State. Unfortunately, a growing number of municipalities are misusing their land use authority to obstruct the development of distributed solar projects, unfairly infringing on the property rights of rural landowners while impeding progress toward the legislatively mandated CLCPA goals. For example, some municipalities will pass recurring solar panel moratoria or impose unreasonable setback requirements that make it infeasible to install solar on most or all of the parcels within a municipality. While large-scale renewable energy projects can circumvent unreasonable local laws through the Office of Renewable Energy Siting (ORES), distributed solar projects have no viable permitting pathway when municipalities unreasonably prevent community solar projects from moving forward. NYSEIA estimates that overly restrictive solar local laws are currently obstructing the development of up to 4.6 gigawatts of distributed solar. Reforms are needed to unlock this potential and sustain cost-effective progress toward New York's clean energy goals.

New York's distributed solar industry strongly supports A.3579-A/S.8392, legislation introduced by Assemblymember Fahy and Senator Cooney that seeks to overcome siting and permitting barriers to the deployment of distributed solar. If enacted, the legislation will:

- Allocate funding to NYSERDA for public education and community engagement to help community residents and local officials understand the benefits and limited impact of distributed renewables:
- Make renewable energy PILOT revenue exempt from New York's property tax cap to provide incentive for local municipalities to host clean energy projects; and
- Create a state-level appeal process that allows projects impacted by unreasonably burdensome local laws to appeal the local agency's decision to ORES.

With the exception of the proposed budget appropriation to NYSERDA for outreach and education, this proposal is self-funded. This proposal will meaningfully accelerate clean energy progress and enhance benefits to clean energy host communities. The state-level appeal process defers to local decision-making ("home rule") in almost all cases, and simply creates a viable pathway for well-sited community-scale projects impacted by unreasonable local permitting. Importantly, this legislation includes educational resources and financial incentives for host communities to ensure that they are able to develop smart solar local laws and reap the benefits of community solar projects in their backyard. NYSEIA welcomes the opportunity to discuss this proposal and community solar siting barriers with all interested stakeholders.



Conclusion

New York's distributed solar + storage industry is making important contributions to New York's clean energy transition. With the right policies, we can go well beyond 10 gigawatts of distributed solar, and help close the gap on New York's 2030 and 2040 CLCPA goals. The Executive Budget omits two key legislative proposals that would accelerate distributed solar + storage deployment and provide meaningful environmental and economic benefits to all New Yorkers. Modernizing the residential solar tax credit and community solar permitting reform will: accelerate clean energy deployment, especially rooftop and community solar; ensure that more low-income New Yorkers can afford clean energy; support New York's growing solar workforce; and provide additional revenue to rural landowners and local governments. These policies will support near-term progress toward the clean energy and equity goals enshrined in the CLCPA as New York works to stand up its offshore wind industry and expand transmission. NYSEIA urges the legislature to include these items in the Senate and Assembly One House Budget proposals, and encourages the Governor and Legislature to include these proposals in New York's final FY 2025 budget.

Addressing climate change while ensuring energy affordability and growing our local clean energy workforce are the challenges and opportunities of our time. NYSEIA applauds Governor Hochul, the legislature, and our state energy agencies for their steadfast commitment to overcoming these challenges and seizing these opportunities. New York's distributed solar + storage industry shares this commitment and seeks to contribute more toward achieving New York's ambitious clean energy and equity goals.

In closing, I want to sincerely thank you for your leadership, and for the opportunity to provide input on these important matters as you develop New York's final budget. The stakes couldn't be higher, and New York is counting on you. I welcome the opportunity to meet with any of you to answer any questions about my testimony or New York's distributed solar and storage industry.